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CDC uses a [blood lead reference value](#) of 3.5 micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ) to identify children with higher levels of lead in their blood compared to most children. This level is based on the 97.5th percentile of the blood lead values among U.S. children ages 1-5 years from the 2015-2016 and 2017-2018 National Health and Nutrition Examination Survey (NHANES) cycles. Children with blood lead levels at or above the BLRV represent those at the top 2.5% with the highest blood lead levels.

This document refers to a blood lead level of 10  $\mu\text{g}/\text{dL}$  as the CDC level of concern for adverse health outcomes in children. This terminology has changed, and readers are referred to the [ACCLPP recommendations of 2012](#).

This document was archived for historical purposes on November 3, 2021.

**ALLIANCE FOR HEALTHY HOMES**  
*Protecting Children from Lead and Other Environmental Health Hazards*



# Lead-Safe Housing Policy Guidance



## **ACKNOWLEDGEMENTS**

This guidance was prepared by the Alliance for Healthy Homes, which is solely responsible for its content. Its primary author was Anne Phelps, with contributions from Don Ryan, Eileen Quinn, Jane Malone, and Ralph Scott. Its designer and producer was Brian Gumm.

The Alliance thanks the Childhood Lead Poisoning Prevention Branch of the Centers for Disease Control and Prevention, which funded the development of these materials.

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## INTRODUCTION

As the Federal Strategy for Eliminating Childhood Lead Poisoning emphasizes, ending lead poisoning as a public health problem requires making our housing stock lead-safe. Blood lead screening, case management services for children with elevated blood lead levels (EBLs), and raising public awareness are all important *supporting* strategies, but identifying and treating children after the damage is done is not protective. In the same regard, educating parents is helpful but insufficient as a prevention strategy. Research makes clear that parents lack the power to protect their children if there are serious lead hazards in their home. The only sure way to protect children from lead poisoning is through primary prevention strategies—preventing, identifying, and controlling lead hazards in housing, especially deteriorated lead-based paint and lead dust hazards.

Of the 39 million leaded housing units in the United States, HUD estimates that 25 million pose “significant lead hazards.” Because these units span the full spectrum of risk—from exceedingly low to extremely grave—different measures are needed in different situations to maximize the public health benefits of investments to improve property maintenance and repair. Making our housing stock lead-safe ultimately depends on action by property owners, but government agencies can foster effective action by setting clear standards, offering technical support and assistance, providing subsidies where justified, encouraging improvements in property maintenance and repairs, and enforcing compliance as needed.

The Alliance for Healthy Homes has created this four-part *Lead-Safe Housing Policy Guidance* to assist state and local policy makers and government agency staff in establishing a prevention-based framework to advance lead-safe housing. To develop this resource, the Alliance drew upon enlightened approaches that jurisdictions across the country are already pursuing and finding effective. We hope that this Guidance will be helpful to health and housing practitioners as well as other advocates for children’s health in every city, county, and state—regardless of its current laws or level of political will.

The *Lead-Safe Housing Policy Guidance* consists of four parts:

- I. Basic Lead-Safe Housing Standards:** A three-tiered approach to setting clear, workable, and protective standards that define rental property owners’ duties.
- II. Legal Authorities:** The spectrum of legal authorities and enforcement options needed for state and local agencies to implement and enforce lead-safe housing standards.
- III. Programmatic Opportunities:** Effective strategies for state and local agencies to strengthen code enforcement and build technical capacity to expand the supply of lead-safe housing.
- IV. Reference Materials:** Applicable federal law, regulations, and standards, fundamental tenant safeguards, and a glossary of common terms.



**PART I**

**Basic Lead-Safe Housing Standards**



## BASIC LEAD-SAFE HOUSING STANDARDS

No jurisdiction with an older housing stock can effectively protect children from lead poisoning without laws and ordinances that clearly state what rental property owners must do to prevent and control lead-based paint and dust hazards. To be effective, such standards must: 1) clearly define landlords' responsibilities; 2) offer adequate protection for children's health; and 3) be practical, workable, and sensitive to the economic realities of affordable housing.

Many cities and states currently lack such clear, workable, and protective standards for lead-safe housing. Some jurisdictions' laws and regulations establish ambiguous requirements or ignore lead hazards altogether. Other jurisdictions have standards that either are too weak to protect children's health or are impractical for property owners to meet.

Part I of *Lead-Safe Housing Policy Guidance* is intended to assist legislators, state and local health officials, and other advocates for children's health develop laws and ordinances that establish effective and enlightened lead-safe housing standards. Because the extent of risk varies widely from property to property, applying uniform requirements to all pre-1978 housing either imposes unnecessary requirements and costs on lower-risk units or fails to offer sufficient protection to occupants of higher-risk units. To provide maximum public health protection for the resources invested, this framework organizes lead-safe housing standards in three tiers, based on level of lead hazard risk:

- ◆ Tier I includes a set of low-cost, prevention-based standards designed for all properties built before 1978 that contain, or may contain, lead-based paint.
- ◆ Tier II offers alternative approaches, criteria, and action triggers that jurisdictions can use to tailor requirements to ensure lead safety in higher-risk properties.
- ◆ Tier III addresses extremely high risk and dangerous circumstances, such as the identification of a lead-poisoned child or significant non-compliance by landlords.

Enacting specific standards for lead-safe housing benefits private property owners as well as children and communities. Codifying lead safety standards in laws and ordinances reinforces the importance of good property maintenance and clarifies what steps landlords need to take in order to prevent and control hazards. Lead-safe housing laws and ordinances provide objective standards against which landlords can demonstrate compliance. Adherence can qualify owners for property and casualty insurance, reduce legal liability, and maintain property condition and value. Primary prevention of lead poisoning provides community-wide benefits through savings in health care and special education costs, improved school performance, and reductions in anti-social behavior and juvenile delinquency.

A one-page summary of *Basic Lead-Safe Housing Standards* is provided on the next page, followed by detailed descriptions.

### SUMMARY

#### **TIER I – Baseline Standards for All Pre-1978 Rental Properties**

*This tier consists of low-cost, prevention-based measures that jurisdictions should require of owners of all pre-1978 properties except those found to be lead-free by a lead-based paint inspection.*

- Maintain properties in good physical condition and in compliance with code
- Perform visual inspection for deteriorated paint and water damage upon vacancy and annually thereafter
- Promptly and safely repair deteriorated paint and its causes
- Follow lead-safe work practices (and avoid unsafe work practices) when repairing deteriorated paint or disturbing painted surfaces
- Urge tenants to report peeling paint and clearly explain how to do so

#### **TIER II – Safeguards for Owners of High-Risk Rental Properties**

*To supplement the baseline standards for high-risk properties, jurisdictions need to establish criteria for designating properties that are presumptively higher risk, as well as additional safeguards that should be required in some circumstances. Alternatives for consideration are provided below. Multiple criteria and/or hazard control measures can be combined to best meet local needs.*

##### Criteria/circumstances for classifying rental properties as higher risk or requiring additional action:

- A government agency identifies peeling paint or other code violations in the unit
- A government agency identifies lead hazards in any unit in a multi-family property
- The property was built prior to 1940/1950/1960
- The property is located in a high-risk area (as defined by a legislative body or executive agency)
- A family with a child under six resides in the unit
- A triggering event occurs, such as property sale, re-rental, or remodeling

##### Alternatives for additional measures required of owners of higher-risk properties:

- Pass visual inspection and clearance dust tests after any activity that disturbs or repairs more than a *de minimis* area of a painted surface (*more than 2 square feet in any one interior room or space*)
- Pass visual inspection and clearance dust tests at vacancy
- Make all floor surfaces smooth and cleanable
- Ensure that doors and windows do not bind
- Perform lead-safe window treatments, such as vinyl/aluminum cladding of window troughs
- Cover bare soil with mulch, gravel, sod, or dense plantings
- Hire a certified contractor to perform a risk assessment or lead inspection
- Hire a certified abatement contractor to control identified lead hazards
- Develop a lead safety plan for ongoing maintenance
- Notify all residents in a building found to contain lead hazards

#### **TIER III – Response to Extreme Situations**

*Jurisdictions should impose special requirements on property owners in situations where housing units pose extremely high risks, such as the identification of an EBL child or the discovery of significant non-compliance with or circumvention of basic lead safety requirements.*

- Respond promptly to all public health agency directives
- Provide public health agency access to other units in a multi-family building for environmental investigation
- Relocate the occupants if identified hazards are not promptly controlled or if a lead hazard control project requires evacuation
- Submit lead hazard control plans to the public health agency for approval
- Safely control identified lead hazards using a qualified contractor and pass visual inspection and clearance

## TIER I

### Baseline Standards for All Pre-1978 Rental Properties

*This tier consists of low-cost, prevention-based measures that jurisdictions should require of owners of all pre-1978 residential rental properties, except those found to be lead-free by a lead-based paint inspection. Many of the elements included in this tier are already incorporated into some jurisdictions' codes.*

- ❑ **Maintain properties in good physical condition and in compliance with code** Well-maintained properties with intact paint rarely poison a child. Water damage from leaks and moisture causes most paint failure. By maintaining property as required by code, such as keeping the roof in good repair and promptly correcting leaks and other moisture problems, property owners can prevent paint deterioration that can create lead hazards.
- ❑ **Perform visual inspection for deteriorated paint and water damage upon vacancy and annually thereafter** Unit turnover presents an excellent opportunity for lead hazards to be assessed and controlled since the safety and convenience of occupants are not of concern in a vacant unit. Property owners should be required to perform a visual inspection for signs of water damage, moisture problems, and deteriorated paint at unit turnover and then annually thereafter. Alternatively, jurisdictions can require owners to have their units inspected by the local housing code enforcement agency prior to renting to new tenants.
- ❑ **Promptly and safely repair deteriorated paint and its causes** Owners should be required to promptly and safely correct the surface problems on painted surfaces and the underlying causes of paint deterioration such as moisture and friction.
- ❑ **Follow lead-safe work practices (and avoid unsafe work practices) when repairing deteriorated paint and disturbing painted surfaces** Research makes clear that traditional paint repair and paint removal work practices can generate significant lead dust hazards. Lead safe work practices (LSWP) include appropriate worksite preparation, occupant protection, safe paint removal methods, and specialized cleaning. Unsafe practices include dry sanding or scraping, open flame burning, operating a heat gun above 1100° F, uncontrolled power washing, and machine sanding without a HEPA filter. To protect occupants and others from exposure to lead hazards, jurisdictions should prohibit the use of unsafe practices for any lead hazard control work, remodeling, renovation, rehabilitation and paint repair. Jurisdictions should require property owners, their employees, and contractors to use LSWP for any work that repairs or disturbs a painted surface.
- ❑ **Urge tenants to report peeling paint and explain how to do so** Property owners cannot address hazards unless they know they exist. Federal law requires property owners to provide tenants with information on lead hazards; jurisdictions should require property owners to also encourage tenants to report deteriorated paint (and other problems), and provide them with information on how to do so. Notices with these instructions can be included in the lease, or delivered, mailed, or posted in the building.

## TIER II

### Additional Safeguards for Owners of Higher-Risk Rental Properties

*To supplement the baseline standards for pre-1978 properties, jurisdictions need to establish criteria for designating properties that are presumptively higher risk, as well as additional safeguards that should be required in some circumstances. Alternatives for consideration are provided below. Multiple criteria and/or hazard control measures can be combined to best meet local needs.*

#### Criteria/circumstances for classifying properties as higher risk or requiring additional action

- A government agency identifies peeling paint or other code violations in the unit**  
Failure to meet basic property maintenance requirements should be seen as a warning that normal upkeep practices are inadequate and more deterioration may be present. By the time an agency documents poor conditions, the problems are likely serious enough to warrant more protective action. A property with even one documented lead hazard is likely to contain others.
- A government agency identifies lead hazards in any unit in a multi-family property**  
There is a significant likelihood that similar hazards are present in other units in the building, due to the common construction, painting, and maintenance history.
- The property was built prior to 1940/1950/1960** Because older properties' painted surfaces typically contain more lead, housing age can be used as a factor for setting priorities.
- The property is located in a high-risk area** Local governments can define a geographical area as high risk based on housing age and condition, household income level, code violations, or elevated blood lead cases.
- A family with a child under six resides in the unit** Children are at higher risk for lead exposure and more vulnerable to its effects. This approach requires vigilance regarding landlord discrimination against families with children.
- A triggering event occurs, such as property sale, re-rental, or remodeling** Jurisdictions can use these housing "events" to trigger a requirement for property owners to perform visual inspections, clearance dust tests, and other safeguards.

#### Alternatives for additional measures required of owners of higher-risk properties

- Pass visual inspection and independent clearance dust tests after any activity that disturbs or repairs more than a *de minimis* area of a painted surface** (*more than 2 square feet in any one interior room or space*) The small specks of lead in household dust are imperceptible to the eye; a clearance lead dust test is the only way to be certain that lead-contaminated dust does not remain behind to poison a child. An independent clearance dust test ensures the veracity of the result.
- Pass visual inspection and independent clearance dust tests at vacancy** Vacancy gives property owners the opportunity to identify any hazards created during the last occupancy and correct them while the unit is unoccupied. To ensure no lead dust hazards remain, property owners can be required to pass independent clearance dust tests at vacancy.

- ❑ **Make all floor surfaces smooth and cleanable** In order to prevent the accumulation of lead dust, property owners can be required to refinish or cover rough, pitted, or porous uncarpeted floors and stairs with smooth products such as vinyl or linoleum.
- ❑ **Ensure that doors and windows do not bind** Property owners can be required to maintain friction and impact surfaces in good operating condition and good repair. Examples of friction surfaces include those parts of a window or door that rub when it is opened and closed. Similarly, property owners should be required to cover impact surfaces with impact-resistant materials or safely replace them. The most common impact surfaces are doors and doorjamb, door trim, doorstops, baseboards, and stair treads, risers, and railings.
- ❑ **Perform lead-safe window treatments** Property owners can be required to repair all deteriorated painted surfaces of windows, including the exterior casing and sills, wells (troughs), sashes, and sash tracks. Common window treatments include covering windowsills and troughs with metal coil stock or vinyl flashing and installing jamb liners. Window replacement offers an alternative to extensive window treatments and also provides potential energy savings.
- ❑ **Cover bare soil with mulch, gravel, sod, or dense plantings** Flaking exterior lead-based paint, previous deposits of leaded gasoline, and exterior paint removal can contaminate soil near the home. Children can be exposed to harmful levels of lead when they get their hands or toys dirty and place them in their mouths during normal play activity. Lead-contaminated soil and dust can also be tracked into homes on shoes or by pets. To protect against this, property owners can be required to cover bare soil with grass, sod, other live ground covers, wood chips, gravel, stones, artificial turf, or similar covering. Property owners can also be required to provide each unit with a doormat to reduce tracking lead-laden soil inside.
- ❑ **Hire a certified contractor to perform a risk assessment or lead inspection and perform hazard control as prescribed by the evaluation report** Owners can be required to hire a certified contractor to ascertain the property's potential lead hazards and control them accordingly.
- ❑ **Hire a certified lead abatement contractor** If lead hazards are extensive, property owners can be required to hire a certified lead abatement contractor to control the hazards.
- ❑ **Develop a lead safety plan for ongoing maintenance** Owners of higher-risk properties can be required to develop a lead safety plan and schedule that documents annual inspections, results, repairs, clearance test results, and notices to tenants.
- ❑ **Notify all residents in a building found to contain lead hazards** The presence of lead hazards in one unit of a multi-family building is a strong indication that its other units also contain hazards. By notifying all tenants when hazards are identified, residents can take steps to protect their children from lead poisoning, and can have their children screened for high lead levels. State and local disclosure laws can require property owners to notify all building residents when lead hazards are identified in any unit, providing an additional safeguard beyond federal law.

## TIER III

### Response to Extreme Situations

*Jurisdictions should impose special requirements on property owners in situations where housing units pose extremely high risks, such as the identification of an EBL child, or the discovery of significant non-compliance with or circumvention of basic lead safety requirements. Such orders must have near-term deadlines for action and close oversight to ensure that hazards are controlled promptly. Jurisdictions should subsequently subject these properties to applicable higher-risk safeguards.*

- ❑ **Respond promptly to all public health agency directives** In order to quickly determine the source of lead poisoning, health investigators must have the full cooperation of the property owner to investigate the places where a poisoned child spends time. Property owners should be required to cooperate fully with the public health agency in planning and achieving corrective action.
- ❑ **Provide public health agency access to other units in a multi-family building for environmental investigation** If lead hazards are identified in one unit in a multi-family building, there is a significant likelihood that similar hazards are present in other units in the building, due to the common painting and maintenance history. Property owners should be required to cooperate with the public health agency in inspecting/evaluating all other units in the building by providing access to the units and effective notification of their occupants.
- ❑ **Relocate the occupants if identified hazards are not promptly controlled or if a lead hazard control project requires evacuation** Where hazards remain, resident children ingest more lead. Lead hazard control work can also put occupants at risk. When the work is extensive, lead-safe work practices may not be enough to keep them safe. In those instances, property owners should be required to relocate the family until the work is completed.
- ❑ **Submit lead hazard control plans to the public health agency for approval** To prevent foreseeable problems and in order to ensure thorough control of all identified and presumed lead hazards, property owners can be required to submit a lead hazard control plan for review and approval by the public health agency. If the work does not achieve the complete removal of lead-based paint, the property owner can be required to submit an ongoing maintenance plan for review and approval by the public health agency.
- ❑ **Safely control identified lead hazards using a qualified contractor and pass visual inspection and independent clearance dust tests** For high-risk situations, especially those involving a child with an elevated blood lead level, it is vital that all identified lead hazards be safely controlled. Following lead-safe work practices is imperative; using a certified abatement contractor offers the greatest assurance. In either case, clearance testing is critical to ensure the effective control of an identified lead hazard.

## **PART II**

# **Legal Authorities**



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## LEGAL AUTHORITIES

Most state and local jurisdictions have legal authority to screen children in order to identify those with elevated blood lead levels (EBLs). Yet many of these same jurisdictions lack the statutory authority to require property owners to prevent and control lead hazards in housing and/or the enforcement powers needed to ensure compliance. Remarkably, at least 15 states that receive CDC lead poisoning prevention grants report that they lack specific power to order property owners to control identified lead hazards, even in the extreme case of an EBL child.

Childhood lead poisoning prevention programs (CLPPPs) cannot effectively protect children if their jurisdiction lacks basic legal authorities and enforcement powers. In some cases, lack of adequate legal authority may be a major limiting factor to continued progress in protecting children from lead hazards in their homes. A critical examination of existing legal authorities and enforcement powers would likely benefit most CLPPPs.

Part II of *Lead-Safe Housing Policy Guidance* provides a checklist of legal authorities related to preventing and controlling lead hazards in housing. In developing this checklist, the Alliance drew upon state laws and regulations, local ordinances, and the International Code Council's Property Maintenance Code. It is important to note that no jurisdiction currently has all these legal authorities and enforcement powers in place. Indeed, many effective CLPPPs operate in jurisdictions that have only a subset of these authorities.

The checklist is divided into five categories:

- ◆ Property Maintenance and Accountability Standards
- ◆ Right of Entry
- ◆ Authority to Compel Compliance with Requirements
- ◆ Work Practice Standards
- ◆ Administrative Mechanisms to Support Enforcement

In order to ensure the authority exists to enforce property owners requirements, there is understandably some overlap with *Basic Lead-Safe Housing Standards*.

Some jurisdictions may find that they have broad legal authorities to protect public health and safety that are currently going unused. In addition to laws specific to lead poisoning, jurisdictions should examine state and local health and housing laws, agency regulations and rules, housing and health codes and ordinances, property maintenance codes, nuisance law, and warranty of habitability law. These existing laws and codes may already grant many of the authorities identified in this checklist. While a jurisdiction may already have broad authority to protect health and safety, it is generally advantageous to specifically enumerate powers related to lead safety.

We hope that CLPPP staff, policy makers, legislators, and public health advocates will use this checklist as a tool to assess existing authorities, identify gaps in existing powers, and then determine which additional legal authorities and enforcement powers would be most helpful to improve program effectiveness and expand the supply of lead-safe housing in their jurisdiction.

A one-page summary of *Legal Authorities* is provided on the next page, followed by detailed descriptions.

## SUMMARY

### Legal Authorities

#### Property Maintenance and Accountability Standards

- Establish baseline property maintenance standards that address lead safety
- Classify deteriorated paint in pre-1960 properties as a serious code violation
- Establish lead dust hazards as a serious code violation
- Require rental property owners to provide documentation of lead-safe status in certain situations

#### Right of Entry

- Conduct an environmental investigation in response to a child with an elevated blood lead level
- Inspect other units in a multi-family building where one unit is occupied by an EBL child
- Inspect units proactively, such as on a routine periodic basis
- Collect environmental samples to determine the presence of lead dust hazards
- Conduct follow-up inspection to ensure lead hazard repair is performed properly

#### Authority to Compel Compliance with Requirements

- Set a specific deadline for completion of repair work
- Establish meaningful and appropriate penalties for unresolved code violations
- Ensure occupant protection, including relocation to lead-safe housing when necessary
- Issue stop-work order to halt unsafe work practices
- Order property owner to hire a certified lead professional (e.g. lead inspector, risk assessor, certified lead abatement contractor) in high-risk situations
- Require cleanup of visible dust and debris and clearance dust testing whenever an agency orders repair in pre-1960 properties
- Authorize agency crews to repair hazards and recover costs by placing a lien on the property
- Declare deteriorated properties unfit for human occupancy or uninhabitable, and order them vacated and sealed until repaired or demolished.
- Place properties with numerous, repeated, or long-standing violations in receivership

#### Work Practice Standards

- Require lead-safe work practices
- Ban unsafe paint removal methods during painting, remodeling, and maintenance activities
- Require property owners, maintenance supervisors, painting/remodeling contractors, and city contractors to complete basic training in LSWP before disturbing or repairing paint in older properties

#### Administrative Mechanisms to Support Enforcement

- Require a renewable rental permit or certificate of occupancy for all rental properties
- Register the identity of the rental property owner and/or agent for delivery of legal notices
- Attach outstanding lead hazard control orders to the property deed
- Publish information on properties with outstanding code violations and recalcitrant owners
- Create a special court to accelerate successful case closure
- Create a special Treasury fund to finance programmatic/enforcement/abatement activities

## LEGAL AUTHORITIES

*State and local agencies need statutory authority to require rental property owners to provide lead-safe housing as well as practical enforcement powers to ensure compliance. This checklist compiles existing authorities from around the country. It is intended to help jurisdictions identify gaps and set priorities for securing additional legal authority needed to accelerate progress in protecting children from lead poisoning.*

## **PROPERTY MAINTENANCE AND ACCOUNTABILITY STANDARDS**

*The most common source of exposure to lead is deteriorating lead-based paint in poorly maintained housing. The link between the adequacy of housing maintenance and the potential for lead exposure puts code enforcement agencies in a unique position to prevent poisonings.*

- Establish baseline property maintenance standards that address lead safety** Good property maintenance can prevent most conditions that cause paint to deteriorate, such as water and plumbing leaks. At a minimum, jurisdictions should require that interior and exterior painted surfaces be maintained in intact condition; that roofs, gutters, leaders, and downspouts be maintained in working and leak-proof condition; and that plumbing fixtures and all water and waste pipes be properly connected, installed, and maintained in sanitary, working, and leak-proof condition.
- Classify deteriorated paint in pre-1960 properties as a serious code violation** Deteriorated paint (regardless of its lead content) is a code violation in most jurisdictions, but is often viewed as an eyesore rather than a potentially serious health hazard. Pre-1960 properties are likely to contain paint with the highest concentration of lead. State and local governments can create a rebuttable presumption that all paint in pre-1960 housing is lead-based paint.
- Establish lead dust hazards as a serious code violation** Although lead dust is widely regarded as the primary pathway of exposure, most housing codes ignore it altogether. In order to provide the clearest legal basis for controlling lead hazards, housing codes should state explicitly that deteriorated lead-based paint, lead contaminated dust, and lead-laden bare soil are citable offenses. Jurisdictions can incorporate by reference EPA standards (see *Reference Materials*: Appendix B) for dangerous levels of lead in paint, dust, and bare soil to enable automatic updates based on research that prompts changes in federal standards.
- Require rental property owners to provide documentation of lead-safe status in certain situations** Authority to require a rental property owner to present documentation of a property's lead-safe or lead-free condition, conducted by a qualified and independent third party (i.e. a certified risk assessor), appropriately places the responsibility for safe housing on the landlord.

## **RIGHT OF ENTRY**

*Jurisdictions need authority for code inspectors and other agency staff to enter a dwelling with reasonable notice to check for lead hazards. If the property owner refuses entry, the agency should have authority to pursue a warrant.*

- ❑ **Conduct an environmental investigation in response to a child with an elevated blood lead level (EBL)** In a property where an EBL child lives, the source of the exposure must be determined and any identified lead hazards effectively controlled to prevent further exposure. Consistent with CDC guidance, an environmental investigation should include sampling for lead dust as well as a visual check for deteriorated paint.
- ❑ **Inspect other units in a multi-family building where one unit is occupied by an EBL child** If lead hazards are identified in one unit in a multi-family building, it is highly likely that other units in the same building contain hazards. Undertaking hazard assessment throughout such buildings is a useful strategy for targeting high-risk units. In addition, other tenants should be encouraged to have their children screened.
- ❑ **Inspect units proactively, such as on a routine periodic basis** Rather than rely solely on tenant complaints, some jurisdictions inspect all rental properties every three or five years, and/or at tenant turnover. Proactive inspection schedules could focus first on high-risk neighborhoods, high-risk properties, or problem landlords. Systematic, periodic inspection programs can reinforce regular maintenance and ensure that properties meet basic health and safety standards. Tenant turnover also presents an excellent opportunity for lead hazards to be assessed and controlled in a vacant unit where the safety and convenience of occupants is not an issue; property owners could be required to hire a certified person to inspect. By identifying underlying problems early, problems can be addressed before lead hazards develop and poison a child.
- ❑ **Collect environmental samples to determine the presence of lead dust hazards** Code inspectors should be authorized to collect environmental samples for analysis in older units with deteriorated paint, where work has been done that disturbed old paint, and in other high-risk circumstances.
- ❑ **Conduct follow-up inspection to ensure lead hazard repair is performed properly** Health and housing agencies must have the authority to re-inspect units cited for violations and perform clearance testing after repairs have been completed. Alternatively, property owners could be required to obtain clearance by a qualified independent third-party.

## **AUTHORITY TO COMPEL COMPLIANCE WITH REQUIREMENTS**

*Jurisdictions must ensure that property owners promptly and safely correct cited code violations.*

- ❑ **Set specific deadline for completion of repair work** Orders to repair lead hazards and other code violations should include a suitable and specific deadline for compliance. Deadlines should be based on a standardized schedule that can be amended reasonably, such as extending the timeframe for exterior repairs to take weather into account.

- Establish meaningful and appropriate penalties for unresolved code violations**  
Jurisdictions should have authority to assess penalties for code violations, including a range of monetary fines, and for egregious situations, criminal penalties. Furthermore, each day that elapses after a missed deadline should be considered a separate violation, which can increase financial pressure on the owner to take timely corrective action.
- Ensure occupant protection, including relocation to lead-safe housing when necessary**  
Property owners' responsibility for providing safe housing includes the obligation to protect occupants from contamination from lead hazards during activities that disturb paint. When it is unsafe for tenants to occupy the premises, jurisdictions should have the authority to require the landlord to pay appropriate relocation costs.
- Issue stop-work orders to halt unsafe work practices** Agencies need authority to stop owners from generating and dispersing lead hazards through unsafe work practices.
- Order property owner to hire a certified lead professional in high-risk situations** Older properties may require a risk assessment or lead-based paint inspection as well as abatement by a certified abatement contractor if lead hazards are extensive.
- Require cleanup of visible dust and debris and clearance dust testing whenever an agency orders repair in pre-1960 properties** Traditional paint repair practices can leave behind dangerous levels of invisible lead dust. Clearance dust testing conducted by agency staff or a third party is the only way to be sure that lead dust hazards are not left behind after repair, remodeling, and lead hazard control projects.
- Authorize agency crews to repair hazards and recover costs by placing a lien on the property** Codes provide for emergency measure to ensure the immediate repair of imminently dangerous conditions. If property owners fail to address lead hazards, enforcement agencies should be authorized to dispatch trained crews to make repairs and institute action to recover the cost if the property owner refuses to pay.
- Declare deteriorated properties unfit for human occupancy or uninhabitable, and order them vacated and sealed until repaired or demolished** The ability to condemn and vacate housing can be a powerful enforcement tool. It protects occupants from hazards and prevents property owners from collecting rent on substandard properties. Officials must take into account the availability of affordable housing in the jurisdiction in ordering properties vacated.
- Place properties with numerous, repeated, or long-standing violations in receivership** In situations where a rental property has multiple, repeated, or long-standing violations, and the property owner consistently fails to comply with hazard reduction orders, agencies need authority to seek a court-appointed independent receiver for the property. The court can authorize the receiver to obtain needed financing, collect and expend rental income to correct lead hazards, and control the property long enough to assure that remediation is complete. By making it easy to turn at-risk, deteriorating property over to receivers, jurisdictions can accelerate repairs, avoid abandonment, and maintain affordable rental housing.

## **WORK PRACTICE STANDARDS**

*Traditional paint repair practices can create serious lead dust hazards. It is critical that painting, remodeling, repair, and maintenance work be done in a safe manner to avoid creating additional hazards.*

- ❑ **Require lead-safe work practices (LSWP)** Lead-safe work practices (LSWP) are a collection of best practices that minimize the amount of dust and debris created during remodeling, renovation, rehabilitation, or repair of pre-1978 housing. LSWP include appropriate worksite preparation and containment, occupant protection, safe paint removal methods, and specialized cleaning to control, contain, and clean up lead-contaminated dust.
- ❑ **Ban unsafe paint removal methods during painting, remodeling, and maintenance activities** Research makes clear that traditional paint repair and removal practices can generate significant lead dust hazards. Unless testing proves that painted surfaces are lead-free, unsafe work practices should not be used during repainting, renovation, and remodeling work in pre-1978 housing. Unsafe methods of paint removal include open flame burning, machine sanding without a HEPA attachment, operating a heat gun above 1100°F, extensive dry scraping or sanding, and stripping in poorly ventilated areas using volatile substances.
- ❑ **Require property owners, maintenance supervisors, painting/remodeling contractors, and city contractors to complete basic training in lead-safe work practices before disturbing or repairing paint in older properties** One way to help ensure adoption of LSWP is to require contractors to attend a one-day basic training course, such as the HUD/EPA LSWP training. These courses cover the dangers posed by unsafe work practices and reinforce the need to control, contain, and clean up lead dust.

## **ADMINISTRATIVE MECHANISMS TO SUPPORT ENFORCEMENT**

*To increase compliance with the law, state and local jurisdictions can implement various administrative means to support enforcement.*

- ❑ **Require a renewable rental permit or certificate of occupancy for all rental properties** Prohibiting owners from renting dwellings that have been cited for lead hazards provides a strong incentive for owners to take corrective action. To ensure that hazardous units are not rented, rental licenses can be revoked and public notices about property conditions can be posted on cited buildings. Similarly, requiring certificates of occupancy for property owners to enter new lease agreements can prompt inspections of vacant units, motivating owners to keep properties in good condition. Such approaches should be coupled with measures to protect tenants from eviction and preserve affordable housing from gentrification.
- ❑ **Register the identity of the rental property owner and/or agent for delivery of legal notices** Requiring owners to register their properties with a state or local agency will assure that the identity of rental property owners can be determined. As part of the registration/licensing obligation, jurisdictions can require owners to provide contact information for themselves and any agents managing the property, and to designate an agent in the property's locality to receive official

notification from public agencies. To be effective, this strategy must be accompanied by meaningful enforcement and penalties. Property owners who do not comply should be subject to fines and precluded from evicting tenants for any reason, including nonpayment of rent.

- ❑ **Attach outstanding lead hazard control orders to the property deed** To protect unsuspecting buyers, jurisdictions can attach copies of lead hazard violation citations and/or repair orders to the property deed, so that a title search or other public records search will reveal untreated hazards or code violations.
- ❑ **Publish information on properties with outstanding code violations and recalcitrant owners** Drawing attention to repeat violators through newspaper and television coverage may help pressure recalcitrant landlords to take corrective action. Such publicity holds property owners accountable, can help build political will for code enforcement, and may deter similar violations by other owners.
- ❑ **Create a special court to accelerate successful case closure** In some jurisdictions, effective code enforcement is hampered by backlogs in the courts. Establishing a special lead or code enforcement court can reduce or eliminate the backlog, build subject matter expertise among prosecutors and judges, and expedite compliance.
- ❑ **Create a special Treasury fund to finance programmatic/enforcement/abatement activities** A special fund in the Treasury can earmark penalties, fines, rental registration fees, and inspection fees to support the code enforcement program, local lead hazard control programs, and childhood lead poisoning prevention programs. Absent such a dedicated fund, these monies typically revert to the general fund.



## **PART III**

# **Programmatic Opportunities**



## PROGRAMMATIC OPPORTUNITIES

Having clear lead-safety standards for rental properties and legal authority to enforce compliance is necessary but not sufficient to protect children from poisoning. Agencies need to use their legal authorities to actually achieve compliance. This requires effective programs and strategies by health departments, code enforcement, and other agencies, and the political will to enforce codes and provide needed resources.

Part III of *Lead-Safe Housing Guidance* compiles a variety of programmatic and enforcement policies and procedures state and local agencies can institute to strengthen primary prevention activities. It should be noted that no single jurisdiction employs all these approaches. Agencies should consider which of these strategies offer the best opportunities to advance primary prevention and pursue those judged most promising.

Promising strategies fall into two broad categories: strengthening code enforcement and building technical capacity to expand the supply of lead safe housing.

This part's first component, *Fortify Code Enforcement*, contains policies and procedures agencies can use to make code enforcement more effective. There are many opportunities to strengthen code enforcement to ensure compliance with property maintenance requirements. In addition, there are multiple opportunities for code enforcement to contribute much more meaningfully to preventing and controlling lead hazards in housing. In some cases, modest investments of time and resources can pay high dividends for lead-safe housing.

This section's second component, *Build Technical Capacity*, offers ways agencies can incorporate lead safety tools and training into program activities to maximize effectiveness and outreach. Making housing lead-safe depends on expanding the technical capacity of contractors and trades to safely repair deteriorated paint and guard against the creation of lead dust hazards. In addition to certified lead abatement contractors, many other tradespeople need to understand and follow basic safeguards to control, contain, and clean up lead dust, including painters, remodeling contractors, maintenance staff, and do-it-yourselfers.

We hope that health and housing agency staff, as well as policy makers and advocates for children's health, will consider these strategies to help identify the opportunities to advance primary prevention in their jurisdiction.

A one-page summary of *Programmatic Opportunities* is provided on the next page, followed by detailed descriptions of these strategies.

## **SUMMARY**

### **Programmatic Opportunities**

#### **Fortify Code Enforcement**

- Provide a central telephone number to make it easier for tenants to report peeling paint
- Consolidate childhood lead poisoning prevention and code enforcement programs
- Impose fees for code enforcement and dedicate them to support code enforcement and lead hazard control activities
- Develop an early warning system to identify deteriorating properties (e.g., using tax delinquencies and other data as indicators)
- Analyze blood lead and other risk data to identify lead poisoning “hot spots” and proactively screen properties in those areas for lead hazards
- Target enforcement to high-risk properties and/or problem landlords
- Train code inspectors in lead-safe work practices and as lead sampling technicians, risk assessors, and lead inspectors
- Train code inspectors to conduct a visual survey for deteriorated paint and water damage whenever they inspect a pre-1978 property
- Train code inspectors to take dust samples when peeling paint is cited in pre-1960 units
- Refer owners of properties with lead hazards to lead hazard control grant programs
- Report violations of the federal lead hazard disclosure law to HUD and EPA
- Work with HUD and EPA to create effective local CHIP and SEP projects through enforcement of the federal disclosure law
- Send landlords notice of previously identified lead hazards and remind them of their duty to disclose
- Ensure property owners’ full compliance with federal requirements for lead-safety in federally assisted housing
- Educate judges and other court personnel about lead safety
- Influence priorities for CDBG and HOME funds through the Consolidated Plan process

#### **Build Technical Capacity**

- Offer low- or no-cost LSWP training to painters, remodelers, building maintenance staff, rental property owners, do-it-yourselfers, and day laborers
- Market LSWP trainings being offered by others in order to reach priority audiences
- Train staff and volunteers of community-based organizations as Lead Sampling Technicians
- Train other service providers to perform visual surveys and collect dust samples during home visits
- Offer free lead dust sampling kits and home hazard assessments upon request
- Inform property owners and contractors who apply for building permits about lead safety
- Establish a free lending “library” for lead-safety equipment, such as HEPA vacuums

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## PROGRAMMATIC OPPORTUNITIES

*State and local agencies can institute a variety of programmatic and enforcement policies and procedures to strengthen primary prevention. The following lists highlight ways that agencies can help prevent and control lead hazards.*

### **FORTIFY CODE ENFORCEMENT**

*In addition to authorizing code inspections and incorporating lead hazards in the code, state and local governments can provide other support to ensure effective code enforcement.*

- Provide a central telephone number to make it easier for tenants to report peeling paint**  
Tenants are more likely to report peeling paint problems if there is a simple and convenient way to do so. Local agencies can staff a centralized hotline, such as a “311” number, to accept reports and offer automated menu options for non-business hours that include languages appropriate to the population.
- Consolidate childhood lead poisoning prevention and code enforcement programs**  
Co-locating the CLPPP and the agency responsible for housing and code enforcement and cross-checking for EBL and code violation data can facilitate collaboration between the traditionally separate activities.
- Impose fees for code enforcement and dedicate them to support code enforcement and lead hazard control activities**  
In many cases, lack of sufficient funding lies at the heart of ineffective code enforcement programs. Typically, fines and penalties that government agencies collect revert to the treasury’s general fund. Code enforcement activities that generate revenues sufficient to cover their costs provide a stable, independent source of funding.
- Develop an early warning system to identify deteriorating properties**  
Jurisdictions can organize and disseminate readily available information in order to identify at-risk properties. Existing information available for early warning tracking includes: code complaints, tax delinquencies, utility liens, emergency repairs performed by the jurisdiction to address public safety hazards, and property ownership records. The information can be used to monitor whether property owners are complying with obligations and identify early signs of deterioration. A web-based system allows residents, housing consumers, and community groups to access this information.
- Analyze blood lead and other risk data to identify lead poisoning “hot spots” and proactively screen properties in those areas for lead hazards**  
State and local agencies should examine multiple lead risk factors geographically. Geographic Information Systems (GIS) software permits powerful consolidation and analysis of multiple risk factors from various data sources, including U.S. Census data, local tax assessor and other housing data, local data on blood lead elevations, and other relevant local factors. Agencies can use analysis of combined housing and health data to identify high-risk neighborhoods in order to direct prevention resources strategically.

- ❑ **Target enforcement to high-risk properties and/or problem landlords** Jurisdictions that implement proactive inspection and enforcement should give first priority to higher-risk neighborhoods and properties meeting known risk criteria and/or landlords with a history of serious code violations.
- ❑ **Train code inspectors in lead-safe work practices and as lead sampling technicians, risk assessors, and lead inspectors** Housing code enforcement officials are in an ideal position to prevent children from becoming poisoned, because their job is to ensure housing meets minimum standards. Jurisdictions can train code inspectors so they fully appreciate the dangers of peeling paint and lead dust and watch out for these hazards. One-day training courses are available from HUD and EPA in lead-safe work practices and lead dust sampling. Alternatively, code inspectors can be trained and certified as lead inspectors or risk assessors.
- ❑ **Train code inspectors to conduct a visual survey for deteriorated paint and water damage whenever they inspect a pre-1978 property** The strong links between water leaks, paint failure, and risk of lead exposure make a visual inspection for deteriorated paint and water damage a valuable tool.
- ❑ **Train code inspectors to take dust samples when peeling paint is cited in pre-1960 units** Dust sampling is a valuable complement to visual inspections and the only way to confirm that lead dust hazards are not present.
- ❑ **Refer owners of properties with lead hazards to lead hazard control grant programs** Although code enforcement and lead hazard control grant programs usually operate independently, their coordinated use can yield effective and profound results, particularly in working with owners of multiple properties. For example, when code enforcement cites a property for violations and orders lead hazard control, the lead hazard control grantee could offer the owner grant assistance to cover a portion of the cost of hazard control repairs in other units.
- ❑ **Report violations of the federal lead hazard disclosure law to HUD and EPA** Federal law requires owners of most pre-1978 properties to disclose information about lead hazards. This law provides significant penalties for violations and authorizes enforcement by HUD, EPA, and DOJ. Health departments and community-based organizations can facilitate enforcement locally by identifying and reporting to EPA and HUD owners of poorly maintained buildings who fail to comply with disclosure requirements.
- ❑ **Work with HUD and EPA to create effective local CHIP and SEP projects through enforcement of the federal disclosure law** Local agencies can work with the federal agencies to develop Children's Health Improvement Projects (CHIPs) or Supplemental Environmental Projects (SEPs) that maximize the contribution of disclosure enforcement settlements to protect children in high-risk communities.
- ❑ **Send owners notice of previously identified lead hazards and remind them of their duty to disclose** Compliance with disclosure requirements can prompt owners to initiate repairs and cause occupants to complain or move if repairs are not made.

- ❑ **Ensure property owners' full compliance with federal requirements for lead-safety in federally assisted housing** HUD's lead-safe housing rule (24 CFR Part 35) establishes detailed requirements to ensure that all pre-1978 properties receiving federal assistance are lead-safe. These requirements apply independently of state and local laws. State and local agencies should report violations in federally assisted housing, including public housing and Section 8 (both vouchers and project-based units) to HUD for federal enforcement.
  
- ❑ **Educate judges and other court personnel about lead safety** Judges and court personnel who understand the dangers of peeling paint, the nature of lead dust hazards, and the importance of lead-safe work practices will be more vigilant and effective in requiring landlords to promptly and safely correct hazards.
  
- ❑ **Influence priorities for CDBG and HOME funds through the Consolidated Plan process** Jurisdictions that receive a formula allocation of Community Development Block Grant (CDBG) and HOME Investment Partnership funds have broad discretion in using these block grants. The funds can be used for a wide range of purposes, including housing rehab and lead hazard control, according to priorities set through a participatory planning process that is guided by a Consolidated Plan, which is updated every three to five years. State and local health agencies should ensure that available data on lead poisoning is taken into account in the Consolidated Plan and priority setting process.

## **BUILD TECHNICAL CAPACITY**

*Opportunities abound to integrate lead safety tools, safeguards, and principles into other delivery systems and building trades to increase their effectiveness and reach.*

- ❑ **Offer low- or no-cost LSWP trainings to painters, remodelers, building maintenance staff, rental property owners, do-it-yourselfers, and day laborers** Health departments, code enforcement agencies, and building departments that sponsor regularly scheduled, low- or no-cost LSWP trainings can help reduce the inadvertent creation of lead dust hazards in the course of routine repair, repainting, and remodeling projects and help make LSWP the prevailing norm. Those who rehabilitate older housing especially need to know how to safely and effectively repair lead-based paint hazards. Another priority audience is day laborers, who often are hired for a low hourly rate and assigned potentially hazardous tasks, such as demolishing and removing dilapidated building components. LSWP can prevent them from creating lead hazards in houses where they work and from tracking lead dust home at the end of the day.
  
- ❑ **Market LSWP trainings being offered by others in order to reach priority audiences** Pursuant to the agreement with the Attorneys General, the National Paint and Coatings Association is required to deliver 600 free training in lead-safe work practices by 2007, based on the one-day HUD/EPA training course. Local agencies can help organize and promote trainings in their area to ensure that this free resource reaches those who need it most.

## Programmatic Opportunities

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- ❑ **Train staff and volunteers of community-based organizations as Lead Sampling Technicians (LSTs)** Environmental health services can be provided to communities through programs that train and employ low-income community residents, including parents of lead-poisoned children and children at high risk. The six-hour LST course teaches how to collect lead dust samples, which can be used for screening high-risk properties for hazards, as well as clearance testing.
- ❑ **Train other service providers to perform visual surveys and collect dust samples during home visits** Agency staff who perform in-home services, such as visiting nurses, provide a unique opportunity to efficiently reach pregnant women and new mothers in high-risk communities. Traditional home nursing visits can be enhanced to perform a visual survey for paint deterioration hazards, collect dust samples, demonstrate lead dust reduction measures, discuss lead poisoning risks, and provide referrals to available lead hazard control resources.
- ❑ **Offer free lead dust sampling kits and home hazard assessments upon request** These services can increase the number of properties screened for lead hazards as well as alert residents to dangers.
- ❑ **Inform property owners and contractors who apply for building permits about lead safety** To reach people before they disturb paint, agencies that issue building permits can provide information on lead hazards, lead-safe work practices, the availability of training, and disclosure requirements to applicants for remodeling or renovation permits.
- ❑ **Establish free lending “library” for lead-safety equipment** Local health departments can support lead-safe work practices by establishing a program to loan lead-safety equipment to help property owners minimize lead dust generation during remodeling and repair projects. Equipment may include HEPA vacuums and shrouded planers, scrapers, and sanders.

## **PART IV**

# **Reference Materials**



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## APPENDIX A

### Federal Law

*Lead-Safe Housing Policy Guidance* is intended to help jurisdictions build on the foundation of existing federal, state, and local requirements. Federal requirements of particular importance include:

- ❑ **The Fair Housing Act of 1968** (42 U.S.C. § 3601 et. seq.) The Fair Housing Act prohibits discrimination in housing because of (among other things) familial status, which includes families with children under the age of 18, pregnant women, and people securing custody of children under 18. The Act covers most housing. In some circumstances, the Act exempts owner-occupied buildings with no more than four units, single-family housing sold or rented without the use of a broker, and housing operated by organizations and private clubs that limit occupancy to members. Discriminatory actions include taking the following actions based on an individual's familial status: refusing to rent or negotiate for housing; or setting different terms, conditions or privileges for the rental of a dwelling. It is also illegal for anyone to advertise or make any statement that indicates a limitation or preference based on familial status. This prohibition against discriminatory advertising applies to single-family and owner-occupied housing that is otherwise exempt from the Fair Housing Act.
- ❑ **Requirements for Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards in Housing** (24 C.F.R. Part 35, Subpart H and 40 C.F.R. Part 745, Subpart F) These joint HUD and EPA regulations require lessors of virtually all pre-1978 dwellings to disclose known information about lead hazards and provide an approved educational pamphlet to prospective tenants.
- ❑ **Residential Property Renovation** (40 C.F.R. Part 745, Subpart E) These EPA regulations require landlords (who make repairs themselves) and contractors to distribute an educational pamphlet to owners and occupants before beginning renovation work in most pre-1978 housing.
- ❑ **Requirements for Notification, Evaluation, Reduction of Lead-Based Paint Hazards in Federally Owned Residential Property and Housing Receiving Federal Assistance** (24 C.F.R. Part 35) The "Lead Safe Housing Rule" was designed to protect children from lead-based paint hazards in housing that is either receiving assistance from the federal government or is being sold by the government. The regulation establishes procedures for evaluating whether a hazard may be present, controlling or eliminating the hazard, and notifying occupants of what was found and what was done in such housing.
- ❑ **Lead-Based Paint Poisoning Prevention in Certain Residential Structures** (40 C.F.R. Part 745) These EPA regulations identify lead-based paint hazards, standards for lead-based paint hazards in target housing and child-occupied facilities, procedures and requirements for the accreditation of lead-based paint activities training programs, procedures and requirements for the certification of individuals and firms engaged in lead-based paint activities, and work practice standards for performing such activities.

## APPENDIX B

### Federal Standards for Hazardous Lead Dust

EPA's national standards establishing dangerous levels of lead in dust, paint, and soil took effect in March 2001. This EPA rulemaking filled a gaping void by establishing the first national standards for lead in the residential environment, specifically lead hazards in deteriorated paint, settled dust on floors and window sills, and soil. These standards govern all properties receiving federal assistance as well as activities by certified lead services providers. While these EPA standards do not mandate action to either identify or control lead hazards in private housing, they provide a clear yardstick to guide responsible action by state and local health departments, property owners, remodeling and painting contractors, lenders, insurers, and others.

The final national standards reflect the results of research and real-world experience over recent years and promise to prove both workable and protective. Among other things, the standards set the stage for expanded environmental sampling of hazardous properties in distressed communities to target attention and resources to protecting children at highest risk. State and local jurisdictions can incorporate by reference these standards to enable automatic updates based on research that prompts changes in federal standards.

Key elements of these standards are highlighted below:

- ❑ **Dust-lead hazard** – 40 µg/square foot on floors and 250 µg/square foot on window sills. The floor standard applies to carpeted surfaces as well as bare floors. After work has been performed on windows, a window trough clearance standard of 400 µg/square foot applies. While some scientists strongly believe that a lower floor dust standard is needed, the floor dust-lead hazard standard established is substantially more protective than EPA's previous guideline (100 µg/square foot). 40 C.F.R. § 745.65(b).
- ❑ **Soil-lead hazard** – 400 parts per million (ppm) for bare soil in play areas and 1,200 ppm average in the rest of the yard. 40 C.F.R. § 745.65(c).
- ❑ **Paint-lead hazard** – Any of the following conditions constitutes a paint lead hazard: 1) lead-based paint on friction surfaces that are subject to abrasion where dust lead hazards are present; 2) lead-based paint on impact surfaces that are damaged or deteriorated; 3) any chewable lead-based painted surface on which there is evidence of teeth marks; and 4) any other deteriorated lead-based paint. Work practice standards do not apply when treating lead paint hazards that are less than two square feet per room, 20 square feet on the exterior building, and 10 percent of a component's total surface area. 40 C.F.R. § 745.65(a).
- ❑ **Work practice standards** – This EPA rulemaking also made a number of conforming changes in work practice standards for conducting lead-based paint activities in target housing. 40 C.F.R. § 745.227.

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## APPENDIX C

### Fundamental Tenant Safeguards

Tenants who have limited housing choices may be reluctant to report poor property conditions for fear of eviction or other landlord retaliation. State and local governments can help lessen these fears by enacting appropriate legislation, offering temporary housing, and providing additional resources for tenants.

- ❑ **Prohibit landlords from retaliating against tenants who report code violations** State and local governments should specifically prohibit property retaliation against tenants who report code violations. Alternately, enacting a “just cause” eviction law can accomplish this same goal.
- ❑ **Allow tenants to escrow rent when their landlord has outstanding code violations** Property owners should not be allowed to generate income from substandard properties. To establish a strong incentive for property owners to correct code violations, state and local governments can allow tenants to escrow rent payments until the property is in compliance. Courts can determine how much of the escrowed payments is due to the landlord when the repairs are completed.
- ❑ **Enact a state or local lead hazard disclosure law to bolster federal requirements and local enforcement authority** Although the federal lead hazard disclosure law requires disclosure of known lead hazards prior to the sale or lease of pre-1978 properties, state and local governments have no enforcement authority. Jurisdictions can adopt state or local disclosure laws to complement federal law, and provide supplemental funding for state and local programs through penalties. State or local disclosure laws also can expand the protection afforded by the federal law.
- ❑ **Enable tenants to bring enforcement actions for retaliation and provide for recovery of damages and attorney fees** In many cases, local agencies lack adequate resources for enforcement of code violations. To ensure that egregious violators are held accountable, jurisdictions can give tenants or non-profit advocacy groups the power to pursue enforcement in court themselves.
- ❑ **Maintain and publicize registry of properties with lead hazards (or lead-free/lead-safe units)** Housing registries can contain information on properties with outstanding code violations, including lead hazards. Others can list properties deemed “lead-safe” based upon existing standards, including those that comply with federal and state lead laws and regulations.

## **APPENDIX D**

### **Acronym Index**

**CBO**—Community-based organization

**CDBG**—Community Development Block Grant program

**CDC**—U.S. Centers for Disease Control and Prevention

**CEHRC**—Community Environmental Health Resource Center

**CLPPP**—Childhood Lead Poisoning Prevention Program

**EBL**—Elevated blood lead level

**EPA**—U.S. Environmental Protection Agency

**GIS**—Geographic Information Systems

**HIPAA**—Health Insurance Portability and Accountability Act of 1996

**HOME**—Home Investment Partnership Grant program

**HUD**—U.S. Department of Housing and Urban Development

**LST**—Lead sampling technician

**LSWP**—Lead-safe work practices

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## APPENDIX E

### Glossary Of Terms

**Abatement**—Any set of measures designed to permanently eliminate lead-based paint or lead-based paint hazards. Abatement includes: (1) The removal of lead-based paint and dust-lead hazards, the permanent enclosure or encapsulation of lead-based paint, the replacement of components or fixtures painted with lead-based paint, and the removal or permanent covering of soil-lead hazards; and (2) All preparation, cleanup, disposal, and post-abatement clearance testing activities associated with such measures.

**Clearance examination**—An activity conducted following lead-based paint hazard reduction activities to determine that the hazard reduction activities are complete and that no soil-lead hazards or settled dust-lead hazards exist in the dwelling unit or worksite. The clearance process includes a visual assessment and collection and analysis of environmental samples.

**Containment**—The physical measures taken to ensure that dust and debris created or released during lead-based paint hazard reduction are not spread, blown, or tracked from inside to outside of the worksite.

**Deteriorated paint**—Any interior or exterior paint or other coating that is peeling, chipping, chalking or cracking, or any paint or coating located on an interior or exterior surface or fixture that is otherwise damaged or separated from the surface to which it was applied.

**Dry sanding**—Sanding without moisture; includes both hand and machine sanding.

**Elevated blood lead level**—The level at which the CDC considers a child to be lead poisoned. Currently, this threshold is set at 10 micrograms/deciliter.

**Encapsulation**—The application of a covering or coating that acts as a barrier between lead-based paint and the environment and that relies for its durability on adhesion between the encapsulant and the painted surface, and on the integrity of the existing bonds between paint layers and between the paint and the surface to which it was applied.

**Federal Lead Hazard Disclosure law**—A federal statute, administered by HUD and EPA, that requires owners of pre-1978 housing to disclose lead hazards to prospective tenants or buyers.

**Friction surface**—An interior or exterior surface that is subject to abrasion or friction, including, but not limited to, certain window, floor, and stair surfaces.

**Hazard reduction**—Measures designed to reduce or eliminate human exposure to lead-based paint hazards through methods including interim controls, abatement, or a combination of the two.

**HEPA vacuum**—A vacuum cleaner with an included high efficiency particulate air (HEPA) filter through which contaminated air flows. A HEPA filter is one that captures at least 99.97 percent of airborne particles of at least 0.3 micrometers in diameter.

**Impact surface**—An interior or exterior surface that is subject to damage by repeated sudden force, such as certain parts of doorframes.

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**Interim controls**—A set of measures designed to temporarily reduce human exposure or likely exposure to lead-based paint hazards. Interim controls include, but are not limited to, repairs, painting, temporary containment, specialized cleaning, clearance, ongoing lead-based paint maintenance activities, and the establishment and operation of management and resident education programs.

**Lead-based paint**—Paint or other surface coatings that contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight.

**Lead-based paint hazard**—Any condition that causes exposure to lead from lead-contaminated dust, lead-contaminated soil, or lead-contaminated paint that is deteriorated or present in accessible surfaces, friction surfaces, or impact surfaces that would result in adverse human health effects as established by the CDC or another appropriate federal agency.

**Lead-based paint inspection**—A surface-by-surface investigation to determine the presence of lead-based paint and the provision of a report explaining the results of the investigation.

**Lead-free housing**—Target housing that has been found to be free of paint or other surface coatings that contain lead-based paint.

**Lead-safe work practices (LSWP)**—Lead safe work practices (LSWP) are a collection of “best practices” techniques, methods, and processes that minimize the amount of dust and debris created during remodeling, renovation, rehabilitations, or repair of pre-1978 housing. LSWP include appropriate worksite preparation and containment, occupant protection, safe paint removal methods, and specialized cleaning. Worksite preparation and containment means setting up the area where work that could disturb lead-based paint is to be performed, so that all debris from the work is contained within the worksite. Occupant protection means taking appropriate precautions to protect occupants and their belongings during ongoing work that may disturb lead-based paint. Specialized cleaning means cleaning the worksite carefully, using techniques that are effective in removing lead-contaminated dust. Cleanup activities should be ongoing during the workday, in addition to a final cleanup at the end of the job.

**Lead Hazard Control Grant program**—A HUD-administered program that awards grants to cities and states to facilitate the control of lead hazards, mainly in targeted low-income housing.

**Lead hazard evaluation**—A risk assessment, a lead hazard screen, a lead-based paint inspection, paint testing, or a combination of these to determine the presence of lead-based paint hazards or lead-based paint in a residential building.

**Lead inspector**—An individual trained under a state- or EPA-approved course to conduct official lead inspections. A lead inspector can also conduct clearance tests after abatement and non-abatement work as well as other lead sampling, but a lead inspector *cannot* perform a risk assessment. A lead inspector must attend three days of training to be certified.

**Lead sampling technician**—An individual trained under an EPA-approved course to conduct clearance testing after non-abatement work and to conduct other dust wipe sampling. A lead sampling technician *cannot* conduct a lead inspection or a risk assessment. A lead sampling technician must attend five hours of training to be certified.

**Paint removal**—A method of abatement that permanently eliminates lead-based paint from surfaces.

**Paint stabilization**—Repairing any physical defect in the substrate of a painted surface that is causing paint deterioration, removing loose paint and other material from the surface to be treated, and applying a new protective coating or paint.

**Paint testing**—The process of determining, by a certified lead inspector or risk assessor, the presence or the absence of lead-based paint on deteriorated paint surfaces or painted surfaces to be disturbed or replaced.

**Painted surface to be disturbed**—A paint surface that is to be scraped, sanded, cut, penetrated, or otherwise affected by rehabilitation work in a manner that could potentially create a lead-based paint hazard by generating dust, fumes, or paint chips.

**Public health department**—A state, tribal, county or municipal public health department, or the Indian Health Service.

**Rehabilitation**—The improvement of an existing structure through alterations, incidental additions, or enhancements. Rehabilitation includes repairs necessary to correct the results of deferred maintenance, the replacement of principal fixtures and components, improvements to increase the efficient use of energy, and installation of security devices.

**Risk assessment**—An on-site investigation to determine and report the existence, nature, severity, and location of lead-based paint hazards in residential dwellings, including: (1) information-gathering regarding the age and history of the housing and occupancy by children under age 6; (2) visual inspection; (3) dust wipe sampling or other environmental sampling techniques; (4) other activity as may be appropriate; and (5) provision of a report explaining the results of the investigation.

**Risk assessor**—An individual trained under a state- or EPA-approved course to conduct risk assessments. A risk assessor may also conduct paint inspections, clearance testing after abatement and non-abatement work, and other lead sampling. A risk assessor must attend five days of training to be certified.

**Section 8**—A HUD-administered assistance program that helps low-income families secure housing they may otherwise be unable to afford.

**Target housing**—Any housing constructed prior to 1978, except housing for the elderly or persons with disabilities (unless any child who is less than 6 years of age resides or is expected to reside in such housing), or any 0-bedroom dwelling.

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**Visual assessment**—Looking for, as applicable: (1) deteriorated paint; (2) visible surface dust, debris, and residue as part of a risk assessment or clearance examination; or (3) the completion or failure of a hazard reduction measure.

**Wet sanding or wet scraping**—A process of removing loose paint in which the painted surface to be sanded or scraped is kept wet to minimize the dispersal of paint chips and airborne dust.



**ALLIANCE FOR HEALTHY HOMES**  
*Protecting Children from Lead and Other Environmental Health Hazards*

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