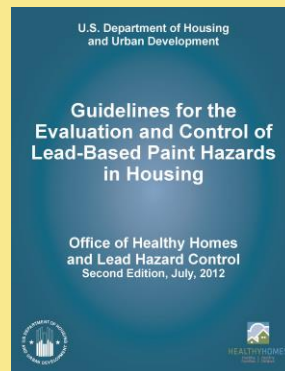


Overview of Updates in the 2012 HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing



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**HUD Office of Healthy Homes and Lead Hazard Control
September 4, 2012**



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Developmental participants

- First draft by National Center for Healthy Housing (NCHH)
- ICF International provided editorial support
- Atrium Environmental Health and Safety Services performing formatting and layout for Web posting
- HUD staff completed the revision, with greatly appreciated external and internal reviews



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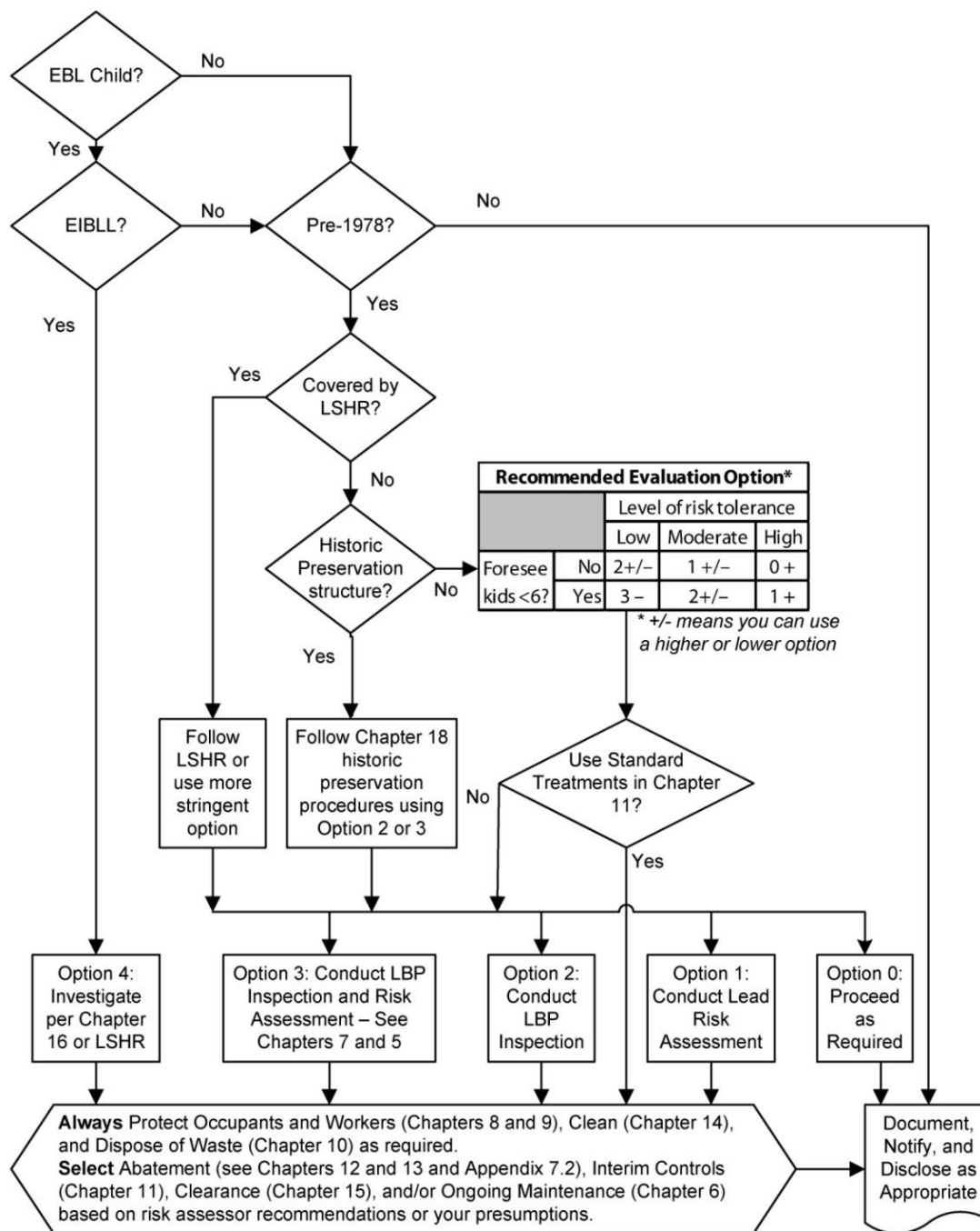
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The whole book in one figure!



NOTE: Check if Federal, state, or local laws and regulations apply. If so, follow them wherever they are more stringent. LSHR stands for Lead Safe Housing Rule (24 CFR 35 subparts B-R).



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Overview of Changes

- Regulations and policies issued and implemented by HUD, EPA, CPSC and NPS
- CDC elevated blood lead level guidance
- Knowledge gained from field and laboratory experience, and technology advances
- Advice given by HUD and others to housing owners, funders, and lead professionals



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Chap. 1: Introduction

- Updated discussion and references on: background on childhood lead poisoning, sources of lead, evolution of lead poisoning prevention
- CDC emphasis on primary prevention, and discussion of CDC response to ACCLPP report
- Qualifications for physicians administering chelation therapy



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Chap. 2: Where to Go for Help — Qualifications and Roles

- Updated organizational names, addresses, website links
- HUD/OHHLHC, and EPA, are public health agencies with respect to childhood lead poisoning
- Roles of housing owners, certified persons, certified firms, accrediting bodies
- Importance of good reports



Chap. 3: Before You Begin — Planning To Control Lead Hazards

- EPA Abatement Rule and Renovation, Repair and Painting (RRP) Rule, e.g., certified firms, certified supervisors, certified renovators
- HUD Lead Safe Housing Rule (LSHR) aspects, e.g., required evaluation and control activities for federally-owned and -assisted housing
- High-level summary of relationship between the RRP Rule and LSHR (detailed summary in regulatory Appendix 6)



Chap. 3 (cont.)

- EPA residential waste disposal:
 - Household waste policy clarification (2000)
 - Resource Conservation and Recovery Act (RCRA) rule update (2003) codified this policy
 - See chapter 10 for specifics
- Project completion: Discussion of cleaning verification and clearance



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Chap. 4: Lead-Based Paint and Housing Renovation

- Updates descriptions of OSHA, EPA and HUD rules and roles
- Notes that LBPH and LBP definitions are under collaborative review by EPA and HUD
- Invokes PRE Rule
- Updates prohibited methods under EPA rules and LSHR



Chap. 5: Risk Assessment and Reevaluation

- Invokes EPA lead training and certification (402) rule, State / Tribal certification program authorizations, and LSHR
- Distinguishes risk assessment (RA) from environmental investigation
- Discusses composite sampling, but gives pragmatic reasons for not encouraging it
- Discusses random sampling of types of common areas



Chap. 5 (cont.)

- ASTM voluntary consensus standards for dust-lead and soil-lead sampling and analysis
- Revised model questionnaires and field sampling forms
- Mobile laboratories re NLLAP in EPA and State/Tribal certification programs
- Model RA report executive summary format
- RA report example (in Appendix 8.1)



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Chap. 6: Ongoing Lead-Safe Maintenance

- Discusses relationship among ongoing maintenance, interim controls, and renovation
- Invokes PRE, RRP, LSHR
- Updated forms



Chap. 7: Lead-Based Paint Inspection

- Invokes EPA certification program, and State / Tribal certification program authorizations
- Notes that there are other analyses besides X-ray fluorescence (XRF) and the common lab methods (AAS, ICP-AES, ASV) that may be used by a laboratory with NLLAP recognition
- Emphasizes that results and LBP inspection / RA reports using an XRF without a current Performance Characteristic Sheet are invalid



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Chap. 7 (cont.)

- Invokes ASTM voluntary consensus standards for sampling and analysis
- Updates recommended report summary paragraphs on disclosing where LBP was, and was not, identified
- As noted previously, LBP definition under collaborative review by EPA and HUD



Chap. 7 (cont.)

- Recommends that owners of LBP-free leasing properties retain reports for the life of the building, to prove easily that lease transactions are exempt from the Lead Disclosure Rule
- Recommends that other owners retain the reports as well
- Discusses mobile laboratories re NLLAP in EPA and State/Tribal certification programs



Chap. 7 (cont.)

- Discusses testing of non-paint surfaces, e.g., unpainted ceramic tile and porcelain bathtubs:
 - Surfaces are not LBP, and not covered by the Lead Disclosure Rule
 - Sometimes tested before renovation if they will be broken or crushed, re worker protection and clearance issues



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Chap. 8: Resident Protection and Worksite Preparation

- Invokes PRE and RRP Rules
- Expands discussion of OSHA rules
- Step-by-step worksite preparation description
- Strongly discourages high-dust jobs



Chap. 9: Worker Protection

- Considerably shortened, since OSHA's guidance for its Lead in Construction standard has been issued (links are provided)
- Updated protective clothing and equipment (e.g., respiratory protection standard) info
- Discusses OSHA hazcom rule revision (3/26/2012) with global harmonization (e.g., revised lead warning sign and lead-contaminated clothing container label)



Chap. 10: Housing Waste

- Reflects EPA waste rules and guidance, esp.:
 - Policy clarification (2000) exempting most residential LBP waste generated by contractors as well as residents, but not concentrated lead waste (e.g., paint strippings, lead paint chips)
 - Resource Conservation and Recovery Act (RCRA) rule update (2003) codified this policy



Chap. 11: Interim Controls

- Reflects PRE, RRP and LSHR
- Provides updated step-by-step procedural guidance
- Reiterates HUD policy that,
“Clearance is highly recommended ... even when not required by regulation”
of HUD or EPA, while noting the role and benefits of those regulations



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Chap. 12: Abatement

- Reflects EPA 402 abatement rule and HUD LSHR
- Notes, re metal components, that factory applied primers in sound condition need not be abated or removed in an abatement project



Chap. 13: Encapsulation

- Notes that encapsulation:
 - with a less-than-20 yr expected life, or
 - without a 20 yr-or-longer encapsulation maintenance plan,
is RRP / interim control, not abatement
- Notes that EPA volatile organic compounds emissions rule for architectural coatings may cover encapsulation; the determination is product-, method- and site-specific



Chap. 14: Cleaning Following Hazard Controls or Other Paint-Disturbing Work

- Updated to reflect methodology research results
- Discusses types of vacuums, use of TSP
- Discusses use of on-site preliminary dust testing (e.g., XRF, ASV) before clearance exam when achieving clearance known to be difficult (e.g., high dust-lead and paint-lead levels before work, surfaces not smooth & cleanable)



Chap. 15: Clearance

- Reflects EPA lead abatement regulations and HUD LSHR
- For certified dust sampling technicians:
 - EPA RRP Rule allowing them to conduct optional clearance, and
 - HUD LSHR allowing them to conduct clearance if exam approved and report signed by certified RA or LBPI, but not to randomly select testing units / locations



Chap. 15 (cont.)

- Use of voluntary consensus standard (ASTM) methods
- Composite sampling of dust not encouraged; procedures described for it if conducted
- Discusses use of on-site dust testing (e.g., XRF, ASV) for clearance exam by NLLAP-recognized mobile laboratory



Chap. 15 (cont.)

- Table of recommended minimum number and locations of dust samples for four clearance categories (interior with containment, without containment; worksite-only; exterior work)
- Updated discussion on option to determine if specified hazard control work was done
- Discussion and checklists for clearance report preparation



Chap. 16: Investigation and Treatment of Dwellings that House Children with Elevated Blood Lead Levels

- New summary of recommendations as a function of BLL
- New list of actions NOT recommended
- New description of assessment/ remediation
- CDC response to ACCLPP report
- Pending decisions on HUD rulemaking, retains EIBLL thresholds and approach, so HUD and state/local agencies have guidance



Chap. 17: (Reserved for future use)

- The content of the first edition's chapter 17, *Routine Building Maintenance and Lead-Based Paint*, is incorporated into revised chapters: 6 (ongoing lead-safe maintenance), and 11 (interim controls)
- Chapter 17 is now reserved



Chap. 18: Lead-Based Paint and Historic Preservation

- Updated re National Parks Service guidance
- Invokes RRP, LSHR, OSHA
- Cautions on chemical stripping re glue melting
- To protect housing's historicity, recommends no:
 - Caustic strippers that can raise wood grain (unless supervised by a trained specialist)
 - Power sanding that can abrade wood surfaces
 - Hot-tank dipping that may loosen glued joints



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Glossary

- Updated with new terms
- Consistent with regulatory definitions; many are simplified to enhance field usability
- Clarified definitions where users had expressed concerns



Appendices - Overall

- Many appendices are now links to websites developed since the first edition, or to a chapter in this second edition
- References and Web links in many appendices are updated
- Appendix 6, on HUD, EPA, OSHA, CPSC and NPS lead paint regulations, reflects current regulations, guidance and training materials



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Appendices

- **Appendix 1** – Units of Measure Used in the Lead-Based Paint Field
 - Terms, definitions and conversions of various units (mass, concentrations, thresholds, etc.)
- **Appendix 2** – CDC’s Childhood Lead Poisoning Prevention Program
 - Links to CDC-assisted State and local CLPPPs



Appendices (cont.)

- **Appendix 3 – EPA Regional Offices**
 - Links to EPA Regional Offices
- **Appendix 4 – OSHA Regional Offices and State Programs**
 - Links to OSHA regional offices and a list of State OSH programs
- **Appendix 5 – EPA Training, Certification and Accreditation Programs**
 - Link to list of programs



Appendices (cont.)

- **Appendix 5.1 – Structured On-the-Job Training (OJT) vs. Unstructured OJT**
 - Discussion, with references, of SOJT
 - Jobs analyzed and broken down into component tasks; instructors given lesson plans and materials
 - Consistency and cost-effectiveness discussed
 - Discussion of criteria for completing OJT for LBP activities, e.g., in RRP Rule
 - Basis for HUD's recommendation of SOJT



Appendices (cont.)

- **Appendix 6 – HUD, EPA, OSHA, CPSC, and NPS Lead Paint Rules**
 - Overviews, and guidance materials on, these rules:
 - EPA-HUD Lead Disclosure Rule
 - HUD Lead Safe Housing Rule
 - EPA Training and Certification Rule
 - EPA Renovation, Repair and Painting Rule



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Appendices (cont.)

• Appendix 6 (cont.)

- Differences and interactions between HUD's LSHR and EPA's RRP Rule
- EPA Pre-Renovation Education rule
- OSHA Lead Regulations (general industry, and construction)
- CPSC bans of lead-containing paint, and lead in consumer products used by children
- NPS rules and guidance on protection of historic properties



Appendices (cont.)

- **Appendix 7.1** – (Reserved for future use)
 - Had been a list of elements of RFPs for risk-assessments and inspections
- **Appendix 7.2** – Types of Lead-Based Paint Enclosure Systems
 - Information that can be used for purchasing
 - Guidance on language that may be helpful in drafting specifications



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Appendices (cont.)

- **Appendix 7.3 – Generic Lead Based Paint Specifications**
 - DoD Unified Facilities Guide Specifications
 - Lead based paint hazard abatement
 - Safety and occupational health requirements
 - Removal/control and disposal of paint with lead
 - Lead in construction
 - NIBS LBP guide specs and O&M manual no longer in print, so deleted from App. 7.3



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Appendices (cont.)

- **Appendix 7.4 – Guidance on Specifications for Interim Control of Soil Lead Hazards Links**
 - Guidance on language that may be helpful in drafting specifications
 - Methods, products, materials, references



Appendices (cont.)

- **Appendix 8.1** – Example of a Pre-Rehabilitation Risk Assessment and Limited Paint Testing Report for a Single-Family Dwelling Operated By a Small-Scale Owner
 - Adapted from “Making it Work: Implementing the Lead Safe Housing Rule in CPD-funded Programs”
 - A detailed report, in order to provide sample content and styles for all of the report segments



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Appendices (cont.)

- **Appendix 8.2** – Example of a Risk Assessment Report for Large Multifamily Housing Development
 - Now a referral to Chapter 5, Section VI.E, for a recommended format for a report



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Appendices (cont.)

- **Appendix 9 – Lead-Based Paint Liability Insurance**
 - Guidance to owners on liability insurance re:
 - Professional liability coverage for LBP evaluation
 - Contractor’s pollution liability coverage for LHC
 - Relation of lead coverage to existing coverage
 - Coverages depending on who does what (owner’s employees, contractors, consultants, etc.)



Appendices (cont.)

- **Appendix 9 (cont.)**

- Claims-made and occurrence coverages
- Policy limits and aggregates
- Policy limits and deductibles
- Recommended minimum characteristics for insuring entities

- **Appendix 10 – (Reserved for future use)**

- Was Q&As on sampling LBP HW; deleted because now under EPA household HW exemption.
- Refers to Chapter 10 for guidance.



Appendices (cont.)

- **Appendix 10.1** – State and Territorial Hazardous Waste Management Agencies
 - Link to EPA list of State and territorial waste management agencies
- **Appendix 11** – One-Hour Waiting Period Rationale for Clearance Sampling
 - Points to published research cited in Chapter 15



Appendices (cont.)

- **Appendix 12** – Statistical Rationale for Sample Sizes and Percentages Used in Guidance for Inspecting in Multi-Family Housing
 - Methodology behind Table 7.3
- **Appendix 13.1** – Wipe Sampling of Settled Dust for Lead Determination
 - An alternative to the ASTM E 1728 lead dust sample collection protocol



Appendices (cont.)

- **Appendix 13.2 – Paint Chip Sampling**
 - An alternative to the ASTM E1729 paint chip sample collection protocol
- **Appendix 13.3 – Collecting Samples for Lead Contamination**
 - An alternative to the ASTM E1727 soil sample collection protocol



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Appendices (cont.)

- **Appendix 13.4** – (Reserved for future use)
 - Was a procedure for sampling airborne particulate for lead; deleted because it is outside the scope of these *Guidelines*
 - Has informational link to NIOSH Analytical Method 7082



Appendices (cont.)

- **Appendix 13.5** – EPA Information on Drinking Water
 - EPA 2-page pamphlet on lead attached
 - Link to EPA’s Ground Water and Drinking Water home page provided
- **Appendix 14.1** – EPA-Recognized Laboratories for Analysis of Lead in Paint, Dust and Soil
 - Links to NLLAP website and list of NLLAP-recognized laboratories



Appendices (cont.)

- **Appendix 14.2 – (Reserved for future use)**
 - Was a procedure for digesting wipe samples using diaper wipes; deleted, since not in use
- **Appendix 14.3 – Procedure for the Preparation of Field Spiked Wipe Samples**
 - Procedures, rationale, and sources:
 - Source of spiked wipe samples (AIHA)
 - Source of paint and dust samples (NIST), with procedures for preparing wipe samples



Appendices (cont.)

- **Appendix 15 – OSHA Lead in Construction Standard Links**
 - Links and encouragement to go to OSHA website, and to seek appropriate legal counsel, because OSHA's standards, interpretations, and enforcement policy may change over time.
- **Appendix 16 – CDC Guidelines on Lead Poisoning Prevention Links**
 - Links to CDC CLPPP, and NIOSH websites



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Contact information

- HUD Office of Healthy Homes and Lead Hazard Control
 - www.hud.gov/offices/lead
 - HUD Lead Regulations hotline:
 - Lead.Regulations@HUD.gov
 - 202-402-7698 (TTY: 800-877-8339)
 - 451 7th St. SW (8236)
Washington, DC 20410-3000
- National Lead Information Center
 - 800-424-LEAD (5323) (TTY: 800-877-8339)
 - www.epa.gov/oppt/lead/pubs/nlic.htm