



# Protecting Children Through Code Enforcement

Health Impacts of Lead

Lead Hazards and Lead Safe Renovation

Lead Regulations-State and Federal

Compliance Options

# PROTECTING CHILDREN THROUGH CODE ENFORCEMENT



**FUNDED BY A GRANT FROM THE U.S.  
ENVIRONMENTAL PROTECTION AGENCY**

*This project has been funded wholly or in part by the United States Environmental Protection Agency (EPA) under assistance agreement number 99T80701 to the Alameda County Healthy Homes Department. The contents of this document do not necessarily reflect the views and policies of the EPA, nor does the EPA endorse trade names or recommend the use of commercial products mentioned in this document.*



**LEAD HAZARD DECLARATION:** I am aware of my responsibilities to implement lead-safe work practices as required by the State of California Health and Safety Code Sections 17920.10 and 17920.11 for renovation, repair, or painting work in pre-1978 residences, childcare facilities, and schools. Any paint disturbing work will be done by or supervised by RRP certified individual(s) and follow Lead Renovation, Repair and Painting (LRP) Rule (EPA). Please visit: [www2.epa.gov/lead](http://www2.epa.gov/lead) or [www.achhd.org](http://www.achhd.org)

**Special Condition #1:**

**BAAQMD DECLARATION:** I am aware of my responsibilities to implement lead-safe work practices as required by the State of California Health and Safety Code Sections 17920.10 and 17920.11 for renovation, repair, or painting work in pre-1978 residences, childcare facilities, and schools. Any paint disturbing work will be done by or supervised by RRP certified individual(s) and follow Lead Renovation, Repair and Painting (LRP) Rule (EPA). Please visit: [www2.epa.gov/lead](http://www2.epa.gov/lead) or [www.achhd.org](http://www.achhd.org)



# CITY OF EMERYVILLE

INCORPORATED 1898

1333 PARK AVENUE  
EMERYVILLE, CALIFORNIA 94608-3517

TEL: (510) 596-4300 FAX: (510) 450-7831

The Environmental Protection Agency (EPA) Renovation, Repair and Painting Rule requires renovators, painters, and rental property owners to be EPA-Lead-Safe Certified firms with an EPA Lead-Safe Certified Renovator for most paint disturbing work at pre-1978 residential properties. **Effective May 1, 2018**, the City of Emeryville has enacted ordinance 17-004 which requires that the applicant for any renovation<sup>1</sup> work that is regulated under 40 CFR §745.82 submit a sworn statement that individuals performing the renovation are properly trained, renovators and firms performing the renovation are certified, and required work practices will be followed during the renovation. Building Permits required under CA. Building Code § 105.1 are subject to this ordinance.

- An EPA Lead-Safe Certified Renovator will be responsible for this project  
Certified Firm Name: \_\_\_\_\_ Firm Certification No.: \_\_\_\_\_
- No EPA Lead-Safe Certified Firm is required for this project because:  
\_\_\_\_\_

**Lead Hazard Warning: Lead-safe work practices are required in CA for work that disturbs paint in pre-1978 buildings. In pre-1978 homes and child-occupied facilities, the EPA requires lead-trained workers and EPA lead-certification for firms.**

**RENOVATION REPAIR AND PAINTING ACKNOWLEDGMENT**  
The Renovation, Repair and Painting (RRP) Rule requires that firms performing renovation, repair, and painting work in pre-1978 buildings, schools, and child care facilities and pre-schools built before 1978 have their firm certified by the EPA. RRP certified firms must follow lead-safe work practices. As the contractor, you must ensure that any paint disturbing work is done by or supervised by RRP certified individuals. For more information, contact the Alameda County Healthy Homes Program at (925) 231-2300 or [www.acphd.org](http://www.acphd.org).

**LEAD HAZARD DECLARATION, SMOKE DETECTORS, CARBON MONOXIDE ALARMS, ENERGY & GREEN BUILDING**  
 I am aware of my responsibilities to implement lead-safe work practices as required by the California Health and Safety Code Sections 17920.10 and 17920.11 for renovation, repair, or painting work in pre-1978 residences, childcare facilities, and schools. Any paint disturbing work will be done by or supervised by RRP certified individual(s) and follow Lead Renovation, Repair and Painting (LRP) Rule (EPA). Please visit: [www2.epa.gov/lead](http://www2.epa.gov/lead) or [www.achhd.org](http://www.achhd.org)

510-567-8280 or [www.acldppp.org](http://www.acldppp.org)

# The Link Between Housing & Health

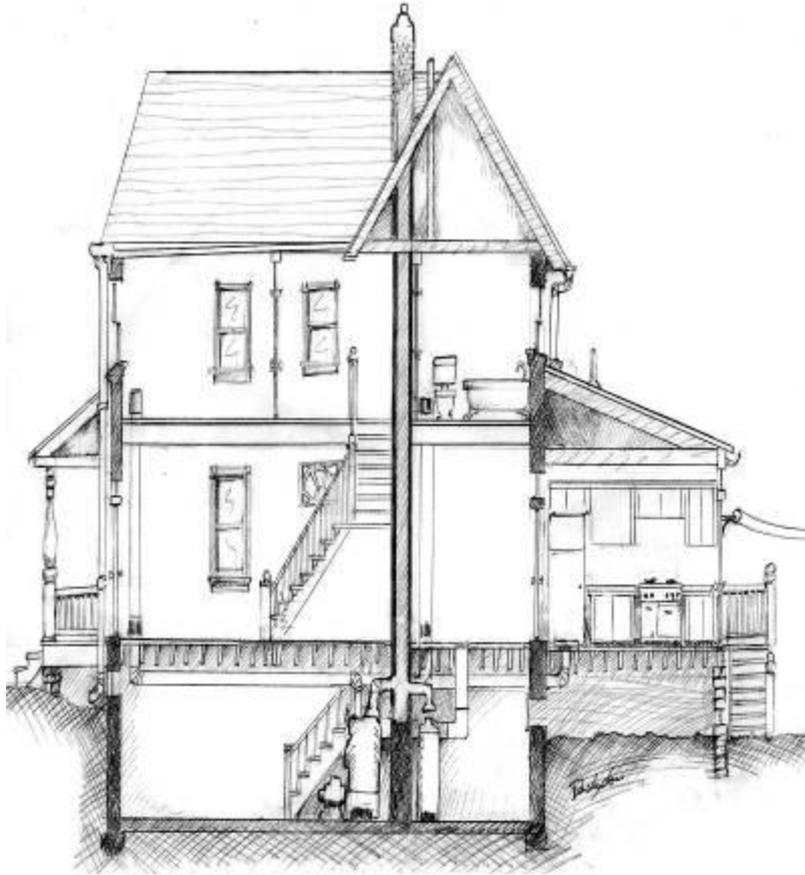


**“The connection between health and the dwelling of the population is one of the most important that exists”.**

***Florence Nightingale***

Cited in Lowry, S. *BMJ*, 1991, 303, 838-840

# 7 Healthy Homes Principles



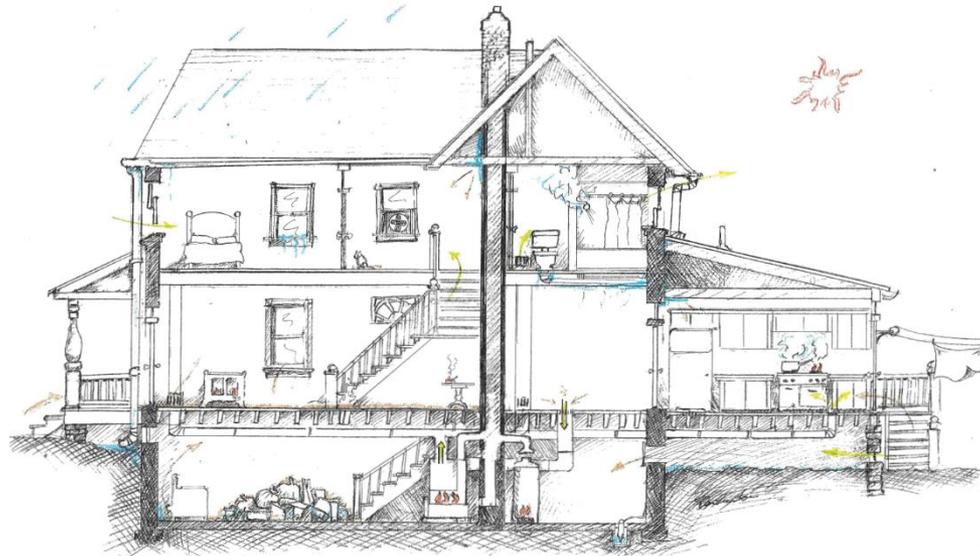
## Keep It:

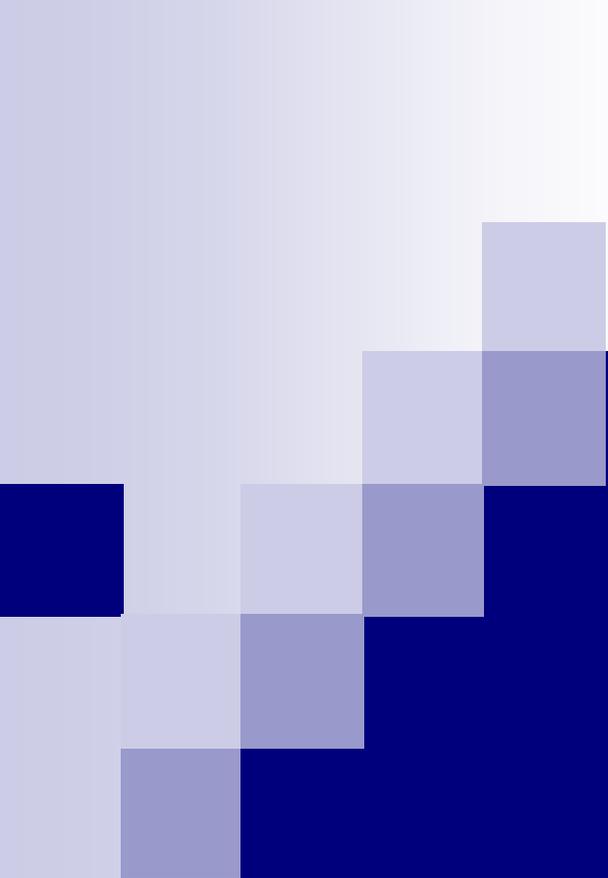
1. Dry
2. Clean
3. Ventilated
4. Pest-Free
5. Safe
6. Contaminant-Free
7. Maintained

# Essentials for Healthy Homes Practitioners



- The Health and Housing Connection
- The House as a System
- Seven Principles of Healthy Housing
- Making It Work-Putting Healthy Housing into Practice





# Lead in Children

# LEAD EXPOSURE

- Swallowing or breathing lead dust
- Small amounts can be toxic
- Often no symptoms
- 8,464 children <21 in California with BLL's of 4.5 or greater in 2015

**No known safe level of lead in the body**



# Lead's Effects on Babies and Young Children

- Can damage the brain and the nervous system
- Can cause behavior and learning problems
- Can reduce muscle and bone growth
- Can damage hearing
- Can cause death

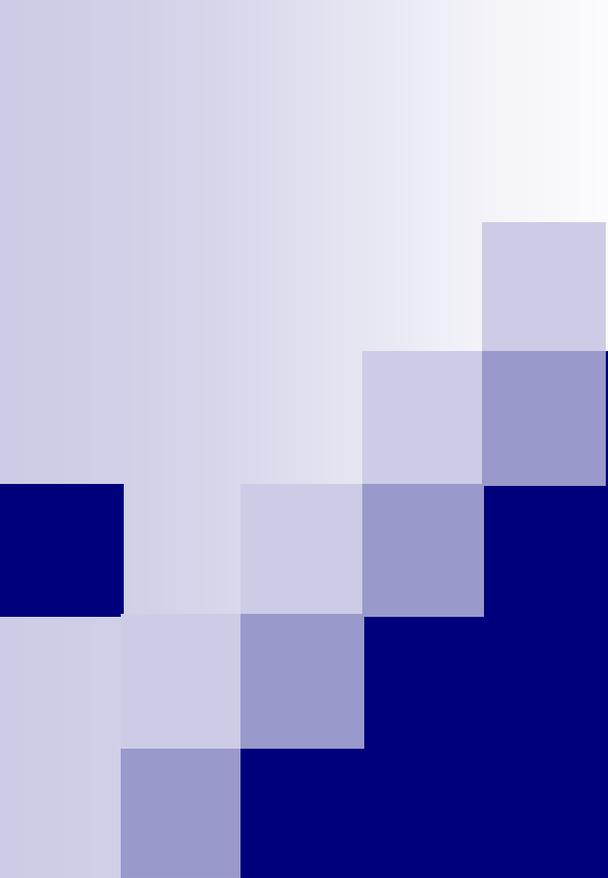


**Even children who seem healthy may have high levels of lead**

# IMPACT ON SOCIETY

- Even small amounts of lead in the blood can reduce math, reading, reasoning, and short-term memory abilities.
- An estimated 20-30% of urban special ed. students suffer from lead poisoning.
- A lead poisoned child is:
  - Six times more likely to suffer from a reading disability
  - Seven times more likely to drop out of high school





# Lead Hazards in Housing

- Existing Hazards/Unsafe Conditions
- Created Hazards/Unsafe Renovation



# Lead-Based Paint and Lead Hazards

## ■ Age of Housing

- Use of lead in paint reduced in the 1950's
- Lead-based paint banned in 1978

## ■ Condition of Housing

- Deteriorated lead-based paint is a hazard
- Bare contaminated soil is a hazard
- Lead dust

## ■ Renovation

- Disturbs lead-based paint

# Lead in U.S. Housing

Age of Housing	% w/Lead-Based Paint	% w/Lead Hazards
Pre-1940	87%	68%
1940-1959	69%	43%
1960-1978	24%	8%

# Deteriorated Paint

## ■ Paint or Coating that is:

- Peeling
- Chipping
- Cracking
- Damaged or separated from the substrate

# Identifying Lead Hazards

## ■ Presume

- Chemical Test Kits can't be used in California to say it is not lead-based paint

## ■ Test

- Paint Chips
- XRF
- Dust
- Soil





19 2:08 PM

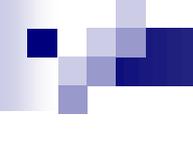




9 16 '9

Nail holes and hairline cracks are not considered deteriorated paint





# Problem: Renovation

## Wisconsin Childhood Blood Lead Survey (EPA)

Children living in homes renovated in the last year were 30% more likely to be lead-poisoned than children where no renovation took place.

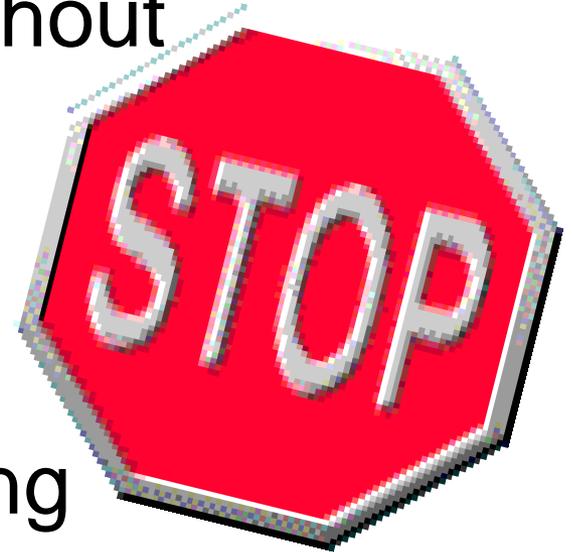
# Contractor Qualifications

*“Perhaps most alarming, in a recent Angie’s List investigation involving nearly 200 contractors across the country, more than a third gave dangerous advice about working in pre-1978 houses, even when specifically asked about lead.” Angie’s List electronic magazine, October 2007*



# WHAT NOT TO DO WHEN THERE IS LEAD-BASED PAINT

- Demolition/Paint Scraping without Containment
- Extensive dry sanding
- Uncontrolled power sanding
- Uncontained Pressure washing
- Open flame burning





**NOT THIS**

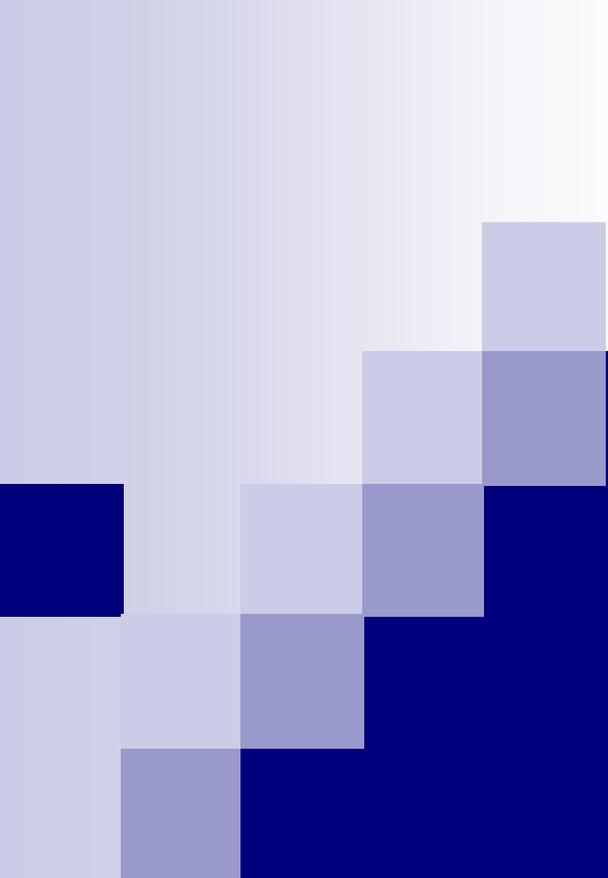


A photograph of a worker on a ladder sanding the exterior of a curved wooden house. The worker is wearing a green long-sleeved shirt and light-colored pants. A red arrow points from the worker's sanding tool to a plume of dust rising from the roofline. The house has grey shingles on the lower level and yellow wood siding on the upper level. A ladder is leaning against the house. The background shows tall green trees under a clear blue sky.

DRY SANDING PLUME

# VIDEO: Lead's Revenge





# Lead Regulations



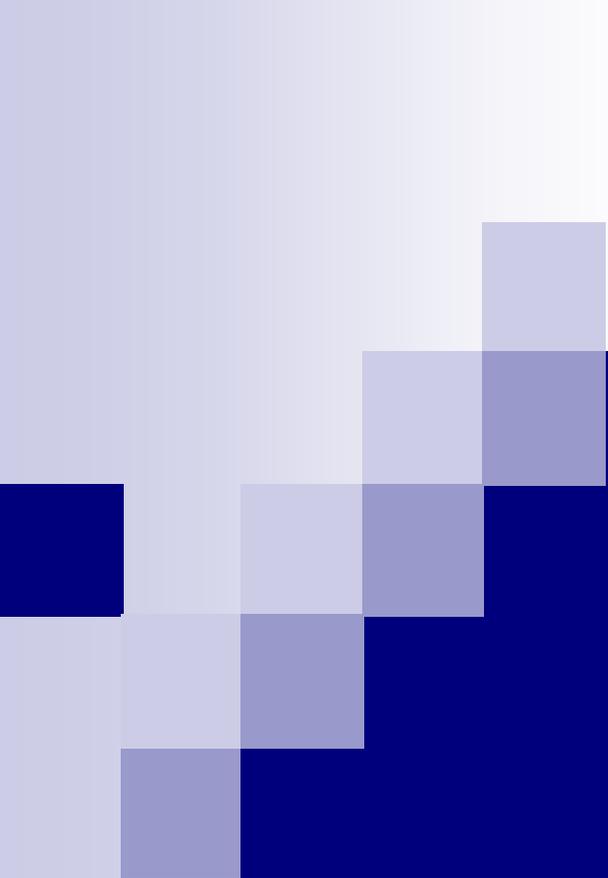
# Key Federal Laws, Regs, and Guidelines

- **HUD Guidelines**
- **EPA Lead Hazard Standards**
- **HUD Disclosure Rule**
- **HUD Lead-Safe Housing Rule**
- **EPA Renovation, Repair and Painting (RRP)**



# Key State Laws and Regulations

- **State Housing Law**
- **Health and Safety Code**
- **Title 17**
- **Civil Code**
- **CalOSHA**



# EPA RRP Rule

Lead Safety Requirements for  
Renovation for Compensation

- Target Housing
- Child-Occupied Facilities



# Target Housing

- Pre-1978
- One or more bedrooms

## Exclusions:

- Child free senior or disabled housing
- Lead free
- Zero-bedroom units

# Child-Occupied Facilities

- Pre-1978 building
- Visited regularly by the same child under six years old:
  - 2 X a week, at least 3 hours each visit and
  - At least 60 hours per year
- Day care centers, pre-schools, kindergarten classrooms



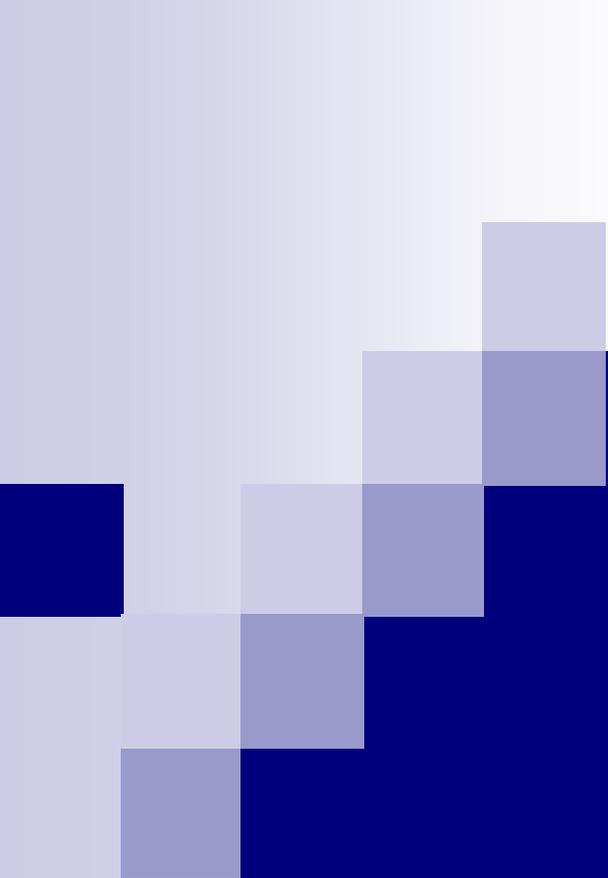
# The Basics

- Pre-Renovation Education
- Certified Firm
- Certified Renovator
- Lead-Safe Work Practices
- Cleaning Verification

# RRP Lead Safe Work Practices

- Trained and protected workers
- Containment
- No Prohibited Practices
- Work wet
- Work clean
- Cleaning verification
- Record keeping





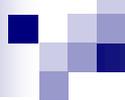
# State Housing Law, Health and Safety Code and Title 17

- Existing Hazards
- Created Hazards/  
Unsafe Renovation

# State Housing Law & Title 17



- PRESUME paint on pre-1978 buildings is lead-based unless tested otherwise.
- CORRECT any lead hazards.
- CONTAIN and use lead-safe work methods.
- MAINTAIN property in lead-safe condition.



# Presumed Lead-Based Paint

## T.17, CCR, §35043

All paint on pre-1978 buildings is presumed to be lead-based paint

- Unless it has been tested by a professional and shown not to be lead-based paint.
- Chemical test kits are not sufficient to say paint is not lead-based paint

# State Housing Law

## H&S §17920.10

- (a) Any portion of a building or premises that contains lead hazards is in violation of the State Housing Law. Lead hazards under this part are:
- Deteriorated lead-based paint-including presumed.
  - Lead-contaminated dust
  - Lead-contaminated soil
  - Disturbing lead-based paint without containment

# State Housing Law

**H&S §17960** The building department of every city or county shall enforce within its jurisdiction all the provisions of this part

**H&S §17961** Health department or environmental department may, in addition to the building department, enforce 17920.10. Agencies shall coordinate enforcement activities to avoid unnecessary duplication.

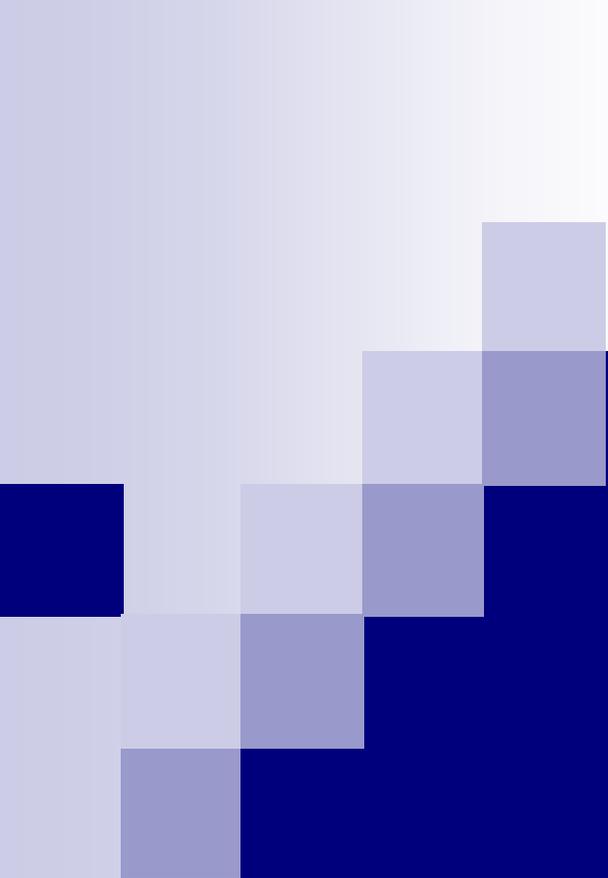
- Under certain circumstances the State Department of Public Health may enforce 17920.10.

# **Title 17 §36050**

## **Lead-Safe Work Practices**

Lead activities:

- Use containment;
- Ensure work area has no visible dust or debris upon completion;
- Demonstrate compliance with above to the Department or local enforcement agency



# Lead-Safe Renovation

# VIDEO: Lead Paint Safety



Lead Paint Safety-Chip Gaines

## Containment:

### How much is enough?

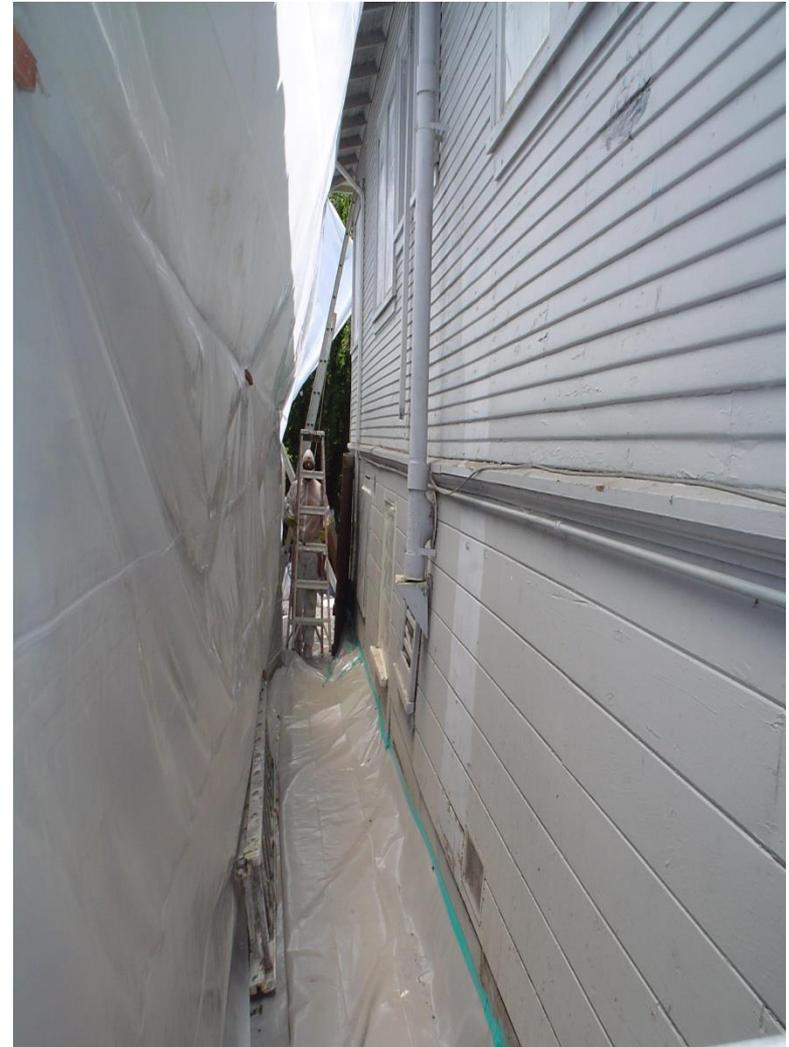
- Enough to capture all the dust and chips generated by the job
  - Minimum: Cover floors within 6 feet of work area.
- In the work area
  - Remove or cover objects and furniture.
  - Cover doors, windows, ducts, etc.

Note: HUD Guidelines are referenced in Title 17 and are more restrictive in some cases.



GROUND COVER CONTAINMENT

# Containment



# To Work on a Window: Cover belongings and put down containment



# Prohibited Practices



- Open Flame Burning / Torching
- Power Tools without HEPA exhaust control
- Heat Guns over 1100 degrees

Note: For Federally assisted, Lead Safe Housing Rule:

- Heat guns that char paint
- Dry scrape/sand more than 1 ft. from electrical outlets
- Use of volatile stripper in a poorly ventilated space





# Containment and the tools of wet scraping



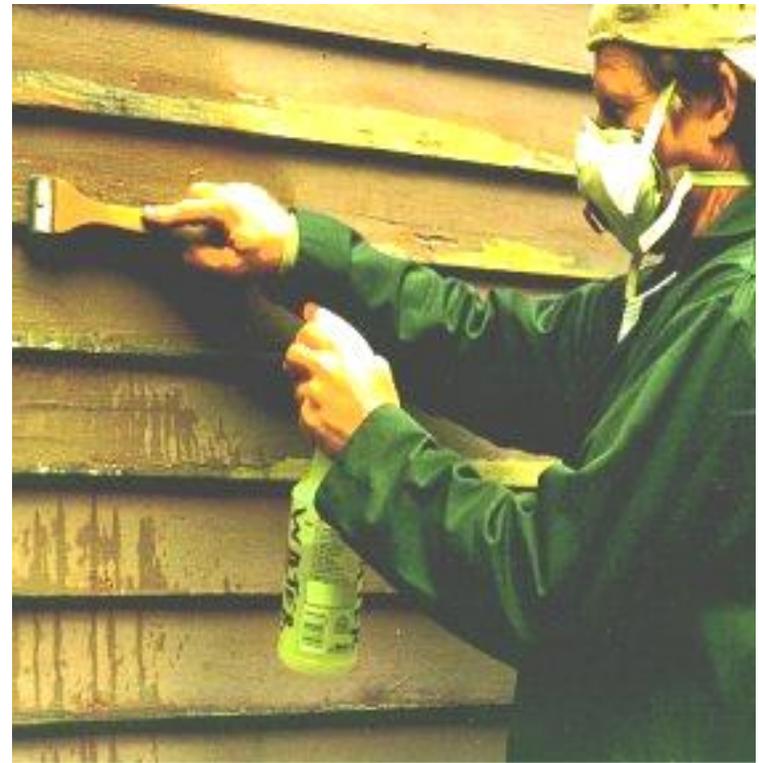
# Work Wet and Work Clean

- **Work wet**

- Minimize lead dust and debris

- **Work clean**

- Keep dust and debris inside the work area
- Clean up as you go along

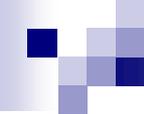


# HEPA assisted sanders



# And More Containment





# Thorough Clean-Up

- Clean plastic, collect all dust and debris
- Clean walls from top to bottom with HEPA vacuum or damp cloth
- HEPA vacuum furniture and surfaces
- Wipe all hard surfaces with damp cloth
- Mop all hard surface floors



# Cleaning Verification

- Cleaning Verification required for RRP
  - “White Glove” test
    - Details in RRP course

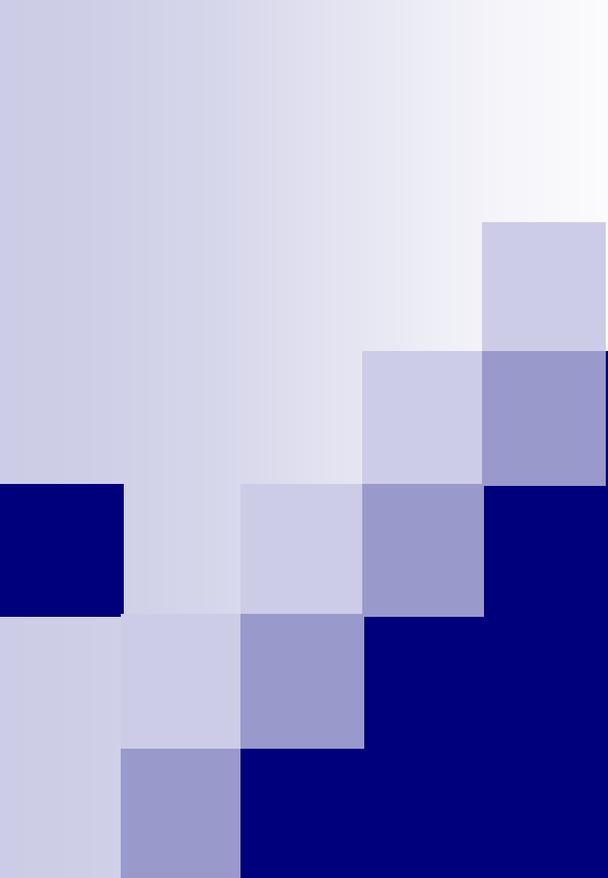
# Clearance Testing?

- Clearance Testing required for
  - Lead hazard control work done in response to a case of lead poisoning (T.17)
  - Permanent abatement projects (T.17)
  - Certain federally-assisted housing units (Lead Safe Housing Rule)
- ACHHD strongly recommends clearance testing after paint disturbing work where children under six live or spend time.



# Handouts

- Contractors Lead Safety During Renovation (EPA)
- Renovate Right (EPA)
- Lead Paint Hazards In Homes: A Guide for Code Enforcement (California)
- Title 25 Authority letter-California HCD

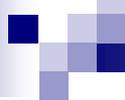


# Compliance: Existing Hazards



# Existing Hazards/ Unsafe Conditions

- Educate and Raise Awareness
- Cooperative Compliance
- Notice and Order to Abate
  - Paint Using Lead-Safe Practices  
or
  - Test: State certified Inspector/ Assessor



# Existing Hazards/ Unsafe Conditions

- Health and Safety Code §17920.10 (State Housing Law):
  - Lead hazards are a condition of substandard housing
  - Violation of §17920.10 is a violation of the State Housing Law and, pursuant to §17995 is a misdemeanor.

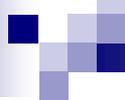


# Existing Hazards/ Unsafe Conditions

## ■ Deteriorated Lead-Based Paint:

- Health and Safety Code §105256:

Authority to issue an Order to Abate for a condition that has created a lead hazard



# Existing Hazards/ Unsafe Conditions

- Deteriorated Lead-Based Paint:
  - T. 17, CCR, §35022: Includes deteriorated ***Presumed*** Lead-Based Paint



# Existing Hazards/Unsafe Conditions: Example One

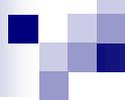
- Order to repaint deteriorated presumed LBP using lead-safe practices
- Owner has option to test
  - If LBP: Repair and Disclose
  - Not LBP: No further repair needed
- Failure to Comply
  - DA Referral
  - Paint testing before court case

# Existing Hazards/Unsafe Conditions: Example Two

- Owner required to hire lead inspector to test deteriorated paint
  - If LBP: Repair and Disclose
  - Not LBP: No further repair needed
- Failure to Comply
  - Fine and/or misdemeanor criminal citation
  - Additional remedies: Civil suit and receivership

# Existing Hazards/ Unsafe Conditions

- Health and Safety Code §17995
  - \$1,000 fine and/or 6 months in jail.  
Misdemeanor criminal citation
  - Subsequent violations at same address:  
\$5,000 fine and 6 months in jail
  - Condition of probation for suspended jail term can mandate sale of rental housing
  - Receivership

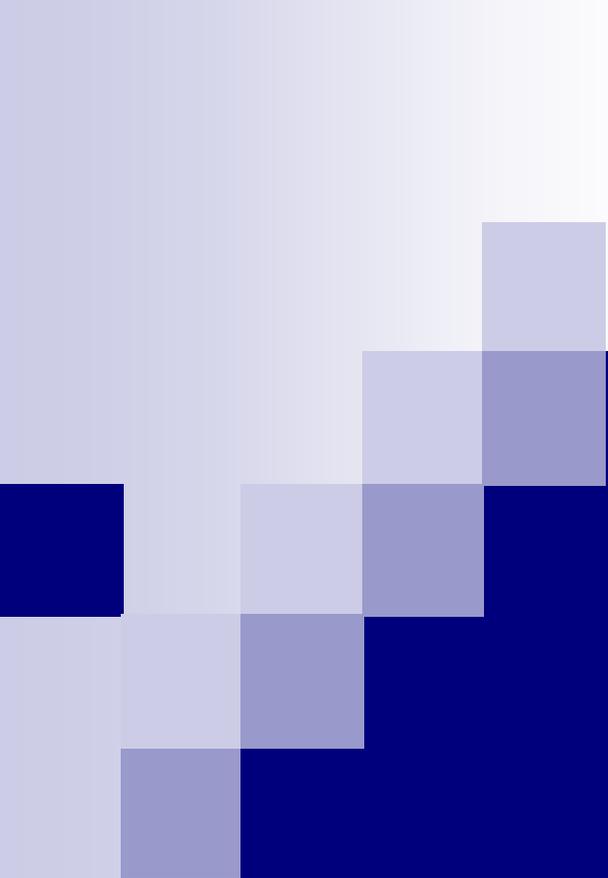


# Existing Hazards/ Unsafe Conditions

- Health and Safety Code §105256 provides enforcement authority in addition to State Housing law
  - Authority to order the abatement of a lead hazard
  - Enforcement authority vested with many agencies and an additional \$1,000 fine for non-compliance



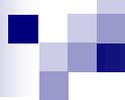




# Compliance: Created Hazards/ Unsafe Renovation

# Created Hazards/ Unsafe Renovation

- Work Requiring Permits
  - Education/Requirements
    - Permit office information
    - Plan set sticker or stamp
  - Signed Acknowledgment
  - Qualifications Check-RRP cert.



# Created Hazards/ Unsafe Renovation

- Inspections
- Unsafe Renovation Complaints
  - Documentation check: Job file, Cleaning Verification
  - Qualifications Check/Require (RRP)
  - Notice and Order to Abate



# Created Hazards/ Unsafe Renovation

## ■ Failure to Use Lead-Safe Work Practices:

- Title 17, CCR, §36050: Lead Safe work practices required for any remodeling activity in pre-1978 building



# Created Hazards/ Unsafe Renovation

## ■ Failure to Use Lead-Safe Work Practices:

- Health and Safety Code §105255: No person shall perform lead-related construction on any residential or public building in a manner that creates a lead hazard.



# Created Hazards/ Unsafe Renovation

- Order to Abate or Cease and Desist:
  - Health and Safety Code §105256:  
Authority to issue an Order to Abate for a condition or activity that is creating or has created a lead hazard







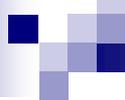






# Summary of Enforcement Authority for Lead Hazards

- Deteriorated Lead-Based Paint
  - *Health and Safety Code section 17920.10 (State Housing Law)*
  - *Health and Safety Code section 105256*
- Failure to Use Lead-Safe Work Practices/Creating a Lead Hazard
  - *Health and Safety Code section 105255*
  - *Title 17, CA Code of Regulations, sec. 36050*



## Further Reference:

- Cal DPH Lead Poisoning Prevention Branch

[www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB](http://www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB)

- HUD online Lead-Based Paint Visual Assessment Course

[www.hud.gov/offices/lead/training/visualassessment/h00101.htm](http://www.hud.gov/offices/lead/training/visualassessment/h00101.htm)

- HUD Guidelines-Lead Hazard Control

[www.hud.gov/offices/lead/lpb/hudguidelines/index.cfm](http://www.hud.gov/offices/lead/lpb/hudguidelines/index.cfm)

