



City of San Diego



**LEAD
SAFE**
NEIGHBORHOODS



**Lead Awareness Training
for
Childcare Providers**

June 2008

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City of San Diego

Purpose of Today's Training

- ✓ Provide general background on lead hazards and related health effects
- ✓ Basic knowledge and signs of lead hazards
- ✓ Share this information with parents and other childcare providers, as well as your friends and family
- ✓ Encourage parents to have their children tested for lead poisoning
- ✓ Help prevent high levels of lead in the blood of children you care for



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This child may be eating poison.



This poison can damage her brain.

She may have learning and behavior problems for the rest of her life.

This poison is lead.



WHAT IS LEAD?

- ✓ Lead is a heavy, bluish/gray, soft, malleable metal
- ✓ Known to be a hazard since ancient times
- ✓ Negative effects of lead were recognized by Ben Franklin in 1786
- ✓ Lead use and occupational exposures accelerated during the 1800's
- ✓ First case of lead paint poisoning was diagnosed in Australia in 1895





LEAD IN PAINT

REASONS LEAD WAS ADDED TO PAINT:

- ✓ Pigmentation
- ✓ Durability
- ✓ Corrosion resistance



Lead Poisoning Has Multiple Sources

- ✓ In San Diego County, 28% from paint, soil, and dust
- ✓ Other common sources include: pottery used for food, housewares, home remedies food, imported candy, water, toys, jewelry, decorative goods, hobbies, and occupational hazards





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Major Source of Lead Exposure: Lead-Based Household Paint

Paint sold before 1978 may contain lead

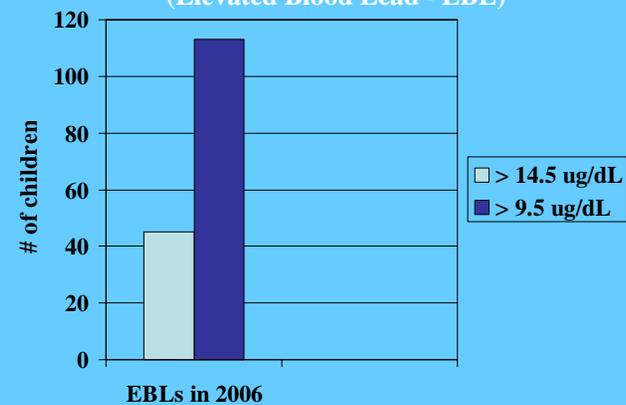
- ✓ Normal wear and tear of paint produces lead dust, the most common source of lead poisoning
- ✓ Deteriorating paint may produce dust and flakes
- ✓ Disturbing intact lead-based paint during remodeling, renovation, and maintenance can create a lead hazard

66% of San Diego housing was built before 1978



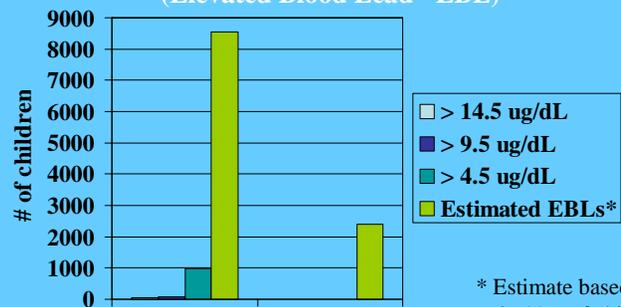
Childhood Blood Lead Poisoning in City of San Diego

CDC definition of lead poisoned child is ≥ 10 ug/dL
(Elevated Blood Lead - EBL)



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EBLs in 2006 28% Related to Env. Sources

* Estimate based on only 11% of children are given blood lead test in 2006

Main Ways That Lead Gets Into the Body



- ✓ Swallowing lead-paint dust or flakes, mainly through normal hand-to-mouth activity
- ✓ Breathing in lead dust



At Greatest Risk: Very Young Children



Very young children, who crawl on the floor and put their hands and toys in their mouths, are at highest risk of exposure and are most susceptible to damage.

Children should be tested at 1 and 2 years of age and as recommended by the child's physician.

Even very small amounts of lead are dangerous.



Symptoms of Lead Poisoning in Children

**USUALLY THERE ARE
NO SYMPTOMS**

- ✓ Fatigue
- ✓ Irritability
- ✓ Headache
- ✓ Constipation
- ✓ Stomachache
- ✓ Cramps
- ✓ Vomiting
- ✓ Weight loss





Lead's Effects on Unborn Children

- ✓ Lead from the mother's blood can pass to the unborn child
- ✓ Lead poisoning in unborn children can cause
 - Learning difficulties
 - Behavioral problems
 - Brain and nerve damage
 - Stillbirth and miscarriage
 - Premature birth
 - Low birth weight



Lead's Effects on Babies and Young Children

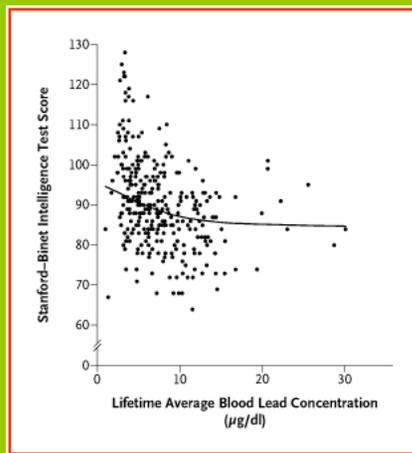
- ✓ Can damage the brain and other parts of the nervous system
- ✓ Can cause behavior and learning problems
- ✓ Can reduce muscle and bone growth
- ✓ Can damage hearing
- ✓ Can cause death



Even children who seem healthy may have high levels of lead



**Highest decrease
in child's IQ
occurs when blood
lead level is
less than 10 ug/dL
– on average, 7.3**



New England Journal of Medicine;
April 17, 2003



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Symptoms of Lead Poisoning in Adults

- ✓ Fatigue
- ✓ Irritability
- ✓ Anxiety
- ✓ Depression
- ✓ Headache
- ✓ Sleeplessness
- ✓ Tremors
- ✓ Metallic taste in mouth
- ✓ Skin paleness, especially of the face
- ✓ Stomachache
- ✓ Constipation or diarrhea
- ✓ Cramps
- ✓ Vomiting or nausea
- ✓ Weight loss
- ✓ Muscle or joint pain
- ✓ Weakness in arms, legs, or wrists
- ✓ Loss of sex drive





Lead's Effects on Adults



✓ Reproductive problems for men and women

- ✓ High blood pressure
- ✓ Digestive disorders
- ✓ Nervous system problems
- ✓ Difficulty with memory and concentration



LEAD-BASED PAINT HAZARD

A lead-based paint hazard is any condition that causes exposure to lead from:

- ✓ Lead-contaminated dust
- ✓ Lead-contaminated soil
- ✓ Paint that is deteriorated or present on accessible, friction, or impact surfaces





LEAD-SAFE WORK PRACTICES (LSWP)

If home built prior to 1979, any disturbance of paint must be done using LSWP in accordance with San Diego Municipal Code 54.1005-1006 & Appendix A

- ✓ Paint on home built prior to 1979 is presumed to contain lead
- ✓ Disturbance of paint with lead concentrations at or above 1000 ppm or 0.5 mg/cm² must use LSWP



LEAD DUST HAZARD

- ✓ Floor is 40 µg/ft²
- ✓ Interior window sill is 250 µg/ft²
- ✓ Exterior window/porch/ground is 400 µg/ft²
- ✓ Soil for children's play area is 400 ppm





Identify Deteriorated Paint

To identify deteriorated paint, you will need to answer this question:

Is the paint peeling, chipped, chalking or cracking?



If the answer to this question is yes, then the paint should be considered deteriorated.



Identify Deteriorated Paint

Is There Anything Else You Should Look For?

When performing a visual assessment, you should look for:

- ✓ Paint chips or dust from painting that were not cleaned up.
- ✓ Paint residue on the floors .
- ✓ Evidence of paint chips in soil near foundation on exterior.





Identify Deteriorated Paint

These photos show evidence of substrate damage:

- ✓ The window sill has extensive moisture damage.
- ✓ The stair tread shows wear, tear and deterioration.



Distressed Furniture



Exterior siding, window components



Deteriorated Stair Rails



Window casing - Extreme picking



Teeth Marks on Walls



Door casing - Impact damage



Note: This may look like an insignificant amount of deterioration, but this can still be dangerous to children and is still considered a hazard.

Exterior window casing



Paint Chips on Ground



Concrete Floor





What Caregivers Can Do

- ✓ Make sure your facility does not expose children to lead
- ✓ Avoid damaging painted surfaces
- ✓ Inspect regularly for water leaks and paint damage. The source of the water leak, must be fixed before the paint hazard can be fixed.
- ✓ CLEAN, CLEAN, CLEAN
Wet-dust and clean floors and window sills regularly with water and detergent and paper towels
- ✓ Become trained to fix lead hazards safely yourself or have a friend or family member get trained to help you fix lead hazards.



What Caregivers Can Do

- ✓ Teach parents about lead poisoning
- ✓ Include information on lead poisoning and blood lead testing in your parent handbook and post information in your facility.
- ✓ Encourage parents to have their children tested for lead poisoning – Children should be tested at 1 and 2 years of age and up to age 6 if never previously tested.





What Caregivers Can Do

- ✓ Teach children to keep non-food items out of their mouths
- ✓ Wash children's hands and toys frequently because invisible lead dust may be present on them
- ✓ Make sure toys are lead-free



What Caregivers Can Do

A balance diet can help prevent the absorption of lead that is ingested

- ✓ Feed children three regular meals and offer nutritious snacks between meals
- ✓ Provide a well-balanced diet, low in fat and high in iron, calcium, and Vitamin C
- ✓ Do NOT cook, serve, or store food in opened cans, in dishes that contain lead including water dispensers, or in leaded crystal.





San Diego Healthy Homes Project:

Eligibility criteria are:

Low income tenants or owners, child under 6 living in or frequently visiting home

HUD Lead Hazard Control and Remediation Grants

Eligibility criteria are:

Low income tenants or owners, child under 6 living in or frequently visiting home

Housing Rehabilitation Program

Offers 0% deferred loans for rehabilitation (some are forgivable)



Lead Safe Neighborhoods:

- ✓ Serves as the primary liaison for connecting the community to lead poisoning prevention resources
- ✓ Through a grant with the San Diego Housing Commission, provides lead hazard removal to qualified residents.
- ✓ Provides vouchers for free blood lead tests for children if they are not covered by any other program (resuming in July 2007).





Lead Safe Neighborhoods:

- ✓ Responds to lead hazard tips and complaints and works with property owner or contractor to correct the problem.
- ✓ Offers training on lead hazard awareness and lead safe work practices to contractors, property owners, childcare providers, parents/residents, tenants, and landlords.
- ✓ Partnership with County CLPPP to perform environmental investigative services for EBL's between 9.5-14.5 ug/dl.





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QUESTIONS?

858-694-7000

Lead-Safe@sanidiego.gov

<http://www.sandiego.gov/environmental-services/ep/leadsafe.shtm>

