Lead Paint Dangers and Safety Meeting Kit



Many people have at least heard that old paint can contain lead that can be harmful. The lead found in old paint is considered inorganic lead. Inorganic lead compounds are classified as “probably carcinogenic to humans”. A carcinogen is defined as any substance or agent that tends to produce a cancer.

LEAD DEFINITION AND EXPOSURE

The CDC defines lead as, “Lead is a soft, blue-gray metal. Lead occurs naturally, but much of its presence in the environment stems from its historic use in paint and gasoline and from ongoing or historic mining and commercial operations.”

EXPOSURE RISKS AT WORK AND HOME

In terms of reducing one’s risk, the two areas of greatest concern are the workplace and the home. **On the job**, high exposures have been associated with lead smelters; construction work that involves sanding, grinding, blasting, torch- cutting or welding surfaces covered with lead paint; auto shops and plumbers who use lead solders; artists and ceramic workers who use lead glazes, and with indoor firing ranges. Studies have shown that lead dust can also be carried on coveralls or other work clothing resulting in contamination of worker’s cars, homes and family.

HEALTH AFFECTS OF LEAD – HAZARDS

The inhalation or ingestion of lead-containing particles can result in “lead poisoning” which has been associated with a number of short term (acute) and long term (chronic) adverse health affects. Depending on the amount of exposure (dose) immediate symptoms may not always be apparent or may resemble other illnesses and result in a misdiagnoses. A simple blood test is the best way to determine if one has been exposed to lead.

Acute, short term health affects may include:

- cramps (lead colic)

- loss of libido
- irritability and moodiness
- birth defects
- headaches
- miscarriage
- insomnia
- stillbirth
- tiredness
- constipation
- nausea
- in children: hyperactivity, lower IQ, slowed growth &amp and hearing loss

Chronic, long term health affects may include:

- muscle & joint soreness
- anemia
- fine tremors
- infertility
- numbness
- kidney damage
- hypertension

Lead can stay in the body for years and is stored in bone or soft tissue including the liver and kidneys. During periods of high calcium demand such as pregnancy, menopause and aging, lead stored in bone tissue can be released back into the bloodstream.

BEST PRACTICES TO PREVENT LEAD CONTAMINATION

- Presume all paints and varnishes applied before 1980 contain lead including finishes on old toys, furniture and playground equipment.
- Consider having your young children tested for lead even if they appear healthy.
- A healthy, low fat diet for children will inhibit absorption of lead.
- Wash children’s hands and toys often.
- Regularly clean horizontal surfaces that children can reach, such as floors and window sills, with TSP or other phosphorus-based cleaner.
- Repair peeling, chipping or chalking paint; keep paint chips out of the soil.
- Do not dry sand, grind or burn painted surfaces; use wet sanding methods to prepare surfaces for re-painting and wash your hands prior to eating, drinking or smoking.
- Do not use a vacuum to pickup paint chips unless the vacuum has a HEPA filter.
- Plant shrubs, ground cover or other physical barrier along the exterior drip line of your home.
- Vacuum dry surfaces such as skirting boards, architraves, window sills, casings, shelves and counter-tops until no dust or residue remains.
- Dampen dusty outside areas with spray from a garden hose and sweep and collect debris. Avoid dry sweeping since it spreads lead dust.
- Shovel paint debris into heavy duty plastic bags.
- Remove the top layer of contaminated soil and put into tough sealable plastic bags.
- Clean tools with TSP solution or sugar soap.

- Clean respirators after use and store them in a container away from the lead source.
- Remove contaminated clothing before leaving the work area and place clothes in a plastic bag until washed.

LEAD CONTAMINATED WASTE DISPOSABLE

- Place lead-containing debris into deflated heavy duty plastic bags and seal them.
- Pour lead-contaminated water generated as a result of wet scraping or sanding, or during clean-up, into a strong, securely sealed container.
- Transport debris and solid waste materials containing lead to waste systems.
- Check with the waste management section of the local council about proper waste disposal.

FINAL WORD

It is important to understand where lead is found in our environment and the health effects related to overexposure. Often times many people develop an illness, but it is misdiagnosed by a doctor or disregarded by the individual altogether.