

# **LEAD**

**On the Job**

**A Guide for Workers**



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# How Are Workers Exposed to Lead?

Workers can be exposed to lead by creating dust or fumes during everyday work activities. Fumes are easier to breathe in and therefore may be more dangerous than dust. These are some of the most common ways to be exposed.

**LEAD DUST** is produced in many ways including:

- ◆ Grinding, cutting, drilling, sanding, scraping or blasting surfaces that are coated with lead paints
- ◆ Tearing down structures that have been painted with lead based paints
- ◆ Working on leaded cables or wires
- ◆ Pouring powders containing lead pigments

**LEAD FUMES** are also created in many ways including:

- ◆ Using heat guns to remove paint from doors, windows, and other painted surfaces
- ◆ Welding or soldering lead containing materials
- ◆ Torch cutting painted and uncoated metal

# What Are the Health Effects from Lead?

Lead can enter the body in two ways:

- ◆ It can be inhaled (breathed in)
- ◆ It can be ingested (swallowed) by getting it on the hands, clothes, or hair, or in food, drinks or cigarettes



Once lead gets into the body, it can stay there for a long time. It is stored in three places: the blood, body organs, and bones. Lead stays in the blood about a month, in body organs for several months, but can remain in the bones for years. It affects the brain and nervous system, reproductive capabilities, the kidneys, the digestive system, and the body's ability to make blood.

**Early** signs of lead poisoning are:

- ◆ Tiredness
- ◆ Headache
- ◆ Metallic taste
- ◆ Poor appetite

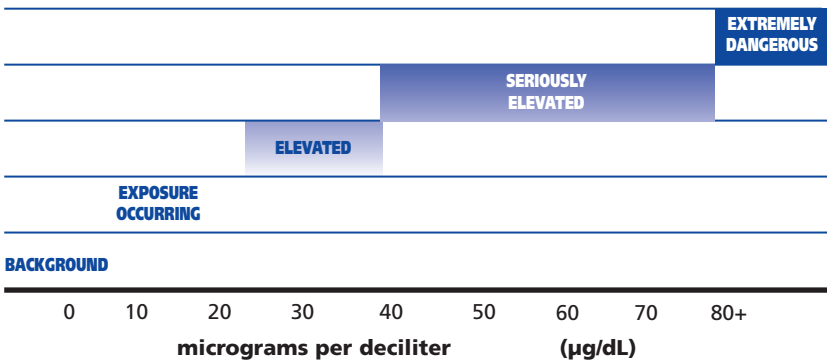
**Later** signs are:

- ◆ Aches or pains in stomach
- ◆ Constipation
- ◆ Muscle and joint pains
- ◆ Memory problems

Everyday aches and pains may hide these symptoms. It is important to remember that lead may hurt your body even if you do not feel sick.

## What Does Your Blood Lead Level Mean?

The most common test for lead is a blood test. It measures how much lead is in your bloodstream. If you think you have been exposed to lead, you should ask your doctor for a blood lead test.



- ◆ At levels above 80 µg/dL, serious, permanent health damage may occur (extremely dangerous).
- ◆ Between 40 and 80 µg/dL, serious health damage may be occurring, even if there are no symptoms (seriously elevated).
- ◆ Between 25 and 40 µg/dL, regular exposure is occurring. There is some evidence of potential physiologic problems (elevated).
- ◆ Between 10 and 25 µg/dL, lead is building up in the body and some exposure is occurring.

The typical level for U.S. adults is less than 10 µg/dL (mean = 3 µg/dL).

# How Can Exposure to Lead Be Reduced?

**Wash** your hands and face before you eat, drink or smoke.

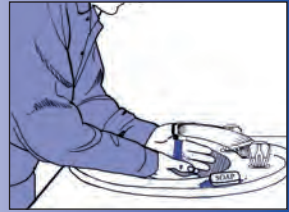
**Do NOT eat, drink or smoke** or store food, drink, cigarettes or cosmetics in areas of lead dust and fumes.

**Wear** a clean, properly fitted air purifying respirator equipped with P100 filters (purple) as a minimum level of protection, in all work areas that have lead dust or fumes. Shave to get the required fit.

**Change** into work clothes and shoes before beginning work each day. Keep your street clothes and shoes in a clean place.

**Shower** at work at the end of the day, before you go home.

**Launder** your clothes at work if possible. If you must take clothes home, wash and dry them separately from other family members' clothes.



# What Is “Take Home” Lead?

Lead dust can be brought into your home on work clothes and equipment. This is called “take home” lead and it can harm anyone who comes in contact with it.



Lead poisoning in children is especially dangerous because small amounts of lead can cause learning problems and serious illness.

If **young children** live in your home and you **work with lead**, talk to your doctor about having them tested.

## What Are Some Sources of Occupational Lead Exposure?

- ◆ Breaking up old lead batteries
- ◆ Torch cutting coated and uncoated metal
- ◆ Remodeling and renovation work
- ◆ Sanding, scraping or blasting lead-based paint
- ◆ Handling scrap metal
- ◆ Soldering electronics, stained glass or radiators
- ◆ Shooting in and cleaning indoor firing ranges
- ◆ Smelting operations – bronze, brass, copper or iron foundries
- ◆ Handling artist pigments

Some **hobbies** involve lead exposure such as:

- ◆ Shooting in indoor ranges
- ◆ Making your own bullets or fishing sinkers
- ◆ Making stained glass or pottery
- ◆ Removing lead based paint (e.g., home renovations)

# Who Can Help?

*Remember to follow your employer's recommendations for safe cleaning practices, and correct use of personal protective equipment and ventilation systems.*

**Your Doctor or other Medical Care Provider.** If you are concerned about lead exposure for yourself or others in your house, see a doctor. The doctor can arrange for blood testing and help you interpret any exposure and health effects. It is important for your doctor to know about your possible lead exposure even if you do not have any symptoms.

**Your Employer or Union.** If you know that you have been exposed to lead, talk to your employer and union about how to reduce exposures. Your employer is required to help you avoid lead exposure with appropriate work practices, protective controls and equipment, and training. Your employer should also provide you with a properly fitting respirator, if necessary. Your safety officer should check your work area for lead dust or fumes.

**New York State Department of Health.** The Health Department can provide guidance, information and technical assistance to you on many occupational health issues. ([www.health.state.ny.us](http://www.health.state.ny.us))

*(800) 458-1158 extension 27900*

**U.S. Occupational Safety and Health Administration (OSHA).** If you feel that your employer does not adequately address a safety or health hazard, you have the right to request an inspection by OSHA. In filing a complaint, you can ask OSHA to withhold your identity from your employer. ([www.OSHA.gov](http://www.OSHA.gov))

<i>Albany . . . . . (518) 464-4338</i>	<i>Syracuse . . . . . (315) 451-0808</i>
<i>Buffalo . . . . . (716) 551-3053</i>	<i>Tarrytown . . . . . (914) 524-7510</i>
<i>Long Island . . . . . (516) 334-3344</i>	<i>Queens . . . . . (718) 279-9060</i>
<i>Manhattan . . . . . (212) 620-3200</i>	

**New York State Department of Labor.** If you are a public employee (work for State, county or city offices), OSHA standards are enforced by the New York State Department of Labor Public Employee Safety and Health (PESH) program. In filing a complaint, you can ask PESH to withhold your identity from your employer.

<i>Albany . . . . . (518) 457-5508</i>	<i>Rochester. . . . . (585) 258-4570</i>
<i>Binghamton . . . . . (607) 721-8211</i>	<i>Syracuse . . . . . (315) 479-3212</i>
<i>Buffalo . . . . . (716) 847-7133</i>	<i>Utica . . . . . (315) 793-2258</i>
<i>Garden City . . . . . (516) 228-3970</i>	<i>White Plains . . . . . (914) 997-9514</i>
<i>New York City . . . . . (212) 775-3548</i>	

**Occupational Health Clinic Network.** The New York State Network of Occupational Health Clinics provides medical and educational services for workers exposed to workplace hazards. (See map on facing page.) ([www.nyhealth.gov/nysdoh/environ/occupate.htm](http://www.nyhealth.gov/nysdoh/environ/occupate.htm))









State of New York  
Department of Health