

## What is lead?

Lead is a soft, grey, non-magnetic, corrosion resistant metal that is found in small amounts naturally in all parts of our environment.

## What are some sources of lead?

Through mining, smelting, and refining processes, more lead is made available in our water, air, food and soil. It can also be found in products that either use or are made of lead. Some examples are; ammunition, lead water pipes, lead batteries, some paints and ceramic glazes, fishing weights and solder.

## How do lead exposures occur?

Lead can be absorbed by breathing air with high lead levels or lead dust, and by swallowing lead-based objects or contaminated food and water. Older homes may contain lead-based paints or water-pipes with lead solder. As the paints age or if they are removed improperly, lead dust can become a source of lead in our homes.

Lead can leach out of pipes and into our drinking and cooking water. Lead exposures can occur at jobs such as welding and refining, or hobbies that involve stain-glass making or shooting ranges because they involve lead or lead-based products.

Using folk remedies, supplements, or jewelry that contain lead are other ways for exposure to occur.

## How can lead affect my health?

Regardless of the way lead gets into our bodies, the effects are the same once it is there. Once it is absorbed into the blood stream it can affect almost every organ and system in the body. Long term exposures can damage the nervous system causing changes in hearing, energy levels, and mental abilities, possibly causing death. There can also be effects such as high blood pressure, anemia, kidney damage, miscarriage, and male infertility.

## Is there a medical test that can determine if I have been exposed to lead?

Yes. In situations where the history and symptoms fit with lead exposures a medical doctor can order specific blood tests to be collected and sent to an appropriate laboratory.

## Does an elevated level of lead always mean that I have lead poisoning?

No. Because lead is found in all parts of our environment, we will

all have detectable lead levels. Too much exposure to high levels of lead can sometimes lead to health symptoms.

The need to treat a lead level depends on the patient's age, actual blood level, and their symptoms.

## What is the treatment for lead exposures?

The main treatment is to remove the source of the lead and prevent re-exposure. This may involve use of proper protective equipment on the job or with hobby-work. It may involve proper cleaning or removal of lead sources from homes, or discontinuation of folk remedies and supplements.

Some patients, depending on age, lead levels, and symptoms, may require medications called chelators, to help remove some of the lead from their bodies.

## What are chelators and when would they be used?

Chelators (kee-lay-tors), attach to some metals and remove them from the body, but they also remove good minerals. Chelators can cause damage to other organs and can cause life threatening allergic reactions. Because of these dangers it is important that patients be assessed by a medical doctor and that appropriate tests are performed at an appropriate laboratory.

This decision to chelate should be made by a medical doctor after considering the test results, the patient's symptoms, and the recommendation of the national guidelines for treatable lead levels.

## Does lead cause cancer?

Currently there is no direct proof that lead causes cancer.

## Where can I get more information?

If you have questions about lead, call PADIS (Poison and Drug Information Service) at 1-800-332-1414. Information Specialists are available 24/7 to help answer your questions.