

LEAD

Pure lead (Pb) is a heavy metal. It can combine with various other substances to form numerous lead compounds. Exposure to lead occurs in at least 120 different occupations, including primary and secondary lead smelting, lead storage battery manufacturing, lead pigment manufacturing and use, solder manufacturing and use, and shipbuilding and ship repairing, just to name a few.

When absorbed into your body in certain doses, lead is a toxic substance. Lead can be absorbed into your body by inhalation (breathing) and ingestion (eating). Lead, except specific organic lead compound, is not absorbed through skin. Inhalation of airborne lead is generally the most important source of occupational lead absorption. You can also absorb lead through your digestive system if lead gets into your mouth and is swallowed.

If you handle food, cigarettes, cosmetics, or chew tobacco that have lead in them or handle them with hands contaminated with lead, this will contribute to ingestion. A significant portion of the lead ingested or inhaled gets into your blood stream and starts to circulate throughout your body, getting stored in various organs and body tissues. Most of the lead entering your body is filtered out, but some remains in the blood and other tissues. If the exposure to lead continues, the amount stored into your body will increase. Even though you may not be aware of any immediate symptoms of disease, this lead stored in your tissues can be slowly causing irreversible damage: first to individual cells, then to your organs and whole body system.

● Some effects of overexposure to lead are as follows:

- Short term or acute overexposure: Lead is a potent, systemic poison. If taken in large doses, lead can kill you in matter of days. Lead adversely affects numerous body systems, and causes forms of health impairment and disease that arise after periods of exposure as short as days or as long as several years.

- Long term or chronic overexposure: Chronic overexposure to lead may result in severe damage to your blood-forming, nervous, urinary and reproductive systems. Damage to the central nervous system in general and the brain in particular, is one of the most severe forms of lead poisoning. Chronic overexposure to lead also results in kidney disease with few, if any, symptoms appearing until extensive and most likely permanent kidney disease. Chronic overexposure to lead impairs the reproductive system of both men and women. Overexposure to lead also disrupts the blood-forming system resulting in decreased hemoglobin-the substance in the blood that carries oxygen to the cells and ultimately result in anemia.

You should immediately notify your employer if you develop signs or symptoms associated with lead poisoning, or if you desire medical advice concerning the effects of current or past exposure to lead.