

Agency for Toxic Substances and Disease Registry (ATSDR)

Santa Susana Field Lab Site
DTSC Community Meeting
September 8, 2015

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ATSDR, Region 9

What is ATSDR?

- ❑ CERCLA created ATSDR in 1980; SARA provided additional authorities in 1986
- ❑ Administered by the Centers for Disease Control and Prevention (CDC)
- ❑ Tasked with evaluating public health impacts at Superfund sites and chemical releases



ATSDR Professionals

Environmental Health Scientists

Toxicologists

Industrial Hygienists

Health Physicists

Geologists

Epidemiologists

Statisticians

GIS Specialists

Health Educators

Communication Specialists



What Does ATSDR Do?

- Protect the public from toxic exposures
 - Hazardous waste sites
 - Chemical “releases”
- Build the science base
- Educate health care providers and the public
- Maintain exposure registries



ATSDR Reference Materials

ATSDR
AGENCY FOR TOXIC SUBSTANCES
AND DISEASE REGISTRY

LEAD
CAS # 7439-92-1

Division of Toxicology and Environmental Medicine ToxFQATM

August 2007

This fact sheet answers the most frequently asked health questions (FAQs) about lead. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Exposure to lead can happen from breathing workplace air or dust, eating contaminated foods, or drinking contaminated water. Children can be exposed from eating lead-based paint chips or playing in contaminated soil. Lead can damage the nervous system, kidneys, and reproductive system. Lead has been found in at least 1,272 of the 1,684 National Priority List sites identified by the Environmental Protection Agency (EPA).

What is lead?

Lead is a naturally occurring bluish-gray metal found in small amounts in the earth's crust. Lead can be found in all parts of our environment. Much of it comes from human activities including burning fossil fuels, mining, and manufacturing.

Lead has many different uses. It is used in the production of batteries, ammunition, metal products (solder and pipes), and devices to shield X-rays. Because of health concerns, lead from paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years. The use of lead as an additive to gasoline was banned in 1996 in the United States.

What happens to lead when it enters the environment?

- ❑ Lead itself does not break down, but lead compounds are changed by sunlight, air, and water.
- ❑ When lead is released to the air, it may travel long distances before settling to the ground.
- ❑ Once lead falls onto soil, it usually sticks to soil particles.

❑ Movement of lead from soil into groundwater will depend on the type of lead compound and the characteristics of the soil.

How might I be exposed to lead?

- ❑ Eating food or drinking water that contains lead. Water pipes in some older homes may contain lead solder. Lead can leach out into the water.

❑ Spending time in areas where lead-based paints have been used and are deteriorating. Deteriorating lead paint can contribute to lead dust.

❑ Working in a job where lead is used or engaging in certain hobbies in which lead is used, such as making stained glass.

❑ Using health-care products or folk remedies that contain lead.

How can lead affect my health?

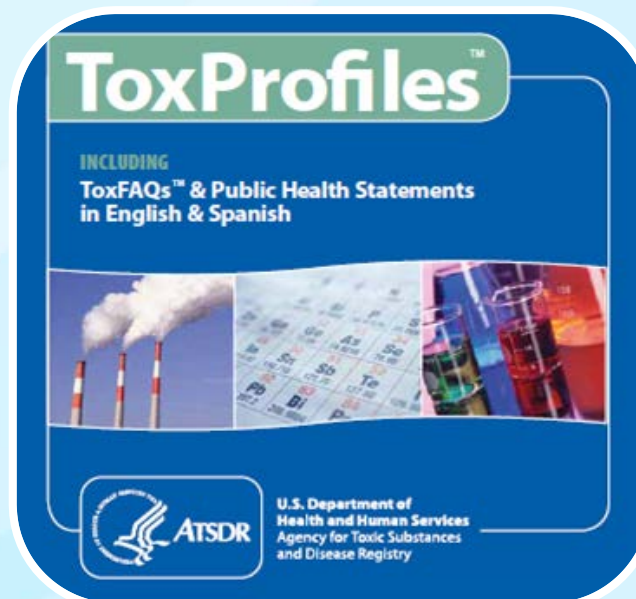
The effects of lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in your body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production.

How likely is lead to cause cancer?

We have no conclusive proof that lead causes cancer in humans. Kidney tumors have developed in rats and mice that had been given large doses of some kind of lead compounds. The Department of Health and Human Services

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, Public Health Service
Agency for Toxic Substances and Disease Registry

ToxFQA fact sheet



Tox Profile

Access both products and more online at
ATSDR's Toxic Substances Portal
<http://www.atsdr.cdc.gov/substances/index.asp>

How ATSDR gets involved:

- A site is on or proposed for the U.S. Environmental Protection Agency's Superfund National Priorities list (EPA's NPL).
- U.S. EPA, states, and local governments request ATSDR's help.
- Someone petitions ATSDR to conduct an assessment of a site.

ATSDR's Previous Work at Santa Susana Field Lab

- 1999 ATSDR Report: *Draft Preliminary Site Evaluation*
- 2006 UCLA Report: *The Potential for Offsite Exposures Associated with the Santa Susana Field Laboratory, Ventura County, California* - funded by ATSDR
- 2007 University of Michigan Report: *Cancer Incidence in the Community Surrounding the Rocketdyne Facility in Southern California* - funded by ATSDR

ATSDR's Current Scope of Work at Santa Susana Field Lab

ATSDR received a petition letter on June 25, 2014 and a second letter, refining the request on November 11, 2014.

After review, ATSDR accepted the petition on March 10, 2015 and agreed to assist the SSFL community in understanding the current SSFL-related public health concerns.

ATSDR's Current Scope of Work at Santa Susana Field Lab

1. Determine whether currently there are any completed pathways of human exposure to SSFL-related contaminants and what public health concerns may be associated with those exposures.
2. Evaluate whether the proposed remedial options would be protective of human health.

ATSDR's Current Scope of Work at Santa Susana Field Lab

3. Provide the SSFL community with public friendly information and presentations of ATSDR's findings and the strengths and weaknesses of SSFL-related epidemiological studies.

Moving Forward

- Attend community meetings
- Site visit for ATSDR technical team
- Continue to collect information
- Prepare reports
- Communicate our findings

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The findings and conclusions in this presentation have not been formally disseminated by the Agency for Toxic Substances and Disease Registry and should not be construed to represent any agency determination or policy.

Thank You

Questions?

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