

REDUCING YOUR EXPOSURE TO LEAD IN FIRING RANGES



What should I know about lead safety?

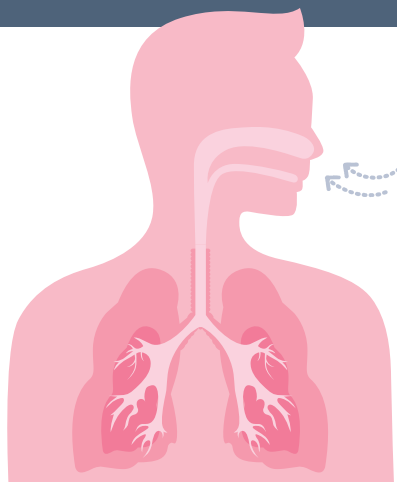
Indoor firing and shooting ranges may be common sources of lead exposure. Workers could be at risk for lead exposure and lead poisoning. As many as 15% of adults in the U.S. regularly participate in target shooting. Occupational and recreational exposure to lead may occur in those who work in firing ranges, military and law enforcement, as well as recreational firearm users.

To minimize your exposure:

- Know how lead can harm your body.
- Protect yourself.
- Find out if you have lead in blood by having a blood test.



How does lead get into my body?



The main ways that lead gets into your body with the use of firearms is through inhalation and ingestion. The particles from bullets, along with dust and fumes from the lead primer, are the primary source. Lead particles are also found on surfaces such as hands, clothing or equipment, and can be ingested or taken home, where they may pose a hazard to children and pregnant women. Consuming wild game hunted using lead bullets can be another source of lead exposure. Lead is absorbed into the bloodstream and can be found in the liver, kidneys and, eventually, in bones.

How does lead harm my body?

According to the Centers for Disease Control and Prevention, there is no safe level of lead. Once lead enters your body, either through the lungs or mouth, it circulates in the blood, soft tissues and bones, where it has the ability to remain for several years. Most adults with lead in their blood will show no symptoms. The signs and symptoms of lead poisoning can vary from person to person, but the severity and number of symptoms is usually worse with higher levels of lead in blood.

For more information and resources, contact the Oklahoma Lead Poisoning Prevention Program (405) 426-8311 | Okpppp@health.ok.gov



Lead Poisoning Prevention

How does lead harm my body?

(continued)



Effects of lead poisoning include but are not limited to:

- Nausea, vomiting, diarrhea, stomach pain
- Lack of appetite, weight loss
- Muscle and joint pain
- Anemia
- Fatigue or hyperactivity
- Headaches or problems with memory or concentration
- High blood pressure
- Kidney problems
- Reproductive issues or problems during pregnancy

What can I do to protect myself?

For employees:

- Use recommended NIOSH protective equipment.
 - ☐ Respirator, as required by your employer
 - ☐ Coveralls, including shoe covers
 - ☐ Safety goggles
 - ☐ Chemical resistant gloves
- Use wet cleaning methods.
 - ☐ Wet-wipe surfaces, use a wet mop or HEPA vacuum
 - ☐ Never dry sweep the range

For everyone

- Practice good hygiene.
- Wash hands, forearms and face immediately after handling firearms and ammunition, and before eating, drinking or having contact with other people.
- Do not eat, drink or smoke inside the firing range.
- Use lead-free bullets when possible.
- Obtain blood testing to monitor lead in blood if offered through your work, or discuss your hobby or occupation with your health care provider.
- Consider having children tested to ensure they have not been exposed to 'take home lead.'
- Shower if possible, and change into clean clothes and shoes before leaving the range.
- Wash and keep dirty clothes or uniforms and shoes separate from other clothing.

Blood lead levels and health effects

Caution | 5 to 19 µg/dL*

- Health effects may be occurring even if you have no symptoms.
- Adult blood lead levels should be kept below 5 µg/dL. However, no amount of lead is safe.
- Levels below 3.5 µg/dL can be harmful to children and developing fetuses.

Alert | 20 to 79 µg/dL

- Serious health problems may occur.

Danger! | 80 µg/dL or higher

- Severe health effects are likely. The damage may be permanent and may occur quickly.



*micrograms lead per deciliter blood