

Firing Ranges The Airborne Lead Dust Hazard

Firearm instructors, other range employees & frequent shooters are inherently at increased risk for lead poisoning from lead dust and fumes generated at firing ranges.

Airborne Lead Dust in Firing Ranges Is Generated by:

- Erosion of the bullet base by propellant gases
- Friction from the lead bullet against the gun barrel
- Exploding lead styphnate primers
- Lead bullets fragmenting from hitting the bullet trap, walls, floors, or range ceiling
- Improper range-cleaning methods disturbing steeled lead dust
- Poor range ventilation found in both indoor and outdoor ranges

Health Effects

Lead is typically absorbed by breathing lead dust. After shooting, lead can also be ingested when drinking, eating and/or smoking without handwashing. During shooting, lead dust can settle on hair and clothing which can then be carried back to cars and homes - potentially harming children. Lead absorbed by children under six years old can cause permanent damage.

Lead is a toxin which affects the:

Brain and nervous system
Digestive system
Reproductive system
Kidneys
Ability to make blood

The body stores lead in the:

BLOOD - for about 1 month
ORGANS - for several months
BONES - for decades

To determine lead exposure, a health professional can take a blood sample for analysis. An elevated blood lead level indicates lead is building up in the body faster than it can be removed.

Recommendations for firing range employees and shooters concerned about lead:

Substitute jacketed or ammunition containing lead-free primers and bullets.

Use the shoot range ventilation systems.

Wash hands and face before eating, drinking, smoking and before leaving range.

Wash and store firing range clothes separate from family clothes.

Ask your physician to order a blood lead test.

Other Bullet-Related Lead Dust Exposures

Melting lead to cast bullets produces fumes which turn into tiny dust particles that can stay in the air for up to 10 hours. Reloading lead bullets and lead shot creates a fine lead dust which is difficult to clean. To minimize lead exposure, do not reload lead ammunition or melt lead inside the home, in an unventilated area or anywhere children under six years old may play. Keep these areas clean and free of dust.

**For additional information, contact the Alaska Department of Health and Social Services
Lead Poisoning Prevention Program at (907) 269-8044.**

