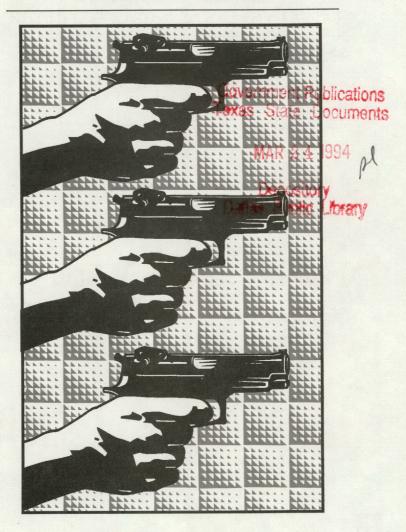
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FIRING RANGES

The Airborne Lead Dust Hazard

Shooter's Guide



Texas Department of Health

THE AIRBORNE LEAD DUST HAZARD

Exposure to lead dust and fumes at the firing range may harm the health of:

Firearm instructors

Other employees

Shooters

The firing range safety plan should:

Protect their health and

Minimize contamination to

the environment

LEAD DUST IN A FIRING RANGE

Airborne lead dust is created by:



Exploding lead styphnate primers



Friction from the lead slug against the gun barrel



Lead slugs hitting the bullet trap, walls, floors, or ceiling of the range



Spent bullets and settled dust



Improper range-cleaning methods disturbing settled dust



Poor indoor range ventilation



Outdoor weather conditions

Other High Lead Dust Sources

Bullet loading creates a fine dust that is very difficult to clean.

Melting lead to cast bullets produces a fume, which turns into tiny dust particles that can stay in the air for up to 10 hours. A person can easily breathe in this fine dust.

The dust also can contaminate surfaces.

NEVER load bullets or melt lead

- In an unventilated area
- Inside the home
- Anywhere children may live or play

Lead Dust Can Be Carried Home!

When employees and shooters are in the firing range, lead dust can:

Settle on their bodies Settle on their hair Settle on their clothes Be picked up on their shoes

Then the dust can be carried to their cars and homes, where it can harm their family and children.

HEALTH EFFECTS

Lead is a strong poison that serves no known use once absorbed by the body. Lead dust can enter the body by breathing or eating.

The body stores lead in the:

BLOOD - for about 1 month

BODY ORGANS - for several months

BONES - for decades

It affects the:

Brain and nervous system

Digestive system Reproductive system

Kidneys

Ability to make blood

Small amounts of lead can build up in the body and may cause temporary symptoms or permanent damage.

To find the amount of lead in the body, a health professional can take a blood sample from an adult or child and have it analyzed.

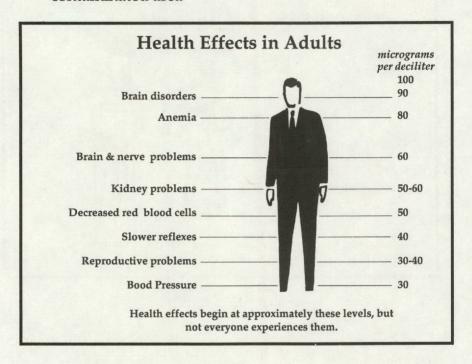
An elevated blood lead level is a sign that lead is building up in the body faster than it can be removed.



Adults

Adults can absorb lead at work or from hobbies. Lead dust and fumes can enter the body by:

- Breathing in lead dust and fumes
- Swallowing lead when drinking, eating, or smoking in contaminated areas
- Not washing their hands and faces after being in a contaminated area

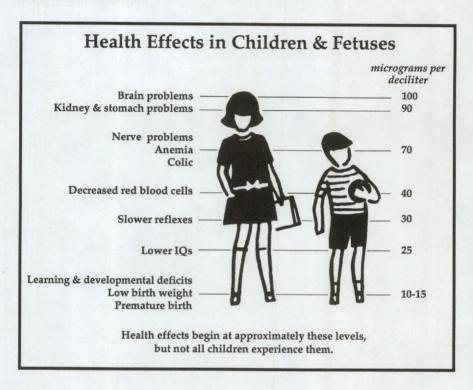


Children

Toys and other things children handle can get lead on them when parents bring lead dust home on clothes, shoes, and other objects.

Even small amounts of lead can harm a young child's developing brain and nervous system, and other organs.

Lead absorbed by children can cause permanent damage. The child may have learning problems and not grow as he or she should.



REFERENCES

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WHAT EMPLOYEES AND SHOOTERS CAN DO

Use the ventilation systems.

Make sure they are working properly.

Wash hands and face before eating - drinking - smoking.

Wash hands and face before leaving range.

Wash range clothes separately from family's clothes.

Always load bullets in a ventilated area.

Do not load bullets in the home or in areas where children live or play.

 ${f D}$ o not allow children into the bullet-loading area.

Keep bullet-loading area clean by using a high-phosphate detergent.

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For more information on lead exposure and firing ranges write or call:

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