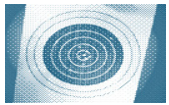


Shoot a Healthy 200: Lead Safety For Rifle Teams

In Connecticut, several teens have been diagnosed with lead poisoning over the past few years due to lead exposure from target shooting and indoor firing range use.

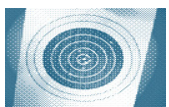
As a competitive rifle team member or coach, you are familiar with gun safety and have the knowledge to keep yourself and others safe during practice and competitions. However, do you know how to protect yourself from lead exposure while using indoor shooting ranges?



How Am I Exposed To Lead In The Firing Range?

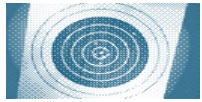


Lead dust is produced by firing lead containing ammunition. You can become exposed to lead at the range by breathing or ingesting lead particles. When a weapon is discharged in a firing range, lead is aerosolized (dispersed in the air as microscopic particles) which can remain airborne and be breathed in. Touching surfaces that have lead dust on them and then eating, drinking or smoking without washing your hands can also cause exposure. Lead dust can build up in ranges that are not routinely cleaned or properly maintained. Lead is a poison and exposure should be reduced to the lowest level possible.



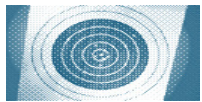
What Are The Health Effects From Lead Exposure at Firing Ranges?

As a teenager or young adult, you should keep your lead exposure as low as possible. If not detected early, people with elevated lead levels can suffer from a variety of health effects. Some health effects caused by lead exposure are digestive problems, kidney damage, fatigue, irritability, memory and concentration problems, and at higher levels muscle and joint pain, nervous system and reproductive system damage. However, you may have dangerously elevated lead levels and have no symptoms at all.



How Can I Reduce My Exposure To Lead At The Firing Range?

Individuals using the firing range, as well as those working at the range can be exposed to lead. Lead exposure at the firing range can be minimized by following some simple safety practices:



Make Sure The Range Has A Routine Cleaning & Maintenance Plan

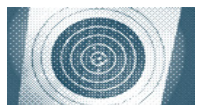
A range that has a routine cleaning schedule and utilizes the following cleaning methods will reduce the amount of lead particles present on range surfaces.

Wet-cleaning instead of dry sweeping—Wet-cleaning prevents lead dust from becoming airborne during clean-up. Dry sweeping stirs up settled lead dust which can then be breathed in or allowed to resettle on surfaces. Do not sweep brass! Use a rubber squeegee or pick up by hand.



Utilizing a HEPA (High Efficiency Particulate Air) vacuum instead of a shop vacuum—EPA vacuums should be the only type of vacuum used in order to prevent fine lead particles from re-entering the air. A HEPA vacuum is different than a regular shop-type vacuum, because it traps the very fine lead particles that are too small to see.

Frequent cleaning schedule—Large amounts of lead dust can build-up in active ranges during a short period of time. Establishing a daily cleaning schedule with a more thorough weekly cleaning schedule will assist in reducing the build-up of lead particles.



Make Sure That The Ventilation System Is Adequate For The Range

- Good ventilation with filters and dust removal systems that are maintained properly and inspected routinely can significantly reduce airborne lead levels in the firing range.
- Supplied air must flow from behind the shooter and exhaust down range maintaining a steady flow across all shooting booths, **carrying the gun smoke away from the shooter's face.**

Remember to Use Good Hygiene Practices

TIP: By using fully jacketed or lead-free ammunition, with a non-lead primer, lead levels in the range can be significantly reduced.

Never eat, drink or smoke in the range shooting booths or adjacent areas.

Remember to always wash your hands, arms, and face before eating, drinking, or smoking. Fine particles of lead dust can easily adhere to your skin, hair and clothing resulting in the accidental ingestion of lead. Shower as soon as you arrive home, as this ensures that any lead residue is washed out of your hair and off of other body parts.



Remember, even small amounts of lead can pose a health risk.

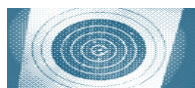
TIP: Consider using disposable floor mats while shooting in the kneeling or prone position. This will reduce possible clothing contamination.

Never Take Lead Home With You!

- Lead dust can settle on your body, clothing, shooting mats and equipment, where it can be carried into your car and home.
- **Always change out of contaminated clothing articles prior to leaving the firing range and place them in a washable storage bag for laundering.**
- Wash range clothing separately from the rest of the family's clothing; this prevents any possibility of cross-contamination.



In addition, shoes and boots used at the range should be left at the range, or stored in a separate sealed plastic bag for use only at the range to prevent lead dust from entering your automobile and home.



Where Can I Find More Information?

For more information about avoiding lead hazards in firing ranges please visit the following websites:

MMWR—Lead Exposure From Indoor Firing Ranges Among Students on Shooting Teams, Alaska 2002-2004

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5423a1.htm>

Fact Sheet: Indoor Firing Ranges, Centers for Disease Control and Prevention, National Institute for Occupational Safety & Health

<http://www.cdc.gov/niosh/topics/ranges/>

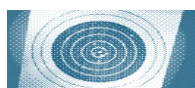
Lead Management & OSHA Compliance for Indoor Shooting Ranges www.rangeinfo.org/resource_library/facility.../Lead-OSHA.pdf

Fact Sheet: Reducing Lead at Indoor Firing Ranges, New York State Department of Health

<http://www.health.state.ny.us/nysdoh/lead/shoot.htm>

Fact Sheet: Firing Ranges, The Airborne Lead Hazard, Commonwealth of Massachusetts, Departments of Labor and Workforce Development

<http://www.mass.gov/dos/leaddocs/Lead-firing.htm>



Who Can I Call?

Connecticut Department of Public Health
Environmental and Occupational
Health Assessment Program
410 Capitol Avenue, MS# 11EOH
PO Box 340308
Hartford, CT 06134-0308
(860) 509-7740
<http://www.ct.gov/dph/occupationalhealth>

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