



Lead Bullets and Firing Ranges

Protect Yourself and Your Family!

This fact sheet is for those exposed to lead from target practice, and especially those who cast their own bullets using lead. Exposure to lead dust and fumes at the firing range may harm the health of shooters, instructors, and maintenance staff. They can inhale or ingest lead at the range and also carry home lead dust that settles on their body, clothes, shoes, and shooting gear, which could expose family members to lead.



Both outdoor and indoor firing ranges can be contaminated with high levels of lead.



Melting lead to cast bullets can result in high exposure to lead.



Lead brought home on your clothing (“take-home lead”) can affect your family, especially young children.



Lead poisoning is 100% preventable.

Here are some ideas for reducing lead hazards at the firing range:

- Use non-lead ammunition and primer whenever possible. Consult your range master or manager.
- Lead bullets should only be cast or fabricated in workshops properly equipped to control lead exposure. The same workshops must also be staffed by trained craftsmen who understand how to protect themselves from lead exposure.
- Don't eat, drink, or smoke inside the range.
- Use one pair of shoes and a set of washable clothes for shooting. Leave them in your locker at the range if possible, or keep them in a plastic bag. Wash clothes worn at the range regularly and wash them separately from your other clothes and family laundry.



(OVER)



Public Health Services
Division of Epidemiology, Environmental and Occupational Health
Environmental and Occupational Health Surveillance Program



Continued... reducing lead hazards at the firing range:

- Wash hands immediately after shooting, cleaning firearms, picking up spent casings/pellets, or reloading ammunition.
- Cleaning and maintenance work at the firing range should be performed by individuals trained in the proper techniques of exposure control.
- Dry sweeping and vacuuming should be prohibited since this can stir up lead dust. Cleaning should be done using a wet mop or a HEPA vacuum.



Spent lead bullets and lead particles accumulated behind targets present a hazard to housekeeping and maintenance staff.



Don't create lead hazards at home!

- Melting lead to cast bullets creates lead fume and dust. Do not cast or fabricate bullets at home!
- Avoid or minimize lead exposure from other activities or hobbies such as:
 - making fishing sinkers;
 - using lead solder;
 - cutting or burning painted steel (like in window frames);
 - removing paint that contains lead; or
 - fabricating stained-glass art objects.
- Don't eat, drink, or smoke* in your hobby area.
- Wash your hands and face before eating, smoking, or drinking.



***NJ Quitline is a free telephone-counseling service for smokers who are ready to stop. It is free, confidential, convenient, and multilingual. NJ Quitline: 1-866-NJSTOPS (866-657-8677). Or visit <http://www.njquitline.org/>.**

Health Effects

Exposure to lead can cause lead poisoning. Potential health effects and symptoms of lead poisoning include irritation of the eyes and throat, tiredness, metallic taste, poor appetite, weight loss, colic, upset stomach, nausea, vomiting, increase in blood pressure, muscle and joint pain, and kidney and nerve damage.

Medical research has shown that exposure to lead can affect a child's behavior and intellectual development. **Children are especially vulnerable to lead** because their organs and central nervous system are still developing, and their bodies are not able to easily eliminate the lead they absorb.



Symptoms of lead exposure may not always be visible. Therefore, it is crucial to consult your health care provider if you think you or a family member may have been exposed to lead. Your local or state health department and the state poison control center can also be contacted for additional information (see Resources below and on the last page).

RESOURCES

Several organizations have detailed guidelines for managing lead use at firing ranges. The New Jersey Public Employees Occupational Safety and Health (PEOSH) Unit enforces the standard for indoor firing ranges for New Jersey public employees (N.J.A.C. 12:100-8). Although this standard does not cover firing ranges in the private sector, useful information on preventing lead exposure can be obtained from this resource. To obtain a copy of the standard, contact the PEOSH Program as indicated below.

New Jersey Department of Health

Environmental and Occupational Health Surveillance Program

(tracks and follows up with workers with elevated blood lead levels; provides information on adult lead poisoning)

Phone: (609) 826-4984

Internet: <http://nj.gov/health/workplacehealthandsafety/occupational-health-surveillance/heavy-metals/>

Environmental and Occupational Health Assessment Program

(provides information on lead in the environment and non-workplace settings)

Phone: (609) 826-4950

Internet: <https://nj.gov/health/ceohs/lead/>

PEOSH Unit *(provides free on-site consultation services to public employers upon request; enforces the PEOSH indoor firing range and lead standards)*

Phone: (609) 984-1863

Internet: <https://nj.gov/health/workplacehealthandsafety/peosh/peosh-health-standards/firingrange.shtml>

Child and Adolescent Health Program

(tracks and follows up with children with elevated blood lead levels; provides information on childhood lead exposure)

Phone: (609) 292-5666

Internet: <https://www.nj.gov/health/childhoodlead/>

Resources continued on back page - - - ➔

Other Resources

National Institute for Occupational Safety and Health (NIOSH)

- ◆ NIOSH Alert - Preventing Occupational Exposures to Lead and Noise at Indoor Firing Ranges
Internet: <http://www.cdc.gov/niosh/docs/2009-136/pdfs/2009-136.pdf>
- ◆ Workplace Solutions - Reducing Exposure to Lead and Noise at Outdoor Firing Ranges
Internet: <http://www.cdc.gov/niosh/docs/wp-solutions/2013-104/pdfs/2013-104.pdf>

Your Local Health Department

(provides information on childhood lead screening and other services)

Internet: <http://nj.gov/health/lh/community/index.shtml#1>

New Jersey Poison Control Center (NJ Poison Information and Education System or NJPIES)

(handles emergency phone calls and provides information to the public)

Phone: 1-800-222-1222

Internet: www.njpies.org

New Jersey Department of Labor and Workforce Development

Division of Public Safety and Occupational Safety and Health

(provides free on-site consultation services to companies and businesses in the private sector upon request)

Phone: (609) 984-0785

Internet: http://lwd.state.nj.us/labor/lisse/employer/Occupational_Safety_and_Health_Onsite_Consultation_Program.html

New York State Department of Health

Aim at Lead Safety

Internet: https://www.health.ny.gov/environmental/lead/target_shooting/docs/control_lead_at_shooting_range.pdf

Connecticut Department of Public Health

Lead In Firing Ranges: Health Concerns

Internet: http://www.ct.gov/dph/lib/dph/environmental_health/eoha/pdf/firing_range_f.s..pdf

U.S. Department of Labor, OSHA (Occupational Safety and Health Administration)

Internet: www.osha.gov

(enforces OSHA lead standards in the private sector)

Contact your local New Jersey OSHA Area Office, by county, as follows:

- ◆ Hunterdon, Middlesex, Somerset, Union, and Warren Counties: (732) 750-3270
- ◆ Bergen and Passaic Counties: (201) 288-1700
- ◆ Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Monmouth, Ocean, and Salem Counties: (856) 596-5200
- ◆ Essex, Hudson, Morris, and Sussex Counties: (973) 263-1003

