

Do You Use Firearms?

Learn how to protect your family from lead exposure

Lead Exposure and Firearms

Using firearms may expose you and your family to dangerous levels of lead. If you or a family member spends time at a shooting range, with firearms, or handling ammunition, you and your family may be at risk of lead poisoning. Persons using ammunition with lead primers or lead bullets are exposed to lead from the gun smoke that is released when the gun is fired¹. **Leaded gun smoke can be inhaled and settles as dust** onto clothing and skin. Lead dust on hands can get into the body when eating, drinking, or through other hand-to-mouth activities. At indoor shooting ranges, lead dust can settle on surfaces like counter tops and the floor. Whether shooting indoors or out, **lead dust on your clothes, shoes, hair, and skin can be taken home to your family.**



Dangers of Lead Exposure

Lead exposure is dangerous for everyone, but is especially harmful for **children under six years old** and pregnant women. Lead exposure can cause learning difficulties and behavioral problems in children and reproductive problems, increased risk of heart attack or stroke, and brain and kidney damage in adults.

You cannot see or smell lead, and people with lead poisoning may not seem sick. The best way to know if you or a family member has lead poisoning is with a blood lead test.

In California, **health insurance plans**, including Medi-Cal and CHDP, **are required to cover blood lead tests** for children who are at risk for lead poisoning.

Protect Yourself and Your Family from Lead:

- When target shooting or hunting, **use jacketed or non-lead bullets.**
- **Do not eat, drink, or smoke** inside a shooting range or while **around firearms.**
- **Wash your hands**, arms, and face with soap and warm water after using firearms, visiting a shooting range, or handling ammunition.
- **Change into clean clothes** and shoes before you get into your car or go home. Put dirty clothes in a plastic bag and wash separately.
- **Take a shower** and wash your hair as soon as you get home.
- **If you reload your own shotgun shells or smelt/cast your own bullets**, establish a safe area outside of the home and away from children and pets². Always wash up afterwards.
- **Hunting note:** Effective July 1, 2019, nonlead ammunition is required when hunting with a firearm in California³. Eating game meat that was shot with lead ammunition may increase blood lead levels⁴.

For more information, visit www.cdph.ca.gov/Programs/CLPPB or contact:

If you work at, manage, or own a shooting range, learn more about preventing workplace lead exposure and lead safety requirements employers must follow by visiting the Occupational Lead Poisoning Prevention Program's website: www.cdph.ca.gov/OLPPP.

¹“Lead Hazards at Shooting Ranges.” California Department of Public Health Occupational Lead Poisoning Prevention Program. Accessed 3/4/2020 from www.cdph.ca.gov/Programs/CCDCPHP/DEODC/OHB/OLPPP/CDPH%20Document%20Library/rangehazards.pdf

²“Lead Hazards from Casting and Reloading.” Michigan State University Dept. of Medicine. Accessed 4/21/2020 from oem.msu.edu/images/annual_reports/lead%20hazards%20casting%20and%20reloading-sept.pdf

³“Nonlead Ammunition in California.” California Department of Fish and Wildlife. Accessed 3/4/2020 from wildlife.ca.gov/Hunting/Nonlead-Ammunition

⁴Green, RE, and Pain, DJ. “Risks to human health from ammunition-derived lead in Europe.” *Ambio* vol. 48, 9 (2019). Accessed 4/10/2020 from www.ncbi.nlm.nih.gov/pmc/articles/PMC6675757/