

Recommendations to Reduce Potential Exposure to Lead in Game Meat Harvested with Lead Ammunition

A recent study in North Dakota has raised concerns about the potential risk of exposure to lead associated with eating wild game harvested with lead bullets. Ingestion of lead from any of a variety of sources can cause significant health problems, especially in young children and pregnant women. Studies have confirmed that game meat processed by hunters and commercial meat processors can contain lead bullet fragments that are too small to see or even feel when eating the meat. The North Dakota study showed that blood lead levels were slightly higher in a group that ate wild game compared to a group that did not, although neither group had blood lead levels high enough that the Centers for Disease Control and Prevention would recommend some type of intervention or medical treatment. However, the health significance of these slightly higher levels is not known.

Although not enough research has been done to fully evaluate potential health risks that may be associated with lead contamination in game meat, data from the recent study suggest these risks are very low for most people.

The Colorado Department of Public Health and Environment and the Colorado Division of Wildlife provide these recommendations to minimize exposure to lead in wild game:

- Because lead fragments cannot be eliminated with complete certainty, pregnant women and children younger than 6 years of age should avoid eating meat from any game animals harvested with lead bullets. These groups are more sensitive to the health effects of lead, and ingesting even small amounts may be harmful. Lead can affect the development of infants and young children when present at levels well below those that would cause any noticeable signs of illness in a child.
- Hunters can eliminate lead in their game meat by using lead-free bullets.
- When processing an animal, liberally trim and discard meat damaged by the bullet and an expanded area around the bullet channel(s) because lead fragments may scatter some distance from the visible bullet wound. Discard any meat that is bruised, discolored, or contains hair, dirt, grass, visible bone or lead fragments.
- Because lead is a soft metal, it can be ground along with the meat, spreading lead contamination through an entire batch of ground meat. In recent studies, lead has been found more often in ground meat than in whole meat cuts. To minimize the amount of processed game meat potentially contaminated with lead, clean the grinder frequently, preferably between each animal. Ask your commercial processor to process your animal individually to avoid cross-contamination from batching multiple animals.

- Even if a carcass is processed using these recommendations, whether at home or at a commercial processor, there is still a chance small amounts of lead may remain in the meat.

Additional Information

Additional information about lead in game meat and the health effects of lead can be found at the following websites:

1. North Dakota Department of Health:
[http:// www.ndhealth.gov/lead/venison](http://www.ndhealth.gov/lead/venison)
2. Minnesota Department of Natural Resources:
<http://www.dnr.state.mn.us/hunting/lead/index.html>
3. Centers for Disease Control:
<http://www.atsdr.cdc.gov/tfacts13.html>