

NEZ PERCE TRIBE POSITION STATEMENT ON NON-LEAD AMMUNITION USE

"The Nez Perce people have immense ecological wisdom and knowledge about the lands where they have always fished, hunted, and gathered. Respect for the natural resources provided by the creator has guided the Nimiipuu to protect the land, water, and wildlife." -NezPerce.org

For the health of our land and safety of our community, the Nez Perce Tribal Executive Committee recommends the use of non-lead ammunition for all food harvest and land management activities requiring the use of firearms.

This recommendation is based on the following facts:

- Lead is a known metal neurotoxin with no "safe" level of exposure for any living being (Vorvolakos, T. et al. There is no safe threshold for lead exposure: A literature review. *Psychiatriki* Jul-Sep; 27(3):204-214, 2016.
- Conventional lead-core, jacketed bullets lose a portion of their weight as they travel through an animal's body, leaving hundreds of tiny pieces of lead behind (Grund, M.D., et al. Bullet fragmentation and lead deposition in white-tailed deer and domestic sheep. Human-Wildlife Interactions 4(2):257-265, Fall 2010).
- Wildlife species are at risk of secondary poisoning if they eat left-over carcasses and gut-piles containing lead fragments (Pain, D.J., et al. Effects of lead from ammunition on birds and other wildlife: A review and update. *Ambio* 48, 935-953, 2019).
- Spent ammunition lead fragments can unintentionally end up in game meat processed for human consumption (Pain, D., et al. Potential hazard to human health from exposure to fragments of lead bullets and shot in the tissues of game animals. *PLOS ONE* 5(4): e10315 2010).
- Anyone who eats game meat harvested with lead bullets should be aware of the risk of ingesting lead fragments. (Knott, J., et al. Implications for wildlife and human of dietary exposure to lead from fragments of lead rifle bullets in deer... Science of the Total Environment 409(1):95-99, 2010).
- Pregnant women and growing children are especially vulnerable to the destructive impacts of lead (Tong, S., et al. Environmental lead exposure: a public health problem of global dimensions. *Bulletin of the World Health Organization, Theme Papers* 78(9):1069-1077, 2000).
- The collective actions of hunters and land managers play an important role in ecosystem health and wildlife conservation (Heffellfinger, J.R., et al. The role of hunting in North American wildlife conservation. *International Journal of Wildlife Studies* 70(3):399-413, 2013).
- Choosing to use lead-free ammunition avoids unnecessary risks to humans and wildlife and represents a positive way to give back to the land while providing for the health of our community (Arnemo, J. M., et al., Transition to lead-free ammunition benefits all. *Ambio* 48:1097-1098, 2019).
- Creator has endowed us with a sacred trust commitment to ancestral obligations and unborn generations as wise stewards. This responsibility includes ensuring the health and perpetuation of life in all forms throughout our homeland.

Lead is a toxic metal with no "safe" level of exposure:

Lead is a known neurotoxin with no safe level of exposure- the effects of human exposure to lead can include compromised immunity, lower IQ, learning disabilities, developmental disorders, neurological diseases, male infertility, miscarriages, increased aggressive behavior, increased incarceration rates, cancer, and death. (https://www.cdc.gov/nceh/lead/prevention/health-effects.htm).

Even though the impacts of sub-lethal exposures are difficult to detect, the effects of lead poisoning are permanent and untreatable. Even small amounts of ingested lead can impact the nervous system, increase blood pressure, decrease sex drive, cause anemia and memory loss and contribute to a poor appetite. Pregnant women and growing children are especially vulnerable to the impacts of lead. Lead exposure contributes to miscarriages and can permanently lower a child's IQ, cause learning disabilities, increase aggressive behavior and lower impulse control. Studies have also correlated particle lead exposure and increased crime rates (*U.S. National Library of Medicine and National Institutes of Health:* June, 2004, and summary article: https://www.brookings.edu/blog/up-front/2017/06/01/new-evidence-that-lead-exposure-increases-crime/).

For those who hand load their own bullets and may have ammunition stockpiles, lead ammunition is still a good choice for target practice at the shooting range where it can be confined in location and responsibly cleaned up.

Lead from spent ammo impacts non-game wildlife:

The average jacketed lead-core bullet loses 30%-40% of its weight upon impact as the bullet mushrooms. Research using x-rays shows this weight loss translates into *hundreds of tiny small fragments* that spread into meat and discarded gut piles. Whether a lead-core bullet hits bone or not, lead dust and tiny particles can move up to 18 inches or more away from the wound channel and can be easily absorbed into the blood stream via the acidic conditions of the stomach if ingested.

Ingested lead fragments can permanently cripple, or kill non-targeted wildlife and is particularly impacting to avian scavenger species. These fragments are often swallowed by scavengers such as, eagles, hawks, ravens, vultures, bears, wolves, etc. that routinely search out hunted left-overs as a food source. Raptor rehabilitation centers throughout the region have shown that this is a widespread problem in all types of birds of prey.

Lead that is adsorbed or incorporated into food items through the soil, as well as lead fragments in carcasses or deposited at shooting sites, is known to be consumed by some birds and small mammals, resulting in elevated lead concentrations. Ingestion by reptiles, birds, and mammals of spent ammunition and lost fishing tackle has also been documented and can cause a range of negative effects in individuals, potentially leading to population-level consequences in some species (e.g., waterfowl, eagles, condors, mourning doves, and loons), and other species where population-level thresholds are adequately described by responsible resource agencies (https://wildlife.org/tws-position-statement-lead-in-ammunition-and-fishing-tackle/).

Lead has been removed from many products including, paint, gasoline, toys, and plumbing. It's now time to remove it from our food web by switching to non-lead ammunition.

There are multiple benefits to hunting lead-free:

Copper based, non-lead ammo is deadly accurate, reduces the risk of losing wounded animals across property lines, increases meat retention, provides a healthy meal for families and wildlife and helps save eagles and other culturally important species. Like lead-core bullets, solid copper bullets expand rapidly upon impact, but stay in one piece without leaving residual contamination behind. Originally designed to take down the largest of big game animals, centerfire non-lead ammunition has comparable accuracy and impact compared to lead, and due to higher velocities and weight retention flies straighter and sets the standard for penetration.

Premium lead ammo and non-lead ammo brands are similarly priced and there are often online deals. Popular non-lead ammo brands include: Barnes, Nosler E-Tip, Hornady GMX, Federal Trophy Copper, Winchester Deer Season XP Copper Impact, Browning BXS, and Remington HTP Copper.

It is the goal of the Nez Perce Tribe to continue to be a regional leader in wildlife conservation research and management. With this in mind, together with our stewardship responsibilities, our goals concerning non-lead ammunition advocacy and use include:

1.) Encouraging hunters and shooters to make a voluntary switch to non-lead ammunition and advocating for the replacement of lead-based ammunition with non-lead brands of all calibers in regional outfitting vendors.

- 2.) Recognizing that the increase of non-lead ammunition use for hunting and land management purposes will require collaboration among a variety of stakeholders.
- 3.) Creating continued opportunities to share awareness and support other efforts to promote greater public understanding of the consequences of lead exposure to wildlife species, while emphasizing the environmental quality and health benefits for wildlife and people from the wide-spread use of non-lead ammunition.

Hunting Stewardship and Safety Program:

In response to these concerns and goals, we have developed a program within our Wildlife Division to promote the use of non-lead ammunition through culturally-appropriate outreach and education programs. The Stewardship Program Coordinator can be reached at (208) 843-7372 or (208) 621- 4695, or wildlife@nezperce.org. Please also see the program webpage at: https://nezperce.org/wildlife/hunter-safety-stewardship-program/.





One shot, one kill: shoot clean