THE HUMANE SOCIETY
OF THE UNITED STATES

TESTIMONY REGARDING HB 2525-A

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SENATE COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

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Chair Dembrow and Members of the Committee:

Thank you for the opportunity to comment on HB 2525-A, a bill that modifies requirements relating to donating game meat to charitable organizations. The Humane Society of the United States urges the committee to adopt the Dash-3 amendments to the bill to address the toxic threat posed by lead ammunition fragments in any game meat being donated to charitable organizations.

Lead is a highly toxic substance.[i] Lead poisoning has been documented in humans for over 2,500 years[ii] and its effects on human health are widely known. The Centers for Disease Control states that there is no safe level of lead exposure.[iii] Over the years, lead has been removed from various paints, gasoline, pipes and a host of other items to protect human health and our environment. Yet lead exposure through hunting ammunition continues to pose a threat to human health. Lead ammunition is the "greatest, largely unregulated source of lead knowingly discharged into the environment in the United States."[iv]

Although the effects of lead exposure are a potential concern for all humans, young children are most at risk. Lead can cause irreversible damage to the brain and nervous system, behavioral problems, anemia, liver and kidney damage, hearing loss, hyperactivity, developmental delays and, in extreme cases, death.[v]

In adults, lead poisoning can cause poor muscle coordination, nerve damage to the sensory organs and nerves controlling the body, increased blood pressure, hearing and vision impairment and reproductive problems.[vi] Failure to treat lead poisoning in the early stages can cause long-term or permanent health damage.

Individuals who consume meat from animals killed with lead ammunition are at risk for lead exposure.[vii] Lead ammunition is highly fragmentable and nearly impossible to remove completely from meat.[viii] Lead fragments can be found as far as 18 inches from the bullet wound channel.[ix] Lead fragments in game meat include not only larger, visible pieces, but also tiny nanoparticles invisible to the naked eye.[x] Lead hunting ammunition needlessly exposes humans to this toxic substance. Game meat is a common dietary staple for many families throughout the United States and lead-based ammunition fragments found in game meat can substantially raise lead levels in humans.[xi,xii]

The best way for people to avoid risk of lead exposure from ammunition is to avoid eating wild animals shot with lead ammunition. For the safety of families in need, game meat donated to charitable organizations should not be shot with lead ammunition and should not processed be in facilities that may have lead contamination from other wild-killed animals.[xiii]

Other states recognize the threat posed by lead-contaminated game meat. North Dakota advises food pantries not to distribute or use donated ground venison because of contamination from lead fragments.[xiv] The Minnesota Department of Health recommends that pregnant women and children younger than six not eat venison harvested using lead ammunition.[xv] Others advise that using non-lead ammunition can eliminate potential lead exposure from processed venison.[xvi, xvii,xviii]

Thank you for considering this information.

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[i] Agency for Toxic Substances and Disease Registry, Centers for Disease Control and Prevention. 2011. Lead CAS ID #: 7439-92-1. https://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=22

[ii] Eisler, R. 1988. Lead hazards to fish, wildlife, and invertebrates: a synoptic review. United States Fish and Wildlife Service. Biological Report 85.

[iii] Centers for Disease Control and Prevention. 2013. Lead Factsheet. National Biomonitoring Program. http://www.cdc.gov/biomonitoring/Lead_FactSheet.html

[iv] D. Bellinger, et al. 2013. Health Risks from Lead-Based Ammunition in the Environment – A Consensus Statement of Scientists. Microbiology and Environmental Toxicology, UC Santa Cruz. http://escholarship.org/uc/item/6dq3h64x.

[v] Agency for Toxic Substances and Disease Registry, Centers for Disease Control and Prevention. 2016. Lead Toxicity, What Are the Physiologic Effects of Lead Exposure? https://www.atsdr.cdc.gov/csem/csem.asp?csem=7&po=10

[vi] *Id.*

[vii] Pain, D. J., et al. 2010. 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.

[viii] U.S. National Park Service. 2011. Lead Bullet Risks for Humans & Wildlife. https://www.nps.gov/pinn/learn/nature/leadinfo.htm

[ix] Minnesota Department of Natural Resources. Examining Variability Associated with Bullet Fragmentation and Deposition in White-tailed Deer and Domestic Sheep. http://www.dnr.state.mn.us/hunting/lead/short-summary.html

[x] Kollander, B., Widemo, F., Ågren, E., Larsen, E. H., & Loeschner, K. (2016). Detection of lead nanoparticles in game meat by single particle ICP-MS following use of lead-containing bullets. *Analytical and Bioanalytical Chemistry*, *409*(7), 1877-1885.

[xi] W. Cornatzer, et al. 2007. Qualitative and quantitative detection of lead bullet fragments in random venison packages donated to the Community Action Food Centers of North Dakota. *Ingestion of Lead from Spent Ammunition: Implications for Wildlife and Humans.* The Peregrine Fund, Boise, Idaho, USA. DOI:10.4080/ilsa.2009.011

[xii] Iqbal, S., et al. 2009. Hunting with lead: association between blood lead levels and wild game consumption.

Environmental Research, *109*(8), 952-959. DOI:10.1016/j.envres.2009.08.007

[xiii] W. Cornatzer, et al. 2007. Qualitative and quantitative detection of lead bullet fragments in random venison packages donated to the Community Action Food Centers of North Dakota. *Ingestion of Lead from Spent Ammunition: Implications for Wildlife and Humans.* The Peregrine Fund, Boise, Idaho, USA. DOI:10.4080/ilsa.2009.011

[xiv] North Dakota Department of Health. Lead in Venison. https://www.ndhealth.gov/lead/venison/

[xv] Minnesota Department of Health. 2008. Information about lead in venison. http://www.health.state.mn.us/divs/eh/lead/leadinvenison.pdf

[xvi] Illinois Department of Public Health. Environmental Health Fact Sheet, Lead in Venison. http://www.idph.state.il.us/envhealth/factsheets/lead-in-venison.htm

[xvii] Michigan Department of Natural Resources. Precaution About Lead in Venison. http://www.michigan.gov/dnr/0,4570,7-153-10363_10856_10905-197557--,00.html

[xviii] Wisconsin Department of Natural Resources. Lead Information for Hunters, Consumers and Meat Processors. http://dnr.wi.gov/topic/hunt/documents/lead.pdf