BELLAMY GENN
GROUP

March 4, 2026

Delegate Marc Korman, Chairman
House Environment & Transportation Committee
250 Taylor Office Building
Annapolis, MD 21401

Re: **HB 1067** – Hunting – Phase-Out of Lead Ammunition - **FAVORABLE**

Dear Chairman Korman, Vice Chair Guyton and Members of the E&T Committee:

On behalf of Animal Wellness Action and the Center for A Humane Economy, we thank Vice Chair Guyton for sponsoring this bill to phase-out the use of lead ammunition in hunting for environmental and health reasons.

The reasons to pass this bill are conclusive and compelling and the result of 3 years of discussions. We believe we have reached common-sense consensus through compromise. We firmly believe no further watering-down amendments are needed that will risk human health, animal welfare and further degradation of the environment.

Some from the Farm Bureau community and others have indicated we need a further delay in the implementation of this ban to protect those with Deer Management Permits and farmers for alternative ammunition cost reasons.

First, there are bag limits to taking deer statewide. So, if the cost differential between lead ammunition and copper or alternative ammunition is even $1.00, if you take two shots at each deer and kill 10 of them, that would be a total of $20 additional dollars a year.

But a Deer Carcass Removal Permit to remove deer from a Deer Management Permit area is $100, plus the Deer Management Permit costs itself, way exceed the alleged concern over financial costs for the non-lead alternative ammunition to farmers from commercial crop damage.

The alternative would be to let the deer sit in the field in gut piles and the lead fragments left in the venison will be eaten by other animals and scavengers and the lead can leach into the soil that grows the crops that the farmer's are trying to protect so they then can sell the crops

commercially to the public. Do you really want unknowingly to buy lead-infused farm products?

So a couple of thoughts that the opponent's to this health and environment bill need to answer.

Did the Farmer's who live near waterways and shoot waterfowl, ducks, geese and other birds get an exemption in 1991 to the lead ammo ban that was ***immediate and no delay in implementation***?

Did professional painters get an exemption to still paint with lead paint?

Did gas station owners get an exemption to still pump gasoline with lead?

Did toy manufacturers get an exemption to still make toys with lead?

Are you going to allow the donation of venison to foodbanks when now 'lead dust' can't be seen in the venison by the human eye?

The *Actual & Real* Implementation Timeline

For example, the under HB 1067, the use of lead ammunition for shooting pen-reared birds would be allowed until September 1, 2027 (the beginning of that hunting season). *That's 18 months from now* under the effective date of the bill.

The upland game birds and webless migratory bird hunting season beings on September 1 and December 19th in 2028, respectively. *That's two and a half years from now* under that phase in date.

The deer firearm season doesn't begin until Mid-October and since the effective delayed date for hunting deer is 2029, it wouldn't impact that hunting season for *THREE AND ONE-HALF YEARS from now!*

We don't need to wait longer than ENGLAND, SCOTLAND & WALES to implement a procedure that our own DNR can do by regulations and provide access for those who cannot find 'commercially available' non-lead ammunition.

Here is the DNR Hunting Season link on their website:
https://dnr.maryland.gov/huntersguide/Documents/Hunting_Seasons_Calendar.pdf

WHAT THE BILL DOES NOT DO:

HB 1067 only applies to hunting in the field -- that means it applies only to licensed hunting activities during the established seasons.
It does not prohibit:

- the *use* of lead at a target practice facility or your own property;
- the *possession* of lead ammunition;

- the *sale* of lead ammunition; or
- the *use* of lead ammunition *in another state*.

Banning the use of lead ammunition in hunting in Maryland is not new. For the last 35 years in Maryland, waterfowl hunters - one of the most important segments of the hunting community – have been using steel and other non-toxic ammunition. Under President George H.W. Bush, in 1991, the U.S. Fish & Wildlife Service (USFWS) banned the use of lead ammunition for ducks, geese and other waterfowl.

Hunters absorbed an initial modest a price increase at the start, but then the pricing leveled off quickly. That ban on lead ammunition – which occurred when all hunters had to go to their local gun store and other brick-and-mortar retailers for ammunition – is considered one of the greatest conservation and animal welfare achievements in wildlife management in the last century.

- It's saved as many as 3.9 million ducks and geese a year from lead poisoning – allowing for more hunting of more abundant game.
- It's stopped hunters and hunting families from consuming lead.
- And it's prevented lead poisoning in dozens of other species.

The same guns and ammo trade groups opposing HB 1067 opposed the USFWS ban on lead ammo. They were wrong then, and they are wrong now. The shift from lead ammo to non-lead ammo is far easier today than 35 years ago, and it will protect Maryland citizens, hunting families and wildlife from lead poisoning.

DNR & USFWS have been effectively enforcing this law for more than three decades. So, the concept and the success story are established. HB 1067 simply applies the prohibitions more broadly now that we have greater medical evidence and peer-reviewed research to understand what a grave risk lead ammo poses for humans of all ages, the hunting families, food bank participants, and dozens of wild species.

HEALTH ISSUES WITH LEAD AMMUNITION EXPOSURE

Nationally-known Epidemiologist and Pediatrician, Dr. Aisha Dickerson, Assistant Professor at the Johns Hopkins Bloomberg School of Public Health, testified in favor of SB 181 before the Senate Education, Energy & Environment Committee indicating that there is no CDC safe level of lead.

Dr. Dickerson testified lead is a well-documented neurotoxin affecting brain development, organ systems, and long-term cognitive health.

-- She has treated children in the emergency room immediately after ingesting lead paint. The greater threat is that lead bioaccumulates over time in the brain, blood and bones, other vital organs and it afflicts people later in life with cognitive problems and impedes normal growth and development.

-- She testified that lead is especially damaging to children who unknowingly ingest venison with lead particles. She testified that lead blocks calcium absorption into the bones. That reduces bone growth in children, causes bones to be more brittle in women, and weakens bones in seniors making them more susceptible falling and serious harm if not worse.

-- She testified that she treated children who ate lead paint chips were in the ER room the same day with lead poising effects.

-- She noted there should be serious concern about donated deer meet to food banks and areas of food insecurity.

Other peer reviewed scientific studies from NIH show there can be a reduction in IQ in children who have been exposed to lead, including lead ammunition, from 5 to 7+ points impacting their ability to learn and creating behavioral issues that parents and the school systems are left to deal with.
See: https://pmc.ncbi.nlm.nih.gov/articles/PMC9150353/

In fact, while dozens or more lead fragments can be seen by X-Ray in deer shot with lead, a recent January 2026 study shows that at the Advance Photon Source at the University of Chicago, synchrotron X-ray imaging, was used to look at venison – far more powerful technology than normal X-ray technology:

- This enhanced imaging directly observed ultra small lead fragments embedded within tissues of game animals struck by traditional lead-based ammunition. Lead fragments down to the size of red blood cells were found in edible tissues of a white-tailed deer, literally like "lead dust" that could not be seen by human eyes.
- Alarming is that this "lead dust" could spread throughout the deer's circulatory system after the initial shot infusing the muscle and organs of the deer with unseen lead.
- Food banks and hunting families clearly do not have access to expensive technology to know they are consuming lead. The CDC says there is no safe level of lead consumption.
- See: Professor Adam Leontowitch's written testimony to HB 1067 (Attached under Natalie Ahwesh's testimony).

We previously banned the use of lead in gasoline, in paint, crystal glass, toys and more.

However, there are few regulations regarding the release of lead into the environment through discharge of lead- based ammunition. For other major categories of lead consumption, such as lead batteries and sheet lead/lead pipes, environmental discharge and disposal are regulated. Therefore, lead-based ammunition is the greatest largely unregulated source of lead that is knowingly discharged into the environment in the United States." See: Bellinger DC, Burger J, Cade TJ et al, 2013. Health risks from lead-based ammunition in the environment. Environmental Health Perspectives. 121(6):a178-179. See:
https://pmc.ncbi.nlm.nih.gov/articles/PMC3672933/pdf/ehp.1306945.pdf

MORE THAN 500 PEER-REVIEWED STUDIES SHOW DEVASTATING LEAD AMMUNITION EFFECTS ON PEOPLE AND WILDLIFE.

- We know that lead fragments in the gut piles of field dressed animals, and in wounded and un-retrieved animals is poisoning and killing non-target animals that scavenge on those remains and carcasses, including bald and golden eagles, hawks, owls, vultures, crows, ravens, blue jays, and foxes.
    - See: https://cwhl.vet.cornell.edu/article/what-you-leave-behind

- We know that the use of lead ammunition in hunting is poisoning almost one-half of the entire continental population of bald eagles, and we know that this poisoning is suppressing growth in the continental populations of both bald and golden eagles.

See: https://www.science.org/content/article/nearly-half-bald-eagles-have-lead-poisoning "Nearly half of the birds showed signs of chronic lead poisoning—46% of bald and 47% of golden eagles." See:
    - https://www.science.org/doi/10.1126/science.abj3068

- We know that the nationwide ban on lead shot for waterfowl hunting (implemented in 1991) has been an unmitigated success, for waterfowl and for waterfowl hunters. "... an estimated 1.4 million ducks in the fall 1997 continental flight ... were spared from fatal lead poisoning."
    - https://www.jstor.org/stable/3802755
    - https://www.fws.gov/sites/default/files/documents/WaterfowlPopulationStatusReport21.pdf

COST & ALTERNATIVES TO LEAD AMMUNITION

The incremental cost difference for non-lead ammunition is minimal—often less than $10–$20 per year for the average hunter. It could be as low as twenty-five cents per bullet for a hunter who shoots a deer with a single shot – which is exactly the goal of deer hunter.

Other costs associated with hunter make the ammunition expenditures negligible in comparison:

- Licenses
- Firearms
- Camouflage clothing
- Tree stands and equipment
- Travel, fuel, lodging
- Processing of game meat
- Taxidermy costs

The cost of Ammunition is one of the smallest components of total hunting expenses.

Specifically, ammunition listed on ammoseek.com, indicates there is non-toxic rifle ammunition readily available in every popular deer hunting cartridge (.240, .308, 30-06, and 30-30) and at roughly equivalent prices to bonded lead ammunition. For example, 30-06/180 grain ammunition in copper and bonded lead, both at $1.45 per cartridge. Non-toxic ammunition for shotguns is also readily available, although generally more expensive ($1.50-$2.00 per round).

See attached Sheet from National Hunter and Writer Ted Williams and Information from Tony DiNicola, who manages deer culling in CT for Cost comparisons.

Alternative Non-Lead Ammunition is Widely Available

Copper, steel, tungsten, and bismuth ammunition are:

- Readily available nationwide
- Sold online and in retail stores
- Equal or superior in performance.
- The U.S. Army uses Copper bullets for accuracy and lethality!
- DNR Secretary Josh Kurtz uses non-lead ammunition to hunt and so does Maryland's Dan Ashe, who was Director of the U.S. Fish and Wildlife Service for six years under President Obama.

DNR PUBLIC COMMENTS & WEBSITE

Comments posted on the DNR Website as of February 19, 2026, indicate any reduction in hunting is a result of hunting limits and increased fees and not the cost of alternatives for lead ammunition!

See, https://dnr.maryland.gov/wildlife/Pages/comment-form-hunting-regulations-2026-28.aspx

Public comments indicate that increased populations of waterfowl, enabled by the lead ban, are a reason for hunters to buy licenses and take to wetlands and fields.

"…upping the goose limit would great! I believe this would make a lot of hunters happy and spark interest in waterfowl hunting where people were discouraged of even buying a license due to these limits. "[Emphasis added].

"all the other license fees and permits it's becoming unaffordable to hunt in Maryland. The money spent on lodging, gas and food etc. adding to Maryland economy along with reasonable license fees should be payment enough to hunt Maryland!"[Emphasis added].

DNR's WEBSITE REFERENCES THE HAZARDS OF LEAD AMMUNITION:

Maryland DNR acknowledges lead ammunition as a health risk to hunters and their families and friends. This warning is included on page 28 of the Maryland 2025-2026 Guide to Hunting and Trapping:

See: https://www.eregulations.com/assets/docs/resources/MD/25MDHD_LR5.pdf

"HUNTERS SHOULD BE AWARE OF LEAD POISONING RISKS WHEN USING LEAD PROJECTILES.

Even small amounts of lead can cause serious health problems. Young children and pregnant women are particularly susceptible to lead poisoning. Meat from game animals taken with lead fragmenting bullets and shot is a lead poisoning risk. [Emphasis added]. Avoid the use of meat from possibly contaminated wound channels, especially in ground meat. Inspection for and removal of fragments and shot is recommended. To avoid lead contamination further from the impact area, careful shot placement to avoid large bone masses and bullet fragmentation is also recommended. Finally, hunters are encouraged to investigate and use non-lead ammunition alternatives. Many non-lead centerfire rifle calibers are now available that are proven to be as effective as lead versions. Likewise, steel and non-lead shotgun shells are also readily available for small game and turkey hunting."

VOLUNTARY PROGRAMS ARE INEFFECTUAL – PROVEN EXAMPLES

- The North American Non-Lead Partnership (now comprised of 50 pro-hunting agencies and organizations) was formed in 2017 to promote voluntary use of non-toxic bullets. At that time, 95% of American hunters were using lead rifle bullets and lead shot for upland game. Other than in California – where a law forbids the use of toxic ammunition – an estimated 95% of American hunters are still using lead rifle bullets and lead shot for upland game. There's very little voluntary pick-up of lead-free ammunition even in exchange programs where the ammunition is essentially free.

- In 2003, scientists published definitive studies linking lead in the blood of California condors to lead rifle bullet fragments. With the species on the verge of extinction, hunters did not voluntarily switch to non-toxic ammunition. They switched only after Republican Governor Arnold Schwarzenegger signed legislation in 2007 to ban lead ammunition use in condor habitat.

- Prairie dog shooting—encouraged by ranchers and government agencies—leaves carcasses riddled with lead fragments that poison raptors and mammalian scavengers. To test whether voluntary change would work, Audubon Kansas offered prairie dog shooters in Kansas non-toxic copper ammunition at no additional cost for four years. Not a single shooter accepted it. The failure wasn't cost or availability; it was resistance to change.

- In the United Kingdom, the nine leading game shooting and rural organizations, promised to voluntarily phase out lead from 2020 to 2025 to obviate the need for a government ban. However, in 2025 the program was deemed a complete failure. Monitoring in the 2024/25 season found that 99% of pheasants were killed with lead ammunition, the same as pre-pledge levels of lead use. A parallel analysis from the same season showed 100%of 78 red grouse carcasses analyzed had lead pellets, despite the voluntary transition period. As a result of the failed voluntary program, mandatory phased-in transition to nonlead ammunition will begin in 2026, with a three-year phase-in for non-toxic ammunition in England, Wales, and Scotland. This matches the timeline proposed for Maryland in SB 181.

- New York, in 2023, implemented a program offering rebates (up to $60) for hunters to purchase lead-free ammunition if they participate in pre-and post-hunt surveys in one region in the state; there were rebates distributed to 200 hunters. Subsequently, this program was expanded statewide. Interestingly, no data analyzing the program effectiveness has been made available, but there is little reason to think that there was significant participation or impact in a state with 500,000 hunters. (No fiscal note has been prepared for SB 181, even if $50 were offered to the 113,000 licensed hunters in Maryland).

SB 181 IMPLEMENTATION TIMELINE

- There is more than ample time for hunters to secure alternatives to lead and use their current supplies. This bill has been around for the two previous sessions and hunters and other interested organizations have been well-aware of the likelihood that this bill would be back, as they noted in their online websites that this "likely will be proposed in the future."
- With a 3-year phase in period, that would be a total of 5 years hunters have been aware of this. And this comes 35 years after Maryland waterfowl hunters were obligated to make the switch. This transition is far easier since hunters can get ammunition on-line from any retailer offering home delivery.
- See: https://www.nrahlf.org/articles/2025/3/26/maryland-legislation-to-ban-lead-hunting-ammo-dies-in-state-house-and-senate/

OTHER STATES & COUNTRIES

Just last year, the countries of England, Scotland and Wales, with combined population almost 10 times the State of Maryland, have enacted a phase out of all lead ammunition by 2029. That's because as noted above, all 'voluntary programs' in those countries to convert to the use of non-lead ammunition failed! The conversion timeframe in England, Scotland & Wales is the exact timeframe in SB 181 for full implementation.

CA, Since 2019 and full implementation of the lead ammunition phase-out, there has been no reduction in hunting compared to MD after full implementation.

See: Comparison Hunting License Chart attached form 2012-2025, attached to former USFWS Director Dan Ashe's testimony. It actually showed an almost 10% increase in CA hunting licenses from 2022 to 2023 after full lead ban implementation!

New Jersey is preparing to introduce a bill identical to Maryland in terms of time frame this year as well.

Additionally, there are six states with petitions being presented to their State Fish and Wildlife Commissions who have Rule-Making authority (Maryland has no analogue body) seeking the same phase-in deadlines as SB 181, though the species types do vary in the West. Those states are: New York, Michigan, Colorado, Washington, Oregon & New Jersey in addition to the proposed NJ legislation.

I ask for a FAVORABLE report on HB 1067.

Respectfully Submitted,
Gil Genn

SUPPLEMENTAL INFORMATION ON COST COMPARISON

Ted Williams & Tony DiNicola COST COMPARISON:
Lesser expensive non-lead ammo for rifles can be .50-.60 center per round in bulk.
Full copper, $1.75-$2.20.
Compare to some lead ammo shells for Shotguns about $1.00 per round.
See: https://www.cabelas.com/shop/en/kent-ultimate-fast-lead-vp-12-ga-2-3-4-1-1-2-oz-shotshells

These are the non-toxic .223 rounds available:

- **Barnes TSX, TTSX, & LRX: * TSX (Triple-Shock X): All-copper** with a hollow cavity for expansion into four sharp petals; TTSX (Tipped TSX): Adds a polymer tip to improve aerodynamics and initiate faster expansion; LRX (Long Range

eXpanding): Optimized for higher ballistic coefficients (BC) and performance at extended distances.

- **Hornady CX (Copper alloy eXpanding):** Replacing the older GMX, this is a gilding metal bullet with a "Heat Shield" tip designed to resist heat deformation and provide devastating terminal performance on medium to large game.
- **Nosler E-Tip: Made of a lead-free copper alloy** with a signature olive-drab polymer tip. It is known for high weight retention and deep penetration.
- **Winchester Copper Impact**: Features a large-diameter polymer tip and a solid copper projectile specifically tailored for deer and medium-sized game.

Varmint & Small Game Bullets (Frangible/Expanding)

Varmint bullets are designed to fragment violently on impact rather than penetrate deeply.

- Nosler Ballistic Tip Lead-Free (BTLF): Uses a fragmenting copper core and a thin copper jacket for immediate expansion.
- Hornady NTX: Features a lead-free powdered core and a polymer tip, designed specifically for ultra-flat trajectories and explosive terminal effect on varmints.
- Winchester Varmint X Lead-Free: Utilizes a zinc core bullet that is designed to be highly frangible upon impact.

When looking for non-toxic (lead-free) .223 Remington ammunition, the price varies significantly depending on whether the round is intended for high-volume training or precision hunting.

The cheapest option is almost always frangible training ammunition. These rounds use a powdered copper composite core that is less expensive to manufacture than solid copper hunting projectiles.

Cost Per Round Comparison

Ammo Type	Top Budget Option	Est. Cost Per Round	Best For
Frangible (Training)	**SinterFire GreenLine**	**$0.60 – $0.80**	Indoor ranges, steel targets, high-volume practice.
Varmint (Small Game)	**Hornady Superformance NTX**	**$1.10 – $1.40**	Varmint/predator control. Explosive expansion.
Hunting (Medium Game)	**Barnes VOR-TX TSX**	**$1.50 – $1.80**	Deer/hogs. Deep penetration and weight retention.
Premium Hunting	**Nosler E-Tip / Hornady CX**	$1.75 – $2.20	Large game or long-range hunting.

The Cheapest Choice: SinterFire

SinterFire is generally the most affordable brand for non-toxic .223.

- **Individual Boxes (20-50 rds):** You can often find their "Reduced Hazard" or "GreenLine" rounds for approximately **$0.70 – $0.80 per round**.
- **Bulk (500-1000 rds):** If purchased in bulk cases, the price can drop to near **$0.60 per round**.

Why the Price Difference?

- **Material:** Solid copper bullets (like Barnes TSX) are machined or swaged from pure copper, which is a more expensive raw material than the lead used in standard ammo.
- **Complexity:** Hunting rounds like the Hornady CX or Barnes TTSX include polymer tips and complex "petaling" designs to ensure they expand reliably at high speeds, which increases the manufacturing cost.
- **Volume:** Standard **lead** ammunition is produced in massive quantities (often $0.40–$0.50/round), whereas non-toxic lines are specialized products with lower production runs.
- It's worth spending the extra money for a **Solid Copper (Monolithic)** round like the **Barnes TSX** or **Hornady CX**. While more expensive, they offer much better terminal performance on medium-sized game than the cheaper frangible training rounds.