BASC response to the HSE socioeconomic questions on lead ammunition.

8 December 2023

1. The British Association for Shooting and Conservation

The British Association for Shooting and Conservation (BASC) is the largest shooting organisation in the UK with approximately 150,000 members.

Our mission is to promote and protect sporting shooting and advocate its conservation role throughout the UK.

Our role is to provide an effective and unified voice for sustainable shooting sports; to benefit the community by providing education, promoting scientific research, and advocating best practice in firearms licensing, habitat conservation, and wildlife and game management; and to promote the benefits of game as food.

Shooting contributes more than £2 billion a year to the UK economy and supports the equivalent of 74,000 full-time jobs.

Shooting is involved in the management of two-thirds of the UK's rural land area and plays a key role in nature recovery, benefitting some of our most vulnerable habitats and species.

Shooting contributes £250 million annually on conservation projects, involving 3.9 million workdays which is equivalent to 16,000 full time conservation jobs.

2. BASC position on lead ammunition

BASC is opposed to any further regulation on the use of lead ammunition in the UK.

Regulations are already in place to mitigate risks to wildfowl from the use of lead shot in wetlands.

There is clear evidence that lead shot poses a risk to a wide range of bird species in terrestrial habitats and a voluntary move away from lead shot for live quarry shooting with shotguns is reducing these risks.

The shooting sector must be allowed time to develop non-lead shotgun ammunition due to a world shortage of components and the need for manufacturers and assemblers to source new machinery to produce lead shot alternatives and biodegradable wads for all shotgun calibers.

Lead in game meat is potentially a risk to human health via secondary exposure and government guidance and market forces are managing risks via best practice.

Lead exposure pathways are not conclusive for livestock, soil, soil organisms, plants, and surface waters; and current legal and regulatory frameworks are in place to manage risks.

3. Background to the HSE lead ammunition review

Following the UK's departure from the European Union the government needed to create new laws on the regulation of chemicals so that the trade in various substances between Great Britain and the EU could continue (Northern Ireland trade being covered under the NI Protocol).

The Health and Safety Executive (HSE) was tasked as the agency responsible for the implementation of the regulations (called UK REACH) and in March 2021 it was announced that the first two substances to be reviewed would be lead in ammunition and certain chemicals in tattoo inks: emulating similar reviews in the EU. Many more substances have since been reviewed and some ban ned.

The scope of the review is the outdoor recreational use of lead ammunition in England, Wales, and Scotland. The indoor use of lead ammunition is excluded, as is military and non-civilian use of lead ammunition.

The approach the HSE has taken, and is taking with its other reviews, is looking at the risks and investigating where it is feasible to reduce those risks to a ‘nil or negligible’ level.

On 22 October 2021 the HSE launched an eight-week call for evidence on the development of a UK REACH restriction dossier for lead ammunition.

BASC submitted detailed evidence to the HSE and successfully applied to be an accredited stakeholder for the lead ammunition review.

On 6 May 2022, the HSE launched a six-month public consultation on restriction proposals for the outdoor recreational use of lead ammunition in England, Wales and Scotland.

BASC provided a 280-page response to the consultation supported by the following four technical reports.

- BASC Technical report on lead airgun pellet weight retention
- BASC Technical report on lead airgun pellet accuracy and muzzle energy
- BASC Technical report on non-lead 22lr rimfire ammunition accuracy and penetration
- BASC Technical report on non-lead .243 rifle ammunition accuracy and penetration

Following the consultation period BASC attended a series of checkpoint challenge panel meetings with the HSE to have oversight of the restriction proposal process.

On 5 January 2023, the HSE announced that it was delaying the next stage of the review process by six months “due to the high response rate (2,759 responses)”.

4. The HSE SEA consultation.

On 11 October 2023, the next stage of the review process was initiated with a 60-day public consultation launched on the HSE’s socioeconomic assessment (SEA) of its lead ammunition restriction proposals.

There are three parts to the HSE SEA consultation.

Firstly, the HSE has published an updated 373-page **HSE background** document relating to the development of the restriction proposals, the evidence used, and some of the feedback received to date.

Secondly, the HSE has published a 104-page **HSE Annex 15 opinion** document containing its revised restriction proposals and its opinion on these proposals, including a socioeconomic assessment. The HSE obtained advice from the Environment Agency (EA) in the production of the proposals and assessment. The EA in turn collaborated with environmental regulators in Scotland and Wales for its advice to the HSE.

Thirdly, a consultation response form has been published which includes **HSE socioeconomic questions** seeking information on factors that the HSE states "need to be taken into account". The response form offers no opportunity, other than in the general comments sections, to provide opinion upon the proposed restrictions. The questions appear to be little more than evidence gathering for further restrictions, rather than to assess the socioeconomic impact of the existing restrictions.

5. BASC position on the HSE proposed restrictions.

BASC is opposed to any further regulation on the use of lead ammunition in the UK for the reasons set out in BASC's position on lead ammunition in Section 2 of this document above. It is in that context that BASC sets out its position below on the HSE's proposed restrictions.

5.1 Lead shot for live quarry shooting.

BASC is opposed to the HSE's proposed restrictions for lead shot for live quarry shooting because the shooting sector voluntary transition away from lead shot for live quarry shooting addresses the evidenced exposure risks identified by the HSE for food and the environment.

Restrictions on the use and the sale of lead shot for target shooting as a means of enforcing restrictions on the use of lead shot for live quarry shooting are not appropriate because this is mission creep and outside the scope of the HSE review.

If there is a restriction recommended for lead shot for live quarry shooting it must be evidence based and proportionate to the evidenced risk. We encourage the regulator to work closely with the sector to secure realistic transition periods that account for global supply chain issues.

As such, there should also be a review by an independent body to ensure the availability of the c80 million cartridges needed across all gauges of shotgun before any legislation comes in to force. This review should be conducted by an external independent body such as Cranfield University and be funded by Defra/HSE.

BASC remains committed to the shooting sector's voluntary transition away from lead shot and single use plastics for live quarry shooting. The transition so far has been a success, given the challenges faced, such as the war in Ukraine and Covid.

5.2 Lead shot for target shooting.

BASC is opposed to the HSE's proposed restrictions on the use of lead shot for target shooting because the use of lead shot for target shooting can continue where risks are controlled.

Evidence for the exposure risks for lead shot for target shooting are theoretical and inconclusive, and any restrictions based on these would be deemed as over-precautionary.

Restrictions on the use and the sale of lead shot for target shooting as a means of enforcing restrictions on the use of lead shot for live quarry shooting are not appropriate because this is mission creep and outside the scope of the HSE review.

BASC believes that any proposed restrictions for lead shot should be aimed at controlling the risks, rather than risk elimination.

BASC believes that if HSE proposed restrictions for the use of lead shot for target shooting (with the correct risk management measures in place) were dropped, then increased CO2 emissions would be avoided given that the CO2 emissions for steel shot production are higher than for lead shot.

BASC's view is that lead shot can continue to be used for most forms of shotgun target shooting where risks are appropriately and proportionately controlled, including the application of existing legislation.

5.3 Lead rifle ammunition for live quarry shooting.

BASC is opposed to restrictions on the use of lead rifle ammunition for live quarry shooting.

The HSE has proposed no restriction "at this time" on the placing on the market or use of lead bullets for live quarry shooting. The HSE has been unable to sufficiently quantify the benefits of restricting this use and has not been able to explicitly demonstrate the proportionality of a restriction. Therefore, no restriction should be made or proposed.

5.4 Lead rifle ammunition for target shooting.

BASC is opposed to restrictions on the use of lead rifle ammunition for target shooting.

BASC believes that lead rifle ammunition can continue to be used for all forms of target shooting where risks are appropriately and proportionately controlled through the application of existing legislation.

5.5. Lead airgun pellets for live quarry and target shooting.

BASC is opposed to restrictions on the use of lead airgun pellets for live quarry and target shooting because risks can be appropriately and proportionately controlled through the application of existing directives, regulations, and best practice guidance.

6. BASC response to the HSE SEA consultation

BASC's response to the HSE SEA consultation has two parts.

The first part contains **BASC's review of the HSE Annex 15 opinion** which has been submitted as a separate document.

The second part contains **BASC's response to the HSE socioeconomic questions** contained in the HSE consultation response form and this is contained in **Section 6** of this document.

Cutting across this and the other BASC document are the following BASC concerns and recommendations that we would like the HSE to take into account for the SEA consultation outcome.

BASC is concerned:

- that the HSE underestimated the costs of its restriction proposals.
- about the lack of UK evidence contained in the HSE background document.
- about the positions within the HSE Annex 15 opinion document
- about the narrow scope of the HSE socioeconomic questions in the consultation response form, which offers no opportunity, other than in the general comments sections, to provide opinion on the impact of the proposed restrictions.

BASC is calling on the HSE to:

- ensure that any proposals for live quarry shooting with lead shot have realistic time frames before any restrictions come into force.
- drop proposals to ban the sale of lead shot for target shooting as a means of enforcing restrictions on the use of lead shot for live quarry shooting because this is mission creep and outside the scope of the HSE review.
- ensure that an independent body is appointed to review the supply of lead shot cartridges before any restrictions come into force.
- drop the proposed restrictions on "approved clay grounds" where appropriate risks management measures are in place.
- not propose any restrictions for lead rifle ammunition for live quarry shooting.
- implement a buy-back scheme.

7. BASC response to the HSE socioeconomic questions

BASC is concerned about the narrow scope of the HSE socioeconomic questions in the consultation response form, which offers no opportunity, other than in the general comments sections, to provide opinion on the impact of the proposed restrictions.

The consultation response form appears to be little more than evidence gathering to place further restrictions upon the shooting community, rather than to assess the socioeconomic impact of the proposed HSE restrictions.

BASC's response to the HSE's socioeconomic questions in the consultation response form are as follows:

Transition Periods

The Agency is considering a 5-year transition period before the entry into force of the proposed restriction on target shooting with shotguns. Due to the voluntary agreement to transition away from lead ammunition for use in live quarry shooting by 2025, the Agency is considering a shorter (e.g., 3-year) transition period for this use.

Please provide information you have regarding the viability, difficulties, and benefits of a shorter transition period for the use of lead ammunition in live quarry shooting with shotguns

BASC believes that target shooting with shotguns where risks can be controlled can continue with lead shot. The risks posed by lead shot on target ranges are controlled by current regulations.

If the concern is birds ingesting shot, then risk management measures can be put in place to mitigate this risk this excludes the need to remove lead.

There is a derogation proposed for police, military security, and athletes to continue using lead shot on these grounds. This identifies that the HSE is not looking to remove the lead shot from the environment but to control who uses it. BASC regards this as overreaching and beyond the scope of the agency.

There is no viability to restrict the use of lead shot for live quarry shooting with shotguns to a shorter timeframe than that proposed for target shooting.

There are very few alternatives suitable cartridges for small gauges such as 16g, 28g, .410, 9mm and .22. The data suggests that over 22% of live quarry shooters in the UK use a small gauge.

The war in Ukraine has had a significant impact on the supply of components, propellants and primers used for domestic ammunition, and the same components are also used in military ammunition which means that there is a shortage.

We cannot determine when these issues will be resolved, therefore BASC believes that any proposed restrictions should be subject to an independent review in the final year before restrictions are due to come into force to ensure that supply chains are able to deliver the appropriate amounts of cartridges needed to deal with the demand and avoid a cliff edge in supply.

The proposals would also not be enforceable by the HSE's own admission, given that shot size 6 / 6.5 that can be used for clay pigeon shooting could be used to shoot live quarry.

Humane dispatch derogation

Do you possess information regarding the need for a derogation on the use of lead ammunition for humane dispatch (i.e. in instances where animals/livestock require humane dispatch, which may occur for example: on-farm; in transit; in markets, lairages or collection centres; or as a result of accidents on the public highway, at racecourses, shows or exhibitions)?

BASC believes that a derogation for humane dispatch is needed. There are multiple factors to consider when dispatching animals whether wild or livestock.

Animal Welfare.

The harder materials used in non-lead ammunition do not expand as fast as lead therefore the margin for error of shot placement is less.

Safety.

The harder materials used in non-lead ammunition are more prone to ricochet and in many cases humane dispatch is undertaken in built up areas, including roads, farmyards and zoos.

By their nature these areas usually have hard backstops, and this increases the risk of ricochet. Therefore, the risk to the user, members of the public, along with potential damage to nearby property is increased. These risks are currently controlled by using soft malleable ammunition (in many cases lead shot) so that the energy is dispersed quicky into the brain of the animal being humanely dispatched and do not pass onto the hard surfaces and if they do the softness of lead means that the ricochet risk is greatly reduced.

Supply.

Humane dispatch can be undertaken with many gauges and calibers of guns, and there are no suitable alternatives to lead ammunition available.

Risk.

There is a negligible risk to humans through the ingestion of lead as a result of humane dispatch as animals that have been dispatched rarely enter the food chain. The ammunition does not pose a risk to wildlife as the lead does not enter the environment.

Monetised benefits associated with restricting lead bullets for live quarry shooting.

Do you have information regarding the monetary benefits associated with reducing the risk of secondary poisoning of raptors from the use of lead bullets e.g., from WTP-based evaluations or similar?

BASC believes that there can be no information relating to the monetary benefits by reducing the risk of secondary poisoning because there is no evidence that this is happening within the UK. The data used to form the opinion document is theoretical. In fact, it would have a negative effect for the user as non-lead rifle ammunition is significantly more expensive than the lead equivalent.

The risk of secondary poisoning of raptors from the use of lead bullets was highlighted within the opinion document as an uncertainty as follow: "**No GB data on secondary poisoning of predatory or scavenging non-avian species have been identified**."

Deer managers control risks by following guidance for disposal of viscera, and best practice dictates that it should be buried at least 1m deep and away from water courses, deposited with a certified waste carrier or deposited on the ground in a discrete location away from view of the public.

This often means disposal in locations of dense cover which would be unavailable to raptor species or other scavenging birds. That further reduces the likelihood of exposure of raptors to 'waste items' such as viscera from deer.

The shooting sector is seeking to source game that is lead free and this will be driven by demand of the Approved Game Handling Establishments (AGHE) and other key stakeholders, and therefore further regulation is not required.

Whilst a theoretical secondary exposure pathway for birds exists, the available evidence considered and presented in the dossier does not demonstrate mortality or sub-lethal effects that are directly attributable to lead shot or other forms of lead ammunition.

The HSE has failed to address this uncertainty, and as such the restriction proposals related to this evidence cannot be justified.

In addition to the lack of evidence of impacts of secondary exposure on individual birds, the HSE Annex 15 opinion document concludes no empirical evidence of impacts at a population level, further bringing into question the proportionality and necessity of related risk management measures and regulation.

BASC believe that any restriction on lead ammunition in relation to a secondary exposure pathway to birds is over-precautionary based on the evidence. Restrictions proposed in relation to secondary exposure can therefore not be justified as proportionate to the risk.

Use of different bullet types for live quarry shooting and target shooting.

The Agency is seeking information on the types of bullets marketed and used for both live quarry shooting and target shooting. For example, whilst non-expanding ammunition must not be used to shoot deer, there is no such requirement for many other quarry.

Please describe any instances in which you use non-expanding ammunition for live quarry shooting in the box below, including an indication of relevant caliber and quarry.

Please describe any instances in which you use expanding ammunition for any shooting other than live quarry in the box below, including an indication of relevant caliber and location.

BASC would draw to the attention of the HSE that lead ammunition is expanding due to its malleability, and in many cases target rounds will be used for live quarry shooting. For example, when rabbit shooting with .22lr, target ammunition is commonly used as it is very accurate and would cause less meat damage.

Equally there are many calibers/gauges including .32, .38, along with 12g and .410 slugs that are all used for live quarry for humane dispatch or to be shot at range.

Historic and muzzleloading firearms ammunition is all "non-jacketed lead ammunition" and is used for live quarry and target shooting.

12-gauge slugs are commonly used for practical shotgun shooting and they are also used when shooting wild boar, whose population is on the increase in the UK.

In conclusion there is a significant overlap on the types of bullets used for live quarry and target shooting and data on this will be limited because it is not illegal. Any restrictions based upon the lack of evidence on the cross over of target ammunition used for live quarry would be deemed as over-precautionary.

Rifles and zeroing.

How often do you zero your rifle for live quarry shooting?

In what locations do you zero your rifle for live quarry shooting? Please choose all that apply. At an indoor shooting range. At an outdoor shooting range. On my own property. At the location of a live quarry shoot. Other private land with the permission of the landowner. Other (specify below)

BASC advocates for best practice to be followed with regards to zeroing one's rifle. This means that at any time an alteration is made, including installing or removing a sound moderator the rifle zero should be checked. People should also check their zero whenever they use a new batch of ammunition.

Zeroing a rifle will be undertaken at any of the locations listed in the question, ie. at an indoor shooting range, at an outdoor shooting range, on one's own property, at the location of a live quarry shoot, and other private land with the permission of the landowner.

It is important for the HSE to understand that as well as zeroing a rifle, it is important for users to practice with their rifles, and this would normally be done on certified ranges such as range days.

Home loading requires users to create small batches of ammunition before going to a range and this could be a private or a registered range to test the ammunition ahead of making larger batches.

There is a significant overlap of live quarry shooters shooting on registered ranges where the need to zero and practice remains. A restriction on expanding ammunition for live quarry shooting would have an impact on users being unable to practice and that therefore could lead to animal welfare issues.

General comments.

It is possible to provide both general comments on the draft opinion and answers to the specific questions.

Derogation for the use of lead ammunition to shoot deer with shotguns.

The deer act sections 7 (a) (b) specifies that a cartridge containing a single non spherical projectile not less than 350 grains or a cartridge containing shot of AAA (5.15mm) fired from a shotgun of no less than a 12 bore, this allows the killing of deer by agricultural or enclosed land with shotguns and specified cartridges. There is a gap within the opinion document that has missed off this piece of legislation that is currently used to manage areas of land. There

are currently no alternatives to meet this requirement, therefore BASC believe that a derogation for the use of lead ammunition to shoot deer with shotguns by landowners/ occupiers under this act is required.

Publicising shooting ranges.

BASC has concerns that the proposed publicising of shooting ranges is a controversial point, because firearms licensing advice is not to publicise the location of firearms and yet we have a public body promoting the fact that they will publicise a list of where people shoot regularly. Some ranges have firearms stored at them and other concerns are that users of the ranges may be targeted / followed by criminals with the intent of stealing guns. BASC strongly advises against a list of ranges is being published.

Expected costs to shooters.

As per the BASC review of the HSE Annex 15 opinion document, the expected costs to shooters are significantly underestimated for shotgun cartridges alone using the HSE modelling. We have identified a shortfall of c£100 million pounds. If the true costs / impacts to the users are to be considered, then the cost should be reflected over a 5-year period in line with the restriction proposals rather than the 20-year time frame used. For users to continue shooting as they are now the changes will need to be made within the transition time frame. BASC believes that the true costs need to be reflected and a buy back scheme implemented.

Non-lead ammunition in small calibers below 6.5mm.

The British Shooting Sports Council (BSSC) has submitted evidence setting out further problems when using non-lead ammunition in small calibers below 6.5mm. This new evidence reinforces the previous technical reports submitted by BASC.

The BSSC trialled five separate types of ammunition in .243Win. Three of the five types of ammunition were 80g and none of these met the criteria of 1700 foot pound of muzzle energy required to shoot all deer in England and Wales. This confirms that any consideration to regulate rifles for live quarry shooting should ensure that there are extended transition periods for small calibers.

Uncertainties and assumptions in HSE Annex 15 opinion document.

There are several uncertainties and assumptions made within the HSE Annex 15 opinion document, these are concerning given the fact that the agency is looking to regulate based upon theoretical scenarios. Any proposed restrictions must be proportionate and supported by tangible evidence.