

BVA, BSAVA and BVZS policy position on responsible use of parasiticides for cats and dogs

Executive summary

Parasiticide products are commonly used in small animal medicine to prevent and treat for various parasites, including fleas, ticks and worms. As well as preventing animal health and welfare problems, human health risks from associated zoonotic threats have to be considered.

Recently, concerns have been raised that some of these medicines are contaminating the environment. As parasiticides are harmful to a wide range of invertebrates, this could be highly detrimental to wildlife and ecosystems, and could in turn impact on public health.

In the farm animal and equine sectors, there are concerns over high levels of resistance to parasiticide products as a result of misuse and overuse. Whilst this is not currently an evidenced threat in small animal medicine, maintaining the efficacy of these products in the future is important.

Given the unknown but potentially severe environmental impacts, there should be a more considered approach to the use of small animal parasiticides. Veterinary professionals should always take a risk-based approach to prescribing medicines, including parasiticides. However, there are many knowledge gaps in relation to parasites and the use of parasiticide products, making that risk analysis difficult. Our position highlights these gaps and calls for more research to be undertaken. It is also designed to promote greater discussion of the concerns associated with the current use of these products and encourage responsible evidence-based approaches to prescribing them.

This position explores the background to the potential conflict that exists between the needs of animal health, human health and the health of the wider ecosystem. It is a true One-Health problem of immense complexity, and our understanding and position will develop as the evidence base grows.

We make 37 recommendations in our position, which apply to a range of stakeholders. These have been grouped accordingly below.

Research

There are many areas identified in our position as requiring further research. This research needs to be carried out with a one health approach in mind, with animal and public health experts involved where relevant. Ideally this research will be undertaken by independent sources, with Government and Academic institutions having a role to play. We recommend that it would be helpful for researchers to:

- collate existing information regarding risks factors which contribute to common ectoparasite infestations, and conduct further research to fill knowledge gaps.
- identify the impacts of parasite-borne disease such as Bartonellosis, Rickettsioses, and Lyme disease on human health, and to quantify the true prevalence of these in both the animal and human population.
- collate existing information regarding the risks to animal and human health of common endoparasites, and conduct further research to fill knowledge gaps.
- carry out a comprehensive literature search to ascertain the research carried out to date on the impacts of parasiticides on non-target invertebrates, and ascertain the key knowledge gaps within the evidence-base.

- conduct research into any knowledge gaps relating to source, prevalence and impacts of veterinary parasiticide products in the natural environment. This should include all commonly used pesticides, in addition to fipronil and imidacloprid, and consider the impacts of combination products.
- conduct further research into the sources of parasiticide pollution in the environment (in addition to veterinary product use).
- collate existing data and where gaps exist, conduct further research into how companion animal parasiticide products are bought, used, and disposed of, and develop evidence on how they may be contaminating the environment.
- identify the extent of the threat posed by resistance to common companion animal parasiticides.
- conduct research on the balance of harms and benefits from current prescribing of all parasiticide compounds to help inform future guidance and recommendations.
- undertake independent research into the optimal use of parasiticide products, with a focus on the required frequency of administration and application to control parasite risks.
- carry out research to better understand the factors which could increase the risks of pets being infected by parasites, including seasonality, multi-pet households, geography, lifestyle factors and pet factors. Veterinary associations have a role to play in signposting the profession to this information as it develops.
- undertake a literature search of the existing evidence base available, followed by focussed research on knowledge gaps, into the presence and effects of both topical and systemic parasite medications in the environment.
- conduct research into non-chemical methods of parasite prevention, both on the animal and in the home environment.

VMD and the pharmaceutical industry

Concerns about the possible environmental impacts of small animal parasiticide products should be taken seriously by the pharmaceutical industry.

The Veterinary Medicines Directorate (VMD) protects animal health, public health and the environment, and promotes animal health and welfare by assuring the safety, quality and efficacy of veterinary medicines. As part of this role, they should:

- collect data on the annual sales of parasiticide products and actual frequency of use on companion animals, and publish sales data annually, in line with records for antimicrobials.
- review the requirements for environmental impact assessment of companion animal parasiticide products.
- consider more active monitoring for resistance to parasiticides.
- reconsider the classification of parasiticides which are currently AVM-GSL.
- extend the restrictions on the advertising of pharmaceutical products to professional keepers to cover companion animal products.

In addition, the VMD and pharmaceutical companies should:

- ensure information provided with veterinary medicines is improved, so that key points on safe usage are clearly and simply presented, such that it can be easily understood by the general pet-owning public.
- make available an increased range of individual parasiticide products, as opposed to combination products, to reduce the need for overtreatment.
- until products can be re-classified, ensure consumers are educated on the correct use of parasiticide products.

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Veterinary organisations, guidance, and resources

Veterinary organisations play an important role in raising awareness of issues, promoting discussion and developing guidance. Veterinary organisations like BVA, BSAVA and BVZS should:

- take concerns about the possible environmental impacts of small animal parasiticide products seriously, proactively promoting discussion and highlighting these challenges.
- work to get profession-wide agreement on the best practice for parasite testing protocols
- engage small animal vets in discussions to ensure the small animal sector as a whole to acknowledges the challenges and works together to consider what constitutes responsible use of parasiticides.
- develop guidance to help prevent or delay resistance to common companion animal parasiticides.
- produce clear independent guidance to assist vets making evidence-based decisions, keeping this updated as new research is produced.
- produce comparisons between costs-to-client of major parasiticide products, in-clinic risk assessments and laboratory testing should be produced to help practices adapt their health plans.
- signpost the profession to new information on the factors which could increase the risks of pets being infected by parasites as it develops
- ensure independent information on the risks associated with parasiticide treatments is available to assist in veterinary decision making.

Veterinary professionals and responsible use

At an individual and practice level, veterinary professionals have a role to play in ensuring medicines are prescribed responsibly. All veterinary professionals should:

- be mindful of the potential for serious harm to natural invertebrate populations, taking a proportionate and targeted approach to treatment when using parasiticides.
- play a role in making sure consumers are educated on the correct use of parasiticide products.
- report to the VMD any cases of suspected resistance to parasiticides.
- use parasiticides responsibly to limit the risks of resistance developing.
- avoid blanket treatment, and instead risk assess use of parasiticides for individual animals as part of their responsible prescribing measures. This should take into account animal, human and environmental health risks, in addition to knowledge of the individual's lifestyle or environment and the results of routine examination to look for parasites eg faecal examinations for worms.
- increase awareness of responsible use and applying tailored, as opposed to blanket, treatments of parasiticides, amongst future vets and through veterinary schools.
- not have blanket treatment policies in place in a veterinary business, instead empowering individual vets to have those conversations with their clients.
- promote clear information on how to prevent animals getting parasites, and how to check for them, to the animal owning public.
- consider more frequent use of testing as part of a risk-based approach to prescribing parasiticides.
- explore and consider the alternative approaches to parasite control currently in place in other European countries.
- ensure they understand the risks associated with parasiticide treatments and be able to advise clients appropriately.
- wherever possible, use targeted and specific treatments rather than combination or broad-spectrum products, unless they assess there is a need to treat for multiple types of parasite, or have evidence that a broad-spectrum product poses a lower environmental risk.

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