



# **BCVA Policy Statement**

## **Parasiticides**

The role of the vet in an integrated approach to parasite control in food producing animals

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## **Executive Summary**

Parasite control in food producing animals has been fraught with challenges in ruminants for some time. In recent years there has been a developing focus on the use of antiparasitic and anti-coccidial veterinary medicinal products for food-producing animals. Farm vets are increasingly aware of the existing resistance and the developing of new resistance in these products, with the inevitable potential for compromised farm animal welfare and further damage to the environment.

Endoparasiticide resistance is a serious threat to the welfare of livestock; left unchecked, it is one of the biggest challenges to the future health and profitability of the sector. Consequently, BCVA has developed this policy statement as a basis on which farm vets and the industry can build the future of endoparasite control in food producing animals, and also to support the long-term health and sustainability of cattle in the UK.

Some parasiticides have endo and ecto parasite action. This document will focus on endoparasites and the resistance in this sector, however, it is acknowledged that ectoparasite resistance can also be a concern.

### **Legislative Change**

In 2019, the policy committee for The Health Products Regulatory Authority (HPRA) in Ireland created a task force to review the position of antiparasitic and anti-coccidial veterinary medicinal products for food-producing animals against the criteria in Regulation 2019/6 for exempting from the normal requirement of a veterinary prescription in Ireland.

In summary, the task force considered that the antiparasitic products that are supplied without a veterinary prescription do not comply with all the criteria contained in Article 34 of Regulation 2019/6. This has resulted in HPRA in Ireland changing their categorisation from 'Authorised Veterinary Medicine – General Sales List (AVM-GSL)', to 'Prescription Only Medicine- Veterinary (POM-V)', meaning that, from 28 January 2022, these products require a veterinary prescription to be supplied in Ireland. This contrasts with the current category in UK of Prescription Only Veterinarian, Pharmacist, Suitably Qualified Person (POM-VPS).

### **Farm Vet Influence**

In the veterinary profession and UK farming we have witnessed a concerted effort toward improved antimicrobial stewardship. Indeed, national antibiotic stewardship campaigns have been well-received by both farm vets and the farming communities they serve. These very approaches can now also act as a framework for an integrated approach to endoparasite control.

BCVA is committed to developing greater understanding of the complexities of parasitology within the veterinary profession. There is a crucial role for endoparasiticides in endoparasite control. It is essential that farm vets have both the resources and relevant understanding to raise

awareness of anthelmintics resistance in cattle; have the ability to create strategies with their farm clients to reduce unnecessary use of these products; and be able to demonstrate that the use of these products should be targeted and structured, based primarily on scientific evidence.

### **Five Point Policy**

BCVA's approach to this policy on endoparasiticides considers the role of the vet in an integrated approach to endoparasite control in food producing animals – principally cattle. BCVA will continue to develop practical tools and educational resources for its members; this document outlines five key policy areas that will inform those assets and illustrates the association's ambitions in meeting the challenges of parasite control.

- **Policy 1: Anthelmintic Resistance (AR) in cattle and sheep**

Fifty years on from the first reported case of anthelmintic resistance in livestock parasites, the prevalence of resistance has increased across the globe, and multiple resistance is becoming a greater threat, with many farms shown to contain parasite populations that are resistant to more than one anthelmintic class. To protect their long-term efficacy, it is vital to ensure primarily that evidence has indicated their requirement; and then that the correct products are accurately administered.

- **Policy 2: Sustainability and soil health**

There is an increasing global challenge to feed a growing human population while preserving the environment. There are many challenges to addressing food safety and food security and the sustainable management of soils is a crucial conservation concern. Soil health can be destroyed by some traditional practices, such as ploughing, fertilisers, and the use of some parasiticides. Farm vets are a critical part of any One Health solution. For this reason, it is in our profession's interest to increase our knowledge about and contribution to maintaining soil health.

- **Policy 3: Safety & efficacy of parasiticides and public perception**

BCVA recognise the efforts of farming, the veterinary profession, and the Government to raise the profile of the UK regarding animal welfare as well as quality food production. This should include ensuring that there is no opportunity for unnecessary parasiticide residues to be discovered in products on our supermarket shelves. Nor should there be any chance of animals suffering due to parasiticides being incorrectly or mistakenly used. Our profession needs to be able to clearly demonstrate how clinicians balance the goal of preserving the effectiveness of parasiticides with their health and welfare obligations to the animals under their care.

- **Policy 4: Education and development of a new ethos**

There are many areas in which vets have positively influenced disease control. Vets and farmers together reduced UK's antimicrobial use by 53% between 2014-2019. Similarly, it has recently been recognised that, to further improve the control of TB, the private vet is a crucial part of this journey. BCVA understands that in such a climate, farm vets are best placed to take ownership of addressing correct parasite control. Importantly, the farmer should be fully equipped with the knowledge of the potential effects of managing this situation badly and the BCVA believe it is the farm vet's role to do this. BCVA supports several initiatives, such as Farm Vet Champions and various assurance schemes like Red Tractor, which contain accessible resources on which vets can draw and share with their farm clients - with the ultimate goal of encouraging prudent use to preserve the effectiveness of these vital veterinary medicines.

- **Policy 5: Method of supply of endoparasiticides**

BCVA considers the current system allows for confusion and lack of communication, relying on bulk sales of medicines rather than bespoke advice to limit their use to only when evidence suggests requirement. It is a missed opportunity to introduce real change, using the concept of a 'parasiticide ambassador'. This should be done through training and CPD for the vets, enabling them to better advise their clients, along with open dialogue with the Suitably Qualified Person (SQP), to ensure that products dispensed to farmers are communicated back to their primary practice. Improved communication between vets and SQPs will ensure that the same message is being reinforced to the farmer via both parties.

## **Acknowledgements**

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## Introduction

In 2019, the Health Products Regulatory Authority (HPRA), which is an Irish body, and their Advisory Committee for Veterinary Medicines (ACVM) established a Task Force to review the position of antiparasitic and anti-coccidial veterinary medicinal products for food-producing animals. BCVA also had growing concerns regarding both the increase in existing resistance and the developing of new resistance in these products, resulting in potentially compromised efficacy.

With the health, welfare and long-term sustainability of sheep and cattle farming at risk, BCVA believes that the issues surrounding resistance and ecological effects of parasiticides should be prioritised by all veterinary sectors, as well as the pharmaceutical and agricultural industry, to prevent further damage.

Stakeholders will need to work alongside each other, and education will be key, to provide both farmers and vets with persuasive, evidence-based information which encourages an understanding that parasite control is more than a simple, routine treatment.

The Sustainable Control of Parasites in Sheep (SCOPS) and the Sheep Veterinary Society (SVS) have already successfully pioneered this approach in the sheep sector; Control of Worms Sustainability (COWS) is close behind, and BCVA is keen to align with their approach in the cattle sector to ensure a consistent message across the agricultural community.

We have seen a dramatic change in attitude regarding significant reductions in antimicrobial use, and we've seen increasing coverage of concerns over the possible environmental impacts of routine endo and ectoparasiticides in companion animals.<sup>1</sup>

All this provides a perfect backdrop for revisiting the situation regarding parasiticide use. The increasingly urgent situation regarding environmental sustainability and the topical issues of prescribing of endoparasiticides in Ireland are additional factors confirming that now is the time to further evolve the research and develop an effective way forward.

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<sup>1</sup> BVA and BSAVA policy position on responsible use of parasiticides for cats and dogs

## Background

Parasite control in food producing animals has been fraught with challenges in ruminants for many years. The industry-led group, SCOPS (sustainable control of parasites in sheep) has done a huge amount of work in this area and states that “left unchecked, anthelmintic resistance is one of the biggest challenges to the future health and profitability of the sector.”

Medicines in the POM-V category for use in food producing animals have, since 2004, required a veterinary prescription- this means that these products can be prescribed only by a veterinarian. Products which do not present a risk to human or animal health or to the environment and which meet the specified criteria for exemption from veterinary prescription are included in POM-VPS category. This category exists in the UK only and products in this category can be prescribed by a veterinarian, a pharmacist or an SQP. There is debate within the small animal sector over the possible effects of parasiticides on the environment and this may even be relevant to the equine and food producing sectors. After a recent review of European legislation, The Regulation 2019/6 for exempting from the normal requirement of a veterinary prescription has been developed and will come into effect on 28 January 2022. The VMD are considering the implementation of provisions in the UK like those in the two EU Regulations. Any changes to the Veterinary Medicines Regulations 2013 that will have an effect in the UK will be subject to formal public consultation to allow stakeholders to give their views on the proposed changes.

The impending change in legislation triggered the creation of a Task Force by HPRA's advisory committee to review the position of antiparasitic and anti-coccidial veterinary medicinal products for food-producing animals against the criteria in Regulation 2019/6 for exempting from the normal requirement of a veterinary prescription in Ireland, as these products were previously available without a prescription

In summary, the Task Force considered that the antiparasitic products that are supplied without a veterinary prescription do not comply with all the criteria contained in Article 34 of Regulation 2019/6. This has resulted in HPRA changing their categorisation to POM-V meaning that, from 28 January 2022, they will require a veterinary prescription to be supplied.

## Policy 1: Anthelmintic resistance (AR) in cattle and sheep

Anthelmintic resistance (AR) is the heritable ability of the parasite to tolerate a normally effective dose of an anthelmintic. The parasite is considered resistant if it survives exposure to the standard recommended dose of the anthelmintic and the ability to survive is passed on to its offspring.

The first case of anthelmintic resistance (AR) in the UK was reported in 1984 to Benzimidazoles (1-BZ). AR to Levamisoles (2-LV) followed in 1996 with the first AR to Macrocytic Lactones (3-ML) in 2001 (Ivermectin) and in 2007 Moxidectin and in 2018 Acetonitrile derivatives (4-AD Monepantel) AR, having only been introduced into the UK in 2010. The most recently introduced Group Spiroindoles (5-SI) is currently the only group not yet to have AR reported<sup>2</sup>.

Since that first reported case of anthelmintic resistance in livestock parasites, the prevalence of resistance has increased across the globe, and multiple resistance is becoming a greater threat, with many farms shown to contain parasite populations that are resistant to more than one anthelmintic class.<sup>3</sup>

There is a crucial role for anthelmintics in endoparasite control; all groups have a requirement to be used. However, to protect their long-term efficacy it is vital to ensure the correct product is accurately used. Making the incorrect choices initially, along with inadvertent selection pressure on parasites when a combination is used unnecessarily, are important contributors to AR. It is also essential to reduce selection pressure by developing and then enforcing a shift from routine treatments to a diagnostic-led approach. BCVA are committed to contributing to this shift. Consequently, structured education is a crucial part of a successful overall approach to this issue (see policy four).

### BCVA will:

- Give vets in practice the tools to help the industry to raise awareness of the reality and importance of AR, using a similar strategy which has been so successful in reducing antibiotic usage.
- Approach AMTRA to ensure the knowledge-sharing is in harmony with the education provided to the SQPs.
- Work with SCOPs, SVS and COWs to align our approach and ensure a consistent message is being conveyed to the agricultural community.

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<sup>2</sup> George SD, George AJ, Stein PA, Rolfe PF, Hosking BC, Seewald W. The comparative efficacy of abamectin, monepantel and an abamectin/derquantel combination against fourth-stage larvae of a macrocyclic lactone-resistant *Teladorsagia* spp. isolate infecting sheep.

<sup>3</sup> Kamaludeen, J. Graham-Brown, N. Stephens, J.e Miller, A. Howell, N. J Beesley, J. Hodgkinson, J. Learmount, D. Williams Lack of efficacy of triclabendazole against *Fasciola hepatica* is present on sheep farms in three regions of England and Wales



- Support and promote use of the Medicine Hub to help UK dairy, beef and sheep vets demonstrate their leading stewardship of antibiotics to other sectors, consumers and customers at home and abroad.

## Policy 2: Sustainability and soil health

There is an increasing global challenge to feed a growing human population while preserving the environment. There are many challenges to addressing food safety and food security and the sustainable management of soils is a crucial conservation concern.

Soil health can be destroyed by some traditional practices, such as ploughing, fertilisers, and the use of some parasiticides. Farm vets are a critical part of any One Health solution, so for this reason, it is in our profession's interest to increase our knowledge about soil health.

Proactive farm health and food systems which improve animal health, welfare, and productivity, can contribute to the reduction of our carbon footprint and help us move toward environmental targets. Effective soil management alongside associated health plans provide the greatest potential for achieving sustainable use of agricultural land. <sup>4</sup>

Some parasiticides have been identified as posing risks to the environment under certain scenarios. <sup>5</sup> Since 1992, every veterinary medicinal product that is authorised must contain an environmental risk assessment (ERA) with a Periodic Safety Update Return every three years, which covers adverse events. This includes consideration and assessment of exposure to soil, water, and air, as well as effects on aquatic and other non-target organisms. It is therefore noted that some products licensed before 1992 were not subject to an adequate ERA, as part of the authorisation process, and that there is possibility of environmental harm caused.

European Medicines Agency (EMA) guidelines set out the data requirements for the ERA. These guidelines acknowledge that most anthelmintics present ecotoxicity concerns, especially when used in animals at pasture, because many of these products are pharmacologically active against organisms that are biologically related to pasture invertebrates. A prime example of this is presented in Moxidectin which the EMA considers fulfils the criteria of persistence, bioaccumulation and toxicity (PBT).

The level of harm a product can do environmentally is directly related to the amount that enters the environment<sup>6</sup>. This is dependent on several factors. These are: physicochemical properties; amount used and method of administration; how and when a product is used i.e., routine versus diagnostic-led; treatment type and dose; animal husbandry practices; manure storage and handling practices; metabolism within the animal; and degradation rates in manure and slurry.

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<sup>4</sup> W R Teague, Forages and Pastures Symposium: Cover crops in Livestock Production: Whole-system Approach. Managing grazing to restore soil health and farm livelihoods

<sup>5</sup> Kümmerer, K, Options for a strategic approach to pharmaceuticals in the environment

<sup>6</sup> Boxall, A.B.A, Fogg, L.A., Blackwell, P.A, Kay, P, Pemberton, E.J., and Croxford, A. 2004. Veterinary medicines in the environment. Reviews of Environmental Contamination and Toxicology.

Clearly, at least four of these factors can be controlled by the industry and farm vets are ideally placed to help facilitate this control.

The main routes of entry to the soil are from the use of anthelmintics in housed livestock; via the spreading of manure on the land and using anthelmintics in grass-fed animals where residues are excreted directly into the environment. <sup>7</sup>

A study in 2002 identified specific antiparasitic products in the environment that were considered potentially high priority but required further data. These included morantel, flumethrin, triclabendazole, fenbendazole, levamisole, ivermectin, nitroxylin, toltrazuril, diclazuril, phosmet, piperonyl butoxide, amitraz, deltamethrin, cyromazine, and emamectin benzoate. <sup>8</sup>

The value of dung beetles has been estimated as being worth approximately £367m per year, yet over 25% of UK species are defined as 'Nationally Rare' and four species may have become extinct in the past 50 years.<sup>9</sup> The benefits of dung beetles to our soil health are far-reaching and include improvement of soil aeration and pasture fertility; reduction of pasture fouling; reduction of the need to harrow; improvement in water quality; fly control and reduction of greenhouse gas emissions. <sup>10</sup>

Macrocyclic lactones (MLs) have negative effects on the soil food web as well as being harmful to river ecology.<sup>11</sup> In 2015, a review article reported that residues of avermectins (ivermectin, eprinomectin and doramectin) and milbemycins (moxidectin) in cattle dung had a negative effect on the entire ecosystem of insects that inhabit and feed on dung, which, over time would result in decreased dung beetle populations and the rate of dung degradation. The effect on dung beetles has a knock-on effect on wider biodiversity. The UK are currently ranked 189<sup>th</sup> out of 215 countries in the world biodiversity intactness index. Clearly, this needs to improve, and vets have a role to play here. <sup>12</sup>

#### **BCVA will:**

- Create a policy document on sustainability complete with action points.
- Link the sustainability document to this Endoparasiticide document.

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<sup>7</sup>Sands, B. & Noll, M. Toxicity of ivermectin residues in aged farmyard manure to terrestrial and freshwater invertebrates

<sup>8</sup> Boxall, A.B.A, Fogg, L., Blackwell, P.A, Kay, P, Pemberton, E.J., 2002, Review of Veterinary Medicines in the Environment. Environmental Agency.

<sup>9</sup> A review of the status of the beetles of Great Britain, Natural England Commissioned Report NECR224, 1 October 2016.

<sup>10</sup>Beynon, S.A. Wainwright, W.A. and Christie, M. (2015), The application of an ecosystem services framework to estimate the economic value of dung beetles to the U.K. cattle industry. *Ecol Entomol*, 40: 124-135

<sup>11</sup> D. Mooney, K.G. Richards, M. Danaher, J. Grant, L. Gill, P.-E. Mellander, C.E. Coxon, An analysis of the spatio-temporal occurrence of anthelmintic veterinary drug residues in groundwater

<sup>12</sup> Jacobs, C. T. and Scholtz, C.H., 2015, A review on the effect of macrocyclic lactones on dung-dwelling insects: Toxicity of macrocyclic lactones to dung beetles. *Onderstepoort Journal of Veterinary Research*, 82(1); 858.

- Work with ecologists and experts in this field to further understand and develop vets' role in this important area.
- Provide farm vets in practice with the relevant CPD to enable them to advise their clients on ecological aspects of using parasiticides wisely and strategically.

### **Policy 3: Safety & efficacy of anthelmintics and public perception**

BCVA recognise the efforts of the industry, the veterinary profession, and the Government to raise the profile of the UK regarding animal welfare as well as quality food production. This should include ensuring that there is no opportunity for unnecessary anthelmintic residues to be discovered in products on our supermarket shelves. Nor should there be any chance of animals suffering due to anthelmintics being incorrectly or mistakenly used.

#### **Residues**

The Irish report stated: “In view of the widespread use of the products concerned over many years and the excellent record of compliance with the food residue standards, the availability of antiparasitic veterinary medicinal products through licensed merchant outlets does not present a particular risk to public health, as regards residues.”

There is rigorous screening for antimicrobials which enables us to state categorically that our food does not contain antibiotic residues, as well as use this data to give the UK public confidence in the food they are buying. Screening is in place at the abattoirs for a selection of inhibitory substances, including parasiticides but this is unlikely to be at the same level for endoparasiticides compared to antibiotics.

The more detailed investigations that have been carried out often show signs of anthelmintic residues such as Nitroxylnil or Triclabendazole. Very little is currently known regarding levels present and whether they could be damaging to human health. But many endo and ecto parasiticides are persistent, toxic and bioaccumulative and have such warnings on their data sheets. There is a growing public understanding of the threat of antimicrobial resistance to human health, alongside an increasing consumer investment in food safety, traceability, and provenance. If the problem of anthelmintic resistance was to be presented to the public, this could easily be perceived to be a real threat to human health.

Furthermore, if such information regarding anthelmintic residues enters the public domain, the damage that could be done to the dairy industry for example is potentially irreparable. Indeed, some proactive milk buyers are already aware of this potential problem. It is therefore essential that our industry addresses it imminently.

In terms of public recognition of any initiative, the profession should be able to clearly demonstrate how clinicians balance the goal of preserving the effectiveness of anthelmintics with their health and welfare obligations to the animals in their care who require the intervention. Communicating any success in reaching this balance relies on the ability to evidence our progress, which in turn relies on effective data. There is a need for reliable, quantitative, data defining the types and amounts of veterinary medicines used in food production. The need for national anthelmintic use figures is the most important goal, and BCVA is supporting the

development of a national Medicines Hub to eventually obtain this data across the livestock sector.

When studies have been done to investigate the presence of pour-on products in water, traces are often found. The VMD have their own scheme in the form of VMD Residue Surveillance. It takes very little time of searching these reports to find mention of anthelmintic residues. The tools are available to quantify residues. It is important that these are used sensibly and sensitively to further investigate whether the residues found are potentially above MRL and therefore of possible risk to human health and/or the reputation of the UK food industry.

### **Parasiticide ambassadors**

BCVA is committed to developing greater understanding in the veterinary profession and believes that public perception can only be improved as we develop our own knowledge and practices. The public must be introduced to evidence-based, accessible information to limit misunderstandings regarding anthelmintic resistance and residues in human food produce.

National antibiotic stewardship campaigns have generally been well-received by both the veterinary profession and farming communities. The recent Farm Vet Champions initiative, launched in 2021 and supported by BCVA, provides valuable resources on which vets can draw and share with their farm clients - with the ultimate goal of encouraging prudent use in order to preserve the effectiveness of these vital veterinary medicines. A similar dedication and focus would benefit parasite control – anthelmintic ambassadors, who would hold the standard in practice and take their cause to clients on farm.

### **Safety**

Many of the data sheets contain clear warnings regarding dosage of these products due to the close safety margins. “Do not use in animals with known hypersensitivity to the active ingredient. Do not use in dogs as fatalities have been reported. Do not exceed stated dose... Do not retreat at intervals less than 60 days (cattle) or 49 days (sheep)”.<sup>13</sup>

Closantel particularly has been found to have very close safety margins and is not licensed or marketed in some countries due to this. Similarly, Levamisole can cause neurological problems with minimal overdosing.

It is therefore crucial that dosage is correct and that farmers have sufficient understanding of the potential welfare implications of over-dosing by even a narrow margin.

### **BCVA will:**

- Support any industry-led initiatives concerning residues in food/milk.

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<sup>13</sup> Otter, A., Bell, S., Loewenstein, N., Hemingway, J., Floyd, T. and Wessels, M. (2018), Closantel toxicity in ewes through drinking cattle pour-on. *Veterinary Record*, 183: 540-541.

- Lobby the VMD for more action regarding why, during their own investigations, residues have been discovered and what the industry can do to reduce this in preparation for if/when it is brought under public scrutiny.
- Advocate creation of parasiticide ambassadors and work with colleagues across the profession to lead the launch of a campaign for greater vigilance on the rational use of endoparasiticides.
- Call for regulation of irrational and unauthorised use of drugs and, implement residue control strategy such as management practice and herd health program that keep animals healthy and producing efficiently to avoid residues.
- Continue to promote the standards of UK animal welfare and quality food production.

## **Policy 4: Education and development of new ethos**

Despite farm vets being intrinsically involved with the health and welfare of their clients' herds, the vet's level of involvement regarding parasite control is often limited. There are several possible reasons for this; farmers tend to view parasite control as 'routine' procedure rather than specifically as 'disease control strategy'. Whilst parasitology is taught across the veterinary curriculum, there is rarely an opportunity to put it into practice unless a farmer actively seeks advice.

One consequence is that vets may feel ill-equipped and inexperienced and disadvantaged in this area and therefore do not always recognise the opportunity to benefit their clients; while the farmer may not realise that there is advice regarding a diagnostic approach to be gained from using their vet more. Farmers regularly source anthelmintics from the agricultural merchants, often using them routinely, therefore increasing the risk of ineffective, unnecessary, and resistance-developing use. There is also little opportunity for treatment information to be shared with the vet. This can lead to a disjointed approach to parasite control and missed opportunities on many levels. For example, the use of Group 4-AD and Group 5-SI anthelmintics: The use of the two newest groups of anthelmintic should be a careful balance between harnessing their potential to slow down the development of resistance and protecting them from overuse.

### **The Role of the Veterinary Profession**

The BCVA would like to see a more active role for vets in practice in the management of parasite control on their clients' farms in a similar way to other diseases. There are many areas in which the vets have positively developed disease control and have therefore actively driven down the use of antibiotics. National antibiotic stewardship campaigns have generally been well-received by both the veterinary profession and farming communities. The recent Farm Vet Champions initiative, launched in 2021 and supported by BCVA, provides valuable resources on which vets can draw and share with their farm clients - with the ultimate goal of encouraging prudent use to preserve the effectiveness of these vital veterinary medicines.

A UK Veterinary Antibiotic Resistance and Sales Surveillance Report shows that, vets and farmers together reduced UK's antimicrobial use by 53% between 2014-2019. Similarly, it has recently been recognised that, to further improve the control of TB, the private vet is a crucial part of this journey. BCVA understands that in such a climate, farm vets are best placed to take ownership of addressing correct parasite control.

Vets must be shown how to use their parasitology training to benefit their clients and have the opportunity to do so. The profession should be equipped to have effective conversations with their clients about the hidden costs of following a 'traditional' worming practice. These would include the increased risk of resistance; wasting money on unnecessary treatments; time of effective contact (TEC) between the host and the parasite, causing potential problems as



productive adults. This will improve both the farmers' confidence in the vet as well as their knowledge and understanding of effective parasite control.

Importantly, the farmer should be fully equipped with the knowledge of the potential effects of managing this situation badly and the BCVA believe it is the farm vet's role to do this.

Conservation and farming can complement each other and should not be set against each other. This will be especially relevant when the new, post-Brexit subsidy scheme is introduced with heavy emphasis on rewarding biodiversity. Vets are well-positioned to form a strong voice to help with this endeavour.

Everything starts with the herd health plan. Many farms are Red Tractor assured and require a parasite control plan in order to comply. For those farmers who do have such a plan, it should be the vets' role to analyse it, investigate its effectiveness and how much it is followed on a day-to-day basis.

**BCVA will:**

- Along with the SVS, further investigate the gaps in veterinary knowledge and how to provide support and training to farm vets to better support their clients and equip them to produce and monitor an effective, tangible, practical parasite-control plan.
- Search for and communicate with suitable providers for this training.
- Investigate the possibility of appointing a "parasiticide ambassador" in the same way that appointing an antibiotic practice champion has been successfully embraced.
- Ensure the training is integrated with that of the SQPs to communicate a single message to the farmers and to avoid confusion.

## **Policy 5: Method of supply of endoparasiticides**

POM-V medicines must be prescribed by a veterinary surgeon, only if the animals are deemed to be under his/her care. POM-VPS medicines may be prescribed in circumstances where the animals are not under the prescriber's care.

Most anthelmintic products used in food producing animals have been available for many years in the UK and have been available under the POM-VPS rules. This means that they can be prescribed by Suitably Qualified Person (SQP) and that livestock owners can obtain and use them independently of their veterinary surgeon.

Under the current system the SQP undertakes relevant training and passes examinations, along with continuing professional development. The nature of this is stipulated by any of the three registration bodies which are AMTRA, VetPol and Vetskill. A register of approved SQPs is available on the DEFRA website.

BCVA believes that the current system allows for confusion and lack of communication, relying on bulk sales of medicines rather than bespoke advice to limit their use to only when evidence suggests requirement. It is a missed opportunity to introduce real change, using the concept of an "parasiticide ambassador". This should be done via training and CPD for the vets and SQPs, enabling them to better advise their clients, along with open dialogue with the SQPs to ensure that products dispensed to farmers are communicated back to their "primary practice". Improved communication between vets and SQPs will ensure that the same message is being reinforced to the farmer via both parties.

In our current situation, it is especially important that there is easily accessible data for the use of products which contain in their data sheets warning statements such as "is toxic to dung insects. Parasiticides are excreted mainly in the faeces, and it cannot be excluded that insects using dung excreted after treatment may be adversely affected." Facts such as this only strengthen the argument that targeted, evidence-based use rather than blanket routine use must be the future of these products.

### **The HPRA Task Force**

In 2004 European legislation established a new requirement that all veterinary medicinal products intended for use in food-producing animals should be subject to veterinary prescription control. Further legislation in 2006, however, allowed for the maintenance of non-prescription status for certain products in European Member States. They had to meet certain criteria. These were that they did not present a risk to human or animal health or to the environment, and that they met the specified criteria for exemption from veterinary prescription.

At that time, the Department of Agriculture and Food advised that all existing veterinary medicinal products that were available without prescription did meet the required criteria. This

legislation has been reviewed as the situation has evolved over recent years, resulting in the adoption of Regulation 2019/6 in January 2019.<sup>14</sup> The Regulation comes into effect in January 2022 and is directly applicable throughout the European Union (EU). Although such regulation no longer directly affects the UK, the VMD have indicated that they wish to stay within the EU criteria. Since 2006 there have been several important developments.

As a result, at the request of the HPRA's Advisory Committee for Veterinary Medicines, a Task Force was established to review the available evidence and report on whether the products concerned remain compliant with the criteria contained in Article 34 of Regulation 2019/6.

The Task Force found that antiparasitic products that are supplied without a veterinary prescription do not comply with two of the seven criteria contained in Article 34 of Regulation 2019/6. Namely:

- a. The veterinary medicinal product does not present a direct or indirect risk, even if administered incorrectly, to the animal or animals treated or to other animals, to the person administering it or to the environment; and
- b. There is no risk to public or animal health as regards the development of resistance to substances even where the veterinary medicinal product containing those substances is used incorrectly.

Given that both these areas are highly contentious and under great scrutiny by the general public as well as by the scientific community, BCVA feel that this situation should be reviewed again by the VMD.

**BCVA will:**

- Work to gain support from all areas of the industry. Support has already been gained from SVS, PVS, BVPA. Specifically, BCVA will seek formal support from BVA
- Write to VMD setting out why BCVA believe that the current categorisation of endoparasiticides should be reviewed and that re categorising as POM-V should be considered. Also, that changes to UK legislation around advertising of such products is controlled to ensure they are used responsibly and sustainably.
- Open a dialogue with AHDA regarding future education possibilities for SQPs.
- Discuss with AHDA and VMD the possibility of ensuring that all POM-VPS products which are prescribed are shared with the farm's primary vet practice, and vice versa, in order to maintain the consistent message to farmers.
- Work to start a parasiticide usage database – whether by practice/trade outlet or by farm.

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<sup>14</sup> Regulation (EC) No 726/2004 of the European Parliament and of the Council of 31 March 2004

## Conclusion

BCVA regards both the increase in existing resistance and the developing of new resistance in antiparasitic and anti-coccidial veterinary medicinal products as an urgent area of focus for the veterinary profession.

Better awareness of appropriate endoparasiticide use is as important as the way we approach antibiotic resistance, deserving the same level of attention in veterinary practice and on farm. The current situation should be considered urgent, requiring immediate focus and relevant, evidence-based solutions.

The private farm vet is well placed to play a leading role in those solutions, alongside their farm clients and the entire agriculture industry. Each of the five policy points in this BCVA policy statement work in alliance with one another, there will be no 'single bullet solution' or isolated pathway to managing the resistance and the development of new resistance in these vital products.

The veterinary profession has achieved considerable success in recent years in sharing evidence-based expertise with their farm clients around antibiotic resistance, with initiatives like Farm Vet Champions gaining considerable attention and traction. Developing and extending this relationship with farm clients to lead to a similar focus on the use of endoparasiticides, with an emphasis on changing the casual perception of anthelmintics in routine terms, is crucial. Failure to do so will be damaging.

Knowledge, understanding and an ongoing dedication to meeting the challenges of resistance will rely on accessible, relevant, and engaging CPD. This will be BCVA's commitment to the challenge; supporting the profession and providing the means to engage with our colleagues in farming – by providing vets with the correct tools to generate conversations that lead to long-term, effective solutions.

<ENDS>

## References & Useful Links

- Beynon, S.A. Wainwright, W.A. and Christie, M. (2015), The application of an ecosystem services framework to estimate the economic value of dung beetles to the U.K. cattle industry. *Ecol Entomol*, 40: 124-135
- Boxall, A.B.A, Fogg, L.A., Blackwell, P.A, Kay, P, Pemberton, E.J., and Croxford, A. 2004. Veterinary medicines in the environment. *Reviews of Environmental Contamination and Toxicology*
- Boxall, A.B.A, Fogg, L., Blackwell, P.A, Kay, P, Pemberton, E.J., 2002, Review of Veterinary Medicines in the Environment. Environmental Agency
- George SD, George AJ, Stein PA, Rolfe PF, Hosking BC, Seewald W. The comparative efficacy of abamectin, monepantel and an abamectin/derquantele combination against fourth-stage larvae of a macrocyclic lactone-resistant *Teladorsagia* spp. isolate infecting sheep
- Jacobs, C. T. and Scholtz, C.H., 2015, A review on the effect of macrocyclic lactones on dung-dwelling insects: Toxicity of macrocyclic lactones to dung beetles. *Onderstepoort Journal of Veterinary Research*, 82(1); 858.
- Kamaludeen, J. Graham-Brown, N. Stephens, J.e Miller, A. Howell, N. J Beesley, J. Hodgkinson, J. Learmount, D. Williams Lack of efficacy of triclabendazole against *Fasciola hepatica* is present on sheep farms in three regions of England and Wales
- Kümmerer, K, Options for a strategic approach to pharmaceuticals in the environment
- Mooney D., Richards K.G, M. Danaher , J. Grant, L. Gill, P.-E. Mellander, C.E. Coxon, An analysis of the spatio-temporal occurrence of anthelmintic veterinary drug residues in groundwater
- Natural England Commissioned Report NECR224, A review of the status of the beetles of Great Britain, 1 October 2016
- Otter, A., Bell, S., Loewenstein, N., Hemingway, J., Floyd, T. and Wessels, M. (2018), Closantel toxicity in ewes through drinking cattle pour-on. *Veterinary Record*, 183: 540-541
- Regulation (EC) No 726/2004 of the European Parliament and of the Council of 31 March 2004
- Sands, B. & Noll, M. Toxicity of ivermectin residues in aged farmyard manure to terrestrial and freshwater invertebrates
- Teague WR, Forages and Pastures Symposium: Cover crops in Livestock Production: Whole-system Approach. Managing grazing to restore soil health and farm livelihoods

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BVA and BSAVA policy position on responsible use of parasiticides for cats and dogs - <https://www.bva.co.uk/news-and-blog/news-article/vet-associations-call-for-risk-based-approach-to-parasiticide-use-for-cats-and-dogs/>

## Glossary of Terms

**Anthelmintic:** Kills helminth parasites (fluke (trematodes), tapeworm (cestodes), and roundworm (nematodes)).

**Anthelmintic Resistance:** The heritable (and therefore genetic) ability of the worm to survive treatment with an anthelmintic.

**Ectoparasite:** Parasite that lives on the outside of its host; these are mostly arthropods

**Ectoparasiticide:** Controls ectoparasites; ticks, mites, lice. For the purpose of this document, ectoparasiticides exclude synthetic pyrethroids (fly control products).

**Endoparasite:** Parasite that lives inside its host, typically helminths but including protozoa. For the purpose of this document, endoparasites exclude protozoa.

**Endoparasiticide:** Controls endoparasites (fluke (trematodes), tapeworm (cestodes), and roundworm (nematodes)) and protozoa. They include anthelmintics.

**Flukicide:** kills fluke (trematodes)

**Helminth:** Endoparasite (fluke (trematodes), tapeworm (cestodes), and roundworm (nematodes)), excluding protozoa.

**Parasite:** Organism that uses other species of plants and animals as hosts.

**Parasiticide:** product that kills parasites that infest livestock, pets and other animals. For the purpose of this document, parasiticides exclude synthetic pyrethroids (fly control products)