

ANNUAL PROGRESS REPORT 2023

























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About RUMA CA&E

Inspired by the success of the UK farm animal sector in reducing antibiotic use during the past five years, the recently formed RUMA Companion Animal and Equine Alliance (RUMA CA&E) will draw on the agriculture sector learnings to help further protect important medicines for future human and animal use.

Created from the leadership and vision of the Responsible use of Medicines in Agriculture (RUMA) Alliance, which has worked with the sectors to help them more than halve (59%) the use of antibiotics to treat UK farm animals and has seen the use of Highest Priority Critically Important Antibiotics in animals reduce by 82% since 2014, the RUMA Companion Animal & Equine (RUMA CA&E) Alliance has been established to define the principles of responsible use of medicines in the companion animal and equine sectors, with a view to contributing positively to the One Health agenda.

RUMA CA&E covers the responsible use of medicines in dogs, cats, rabbits, small mammals, exotic animals kept as pets, and equids. The aim is for the UK to lead the way in these sectors through evidence-based and measurable activities that will promote and enhance stewardship. RUMA CA&E has focused its limited resources initially on the responsible use of antibiotics but discussions are underway to extend that remit into other areas including antiparasitics.

The Alliance will:

- Agree and define, through effective consultation with stakeholders, areas to establish specific targeted activities and research that will form the basis of agreed sector specific KPI development and monitoring. These KPI's will ensure that specific goals are set, and efforts are focused in the appropriate areas to demonstrate progress:
 - Strategic KPI's for industry level reporting
 - o Practical KPI's relevant to practitioners that will inform organisation or practice-wide activities
- Assist stakeholders, associations, and organisations across the sector to develop, endorse, implement, and raise awareness of guidance and protocols on the stewardship and responsible use of medicines within the companion animal and equine sectors. The protocols and guidance will be practical, drive positive behaviour change, align with KPI progression, and protect patients and practitioners alike
- Provide evidence of progress from the companion animal and equine sectors towards achieving the government 20-year vision and five-year national action plan for how the UK will contribute to containing and controlling AMR
- Provide a focal point of expertise and advice for government, regulatory and technological consultation when considering the development of strategies, legislation, regulations, codes or technologies relating to the companion animal and equine sectors



¹ RUMA Companion Animal & Equine. <u>RUMA CA&E (rumacae.org.uk)</u>

² RUMA. <u>Home - Responsible Use of Medicines in Agriculture Alliance (ruma.org.uk)</u>

Vision

For the UK to lead the way in the responsible use of medicines in the Companion Animal and Equine sectors, through evidence-based and measurable activities that will improve the stewardship of medicines and optimise animal health and welfare, as well as related human and environmental health.

Mission

To promote, enable and measure responsible use of medicines in the Companion Animal (including exotic animals kept as pets) and Equine sectors

To promote evidence-based activities that influence and encourage behaviours that are consistent with the responsible use of medicines

To engage stakeholders from across the Companion Animal and Equine sectors to promote collaborative activities that influence and encourage all parties to take ownership, responsibility and accountability for the stewardship of medicines

GWYNJONES RUMA CA&E Chair



Introduction

It has been another busy year for RUMA CA&E. We have fed into the Veterinary Medicines Regulations consultation, delivered our second roundtable event bringing industry stakeholders together to drive important data-focused discussions, and we continue to be involved in numerous collaborative projects across the CA&E sectors. RUMA CA&E has also taken the lead project managing the Antibiotic Amnesty which is again running in 2023 after a successful pilot last year.

Our core focus over the past year as an Alliance has again been on the responsible use of antibiotics across CA&E sectors and, as reported last year, work has already progressed in defining dog and cat measures, which will soon expand into the equine and exotics sectors. However, while antibiotics remains a primary focus, we recognise the importance of widening our remit to cover antiparasitics and anthelmintics and with that in mind, we are working with key industry stakeholders to explore how, as an Alliance, we can support responsible use discussions in these areas.

I'm pleased to also report that our membership continues to flourish and we have welcomed a number of new members this year to the RUMA CA&E family - all of whom help further strengthen our reach and impact, and provide new opportunities to support the sectors we represent.

Keeping with the theme of strengthening our activity, we now jointly share the Independent Scientific Group (ISG) with our sibling organisation, RUMA Agri and have recently appointed a new chair for this group; Professor Pete Borriello CB, who has had a long and esteemed career in the fields of both animal and human health. This shared resource brings together eminent specialists in areas related to the responsible use of medicines in both human and animal medicine. The members advise both RUMA Agri and RUMA CA&E on technical developments. which helps underpin our fact-based and scientific approach. This provides independent expert voices with a One Health perspective on the responsible use of medicines in livestock and companion animals and equines. We have also appointed a new Chair of the Targets and Measures Working Group (T&MWG), Kit Sturgess, and this group will continue to play a vital role in the next stage of work to evolve metrics for equines, small mammals/exotics, and engage with stakeholders to set realistic targets in all sectors.

I would once again like to thank the RUMA CA&E Alliance, Board and Targets and Measures Working Group for their ongoing commitment and efforts this past year. I would also like to thank NOAH and the BVA for their sponsorship and support for our second roundtable event back in the summer.



2023 RUMA CA&E activities

1. Data Roundtable

A key priority since our last report has been to engage with practice management system companies and understand the capabilities for standardising data and reporting.

RUMA CA&E exited 2022 in a strong place thanks to the first roundtable at which national antibiotic measures for dogs and cats were defined, providing a clear set of foundation metrics to work from. It was the expectation to then move into equine and exotics roundtables in 2023 to carry out a similar exercise but, after consultation with the Alliance's equine and exotics members, these plans changed direction for very good reason.

In discussion with the British Equine Veterinary Association (BEVA) and the British Veterinary Zoological Society (BVZS) it became clear that another step was needed before these sector roundtables could take place. Manufacturers sales data is limited and provides no insight into use in equine and exotics sectors because there are so few licensed products, meaning there is more prescribing under the cascade and it is therefore impossible to extract meaningful insights from the sales data. This meant the next roundtable instead needed to be centred on usage data rather than sales data which can more reliably inform discussions around measures and targets in those sectors.

Summary of the challenges of only using sales data:

- Manufacturer sales data reflects what is sold by a Marketing Authorisation Holder e.g. to a wholesaler. Just because a product is sold one year doesn't mean it is used that year and may even expire before it is used
- Difficult to split down to sector level as:
 - o Many products are licensed for multiple species
 - o Some products are used under the cascade for a species that they are not licensed for
- Doesn't include products that are prescribed under the cascade using a Special Import Certificate

In July 2023, a range of stakeholders from the sectors, veterinary corporates and from practice management system companies, came together to begin the process of addressing the following:

- Understand the data collection work stakeholders are already doing
- Discuss and agree a prioritised approach to usage data collection across the CA&E sectors
- Agree a timeline for data collection activity

The attendees assessed the importance of Practice Generated Data (PGD) and were asked to consider the following points:

- What the issues are with gathering/utilising PGD
- Where PGD is held and in what form
- Identify what the possible solutions might be to the issues

Next steps

The Data Roundtable delivered a range of feedback and questions around the areas outlined below. RUMA CA&E is now in the process of working with stakeholders to further explore a range of next steps associated with each element:

- Data security, storage and sharing
- Consistency and standardisation in data recording
- Identifying exactly which data are needed to gather the right levels of insight
- Data sources understanding where data exists and how it can be gathered
- Proof of concept testing establish a methodology



2. Targets and Measures Working Group (T&MWG)

The Targets and Measures Working group comprises a number of companion animal experts whose initial focus was on formulating a set of realistic and achievable dog and cat targets. This work was completed last year and details of these targets are shared again below for reference.

In 2023, a new Chair of the T&MWG has been appointed, Dr Kit Sturgess who will now lead the group forward and continue progressing the building blocks needed to further our work in the targets and measures area.

Looking ahead, it is important momentum is maintained towards the next stage of work to evolve metrics for equines, small mammalsand exotics, and engage with stakeholders to set realistic targets in all sectors.

Reminder of National Metrics for Dogs & Cats

The national metrics selected are mg/kg for systemic and topical use, and the average number of days treated per animal for systemic medication. All these metrics would be provided for both cats and dogs, and separated into total use and HP-CIAs.

mg/kg	total systemic sales	separated out by dogs and cats o It is recognised this is not directly clinically relevant but will be helpful for identifying trends and provides a comparison with how other sectors are reporting
mg/kg	topical use	separated out by dogs and cats
mg/kg	topical use HP-CIA	separated out by dogs and cats
Av. Number of days treated/animal:	systemic use	separated out by dogs and cats o Total use and Highest Priority Critically Important Antibiotics (HP-CIA's) N.B. This will look at trends and not individual prescribing behaviours

Metrics explained

Mg

- O Relates to the weight of antibiotic active ingredient
- O Calculated by multiplying the volume sold (e.g. tablets, mls) with the active ingredient per unit (e.g. mg/tablet, mg/ml)

Kg:

- O Relates to the weight of the animal population
- O Calculated by multiplying the number of dogs and cats (using PDSA estimates) with the average weight of dog and cat (currently estimated using SAVSNET)

Average number of days treated/animal (DDDVet - Defined Daily Dose for animals, the assumed average dose per kg animal per species per day)

This is calculated (for each active ingredient and route of administration and for both dogs and cats) by using an assumed average dose per animal per day. See appendices for more information on methodology.



Latest data on Dogs and Cats

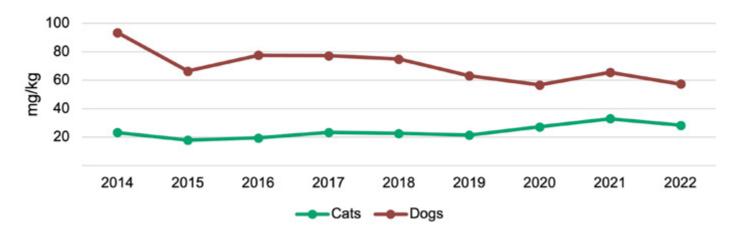




Data provided by the Veterinary Medicines Directorate (VMD) and taken from the UK-Veterinary Antibiotic Resistance Sales Surveillance (2022) Report.

Active ingredient (mg/kg) of antibiotics sold for use in dogs and cats, 2014 to 2022

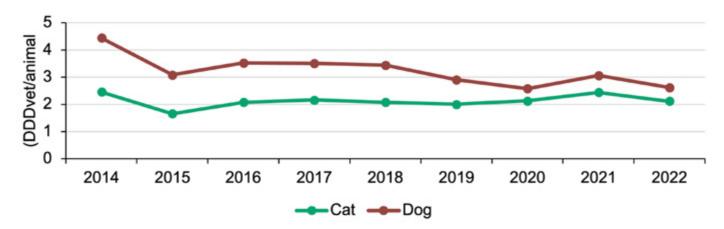
	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dogs	93.6	66.5	77.6	77.3	74.9	63.2	56.7	65.6	57.3
Cats	23.2	17.9	19.4	23.3	22.7	21.5	27.3	32.9	28.3



In dogs, antibiotic use has decreased year-on-year since 2016, except for between 2020 and 2021 when it increased. In cats, antibiotic use decreased between 2014 and 2015 but since then has shown a small but steady upward trend, with a decrease between 2021 and 2022. Whilst this metric is consistent with that used in other sectors, there are a number of disadvantages to using it in the companion animal sector. We intend to keep reporting on this metric but our focus areas will be led more by the DDDVet results.

Active ingredient (DDDvet/kg) of antibiotics sold for use in dogs and cats, 2014 to 2022

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dogs	4.44	3.09	3.52	3.51	3.44	2.91	2.58	3.07	2.62
Cats	2.46	1.66	2.08	2.17	2.1	2.01	2.13	2.43	2.11

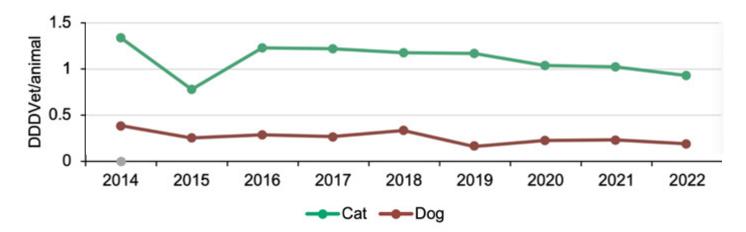


The DDDVet data shows the same trends as described for mg/kg, with both sectors showing an increase as society and the veterinary sector initially emerged from the pandemic, but then a decrease between 2021 and 2022.



Active ingredient (DDDVet/animal) of HP-CIAs, sold for use in dogs and cats, 2014 to 2022

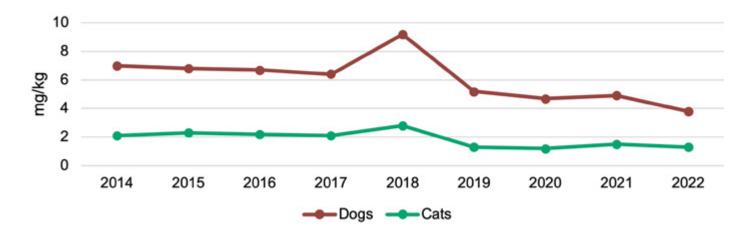
	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dogs	0.38	0.26	0.29	0.26	0.28	0.22	0.23	0.23	0.19
Cats	1.34	0.78	1.24	1.22	1.18	1.17	1.04	1.03	0.93



Whilst both sectors saw a decrease in HP-CIA use between 2021 and 2022, the use of HP-CIAs in cats remains high accounting for 44% of overall use. Use of HP-CIAs in dogs was the lowest since 2014.

Active ingredient (mg/kg) of topical products sold for use in dogs and cats, 2014 to 2022

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dogs	7.0	6.8	6.7	6.4	9.2	5.2	4.7	4.9	3.8
Cats	2.1	2.3	2.2	2.1	2.8	1.3	1.2	1.5	1.3



The companion animal sector utilises topical antimicrobial therapy more frequently than the other animal sectors, particularly in the management of ear and skin conditions. Whilst the application is far more targeted to the infected area, there remains exposure of pathogens to antibiotics, challenges in compliance and the possibility that active ingredients may be absorbed systemically. The T&MWG felt it was important that use of topical products was therefore monitored.

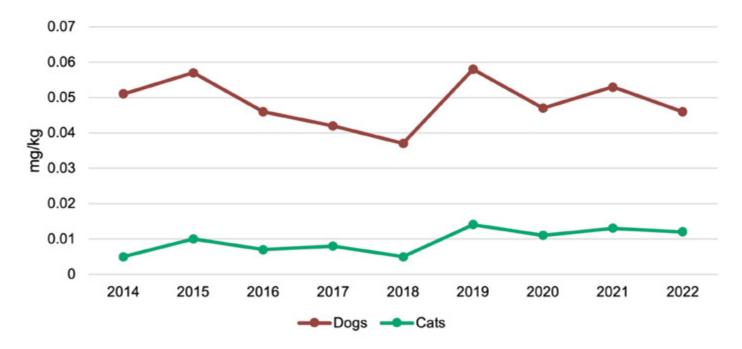
Both dog and cat sectors saw a reduction in topical products sold between 2021 and 2022. Dogs saw a reduction of 1.1mg/kg whilst cats saw a smaller decrease of 0.2 mg/kg.

Dogs saw the lowest recorded amount sold for use between 2014 and 2022 (3.8mg/kg) showing a decrease since 2014 of 54% (3.2 mg/kg).



Active ingredient (mg/kg) of topical HP-CIA product sold for use in dogs and cats, 2014 to 2022

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Dogs	0.051	0.057	0.046	0.042	0.037	0.058	0.047	0.053	0.046
Cats	0.005	0.010	0.007	0.008	0.005	0.014	0.011	0.013	0.012



There are a number of topical products containing HP-CIAs in use in the Companion Animal sector which provide valuable options to clinicians in the face of some conditions which can be difficult to treat. It is encouraging to see that the rate of use in both dogs and cats is much lower than overall topical use, and that between 2021 and 2022 there has been a decrease in use of topical HP-CIAs in dogs. The responsible deployment of these treatment options through good antimicrobial stewardship is important so that they remain efficacious for the future and don't contribute to the development of wider resistance.

Data sources:

For sales - VMD VARSS

For weight (kg) - SAVSNET data, using median data from dogs and cats aged over 18 months old

For population data - PDSA PAW Report for population data



3. Clinical scenarios

Part of RUMA CA&E's remit is to play a role in the reduction of HP-CIA use, and to establish in which conditions HP-CIAs are most commonly prescribed. Last year we committed to exploring this further. Following stakeholder input, the following clinical scenarios have been identified as those to prioritise, based on where it is considered there is the greatest scope to improve antibiotic stewardship, particularly stewardship of HP-CIA use:

- Cat bite abscess
- Kennel Cough
- Acute diarrhoea
- Cat Flu

Work is underway to create a dedicated area on the RUMA CA&E website to share guidance and protocols on these clinical scenarios. Working with our Alliance members we plan to bring together best practice guidance as well as case studies which help demonstrate the impacts and outcomes. RUMA CA&E will then actively publicise these insights to help support the profession.

4. Independent Scientific Group (ISG)

The original RUMA ISG was established in 2017. Until 2023 it worked exclusively for RUMA Agriculture. Following the inception of RUMA CA&E however, both RUMA organisations felt it would be more effective to jointly share the expertise of the group which now means the ISG provides a dual role in supporting the work of RUMA Agriculture and RUMA CA&E.

In September 2023, Professor Pete Borriello CB who has had a long and esteemed career in the fields of both animal and human health, was appointed as the new Chair of the ISG.

The ISG members cover areas of human and animal medicine, and they advise both RUMA organisations on technical developments, provide a fact-based and scientific approach, and provide independent expert voices with a One Health perspective on the responsible use of medicines in farm, companion and equine animals. The members of the Group are all eminent specialists in their own right, in fields related to the responsible use of medicines across human and animal medicine. They cover a wide range of specialisms and share a common desire to bring factual evidence and science to the debate around animal medicines, with the most recent focus being on antibiotic resistance in particular, to prompt the right actions, while ensuring animal health and welfare is protected.

5. Industry/Sector collaborations

Antibiotic Amnesty

The first ever One Health Antibiotic Amnesty took place in veterinary practices across the UK and community pharmacies in the Midlands region during November 2022. During November 2023, the veterinary sector came together again for the Antibiotic Amnesty campaign to encourage the public to return out-of-date and unused antibiotics to help tackle the growing issue of antimicrobial resistance (AMR).

The amnesty, which RUMA CA&E has project managed during 2023, brings together a collaboration of UK veterinary organisations, practices and charities, to educate owners about antimicrobial resistance (AMR) and raise awareness of the importance of the safe use and disposal of these important medicines in order to address AMR and prevent environmental pollution.

As this report is published, the 2023 Antibiotic Amnesty campaign will be nearing completion and the results will be published in Q1 2023. Steve Howard, Secretary General for RUMA Companion Animal and Equine, says: "RUMA CA&E has been delighted to project manage the Antibiotic Amnesty in 2023. This initiative perfectly aligns with our role and remit of encouraging innovative and proactive efforts to improve the responsible use of medicines, which includes responsible disposal, whilst optimising and protecting animal health and welfare, as well as human and environmental health and welfare."

Responses* received from an owner survey following the antibiotic amnesty in 2022 were encouraging, with most (94%) aware that giving leftover antibiotics to their pet for another illness/ problem or to another animal, risked side effects. The most common reason given for owners being left with unused antibiotics was the recovery of their pet before the end of the treatment course (21%). However, the importance of this initiative was illustrated in the responses which showed that owners were less aware of the correct methods of disposal and the risks posed by environmental pollution, with a disturbing 46% having disposed of the antibiotics via household waste or down the sink or toilet, and 38% said they were holding on to them for potential future use.



Exploring Improved Antimicrobial Stewardship in UK Cats and Dogs

RUMA CA&E is proud to be supporting The RVC VetCompass project 'Improved Stewardship to Protect Veterinary Antimicrobial Usage in UK Cats and Dogs', which is a collaboration with the Pets at Home Vet Group and funded by the Petplan Charitable Trust. It aims to benchmark current antimicrobial use in UK veterinary practices, and to develop, evaluate, and promote novel interventions that reduce antimicrobial prescribing, while still being practical and realistic to implement in first opinion surgeries.

Veterinary antimicrobial stewardship is increasingly acknowledged as critically important to the long-term sustainability of antimicrobial effectiveness in human and animal health¹, especially given the high levels of antibiotic prescribing commonly found in companion animal practice^{2,3}. Various interventions have been evaluated for their effects on decreasing antimicrobial prescribing by veterinarians, especially with regard to high-priority categories that are critically important to human health⁴⁻⁷. However, there remains a need to establish scalable, evidence-based interventions that consistently improve antimicrobial stewardship more broadly, and that can be widely adopted across a wide range of small animal veterinary practices.

The study will use a randomised control trial (RCT) approach. A range of interventions are currently in development, with a 12-month implementation period planned from 2024. Following the study, all effective study resources and interventions will be made freely available to the wider veterinary profession.

For further information, please visit

https://www.rvc.ac.uk/research/projects/veeph/improved-stewardship-to-protect-veterinary-antimicrobial-usage-in-uk-cats-and-dogs

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London Vet Show

Panel Debate

Representatives from RUMA CA&E and RUMA Agriculture took part in the panel debate: Super drugs vs super bugs: Is the UK making progress against the threat of AMR? This provided a great platform for a One Health discussion and to share the work of both RUMA Alliances, including not only the work achieved to date, but the opportunities ahead and activities underway.

RUMA CA&E AMR collaboration with IVC Evidensia

RUMA CA&E collaborated with IVC Evidensia on an initiative to support the profession in educating clients of the dangers of Antimicrobial Resistance (AMR). Together, IVC Evidensia and RUMA CA&E produced a free Social Media Toolkit for any UK veterinary professional to use, containing both visual assets and captions. It gives veterinary professionals extra support in educating clients on social channels about AMR and the safe disposal of antibiotics and will also extend support offered beyond the usual Antibiotic Amnesty month of November.

This initiative launched at London Vet Show: https://rb.gy/t3e1ie

Lab Day participation

RUMA CA&E was delighted to have the opportunity to introduce its work at the 'Antimicrobial Stewardship: Veterinary Microbiology Laboratories' event held in May 2023 at RVC to start the conversation around the importance of collecting AMR data in the sectors. This collaborative initiative focused on antimicrobial stewardship and centred on the role of veterinary diagnostic laboratories in this enterprise. The day included interactive talks and opportunities for workshops to discuss future steps to improve stewardship in a coordinated fashion. The event started to build relationships with key stakeholders in this critical step of the Antimicrobial Stewardship (AMS) and Antimicrobial Use (AMU) journey which will help contribute towards building a picture of the levels of AMR in the CA&E sectors. The event considered a number of questions:

- What are the current & future challenges of multidrug-resistance in small animal practice?
- What can the microbiology labs do to support good antimicrobial stewardship?

RUMA CA&E webinar at the RUMA Agriculture conference

RUMA CA&E was invited to present a webinar at the 2023 RUMA Agriculture One Health conference in November. This was an opportunity to share an overview of our work to date including the journey undertaken to define national metrics for measuring antibiotic use in dogs and cats, plus key sector initiatives such as the Antibiotic Amnesty. This was also an opportunity to discuss the latest national usage figures released and explore the next steps in the measures and targets journey. The webinar also opened up discussion around the need for data for the CA&E sectors and how learnings from the Livestock sectors have helped shape our thinking in this area.

The recording can be watched back here: https://rb.gy/9mm1on



Next steps

- PGD data continue to look at standardisation of data and explore the best ways of sharing data
- Clinical scenarios ongoing work to provide guidance and protocols to the profession
- Further roundtable events equine and exotics
- Explore more industry collaborations
- Start to explore AMR levels in the sectors.

Examples of industry/sector activities and initiatives

A number of our members have shared details about their AMS work which we are pleased to share within our annual report. This is not an exhaustive list of activity but provides examples of the work underway across the CA&E sectors.

Dogs Trust

Dogs Trust completed a review of antibiotic usage across its 21 rehoming centres in March 2023 for the previous 12 months. This will be monitored to identify areas that need to be addressed.

The responsible use of antibiotics SOP has recently been updated, this refers to the BVA 7-point plan and links to other SOPs: Using disinfectants and cleaning kennels SOP, and Biosecurity and disease management SOP, which cover preventative measures to reduce the need for antibiotics.

Specific staff such as rehoming centre managers and vet nurse assistants must complete dispensing training with regular refreshers, this includes a section on responsible use of antibiotics and the PROTECT poster.

Dogs Trust stopped blanket fenbendazole treatment for dogs arriving in its care in 2022 following a trial in three centres. Monitoring every three months since then has not shown any increase in giardia cases.

Funding from Dogs Trust Worldwide is only provided to projects that have responsible antibiotic protocols in place, and Dogs Trust has recently supported projects in Thailand, Bulgaria and India to amend their protocols to be aligned with its goals, including implementing an impact assessment in Thailand. Responsible use includes not using prophylactic antibiotics at the time of neutering.

RCVS Knowledge

The period between 2022 – 2023 saw RCVSK increase its Antimicrobial Stewardship offering to veterinary teams and its commitment to tackling AMR.

As part of its 2022/2023 RCVS Knowledge Awards, the award categories were expanded with the introduction of the RCVS Knowledge Awards for Antimicrobial Stewardship (AMS). The Antimicrobial Stewardship Awards aim to showcase and celebrate practical examples where individuals and teams are improving responsible antimicrobial prescribing. The Antimicrobial Stewardship Champions were celebrated in the 2023 Awards:

- White Lodge Veterinary Surgery conducted a prospective audit to review antibiotic use in cat bite abscesses and treated 86% of their patients successfully without antibiotics.
- Paragon Veterinary Referrals focused on preserving critically important antimicrobials through the establishment of an Antimicrobial Stewardship Team, the development of guidelines, and in-house CPD.



In November 2022, RCVSK joined veterinary stakeholders in the first every veterinary Antibiotic Amnesty. The objective of the campaign was to educate clients about the risks of AMR and encourage safe disposal of unused or out of date antibiotics. Alongside RUMA CA&E we built a dedicated webpage that hosted free resources for teams to hold their own amnesties in practice.

During World Antimicrobial Awareness Week in November 2022, RCVSK Executive Director Chris Gush joined Ian Ramsey, Vanessa Schmidt, Fraser Broadfoot and Sue Patterson on a panel discussion entitled Antimicrobial Resistance - what can the veterinary profession do? The slogan of World Antimicrobial Awareness Week remained 'Antimicrobials: Handle with Care' and the panel discussion considered antimicrobial use in veterinary medicine.

In June 2023, RCVSK took great strides in widening its AMS offering to the veterinary profession with the launch of our VetTeamAMR programme. VetTeamAMR champions the responsible use of antimicrobials within companion animal and equine veterinary teams. As part of VetTeamAMR, RCVSK provides free audit tools and over 40 hours of CPD to help veterinary teams improve their antimicrobial use. The Learning platform now includes webinars and content on responsible use of antibiotics, focusing on certain disease processes that antibiotics might be prescribed for. This learning platform also links to the separate course, Managing Veterinary Medicines, which includes six hours CPD on the legal and responsible use of medicines.

An Antibiotic Audit Tool, allowing vets and owners to report on their antibiotic prescribing, use and outcomes, is now available for Equines. Phase 2 of the audit tool, which allows practices to upload bulk data, is currently in development.

The Learning platform and audit tool were launched in June with two online launch events, featuring key speakers on antimicrobial use.

Challenges that lie ahead will be getting the profession to embed auditing and quality improvement within their roles, alongside the other challenges they are facing within practice.

Vets for Pets

Vets for Pets provides internal reports and access to spreadsheets for vet partners to assess and monitor their use of antibiotics in its clinics and this gives the ability to benchmark against the rest of the group.

Vets for Pets is also participating in collaboration with the Royal Veterinary College and Vet Compass for the antimicrobial stewardship study (referenced earlier in the report) due to start in January 2024.

Looking ahead, Vets for Pets is looking to develop a defined stewardship programme.

VetPartners

During AMR Awareness Week VetPartners released their annual Antimicrobial Stewardship Report to highlight ongoing efforts in promoting the responsible use of <u>antibiotics</u>.

Over the past few years, VetPartners have launched several initiatives focussing on the quantity, type and clinical indication of antibiotics used in VetPartners practices. Responsible antibiotic use has been high on the agenda for clinical teams. VetPartners believes that antimicrobial stewardship is a team effort and its initiatives have therefore involved all parties with vets, nurses and client care teams being central to the work carried out. Its latest report continues to build on key baseline data to increase understanding of current antibiotic usage and identify areas for intervention. It highlights VetPartners' ongoing work as well as including links to existing resources and those newly created. These resources can be freely accessed by VetPartners colleagues, but external requests can be made via clinical.board@vetpartners.co.uk.

PDSA

PDSA has continued to support the development and work of RUMA CA&E and has included AMR questions in the PDSA PAW report to ascertain owner perceptions and understanding of AMR. PDSA has



also taken the concept of DDDvet and applied it to dog, cat and rabbit usage data rather than sales data as a proof of concept for the first time.

The charity has produced its first AMS report, which showcases the PAW results, the DDDvet data showing a reduction of 30% in overall antibiotic usage and a 67% reduction in HP-CIA usage, and provides examples of the protocols it has created and rolled out over the last 10 years of its AMS journey, as well as some of the impacts of those protocols.

To read the PDSA AMS report visit: https://www.pdsa.org.uk/media/14348/amr-stewardship-report-2023.pdf

Other Medicines Stewardship Initiatives

British Veterinary Association (BVA)

Alongside the British Small Animal Veterinary Association (BSAVA) and British Veterinary Zoological Society (BVZS), BVA has continued to raise awareness of the importance of responsibly using parasiticide products for cats and dogs. BVA's work has been in response to the increasing concern that some of these medicines are contaminating the environment, potentially reaching rivers through wastewater. This year BVA developed a resource pack to support veterinary professionals when speaking to clients about how to responsibly use parasiticides products, to help minimise any negative impacts to pets, people and the planet. BVA also contributed to roundtable discussions and highlighted new research on the environmental harms posed by these medicines.

Following the launch of its joint <u>policy position</u> with BSAVA and BVZS in 2021, BVA research showed almost all (98%) companion animal vets are concerned about the impact of parasiticides on the environment. BVA has continued working to highlight the importance of using these products carefully, applying a risk-based approach, to help minimise environmental risks while still protecting animal and human health and welfare and in September 2022, launched its <u>five point plan poster</u>. The poster is designed to be displayed in veterinary surgeries, offering tips for each of the five points on how to adapt the use of parasiticides in practice. The five points are:

- Work with clients to prevent and check for parasites
- Understand the potential risks to animals, humans, and the environment
- Take a risk-based approach to prescribing
- Ensure appropriate use
- Record and monitor use

In April 2023, BVA launched its <u>client facing resource pack</u>, which included posters for the waiting room, slides for waiting room screens, and a leaflet to print out or email to clients. These included advice on using parasiticide products safely, to help minimise any negative impacts for pets, people and the planet. As well as providing useful advice, the resources are designed to help veterinary professionals begin to have conversations around the environmental concerns associated with these medicines. BVA also produced a range of graphics to share on social media, linked to its new <u>animal owners webpage</u> which provides further guidance.

BVA joined a roundtable discussion at Imperial College London and later welcomed the launch of their briefing paper, 'Are urban areas hotspots for pollution from pet parasiticides?'. BVA had been calling for more research into the impact of parasiticides on the environment, and this paper showed that chemicals in many small animal parasiticide products are present in waterways in urban areas, often in concentrations high enough to cause harm to the environment and ecosystem.

To continue providing advice and raise awareness of the need for responsible use, BVA held a dedicated session exploring how to use parasiticides for cats and dogs safely as part of its Clinical Theatre



programme at BVA Live, in May 2023, at the NEC in Birmingham. Ticked off! Controlling parasites in dogs and cats touched on whether year-round preventative treatment with parasiticides is necessary for most dogs and cats in the UK, exploring the benefits of a risk-based approach and how the veterinary professions can begin to take this on board.

A major challenge in driving change will be the many knowledge gaps in relation to parasites and the use of parasiticide products, making risk analysis difficult. The BVA policy position highlights many gaps and calls for more research to be undertaken in a number of areas.

Controlling ANTiparasitic resistance in Equines Responsibly (CANTER)

A new pan-industry group, the first of its kind worldwide, has been formed to tackle the increasing threat that wormer resistance poses to horse health and the equine industry. Termed CANTER to communicate the urgency of its crusade, Controlling ANTiparasitic resistance in Equines Responsibly brings together voluntary representation from the widest reaches of the sector. These include leading experts in the field across prescribers, diagnostic providers, pharmaceutical companies, trade organisations, technical experts, horse owners, charities, and policy makers. All recognise the critical consequences of antiparasitic resistance and the need for coordinated action to slow the development and maintain efficacy of our limited treatments.

It recognises that antiparasitic resistance (AR) in equine parasites has critical health, welfare and husbandry consequences and coordinated action is essential to maintain future antiparasitic efficacy and slow the development and spread of AR. CANTER's initial focus is resistance in equine internal parasites.

For more information visit: https://canterforhorses.org.uk/















RUMA CA&E Board and Alliance Members

















Alliance Members

PDSA	RUMA Agriculture	AMTRA
PdSQ THE VET CHARITY FOR PETS IN NEED	REPORTER USE OF MEDICINES IN AGRICULTURE ALLIANCE	ANNAL MEDICINES TRAINING REGULATORY AUTHORITY
RCVSK	BVZS	VetSkill
RCVS RNOWLEDGE	Pos	VetSkill Vectoral lands of the life
BSAVA	BVA	Linnaeus
BSAVA BILITEM SMALL ARMAL VETERIRARY ASSOCIATIO	BVA CBRITISH Veterinary Association	LINNAEUS
NOAH	Vet Compass/RVC	Vets for Pets
NOAH Reporting the failure of animal health	Vet Compass Royal Veterinary College University of London	Vets for Pets
BEVA	AHDA	VetPol
® BEVA	AHDA	V ⁺ vetpol [*]
SAVSNET/Uni of Liverpool	Battersea	BVNA
LIVERPOOL LIVERPOOL	€ ₩ BATTERSEA	BVNA British Veterinary Nursing Association
VMD	Joii Pet Care	Dogs Trust
Veterinary Medicines Directorate	⊌® ii	DogsTrust
Vet Schools Council	Surrey University	
VSC Veterinery Schools Council	SURREY	















Our report sponsor (Animalcare



Animalcare is a sustainable and passionate organisation committed to leading in animal health through innovative and trusted products and services to support the veterinary profession. We care about the well-being of animals and the positive impact that healthy animals have on their owners and society.

Comment from Dr Colin Capner, Senior Veterinary Manager, Animalcare UK

"Antibiotic drugs are an important group of compounds for the control of infections that cause morbidity and can be potentially life threatening. Their importance to the individuals of all species is well understood but they have a much broader societal impact also. This is the subject of a 2023 Office of Health Economics report – Capturing the Broader Value of Antibiotics*.

"The need for the responsible use of antibiotics is amplified given the lack of new drug class discoveries, and the rise of antimicrobial resistance. Whilst rational reductions in use in the production animal sector have been measured helped by the work of RUMA Agri, there is more to do in terms of human use. Measurements of the use of antimicrobials in companion animal and equine medicine have until recently been less systematically examined, but the creation of the RUMA Companion Animal & Equine Alliance (RUMA CA&E) is a significant innovation helping to improve this situation. The aims to promote responsible use and stewardship of medicines are important in raising awareness and championing improvements in appropriate use.

"Improved knowledge of the variety of microbiomes integral to the normal metabolic functions of animals is further advancing the availability of alternate approaches to antimicrobial use. The ways in which antimicrobials impact the composition of these complex communities of microbes, and the ways in which that contributes to the spread of resistance genes, is at the cutting edge of current research, relying increasingly on gene technologies. Interpreting these findings for clinicians, underpins how we might usefully transfer this knowledge from the laboratory to the consulting room.

"The partnerships that RUMA CA&E are creating across the industry and profession are important in bringing together key stakeholders. Disseminating evidence-based information to veterinary professionals via a variety of media is important in raising awareness, but also in reminding all of us day-to-day of how our actions can contribute to or help prevent AMR. Animalcare Ltd, is pleased to be a sponsor for this report, not only to facilitate the work of RUMA CA&E but to assist in the dissemination of their findings."



^{*} https://www.ohe.org/publications/capturing-the-broader-value-of-antibiotics/













Abbreviations & glossary

AMR	Antimicrobial Resistance
AMS	Antimcrobial Stewardship
AR	Antiparasitic Resistance
BEVA	British Equine Veterinary Association
BSAVA	British Small Animal Veterinary Association
BVA	British Veterinary Association
BVZS	British Veterinary Zoological Society
DDDVet	Defined Daily Dose for animals, the assumed average dose per kg animal per species per day
MAH's	Marketing Authorisation Holders
NOAH	National Office of Animal Health
PDSA	People's Dispensary for Sick Animals
RCVS Knowledge	Royal College of Veterinary Surgeons – Knowledge (The knowledge hub for veterinary professionals)
RUMA	Responsible use of Medicines in Agriculture Alliance
RUMA CA&E	Responsible use of Medicines Alliance – Companion Animals & Equine
RVC	Royal Veterinary College (University of London)
Savsnet	Small Animal Veterinary Surveillance Network (University of Liverpool)
T&MWG	Targets & Measures Working Group (RUMA CA&E)
Vet Compass	The VetCompass Search Engine indexes millions of clinical records collected from primary practices and referral centres. Researchers use these records to create an evidence-base. The evidence is used by vets to improve the health and welfare of animals.
VMD	Veterinary Medicines Directorate
vsc	Veterinary Schools Council















Appendices

Average number of days treated/ animal

This is calculated (for each active ingredient and route of administration and for both dogs and cats) using the method below:

Total amount of active ingredient (mg)

(DDDVet (mg/kg/day) * total animal population weight at risk (kg))

The total amount of active ingredient and total animal population weight at risk is calculated in the same way as for the mg/kg calculation. DDDVet represents the average dose per kg animal per species per day. These standard daily doses are extracted from the Summary of Product Characteristics (SPC) for each antibiotic product. If there is a dose range, then the lowest dose was chosen, and where the dose rate varies between products with the same active ingredient/ route of administration, then the median dose rate was selected. For long acting products, the DDDVet is calculated by dividing the daily dose rate with the length of activity for that product. A full list of the DDDVet figures used for each active ingredient/ route of administration can be found in Table S1.3.1 of <u>VARSS Supplementary Material 1</u>.



COMPANION ANIMAL & EQUINE

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