



# VetPartners Antibiotic Stewardship Report 2023



## Welcome to the VetPartners Antimicrobial Stewardship Report 2023!

In celebration of the World Health Organisation's World AMR Awareness Week, the VetPartners Clinical Board are delighted to present some more of our Quality Improvement (QI) work about our antibiotic use in the UK over the last year.

This year's focus for Antimicrobial Awareness Week across the world is '**preventing antimicrobial resistance together**'. Our work continues to align with this and we use a whole practice team approach to promote the responsible use of antibiotics.

Quality Improvement is one of the key activities for our Clinical Board and the responsible use of antibiotics is high priority for our practice teams. Hence this is a key area we have worked on to help teams progress their practice.

Last year, during Antimicrobial Awareness Week, we launched our first antibiotic stewardship report and we were delighted with the impact it had. We were contacted by people throughout the UK and beyond to discuss our work and how we can partner with others to make a difference.

This year we continue to monitor our baseline data on the overall use of antibiotics within the business, as well as focussing on specific drugs. With these data we can look at variability between practices and together we can share ideas about how to make practical changes to further our stewardship. We have also looked at certain conditions where our teams say they would like to change their practice and we use quality improvement techniques to facilitate this. All of this work is aimed at enabling our teams to **reduce, refine** and **replace** our use of antibiotics and protect these important drugs.

We recognise that good antimicrobial stewardship is a team effort and that we all have a responsibility to combat antimicrobial resistance, not just those prescribing. So, we are including our nursing, tech, yard, lab and client care teams in our antibiotic stewardship work.



This report includes highlights of our ongoing work, as well as links to existing and new resources that we have created for our teams. I hope you enjoy reading this report and I would encourage you to get in touch and tell us what you think of it and share ideas or suggest partnerships moving forward.



Please contact us by emailing [clinical.board@vetpartners.co.uk](mailto:clinical.board@vetpartners.co.uk).

Thank you for your help,

*Rach*

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Director of Clinical Research and Excellence in Practice, VetPartners



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## The quantity of antibiotics used and monitoring

One key point to consider within our teams is the absolute amount of antibiotics we regularly prescribe and use. One overall objective of our work is to safely enable a reduction of our use of antibiotics, without harming patient outcomes.

In the last two years we have also found a way of monitoring this antibiotic purchasing over time. This is not quite the same as usage, but it is REALLY exciting as it gives us a large-scale view of our antibiotics use over time and we can look at changes.

Across the VetPartners UK team between January and June 2023 together we bought just under three tonnes of antibiotics. The actual figure was 2,987kg (compared to 3,037kg in 2022 and 3070kg in 2021). WOW!

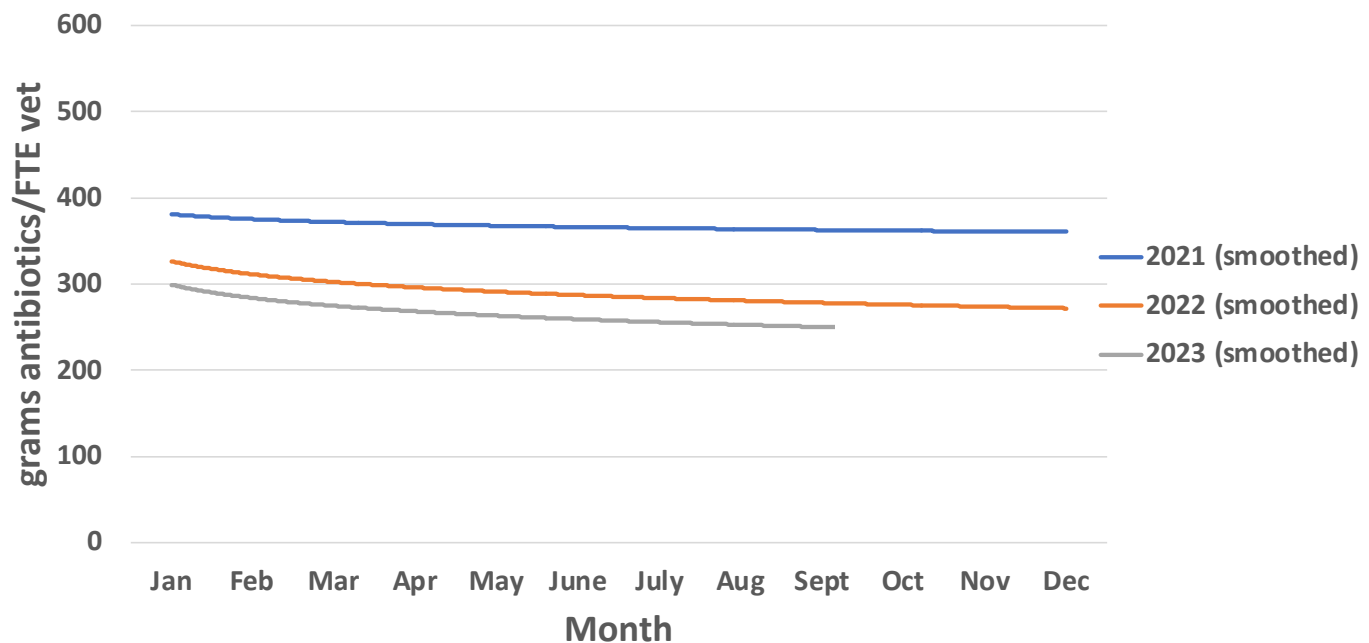
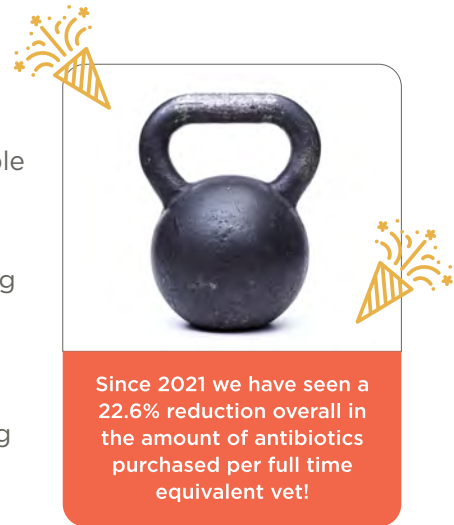
We looked at this in relation to the number of full-time equivalent (FTE) vets working in our practices, as one of the key points we can affect is the point at which we decide to prescribe or not prescribe antibiotics.

On average we bought just over 1.5kg of antibiotics per vet in the first six months of this year. The actual figure was 1.68kg/FTE[vet] (compared to 1.86kg/FTE[vet] in 2022 and 2.17kg/FTE[vet] in 2021).

We have reduced this amount by **9.7% compared to 2022 and 22.6% compared to 2021!**

**This is amazing progress and we applaud all of our teams for their role in this work.**

The amount of antibiotics purchased varied between practices. Our VetPartners practices are diverse and undertake a variety of work with different species which affects the quantity of antibiotics required.



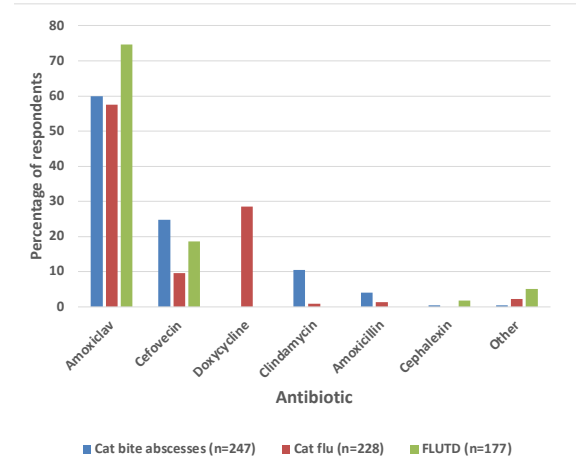
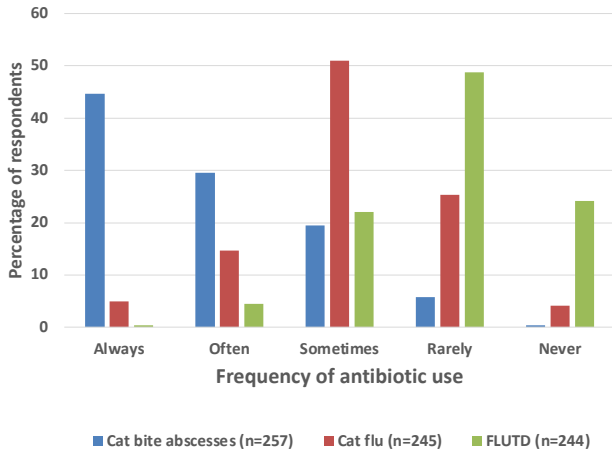




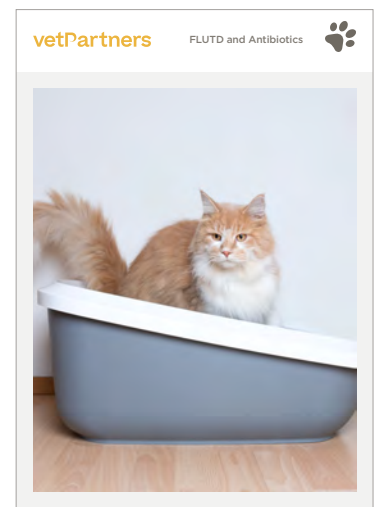
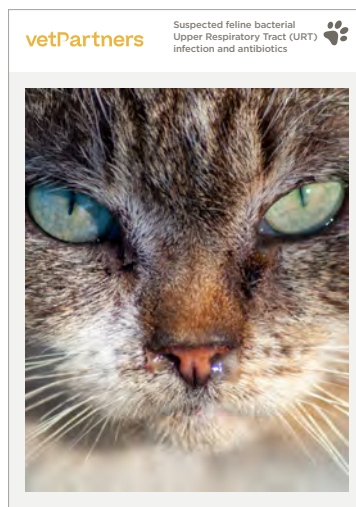
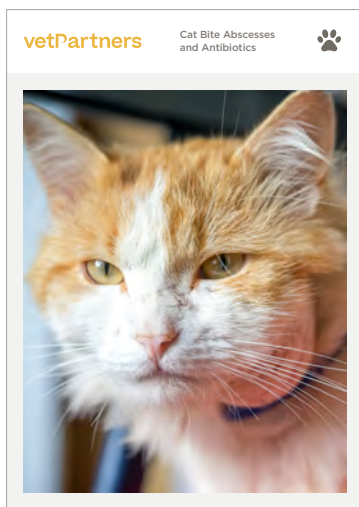
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As well as how much cefovecin we use, we examined different choices including antibiotic selection and frequency of use for certain conditions in cats where our teams said they used this drug the most.



Across our teams, with the support of Zoetis, we met to discuss how we can take a unified approach to responsible cefovecin use and preserve this drug for cases where it is truly needed. Some of these discussions took the form of clinical vignettes exploring cases where cefovecin might be inappropriately used and looking at ways to reduce, replace and refine it. This allowed the creation of several resources to support our practice teams moving forwards.



Through engaging in this way, some of our teams have also carried out practice level audits and created key resources to support the antibiotic stewardship of other teams within VetPartners – this is when change happens! For those wishing to make practice level changes several resources are now available to our teams on VetPartners Learning, including some of our clinicians' experiences of auditing cefovecin use, tips for reducing inappropriate use and an example case report from one of our practices.



**VetPartners teams can access our course 'Convenient but critical - Let's talk about Convenia in cats' here:**

<https://www.vetpartnerslearning.com/course/view.php?id=384>



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## Antibiotics in focus: Equine

Fluoroquinolones and 3rd/4th generation cephalosporins are classified as highest priority critically important antibiotics (HP-CIA) (WHO, 2011) and antimicrobial resistance is a global public health concern in both humans and animals.

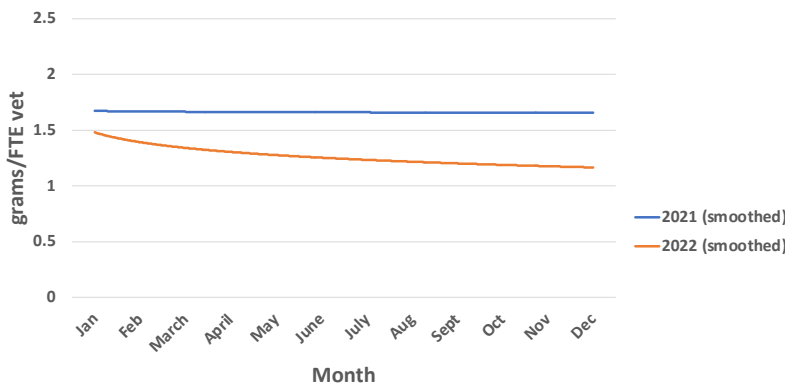
### Where are we now?

To improve our usage of these HP-CIAs we need to know how much we are currently using. The Equine Clinical Board and the Clinical Board Support Team have undertaken an audit of purchasing data for ceftiofur and enrofloxacin across our equine practices, which will be rolling forwards as an annual initiative. To date, we have tracked monthly purchasing of the HP-CIAs during 2021 and 2022 and are currently analysing 2023 across VetPartners equine practices.

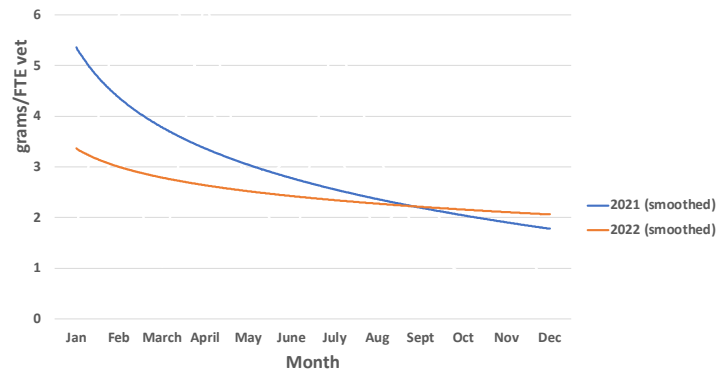


The great news is that we have reduced the use of ceftiofur by 18.8% and enrofloxacin by 10.8% between 2021 and 2022 (ceftiofur 18.63g/FTE in 2021 to 15.12g/FTE in 2022, enrofloxacin 33.42g/FTE in 2021 to 29.81/FTE in 2022).

**Ceftiofur**



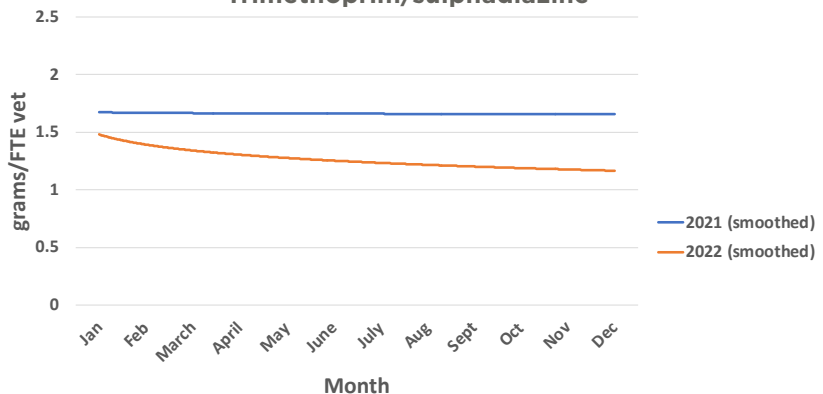
**Enrofloxacin**



By looking at the variation across practices we can see that some practices have completely or almost completely stopped using these molecules, whilst maintaining great clinical outcomes for the horses they treat. Some practices still occasionally use them and are selecting appropriately on a case-by-case basis. This highlights the value of QI activities and that they do indeed lead to change without negatively influencing clinical outcomes.

The Equine Clinical Board also wanted to monitor trimethoprim/sulphadiazine usage as use of first-line broad spectrum antimicrobials may increase if our clinical teams change their prescribing behaviours. The good news is that ALL antibiotic usage is being reduced, and this shows our teams are considering alternative options such as topical treatments for minor wounds, or other diagnostics (or diagnostic tools) to refine and replace antibiotic use.

**Trimethoprim/sulphadiazine**



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## Antibiotics in focus: Farm

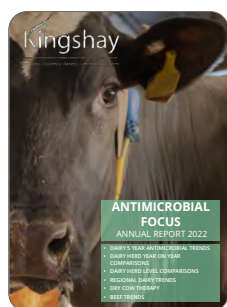
### Use of antibiotics in cow caesars

We have been auditing the outcome of cow caesars for over two years now and have data on 468 different surgeries. Thank you to everyone who has contributed so far, the audit is still ongoing so we welcome our teams to take part if they can. We have now looked at how systemic and local antibiotics are used during and after surgery.

All caesars except one received systemic antibiotics, with amoxicillin/clavulanic acid being the most common choice (68/141, 48%), followed by penicillin/streptomycin (54/141, 38%) then amoxicillin (19/141, 13%). Going forward, we will now be collecting data on duration of systemic antibiotic course advised, to find out more about how we use antibiotics following cow caesars.

For the majority of caesars (n=394/464, 85%), local antibiotics were not used. The most common use of local antibiotics was on the uterus/in the abdomen (58/464, 13%). Reason for local antibiotic use was unclear, however only 17% (12/70) of these caesars had a long dead/malodorous calf. Survival was similar in cows who were given local antibiotics (85% alive at 60 days post caesar), versus cows who were not given local antibiotics (88%).

We need to interpret these data with caution as this is audit, not research data, but we hope this may start some discussions among our teams about how we make decisions around the use of local antibiotics.

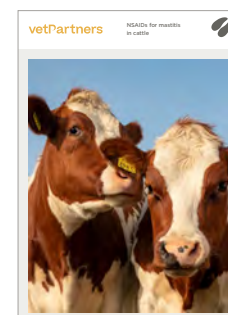
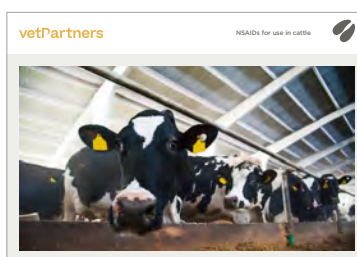
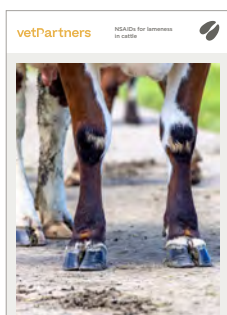


### Kingshay Antibiotics report

Our team at Kingshay produced their Antimicrobial Focus Annual Report 2022 at the start of this year. This work, focussing on farm level use of antibiotics, compliments the work we are doing in VetPartners looking at prescribing patterns by our clinicians. The report shows interesting variation between farms, with the highest 25% of antimicrobial users accounting for a large proportion of overall use. The variation between regions also gives us plenty of areas to work on. Watch out for the 2023 report which will be launching in January!

## NSAIDs

Over the last year we have discussed the role of NSAIDs in safeguarding animal health and welfare alongside the responsible reduction of antibiotic use. We have looked at a number of conditions where the evidence base is growing to show that these medicines can have beneficial outcomes for farm animals. We have explored and summarised the evidence base for these medicines across many conditions and this will be a focus of our quality improvement work for 2024.



VetPartners teams can access our NSAID resources here:

<https://www.vetpartnerslearning.com/mod/folder/view.php?id=6245>





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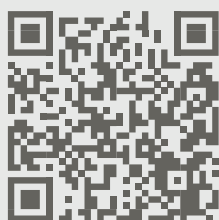
As part of our antibiotic stewardship activities, we are pleased to be collaborating with other groups across the veterinary profession and beyond to share our work and the work of others.

Whether you are part of the VetPartners team or not, if you are working in this area, interested in our data or are looking for partners passionate about this subject, please get in touch using the contact details shown below.

*We are extremely grateful to all those involved in the production of this report and we are proud to have such incredible people working within VetPartners.*

*We couldn't achieve all that we do without you - thank you all!*

## #Wearefamily



My VetPartners  
Clinical Board

**Progressing Practice Together**

Email: [clinical.board@vetpartners.co.uk](mailto:clinical.board@vetpartners.co.uk)

Visit: <https://www.myvetpartners.co.uk/clinical-board>

<https://vetpartners.co.uk/our-clinical-board/> and

<https://www.vetpartnerslearning.com> to learn more including condition and species specific resources and ideas.



VetPartners  
Our Clinical Board

