AMR National Action Plan 2024-2029 - call for evidence

The Threat of AMR

1. From your experience, how has the scale of the threat of AMR changed since the national action plan was published in 2019?
   - the threat of AMR has increased since 2019
   - the threat of AMR has stayed the same since 2019
   - the threat of AMR has reduced since 2019
   - don't know

The UK veterinary sector has made good progress to reduce use of veterinary antibiotics in production animals. The most recent reports from VARSS and RUMA show a reduction of 55% in sales since 2014; and an 83% reduction in highest priority critical antibiotics. While there is limited evidence to indicate that this reduces the risk of AMR in humans, AMR remains a complex threat that extends within and across sectors. It is also a global issue that can be spread through human and animal travel. Understanding of the role that environmental AMR plays in transmission of resistance is increasing. More research is needed to improve the evidence base on how the use of antimicrobials in farming contributes to this. There is also a case for improved surveillance across the human and animal sectors to improve our understanding of the overall threat. There is nonetheless increasing awareness in the farming industry that antimicrobial medication should not be used as an alternative to good management, vaccination, or effective quarantine and biosecurity procedures.

2. In your opinion, what are the top 3 drivers of AMR? Please give 3 short answers.
   For the veterinary sector:
   - A lack of rapid, affordable diagnostics to reduce precautionary prescribing, and lack of Minimum Inhibitory Concentration (MIC) susceptibility data in many cases, enforcing empirical prescribing decisions.
   - Public expectation that antimicrobial use is a sensible precaution where diagnosis is uncertain, and lack of awareness of the impact of giving antimicrobials unnecessarily. Human and veterinary medicine need to work together to change this.
   - Poor compliance with dose and duration of prescriptions; and with recommendations to minimise the risk of infectious disease, including vaccination, and the persistently high prevalence of infectious conditions as a consequence.

Priority Interventions for Tackling AMR

3. Which of these areas would you most like to see prioritised over the next 5 years?
   - reducing the need for, and unintentional exposure to, antimicrobials
   - optimising the use of antimicrobials
   - investing in innovation, supply and access

We must maintain the progress made to reduce use of veterinary antimicrobials, but usage cannot be reduced to zero. Antimicrobials remain essential treatment for contagious and zoonotic diseases in both production and companion animals. Additional measures will be needed to consolidate success so far. The next step is to optimise usage to ensure that the right antimicrobial is used for the right animal in the right dose and duration. This would include work across companion and livestock animal sectors with vets, pharmaceutical companies and owners to facilitate AB access (e.g. availability, affordability, ease of administration etc) and knowledge transfer where appropriate.
Use of Highest Priority Critically Important Antibiotics (HP CIAs) must be restricted, and used under veterinary direction, backed up by either sensitivity or diagnostic testing. Where the welfare of the individual animal, herd or flock, and wider context are considered, euthanasia can be an alternative treatment option. In food-producing animals it may be possible to reserve off-label use for exceptional circumstances, following appropriate sensitivity testing. The strictly limited licensing may make this counterproductive for companion animals and equines. In the interests of animal welfare, critically important antibiotics should remain available for veterinary use. They provide key treatments against some animal diseases where there are currently few or no viable alternatives.

Investment is needed to support laboratories with rapid diagnostic procedures to speed up the acquisition of culture and sensitivity, and MIC data. This would be hugely advantageous to optimise appropriate antibiotic selection should it be required. Government support is most needed and can most influence innovation through tax breaks, grants, planning exemptions etc.

4. Are there any actions you think are required to tackle AMR that do not fall within one of these categories?
   - yes (please specify)
   - no
   - don’t know

There are opportunities within the ongoing review of the Veterinary Medicine Regulations to strengthen guidance on prophylactic and metaphylactic use of antimicrobials; to better regulate availability of these medicines online (for example preventing a prescription being filled through multiple online retailers); and to introduce further measures to counter illegal unregulated channels of supply. The RCVS Under Care Review also presents a potential opportunity to restrict remote prescribing of antimicrobials outside the vet-client-patient relationship.

Learning for previous action to tackle AMR

5. Within the UK, what are the key successes we should look to maintain or build on in responding to AMR? Please include up to 3 examples in no more than 250 words.

UK farms are one of the lowest users of veterinary antibiotics in Europe (ref the VARSS and RUMA reports released in November 2022). Sales have reduced by 55% since 2014 to their lowest recorded level, and sales of HP CIAs (as designated by the WHO) have declined for 7 years in row – an 83% reduction. In the pig sector, for example, measuring usage at farm level and collating it nationally has allowed targets for reduction to be set and achieved, and to identify farms which need additional support to achieve the targets.

RUMA is expanding its remit beyond livestock through the RUMA Companion Animal and Equine collaboration. RUMA CA&E released its first annual report in December 2022 and is seeking to raise awareness of AMR through initiatives such as last November’s antibiotic amnesty for pet owners and small animal vets.

Separately, the Arwain DGC programme in Wales has instituted Veterinary Prescribing Champions working with 90% of farm practices in Wales to reduce their antimicrobial use. It has developed a voluntary code of conduct and guidelines for prescribing antimicrobials. It is also collecting data on prescribing patterns and incidence of resistant pathogens across Wales.

6. Within the UK, what are the areas that require more focus or development to address AMR? Please include up to 3 examples using no more than 250 words in total.

In the veterinary sector, there is a need for more effective and affordable rapid diagnostics, to support the better targeting of antimicrobial therapy.
Availability of more first-line antimicrobial options and clinical data to support their use, in order to spare the use of critically important antimicrobials

Central recording of antimicrobial use to facilitate surveillance and evidence gathering to improve our picture of how usage is changing and where greater efforts are needed.

7. **Within your sector, do you think the UK has sufficient capacity and capability to tackle AMR?**
   - yes
   - yes, in some areas (please specify)
   - no
   - don’t know

Since 2014 the veterinary sector has made good progress in changing its use of antimicrobials – notably in the livestock sector. This is beginning to track to companion animal and equine medicine as well. The equine sector, particularly, is working on point of care usage data to track reductions in usage and justification and monitoring the use of critically-important antibiotics. However, there is a lack of evidence and oversight in many areas, and a need for better data and regulation to support the efforts of vets. There is also still more work to do to disseminate the message to farmers and pet owners.

There is also an overall shortage of vets which limits capacity to proactively tackle AMR, and leaves gaps, particularly in food safety and imports, which have a potential impact on AMR.

8. **What additional capacity and capability is needed in your sector to effectively tackle AMR? Please give up to 3 examples using no more than 250 words in total.**

Improved data capture, analysis, dissemination, and benchmarking are required across all sectors to underpin future interventions. Efforts to provide usage data rather sales data, should be incorporated within the new AMR strategy.

A focus on improving surveillance and the flow of information between farmers, vets, labs, and national bodies so that all parties better understand disease incidence, and medicine and vaccine use, which will improve decision making to tackle AMR. This will also need effective resourcing of the UK veterinary profession.

Greater support to facilitate local, regional, and national reporting of culture and sensitivity data, the occurrence of multiple resistant organisms, bacteria specific MIC data, and more research into pharmacokinetics of antimicrobials, particularly in equine species, to facilitate appropriate treatment.

9. **In your opinion, what are the key barriers to making progress on tackling AMR in your sector? Please give up to 3 examples using no more than 250 words in total.**

Veterinary prescribing is subject to much less scrutiny than for human medicines. There is a case for increased regulation to ensure that vets and farmers have full oversight of prescribing for a particular herd or animal. Specifically there is a need for accurate records of anti-microbial use.

Social expectations of clients that their animal needs an antibiotic or another “stronger” one.

For companion animals and equines, there is a need for improved diagnostic equipment and processes, as well appropriate formulations (tablet and bottle size) for small animals. Veterinary developments are often focussed on production animals, where there is stronger commercial justification for the research and development.
International efforts to tackle AMR

10. What, if anything, do you think we can learn from other countries’ responses to AMR? Please be specific about which countries you are referring to in your answer. Please give up to 3 examples using a maximum of 250 words in total.

In some instances, a more rigid approach such as that applied in some European countries (e.g. Germany) is counterproductive and may compromise animal welfare. The focus needs to be on appropriate and effective medication. Ineffective dosages in data sheets may be a stronger driver for AMR than appropriate dosing based on pharmacokinetics.

Opportunities from Covid-19

11. In your opinion, which of these tools should be prioritised for adapting to use in tackling AMR?

- diagnostics
- surveillance
- therapeutics
- vaccines

Rapid affordable diagnostics to rule infections in or out while on the farm or in clinic, would be helpful to reduce and prevent “precautionary” prescribing pending test results. More rapid processes in diagnostic laboratories are also important.

Developing vaccines to prevent diseases, rather than relying on antimicrobials to cure them.

12. In your opinion, are there any other tools that should be adapted from use during the COVID-19 pandemic for tackling AMR?

- yes (please specify)
- no
- don’t know

Systemic biosecurity to reduce infection rates.

The value and power of vaccines in reducing infection rates and the need for antimicrobials.

Increased awareness of the risks associated with mixed age groups.

13. Do you believe the changes in ways of working within your organisation due to the COVID-19 pandemic have affected efforts to respond to AMR, such as delivery of the current national action plan (NAP)?

- yes
- no
- don’t know

The move to remote consultation during the pandemic, and the relaxation of RCVS guidance, has potentially led to a significant increase in antimicrobial prescribing in the veterinary sector. In October 2021 a Savsnet review of telemedicine found antimicrobials were prescribed two thirds more often in remote consultations than face-to-face. This study related to small animal practices, rather than livestock, but is indicative of the impact that a move to remote prescribing could have on efforts to tackle AMR.
14. In what way have they affected the response to AMR or delivery of the NAP? Please give up to 3 examples using no more than 250 words in total.

15. Are there other ways in which the COVID-19 pandemic has altered the AMR risk landscape? Please give up to 3 examples in no more than 250 words in total.

16. Are there other global events, such as supply chain disruption or the conflict in Ukraine, that have changed the UK’s ability to respond to AMR?
   – yes
   – no
   – don’t know
   – If yes, how have other global events changed the UK’s ability to respond to AMR? Please specify which global event you’re referring to.

The Northern Ireland Protocol is creating some challenges with the supply of medicines (human and veterinary) into Northern Ireland. If not resolved, there is potential for an increase in use of antimicrobials in the absence of other vaccines/medicines. There have also been wider supply chain issues affecting availability of vaccines for e.g. equine flu.

Prudent use of antibiotics is a necessity - there is no zero-use scenario, and too little use risks supply chain shortages. Alternatively, we simply improve our own results at the expense of moving production overseas into areas with less oversight and no overall impact on the end goal.

Measures of Success

17. In your opinion, what are the best measures of success in tackling AMR? Please give up to 3 suggestions.
   A sustained change in client expectations and prescribing behaviours
   A measurable reduction in antimicrobial use without compromising health and welfare
   A demonstrable reduction in resistant pathogens

18. Do you believe that there is sufficient public and professional awareness of AMR?
   – yes
   – no
   – don’t know
   If no, what should be done to increase awareness of AMR? Please tell us in a maximum of 250 words.

There is more work needed to embed the message with the public at a systemic level – perhaps particularly with veterinary clients, who may not be translating messages about AMR for humans across to treatment of their animals.

Further information

19. Is there any other evidence you would like to tell us as we develop the 2024 to 2029 national action plan? Please tell us using no more than 250 words.

20. Are you content for the DHSC AMR policy team to contact you to take part in further stakeholder engagement as we develop the 2024 to 2029 national action plan?
– yes
– no