



Animal Medicines Australia
ABN 76 116 848 344 | ACN 116 848 344
18 National Circuit
Barton ACT 2600, Australia
P: +61 2 6257 9022
animalmedicinesaustralia.org.au

28 June 2019

Submitted via Consultation Hub:

<https://consultations.health.gov.au/>

Dear Sir/ Madam,

SUBMISSION BY ANIMAL MEDICINES AUSTRALIA ON THE CONSULTATION PAPER - AUSTRALIA'S ANTIMICROBIAL RESISTANCE STRATEGY – 2020 AND BEYOND

Animal Medicines Australia (AMA), as the peak association representing the Animal Health Industry in Australia, welcomes the opportunity to provide comment on this consultation paper. AMA members, representing the leading animal health companies in Australia, are pleased to play their role in developing and implementing effective responses to the challenges presented by antimicrobial resistance.

AMA members innovate, manufacture, formulate and register products to prevent control and treat disease across the livestock, equine and companion animal sectors. Responding to the challenge posed by antimicrobial resistance requires a scientifically robust evidence base to inform effective interventions by all sectors.

AMA looks forward to continuing to work with all stakeholders to develop a rigorous strategy that preserves and protects antibiotics as valuable resources that are critical to protect human, animal and environmental health, and consistent with One Health principles.

Please find our comments on the consultation paper attached. If you have any questions, please contact AMA's Science and Technical Manager, Dr Charmian Bennett on 02 6257 9022.

Sincerely

Ben Stapley
Executive Director

**SUBMISSION ON THE CONSULTATION PAPER:
Australia's Antimicrobial Resistance Strategy – 2020 and
Beyond**

28 June 2019



**Animal
Medicines**
Australia

Executive Summary

Animal Medicines Australia (AMA) is the peak industry body representing the leading animal health companies in Australia. Our policies and strategies are designed to protect and promote the health of animals in our care, now and in the future, whilst minimising risks to human health, safety and the environment.

We work proactively, cooperatively and collaboratively with other stakeholders to promote the responsible and judicious use of antimicrobial medicines to improve and protect animal health and welfare. This promotes better human health through the prevention of zoonotic disease transmission and supporting sustainable production of safe and nutritious food and fibre from animals for human consumption and use.

Australia's 2020 Strategy to respond to antimicrobial resistance (AMR) requires co-operation, engagement and collaboration by all stakeholders. Australia's animal health industries are committed to addressing the risks of AMR in partnership with all stakeholders. In particular, our submission highlights that:

- AMA supports the proposed framework for the new AMR Strategy, with shorter-term, sector-specific action plans to support the national Objectives. This includes scoping work in other sectors (such as the environment and food) consistent with a One Health approach.
- AMA supports the development of evidence-based antimicrobial stewardship plans that reflect the specific needs and challenges of the animal health sector, its regulatory environment and the actions already taken to reduce the need to use antimicrobials.
- AMA supports dedicated funding of animal health research in the future and a national research agenda that reflects the needs and priorities of its stakeholders.
- AMA supports Australia's ongoing engagement with regional and international stakeholders to address AMR. AMA encourages consistent and transparent engagement with all local stakeholders to ensure that Australia's local needs and conditions are reflected in government positions and decisions.
- AMA supports governance arrangements that include all stakeholders, including government, industry and users.

AMA supports an effective, responsible and balanced strategy that is consistent with One Health principles and that preserves antimicrobials as a valuable resource to protect human, animal and environmental health.

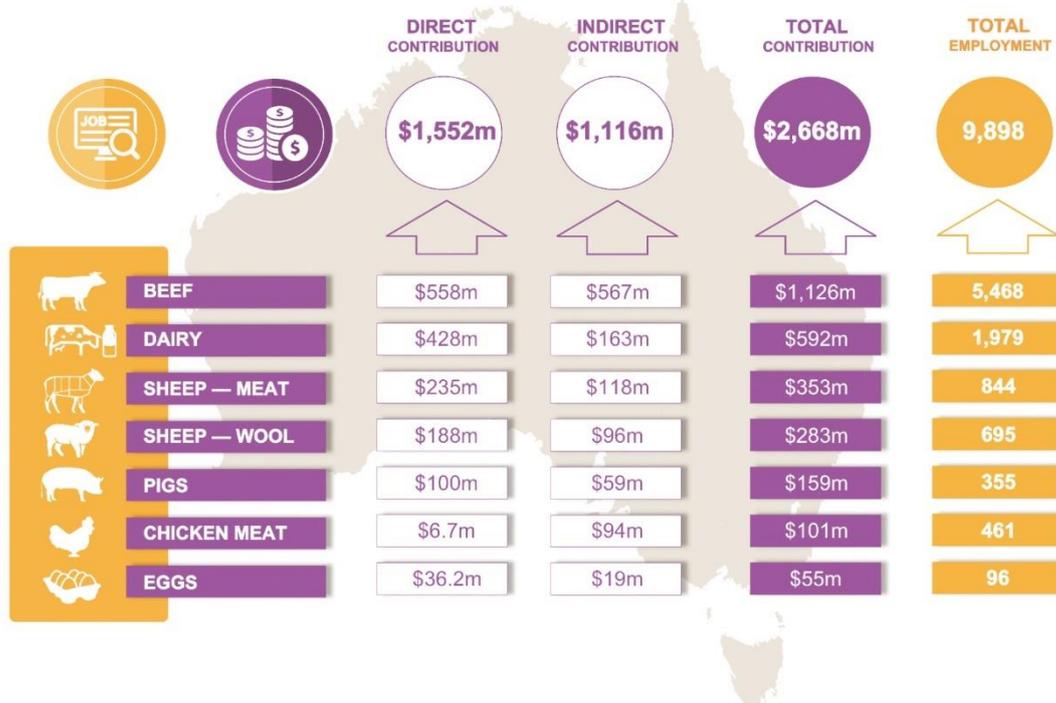
About Animal Medicines Australia

Animal Medicines Australia (AMA) is the peak industry body representing the leading animal health companies in Australia. AMA member companies are the global innovators, manufacturers, formulators and registrants of a broad range of veterinary medicines who work at the cutting edge of animal health science to prevent, control and treat disease across the livestock, equine and companion animal sectors. Products from our member companies account for more than 90% of all animal health product sales in Australia.

In the livestock sector, AMA member company products increase farm productivity and deliver significant improvements in environmental, health, safety and animal welfare outcomes. Animal medicines also underpin the high quality and safety of Australian animal products for local consumption and for export.

Animal medicines are responsible for an average 10.6% of production across 7 major commodity groups – beef, dairy, sheep meat, wool, pork, poultry meat and egg production¹. Animal medicines reduce the average cost of meat, eggs and dairy products to the consumer by more than 12%, create an additional 9,898 full time jobs, generate \$578 million in wages and contribute more than \$2,668 million to the Australian economy.

ESTIMATED TOTAL ECONOMIC AND EMPLOYMENT CONTRIBUTION ATTRIBUTABLE TO ANIMAL HEALTH PRODUCTS USE IN 2015-16



Note: Totals may not add due to rounding.

SOURCE: ACIL ALLEN CONSULTING ESTIMATES

¹ Acil Allen Consulting (2018). *Economic contribution of animal medicines to Australia's livestock industries 2015 – 2016*, June 2018.

In the companion animal sector, animal medicines facilitate healthier, longer and better quality relationships between people and animals. In 2016, there were more than 24 million pets in Australia. AMA's Pet Ownership in Australia report (2016) ² highlights the important role that pets play in our lives and communities, with over \$12bn spent by owners on their pets every year.

² Animal Medicines Australia (2016). *Pet Ownership in Australia 2016*. Available for download from <https://animalmedicinesaustralia.org.au/pet-report/>

Introduction

Animal Medicines Australia (AMA) represents the registrants of animal health products and promotes the responsible and sustainable use of all veterinary medicines. Our policies and strategies are designed to protect and promote the health of animals in our care, whilst minimising risks to health, safety and the environment.

AMR poses a major threat to human and animal health and welfare. Australia's veterinary pharmaceutical industry has a critical role to play in the development and implementation of effective AMR responses. Antimicrobial medicines are essential to treat sick animals, control animal diseases, prevent zoonoses and support safe and sustainable food and fibre production.

We support an effective, responsible and balanced strategy that is consistent with One Health principles and that preserves antimicrobials as a valuable resource to protect both human and animal health, now and in the future.

Protecting animal health and welfare

Just as in human health, AMR poses a major threat to animal health and welfare. Animal welfare starts with good animal care and management practices that reduce the risk of disease and improve the animal's quality of life. Antibiotics are just one of many tools that farmers may use when necessary to keep their animals healthy. Healthy animals have a better quality of life, are less susceptible to infection and disease, produce higher quantities and better quality food and fibre, consume fewer resources, have a lower environmental impact and support Australia's \$30bn livestock industries.

Bacteria are ubiquitous in the environment – in the soil, vegetation and water – and it is impossible to prevent exposure of animals and humans to all bacteria that could, potentially, cause an infection. Even with the best practices and highest possible standards of animal health and welfare, it is inevitable that some animals, at some point in their lifetime, may develop a bacterial infection and require antibiotic treatment to regain health.

Those who care for animals have a legal, moral and ethical obligation to prevent illness when possible, and treat sick animals when necessary. It is vital that antibiotics are available to a veterinarian to use when an animal is sick or at high risk of infection. When antimicrobials are needed, they should be used responsibly and judiciously to minimise the development of AMR and ensure that we retain the ability to treat and control many debilitating animal diseases in the future.

Animal health supports human health

Diseases that can pass from animals to humans through direct contact, or via food, water or the environment, are known as zoonotic diseases, or zoonoses. Approximately 60-70% of all known infectious diseases are zoonotic in origin.

The responsible and judicious use of antimicrobials in animals is vital to keep animals healthy and reduce the transmission of zoonoses, such as salmonella, campylobacter, *E.coli*, brucellosis, leptospirosis and anthrax.

Effective prevention of foodborne diseases starts at the point of production by reducing the burden of disease in the animal.³ Protecting livestock from disease therefore represents a critical investment in public health and supports the production of safe and nutritious food for Australians and our many international trading partners.

³ <http://www.oie.int/en/food-safety/>

Proposed AMR Framework for the new Strategy

AMA supports the overarching framework proposed for the next AMR Strategy. The proposed framework will allow the identification of priorities and development of sector-specific actions plans that support national objectives. Each sector may then address those objectives and priorities in a way that is tailored to their particular circumstances.

AMA would welcome discussion on measures to support the effective co-ordination of AMR responses. This will ensure that sector-specific actions support the national objectives and are likely to result in the desired outcomes. AMA supports an integrated, One Health approach to tackling AMR, with high-level co-ordination to ensure that the actions of one sector do not adversely affect the ability of other sectors to respond. AMR is a complex, multidisciplinary and interdisciplinary issue, and co-operation and co-ordination between sectors is essential to drive positive outcomes.

AMA would also welcome the opportunity to work with all stakeholders to ensure representation and engagement in governance of all sectors with responsibilities for actions under the Strategy.

Future Direction of the Strategy

SHORTER-TERM, SECTOR-SPECIFIC ACTION PLANS

AMA supports the development of shorter term, sector-specific action plans that are consistent with and support the national objectives. This will allow each sector to make plans that are relevant and appropriate to that sector, and will increase the likelihood of achieving national objectives. Emerging issues may also be most effectively addressed through the regular review and update of shorter-term, sector-specific action plans to guide responses that are relevant, practical and appropriate.

EXPANDING THE SCOPE OF THE STRATEGY

Expanding the Strategy to also incorporate the environment and food sector is supported in principle. AMR is a highly complex issue and requires collective action to effectively respond.

However, the next Strategy should remain primarily focused on bacteria and antibiotics in human and animal health, whilst retaining the flexibility to include additional antimicrobial-resistant organisms and/or sectors in the future. Almost all of the antimicrobials used in Australia are used in these two sectors, and these sectors will be critical in developing and implementing effective actions under a new Strategy. Remaining focused on these sectors, especially during the earlier part of the new Strategy, will provide a strong foundation for AMR actions and ensure that scarce resources (within government and industry) remain focused on the actions that are likely to deliver the greatest benefits.

AMA supports the need to consider all possible avenues of AMR risk, such as the transmission of resistant organisms via the food chain. Although it is expected that AMR risks associated with animal-derived food in Australia will be low, due to rigorous food quality and safety systems, strong regulatory

controls and the predominant use of extensive livestock production systems, AMA considers that it is prudent to incorporate scoping work in the new Strategy to better understand the role of the food and environmental sectors in the development and spread of antimicrobial resistance. Relevant actions related to this scoping work may then be gradually implemented as the Strategy progresses.

Vision and Goal

AMA supports the Vision and Goal as stated in the consultation document. The Goal statement is especially useful, as it is a clear statement of intent with a measurable outcome of progress and success.

AMA considers that the success of the Strategy will be demonstrated when:

- the majority of antibiotic prescribing is in accordance with best practice, evidence-based prescribing guidelines, in both human and animal health,
- there are low rates of inappropriate prescribing of antibiotics, as measured against the relevant prescribing guidelines for human and animal health,
- there is a low prevalence of resistance in pathogenic organisms, as detected through surveillance of human and animal health, and
- susceptibility to key antibiotics is maintained over time, especially for pathogens that have shown increasing resistance in overseas settings.

Objective 1: Increase awareness and understanding of antimicrobial resistance, its implications and actions to combat it, through effective communication, education and training

PRIORITY AREAS FOR ACTION

AMA suggests that the Priorities are reorganised to represent a clearer cascade from society-level awareness (in which people are increasingly aware of responsible use and understand what that means), to the professional level (where individuals with the authority to prescribe are responsible for their own thinking and behaviour), to the interface between the prescribers and the end-users (the human or animal patient). This would highlight the importance of these critically important points in the supply chain for targeted and effective actions.

SECTOR ENGAGEMENT

Australia's animal pharmaceutical, veterinary and production industries continue to be proactive in developing and implementing stewardship responses to AMR. These initiatives seek to ensure the responsible, sustainable and judicious use of antimicrobials. Animal sector initiatives and activities to date have included:

- AMA and the Australian Veterinary Association (AVA) are jointly developing a series of comprehensive antibiotic prescribing guidelines for all major livestock species in Australia (pigs, poultry, cattle (extensive, feedlot and dairy), sheep and horses). These guidelines are independent, evidence-based and will be freely available to all registered veterinarians. The prescribing guidelines for pigs were published in May 2019⁴ and the guidelines for poultry are in progress. The entire project is expected to be finished by mid-2020.
- The AIDAP Prescribing Guidelines for Cats and Dogs⁵ are already freely available to veterinarians. This means that Australian veterinarians will have access to independent, best practice, evidence-based antibiotic prescribing guidelines for all major animal species in Australia within the next 12 months.
- AMA has developed and published fact sheets for animal owners to emphasise the responsibilities of animal owners to use antibiotics responsibly.⁶ One fact sheet is directed at the owners of companion animals, whilst a separate fact sheet for livestock and horse owners reflects the different contexts in which larger animals are kept.
- AMA and all of its member companies have signed a global agreement to support and promote the responsible use of antibiotics in animals. The "Animal Health Sector Commitments and Actions on Antibiotic Use"⁷ specifically promotes the

⁴ <https://www.ava.com.au/siteassets/resources/fighting-antimicrobial-resistance/antimicrobial-prescribing-guidelines-for-pigs.pdf>

⁵ Australian Infectious Disease Advisory Panel (AIDAP) Antibiotic Prescribing Detailed Guidelines for Cats and Dogs. Available from <https://www.ava.com.au/library-resources/other-resources/fighting-antimicrobial-resistance/amr-resources/>

⁶ Available from <https://animalmedicinesaustralia.org.au/animal-health-resources/antibiotics/>

⁷ <http://animalmedicinesaustralia.org.au/wp-content/uploads/2017/10/ABCommitment-Australia.pdf>

responsible and judicious use of antibiotics, highlights the importance of disease prevention, and includes a commitment for companies to invest 6-9% of annual turnover to the development of new veterinary medicines to reduce the need to use antibiotics. This Commitment is supported by organisations that represent over 200 companies and 700,000 veterinarians worldwide.

- AMA and its member companies also practice good antimicrobial stewardship by adhering to the “5 R’s” Principles:⁸
 - o *Responsibility* of all stakeholders (from development to use) to uphold the principles of antimicrobial stewardship,
 - o *Review* of compliance with stewardship practices with continuous improvement to reflect contemporary best practice,
 - o *Reduce* the need to use of antimicrobials wherever possible without compromising animal health and welfare,
 - o *Refine* use of antibiotics to ensure that the right antibiotic is used, at an appropriate dose, for the right duration and by the most appropriate route of administration to maximise clinical efficacy, and
 - o *Replace* antibiotics that are medically important in human health when there is evidence to support the efficacy and safety of an alternative and without compromising animal health and welfare.
- The animal sector organised a conference dedicated to veterinary antibiotic use, surveillance and stewardship at the end of 2018. This conference was attended by both the Chief Medical and Chief Veterinary Officers, and highlighted the array of independently funded initiatives and actions in many animal industries to support the responsible and judicious use of antibiotics in animals.
- Australia’s major animal production industries produced the Antimicrobial Stewardship in Australian Livestock Industries report⁹ in November 2018.
- The animal sector has also worked closely with the federal Office of the Chief Veterinary Officer to develop the Australian Animal Sector National Antimicrobial Resistance Plan (Nov 2018).¹⁰
- Most major livestock industries now have antibiotic stewardship plans in place¹¹, or that are close to completion. In some industries, these stewardship plans have been in place for so long that they are now being reviewed and updated to reflect current best practice.
- Numerous snapshot studies have consistently revealed low rates of antibiotic use and low levels of antibiotic resistance in Australian animals. The animal sector is united in its long-standing request for the Australian government to support ongoing surveillance of antibiotic resistance in our animal populations.

Increasing awareness and understanding of antimicrobial resistance will be essential to the Strategy’s success. AMA welcomes the opportunity to raise awareness of not only the AMR challenge, but also the significant actions already being put in place in response.

⁸ Page S, J Prescott and S Weese, 2014. “The 5Rs approach to antimicrobial stewardship”. *Veterinary Record*, 175(8), p207-8.

⁹ Available from <https://www.animalhealthaustralia.com.au/antimicrobial-stewardship-in-australian-livestock-industries/>

¹⁰ Available from <http://www.agriculture.gov.au/animal/health/amr>

¹¹ <https://www.animalhealthaustralia.com.au/antimicrobial-stewardship-in-australian-livestock-industries/>

PUBLIC ENGAGEMENT & COMMUNICATION

Community engagement is important to build widespread support for, and shared understanding of, actions to address the threats posed by AMR. For example:

- improving widespread understanding that antibiotics will not work for viral infections,
- promoting acceptance of situations in which a treating doctor or veterinarian may choose not to prescribe antibiotics,
- maintaining consumer confidence in the quality and safety of the Australian food supply chain, and
- affirming trust in the veterinary profession to protect the health and welfare of all animals in our care.

Care is required to ensure that messages are scientifically sound and based on the best available evidence.

Objective 2: Implement effective antimicrobial stewardship practices across human health and animal care settings to ensure the appropriate and judicious prescribing, dispensing and administering of antimicrobials

STEWARDSHIP

AMA supports and advocates for the responsible, judicious and sustainable use of antimicrobial medicines in animals. Evidence-based risk analyses are critical to support effective interventions. Investments may then be targeted to where the greatest benefits are likely to accrue. Stewardship responses should also reflect the specific needs and challenges of each sector, the regulatory environment in which it operates, and the actions already taken to address AMR.

The achievements outlined under Objective 1 clearly demonstrate the commitment of the animal health sector to support the responsible and judicious use of antimicrobials. The animal health sector in Australia has made substantial advances in effective antimicrobial stewardship, including the development of antibiotic stewardship plans in Australia's major livestock industries.¹²

PRESCRIBING GUIDELINES

The Australian Veterinary Association (AVA) and AMA are currently working together to produce antibiotic prescribing guidelines for all major livestock species in Australia (pigs, poultry, sheep, cattle (extensive, feedlot and dairy) and horses). These guidelines will complement the existing AIDAP Prescribing Guidelines for cats and dogs.¹³ In the near future, all Australian veterinarians will therefore be able to access locally-relevant, best practice, evidence-based prescribing guidelines for all major animal species in Australia, at no cost.

HARMONISATION

AMA wishes to acknowledge the substantial amount of work already done by commonwealth, state and territory governments towards national harmonisation of access and use legislation for veterinary medicines, including antimicrobials. Consistency in legislation will support high rates of compliance and provide equality for producers. However, this needs to happen in conjunction with ongoing education, the development of prescribing guidelines, industry stewardship initiatives and surveillance of antimicrobial resistance.

¹² <https://www.animalhealthaustralia.com.au/antimicrobial-stewardship-in-australian-livestock-industries/>

¹³ Australian Infectious Disease Advisory Panel (AIDAP) Antibiotic Prescribing Detailed Guidelines for Cats and Dogs. Available from <https://www.ava.com.au/library-resources/other-resources/fighting-antimicrobial-resistance/amr-resources/>

Objective 3: Develop nationally coordinated One Health surveillance of antimicrobial resistance and antimicrobial usage

PRIORITY AREAS FOR ACTION

AMA notes that Priority Areas 3.5, 3.6 and 3.7 are outcomes of Priorities 3.1-3.4, rather than actions. AMA therefore suggests that Priorities 3.5-3.7 are omitted to keep the focus of this Objective on its key actions.

SURVEILLANCE OF ANTIMICROBIAL RESISTANCE

AMA supports the implementation of ongoing surveillance of antibiotic resistance in Australia's animal populations. A One Health-based surveillance system will improve the health outcomes for both people and animals. It will also provide critically important quantitative data to understand the development and dissemination of resistant bacteria in humans and animals.

The consultation document mentions challenges associated with the variability of susceptibility testing methods and standards between human and animal health. AMA understands that the veterinary diagnostic laboratories have been actively developing standardised diagnostic protocols to support the aggregation of consistent data from multiple laboratories.

Surveillance data will be critical to support better policy making in the future. Antimicrobial resistance data may also become increasingly important in maintaining global trade market access for animal-derived products. Given Australia is an export-based economy, it is prudent to prioritise the establishment and implementation of a multi-sectoral surveillance system that can be used to demonstrate Australia's good status in anticipation of AMR-based trade criteria being imposed by trading partners.

MEASUREMENT OF ANTIMICROBIAL USE

AMA would welcome the consideration of appropriate mechanisms and metrics to measure antibiotic prescribing and use. However, measuring prescribing and use within animal health presents a number of unique challenges. These include:

- a. Individual veterinary practices are required to keep dispensing records, but these could be paper records in some practices, or digital records in others, and created with a variety of different data management systems. There is no simple, unified system that can collate and merge these records into sector-level data sets.
- b. Antimicrobial use in veterinary practice is diverse. For example, a single antibiotic may be used in multiple species, each with a different dose rate. The same antibiotic may also be available in tablet form for some uses, and injectable form for other uses. Further, veterinarians have the ability to legally prescribe medicines off-label when there are no registered medicines available in order to protect the welfare of an animal. This diversity in veterinary use is difficult to capture accurately with a single metric of use.

Considering appropriate animal metrics that can be clearly linked to AMR outcomes should be a priority activity for the next Strategy.

Objective 4: Improve infection prevention and control measures across human health and animal care settings to help prevent infections and the spread of resistance

INFECTION PREVENTION AND CONTROL

Infection prevention and control (IPC) measures reduce the need to use antibiotics. They are essential components of any AMR response. IPC protocols should reflect the unique characteristics of veterinary practice, such as the treatment of different species and the diversity of animal care settings. Biosecurity is also an important component of IPC in the animal health sector.

Infection control best-practice guidelines for the veterinary sector are available from the Australian Veterinary Association and the Australian Infectious Diseases Advisory Panel.¹⁴ IPC and biosecurity are also core components of veterinary and animal care training curriculums in Australia.

VACCINES

Vaccines are a key tool for veterinarians and animal health care providers to protect and maintain animal health. Vaccines substantially reduce the incidence of infections that may require antibiotics to treat. Improved access to and uptake of vaccines for animals would therefore contribute to a reduction in the need to use antibiotics, as well as significant improvements in animal welfare.

AMA is keen to explore mechanisms to improve access to new animal vaccines. However, there are a number of significant scientific, technical and regulatory challenges associated with the introduction of new animal vaccines to Australia.

It is important to also recognise that while some vaccines are likely to reduce the need to use antimicrobials, it is not possible to develop a vaccine for every potential infection that may require antibiotic treatment. There will always be a role for responsible antimicrobial use to support and protect animal health.

¹⁴ AVA and AIDAP Infection Control guidelines available from <https://www.ava.com.au/library-resources/other-resources/fighting-antimicrobial-resistance/amr-resources/>

Objective 5: Agree a national research agenda and promote investment in the discovery and development of new products and approaches to prevent, detect and contain antimicrobial resistance

NATIONAL RESEARCH AGENDA

AMA supports agreement on a national research agenda to promote investment in the discovery and development of new products and approaches to address AMR. Consistent with a One Health approach, any research agenda should reflect the needs of both the human and animal health sectors.

A national research agenda must also reflect the need for interdisciplinary and multi-disciplinary research to investigate and effectively address AMR. For example, comprehensive analysis of bacterial pathogens to understand their origin, evolution, distribution and impact on both human and animal populations.

The animal health sector is prioritising research on the responsible and judicious use of existing antibiotics and other products that will reduce the need to use antibiotics, including vaccines, enzymes, probiotics and other technologies that protect animals from bacterial infections.

ANIMAL HEALTH RESEARCH FUNDING

AMA would welcome improvement in dedicated Government funding and research support for animal health. Antibiotics are critically important medicines for animal health, as they are in human health. Antibiotics are not only used in livestock, but they are also important medicines for the pets that share our homes, working and service animals, sport and performance animals, injured wildlife, and exotic and endangered animals in our care.

At present, it is difficult to access government funding to support AMR research in the animal health sector. The National AMR Strategy is built on a One Health framework to reflect the complexity of the AMR issue. National funding models must also reflect this One Health framework and support all stakeholders to more fully understand the role and impacts of AMR in their sector.

AMA suggests that the new Strategy gives greater consideration to supporting AMR research in the animal health sector in the future. Protecting animal health promotes better human health by reducing the spread of zoonotic infections, ensuring that animal-derived food and fibre is safe for consumption and use, and by promoting longer, healthier relationships with our pets.

Objective 6: Strengthen international partnerships and collaboration on regional and global efforts to respond to antimicrobial resistance

AMA supports Australia's engagement in international partnerships and global responses to AMR. AMA considers that a key responsibility of government is to engage with local stakeholders to inform Australia's contributions to global responses and ensure that Australia's specific environmental conditions and disease threats are reflected in the outcomes. This includes Australia's participation in global and regional fora such as Codex Alimentarius, the World Health Organisation (WHO), World Organisation for Animal Health (OIE), Food and Agriculture Organization of the United Nations (FAO) and the Asia-Pacific Economic Cooperation (APEC).

AMA wishes to note that effective engagement with local stakeholders by government and representative bodies could be improved through consultation before *and* after key events, such as Codex meetings. Effective actions to address AMR need to be supported and promoted through consistent stakeholder engagement at all levels, and not just 'top-down' approaches.

AMA is a member of HealthforAnimals, the global industry body for manufacturers of veterinary medicines. AMA, along with all of our member companies, have signed a global agreement to support and promote the responsible use of antibiotics in animals. The "Animal Health Sector Commitments and Actions on Antibiotic Use"¹⁵ specifically promotes the responsible and judicious use of antibiotics, highlights the importance of disease prevention, and includes a commitment for companies to invest 6-9% of annual turnover to the development of new veterinary medicines to reduce the need to use antibiotics. This Commitment is supported by organisations that represent over 200 companies and 700,000 veterinarians worldwide.

¹⁵ <http://animalmedicinesaustralia.org.au/wp-content/uploads/2017/10/ABCommitment-Australia.pdf>

Objective 7: Establish and support clear governance arrangements at the local, jurisdictional, national and international levels to ensure leadership, engagement and accountability for actions to combat antimicrobial resistance

AMA welcomes actions to improve transparency in AMR governance. In particular, there is a pressing need to actively engage all sectors in the governance of the Strategy. Consistent stakeholder engagement at all levels of government, industry, the supply chain and users is essential to support co-operative, collaborative and effective responses. The many achievements of the animal pharmaceutical, veterinary and production sectors testify to its commitment to work collaboratively on AMR responses.

AMA recognises the important role that ASTAG has in AMR governance in Australia. The new Strategy provides an opportunity to ensure AMR governance reflects the One Health framework. All sectors with responsibilities for implementing actions under a national Strategy should be fully engaged in its governance. AMA welcomes the opportunity to discuss appropriate governance arrangements for AMR.