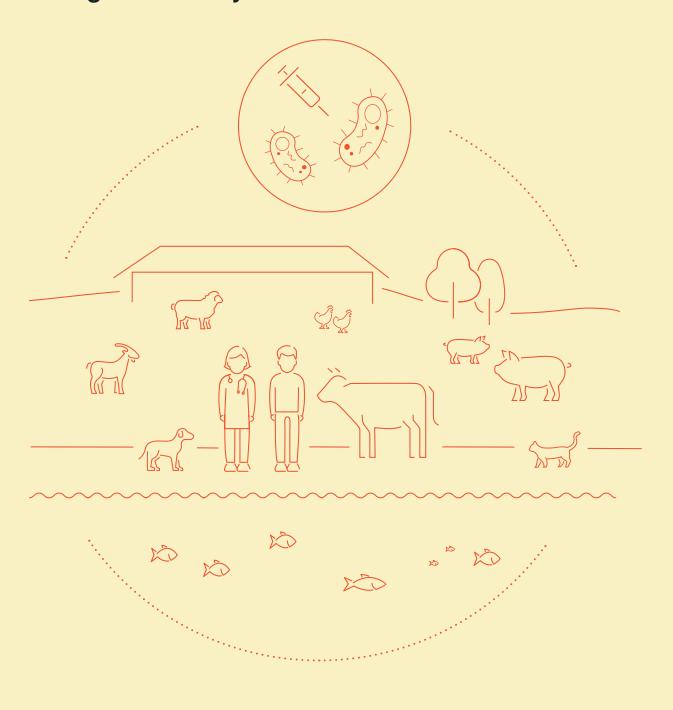
# Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials

#### Preserving the efficacy of antimicrobials





### **Foreword**

Antimicrobial medicines have transformed the practice of human and animal medicine. Infections that were once lethal are now treatable. The use of antimicrobial drugs has advanced global public health, animal health, and food safety and security. However, the overuse and misuse of antimicrobial products in humans, animals and plants has dramatically contributed to the emergence and spread of antimicrobial-resistant microorganisms, which pose an extraordinary threat to human and animal health, and to the world ecosystem.

On September 21, 2016, I had the honour and privilege of representing the World Organisation for Animal Health (WOAH, founded as OIE) and addressing the 71st United Nations General Assembly regarding the global threat that antimicrobial resistance (AMR) poses to human and animal health. My voice was among many others, including Directors General of the World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO), speaking out about AMR and shining a light on the severe threat it presents.

The international community has started to come together to take steps to combat antimicrobial resistance.

As the reference organisation for standards related to animal health and zoonoses, WOAH is committed to supporting its Members as we confront the shared global threat of AMR in animals and humans. Our Standards and guidelines provide a framework for responsible and prudent use of antimicrobial products in animals, and for surveillance of use of antimicrobials and antimicrobial resistance. Our communication and advocacy materials foster understanding of the risks of AMR and encourage the adoption of measures that slow its spread. Science drives the development of tools and policies that support Veterinary Services and enhance animal health and welfare.







At our 83rd General Assembly in 2015, all 180 Members made a commitment to support the WHO Global Action Plan on Antimicrobial Resistance, and support the development of National Action Plans. This shared commitment highlights the increasing awareness of the threat posed by resistant pathogens and the need for action. In 2016, WOAH's 84th General Assembly unanimously adopted Resolution 36, which mandated WOAH to compile AMR activities into a strategy.

Our Strategy on Antimicrobial Resistance is aligned with the WHO Global Action Plan and recognises the importance of a "One Health" approach – involving human and animal health, agricultural and environmental needs. It outlines the goals and tactics we have in place to support our Members and to encourage the national ownership and implementation. Time is of the essence. As the saying goes, "an ounce of prevention is worth a pound of cure."

I urge our Members to actively move forward on developing and implementing cross sectoral National Action Plans. WOAH is at your service, wherever you are in the process of building and implementing a strategy to combat AMR in animals.

# "Alongside our Quadripartite partners - FAO, UNEP and WHO - we move towards a common objective: to control AMR for the benefit of all."



Dr Monique Eloit, Director General, World Organisation for Animal Health

# It's everyone health

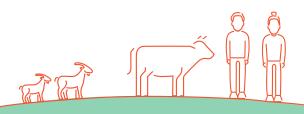
The availability and use of antimicrobial medicines has transformed the practice of human and animal medicine. Infections that were once lethal are now treatable, and the use of antimicrobial drugs has advanced global health as well as animal health, which is a key component of policies to improve animal welfare, food security and food safety.

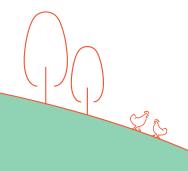
Preserving the efficacy of these life-saving medications, as well as their availability for both human and veterinary use, is therefore essential to preserve our future. The development of antimicrobial resistance (AMR) compromises this dual objective and impacts our ability to successfully treat infectious diseases.

AMR occurs when bacteria, viruses, fungi and parasites no longer respond to antimicrobial agents. As a result of drug resistance, antibiotics and other antimicrobial agents become ineffective and infections become difficult or impossible to treat, increasing the risk of disease spread, severe illness and death. AMR may occur naturally as organisms adapt to their environments. However, **overuse** and misuse of antimicrobial agents in humans, animals and plants sectors has dramatically accelerated the emergence of AMR. Consequently, minimising the emergence and spread of AMR requires a coordinated, focused multi-sectorial and multinational effort.

Animal health and welfare depend on the availability, effectiveness and appropriate use of quality veterinary medicines, including antimicrobials. To continue to progress in disease control management and in improving animal welfare, we as international, regional, national and local animal sector leaders, need to encourage and achieve a sustainable change in behaviour so that antimicrobial use in animals closely respects WOAH international Standards on responsible and prudent use of antimicrobials.

In particular, Veterinary Services including veterinarians and veterinary paraprofessionals have a key part to play in this, through our role in regulating and supervising use of antimicrobials and offering professional advice on their use to farmers and animal owners.





## Our role in the fight against AMR

We have been working on AMR for a long time. In undertaking our role as a standard-setting organisation\* for animal health, including zoonoses, we have developed a wide range of international standards on antimicrobial agents, in particular on responsible and prudent use as well as on surveillance of antimicrobial use and resistance.

These standards are regularly reviewed and updated through the transparent and inclusive process of expert advice and member consultation before presentation for adoption to the World Assembly of Delegates each year. We also work with our Members in a comprehensive and continuous capacity building process for their Veterinary Services.

# "WOAH has developed a wide range of international standards on antimicrobial agents."

# FAO, UNEP, WHO and WOAH: A Quadripartite Partnership

The rise of AMR is a shared responsibility between human, animal, environmental and plant sectors, which therefore requires a multi-sectoral, global and coordinated approach.

The Quadripartite partnership reflects the "One Health" nature of the AMR challenge, and has been proven as a mean of successfully addressing animal and public health risks associated with zoonoses and animal diseases. Recognising the needs and challenges of each sector, the Quadripartite relationship drives the development of policies and tools that support the investments of Members to combat AMR and enhance biosecurity at every level.

In this context, in 2015 the World Health Organization (WHO) issued a Global Action Plan on AMR<sup>2</sup> developed in collaboration with WOAH and FAO. The Global Action Plan recognises the need to address the challenge of AMR through a "One Health" approach. This approach emphasises the interconnectedness of the health of humans, animals, plants and the environment. Issues and solutions are viewed through the lens of multi-sectorial collaboration between stakeholders in all sectors.

On 21 September 2016, the United Nations General Assembly adopted a political declaration aimed at combating the global threat posed by AMR and confirmed the "One Health" approach in line with the Global Action Plan. The Directors General of FAO, WHO and WOAH were present and addressed the General Assembly to support this declaration.

<sup>\*</sup> The World Trade Organization's (WTO) Sanitary and Phytosanitary Agreement (SPS), signed in 1994, established WOAH as the reference organisation for standards related to animal health, including zoonoses<sup>1</sup>.

# Our Strategy on AMR and the Prudent Use of Antimicrobials

In 2015, in addition to a full review of the standards related to AMR, our Members officially committed during the 83rd General Session to combat AMR and promote the prudent use of antimicrobials in animals<sup>3</sup>. WOAH World Assembly of Delegates stated its full support for the Global Action Plan on AMR. One year later, during the 84th General Session, the World Assembly of Delegates directed WOAH to compile and consolidate all the actions to combat AMR into a global Strategy<sup>4</sup>.

The structure of this strategy supports the objectives established in the Global Action Plan, and reflects our mandate as described in our Basic Texts and Strategic Plans, through four main objectives:

- Improve awareness and understanding;
- Strengthen knowledge through surveillance and research;
- Support good governance and capacity building;
- Encourage implementation of international standards.

Since 2022, we have set a monitoring and evaluation system to assess the delivery of our strategy. In parallel, WOAH contributes to the monitoring and evaluation of the overall Global Action Plan, in collaboration with the Quadripartite partners.

"We, sectors and countries, all share responsibility in the development of antimicrobial resistance. It is by addressing this global threat together that we will manage to protect human and animal health, and therefore, our future."

Dr Monique Eloit, Director General, World Organisation for Animal Health



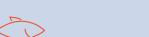


## **Objectives**

#### Objective 1: Improve awareness and understanding

AMR is a global threat, and the emergence of antimicrobial-resistant pathogens threatens decades of progress against infectious diseases in animals and humans. Veterinary Services play a critical role in building awareness of AMR and encouraging the prudent use and management of antimicrobial medicines in animals. **Our initiatives seek to increase awareness and understanding among Members, veterinarians, farmers, animal owners, stakeholders and citizens**, and in doing so, support the development and implementation of tools and policies that enhance animal health and welfare.

- Support Members through the development of targeted communications and advocacy materials designed to foster understanding of the risks of AMR in a large range of actors and encourage the adoption of measures that reduce the use of antimicrobials and slow the emergence and spread of resistant microorganisms.
- Promote awareness of AMR more especially through Veterinary Statutory Bodies and Veterinary Education Establishments to encourage a professional culture that supports the responsible and ethical use of antimicrobial products in animals.
- Continue to support professional development goals by organising and conducting workshops, conferences and symposia that promote the prudent use of antimicrobials and address the issue of AMR at global, regional and national levels.
- Expand the portfolio of WOAH guidance, educational and scientific reference materials
   associated with combatting the emergence and spread of AMR microorganisms in
   animals while promoting good animal husbandry, vaccination and biosecurity measures to
   prevent diseases and limit the need for antimicrobial treatments, in collaboration with
   partner organisations and stakeholders.
- Collaborate with FAO, UNEP and WHO to ensure the alignment and coordination of policy and advocacy initiatives aimed at combatting AMR.



## Objective 2: Strengthen knowledge through surveillance and research

In many countries, WOAH Performance of Veterinary Services (PVS) evaluation missions<sup>5</sup> have found that antimicrobial drugs are widely available and their distribution and use is largely uncontrolled and unmonitored. Despite Members adopting standards on antimicrobial use and on monitoring and surveillance for resistance, the current lack of implementation in many countries constrains our ability to fully understand the risks, to target interventions and to monitor progress.

Since 2015, the World Assembly of Delegates has set as a priority the development of a global database on the use of antimicrobials in animals. This project, supported by FAO and WHO as part of the Global Action Plan, started in 2015 and will allow countries, regions and the global community to establish baseline information using a harmonised approach, to measure trends over time and to evaluate effectiveness of actions taken to ensure responsible and prudent use of antimicrobial agents.

This global database will be linked to the our World Animal Health Information System (WAHIS)<sup>6</sup>, a web-based reporting system that collects, processes and avails online information about animal populations and diseases in real time, providing notifications to Members of sanitary events in animals.

WOAH and its Reference Centers are also supporting coordinated national and international surveillance systems for microorganisms with acquired AMR traits across animal production and along the food chain.

- Support Members in developing and implementing monitoring and surveillance systems to detect and report antimicrobial use and the emergence of organisms with AMR characteristics.
- Build and maintain a database for collecting and holding data from Members on the use of antimicrobial agents in food-producing and companion animals, with associated analysis and annual reporting.
- Enhance the development, use and functionality of WAHIS to ultimately allow analysis of data on antimicrobial use taking into account animal populations of each country and region.
- Guide and support research into alternatives to antibiotics by working alongside partner
  organisations to encourage the development and uptake of new tools, products and
  methodologies that will reduce the dependence of animal sectors on antimicrobials and slow
  the emergence and spread of AMR.
- Identify and pursue opportunities for public-private partnerships in AMR research and risk management, working alongside and in conjunction with FAO, UNEP and WHO efforts.

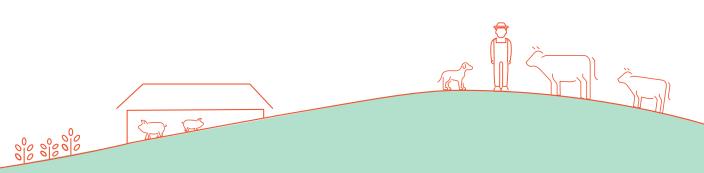
<sup>\*</sup>The PVS Evaluation Tools for Terrestrial and Aquatic Animals, respectively, specifically explore the technical authority and capability of the Veterinary Service with respect to the regulation of veterinary medicines and biologicals, including residue monitoring, as well as other more general competencies and capacities related to regulatory systems, resourcing, laboratories and competencies of veterinarians and veterinary paraprofessionals<sup>5</sup>.

#### Objective 3: Support good governance and capacity building

WOAH is committed to supporting Veterinary Services of Members to build their capacity as well as to develop and implement National Action Plans for AMR, to regulate and promote responsible and prudent use of antimicrobial agents, and to implement monitoring and surveillance. Many Members need support to develop policies and legislation to govern the importation, manufacture, marketing authorisation, distribution and use of quality veterinary medicines, including antimicrobials.

We work alongside international partners and stakeholders to improve Members' capacity to build robust plans and policies to control AMR, to promote responsible and prudent use and good animal husbandry and disease prevention and control practices. International cooperation and exchange of experience is critical as the global community seeks ways to combat AMR, and funding is necessary to assist countries when needed as they adopt policies and guidelines that support animal health and welfare.

- Provide assistance and leadership to Members as they develop and implement National Action Plans and policies governing the use of antimicrobials in animals, promoting the "One Health" approach and the interconnectedness of the health of humans, animals, plants and ecosystems.
- Provide tools and guidance to assist Members in their AMR risk-assessment initiatives associated with antimicrobial agents and use in animals.
- Work alongside Members to ensure Veterinary Services have the capacity to implement WOAH Standards, taking advantage of their engagement in the PVS Pathway<sup>7</sup>.
- Support Members to develop and modernise legislation governing the manufacture, marketing authorisation, importation, distribution and use of veterinary products.
- Engage Members through regular training of Focal Points on Veterinary Products, establishing direct links and support processes.
- Ensure that well-trained veterinarians and veterinary paraprofessionals are at the forefront of national and regional efforts to improve animal health and welfare and the stewardship of antimicrobial products through training initiatives at international, regional and national workshops and conferences.



#### Objective 4: Encourage implementation of international Standards

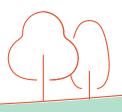
WOAH Standards and guidelines reflect the best available science and provide a global benchmark for consistent regulation of antimicrobials, for promoting responsible and prudent use, for risk analysis, surveillance and monitoring, and for reporting<sup>8</sup>. These activities are critical to building trust and confidence in livestock sectors and to achieving the objective of slowing the emergence and spread of AMR.

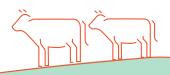
Our Standards provide a framework to achieve consistent outcomes using equivalent methodologies adapted to local contexts. The adoption of WOAH Standards and their implementation enables Members to improve biosecurity, to support animal health and welfare, and to support public health. Further, this enables Members to participate in safe international trade for economic and food security benefits.

Harmonisation between sectors, countries and regions ensures we generate comparable data, are able to turn it into information that improves our understanding of risks and opportunities, and can report progress towards the objectives of the Global Action Plan.

- Support individual Members in their efforts to implement WOAH international Standards for responsible and prudent use of antimicrobials and to combat AMR in animals taking into account their respective social, economic and cultural circumstances.
- Disseminate and encourage adoption of the recommendations in the WOAH List of Antimicrobials of Veterinary Importance<sup>9</sup>.
- Strengthen multilateral support for implementation of WOAH Standards among policymakers, our cooperation partners and donors to contribute to a well-coordinated international effort in the fight against AMR.
- Build on the success of the WOAH Standards development work programme to continue to advance for the animal sectors our comprehensive framework of quality, science-based standards that support the Global Action Plan on AMR.
- Collaborate with FAO, UNEP and WHO to support the development of a comprehensive and aligned framework of international standards and guidelines across human health, animal health, agriculture and the food chain.







# WOAH Strategy on Antimicrobial Resistance (AMR) and the Prudent Use of Antimicrobials

Protecting animal health and welfare by supporting global efforts to combat antimicrobial resistance

# Improve AMR awareness and understanding



Targeted communication













# Strengthen knowledge through surveillance and research

**AMR National Action Plans** 



Monitoring and surveillance systems



Report trends in antimicrobial use and AMR



Emergence of organisms with AMR traits

#### **Antimicrobial Resistance**











Veterinary Services play a critical role

#### **WOAH Strategy**

# Support good governance and capacity building

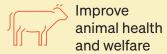


Well trained

veterinarians

and veterinary

paraprofessionals





Stewardship of antimicrobial products

# **Encourage implementation of international standards**

#### **WOAH International Standards**

Science-based and adopted by our Members



Improving worldwide









Production

Monitoring

Circulation

Use in animals

of antimicrobials

#### **Antimicrobial Resistance**



### **WOAH Strategy**

www.woah.org

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