The OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials

November 2016

WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

OIE Strategy on Antimicrobial Resistance

The availability and use of antimicrobial medicines have 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 public health, animal health, and food safety and security. However, the overuse and misuse of antimicrobial products has dramatically contributed to the emergence and spread of antimicrobial-resistant organisms, 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 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.

Now the international community must come together and take steps to combat antimicrobial resistance, it's not too late.

As the reference organisation for standards related to animal health and zoonoses, the OIE is committed to supporting Member Countries as we confront the shared global threat of AMR in animals and humans. OIE 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. OIE communications and advocacy materials foster understanding of the risks of AMR and encourage the adoption of measures that slow its spread. OIE science drives the development of tools and policies that support Veterinary Services and enhance animal health and welfare.

At the OIE's 83rd General Assembly in 2015, all 180 Member Countries 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, the OIE's 84th General Assembly unanimously adopted Resolution 36, which mandates that OIE compile AMR activities into a strategy.

The OIE Strategy on Antimicrobial Resistance is aligned with the WHO Global Action Plan and recognizes 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 Member Countries 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 all OIE Member Countries to actively move forward on developing National Action Plans. The OIE is at your service, wherever you are in the process of building and implementing a strategy to combat AMR in animals. Alongside our Tripartite colleagues – the WHO and the FAO – we move towards a common objective: to control AMR for the benefit of all.

Dr Monique Eloit,
Director General of the OIE

"Protecting animals, preserving our future."

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 refers to microorganisms, such as bacteria, viruses, fungi and parasites, which have acquired resistance to antimicrobial treatment. 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, minimizing 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 the OIE international standards on responsible and prudent use.**

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.

The Role of the OIE in the fight against AMR

The OIE has been working on the AMR issue for a long time. In undertaking its role as a standard- setting organisation* for animal health, including zoonoses, **the OIE has developed a wide range of international standards on antimicrobial agents**, in particular on responsible and prudent use. 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 from our 180 Member Countries each year. The OIE also works with its Member countries in a comprehensive and continuous capacity building process for their Veterinary Services.

"The OIE has developed a wide range of international standards on antimicrobial agents"

WHO, OIE and FAO: A Tripartite Partnership

Food and Agriculture Organization of the United Nations

WORLD ORGANISATION FOR ANIMAL HEALTH

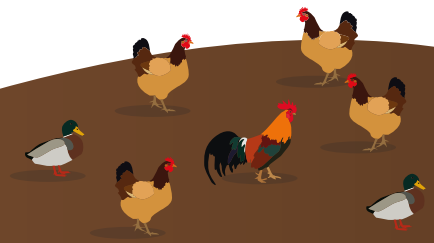
World Health Organization

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

The OIE-FAO-WHO collaboration, a tripartite partnership, reflects the **"One Health"** nature of the AMR challenge, and has been proven as a means of successfully addressing animal and public health risks associated with zoonoses and animal diseases. Recognizing the needs and challenges of each sector, the tripartite relationship drives the development of policies and tools that support the efforts of Member Countries 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[2] developed in close collaboration with its tripartite partners, the OIE and FAO**. The Global Action Plan recognizes the need to address the challenge of AMR through a "One Health" approach. This approach emphasizes the interconnectedness of the health of humans, animals and ecosystems. Issues and solutions are viewed through the lens of multi-sectorial collaboration between stakeholders in all sectors.

More recently, 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 three Directors General of the tripartite partnership were present and addressed the General Assembly to support this declaration.



* The World Trade Organization's (WTO) Sanitary and Phytosanitary Agreement (SPS), signed in 1994, established the OIE as the reference organization for standards related to animal health, including zoonoses[1].

The OIE Strategy on AMR and the Prudent Use of Antimicrobials

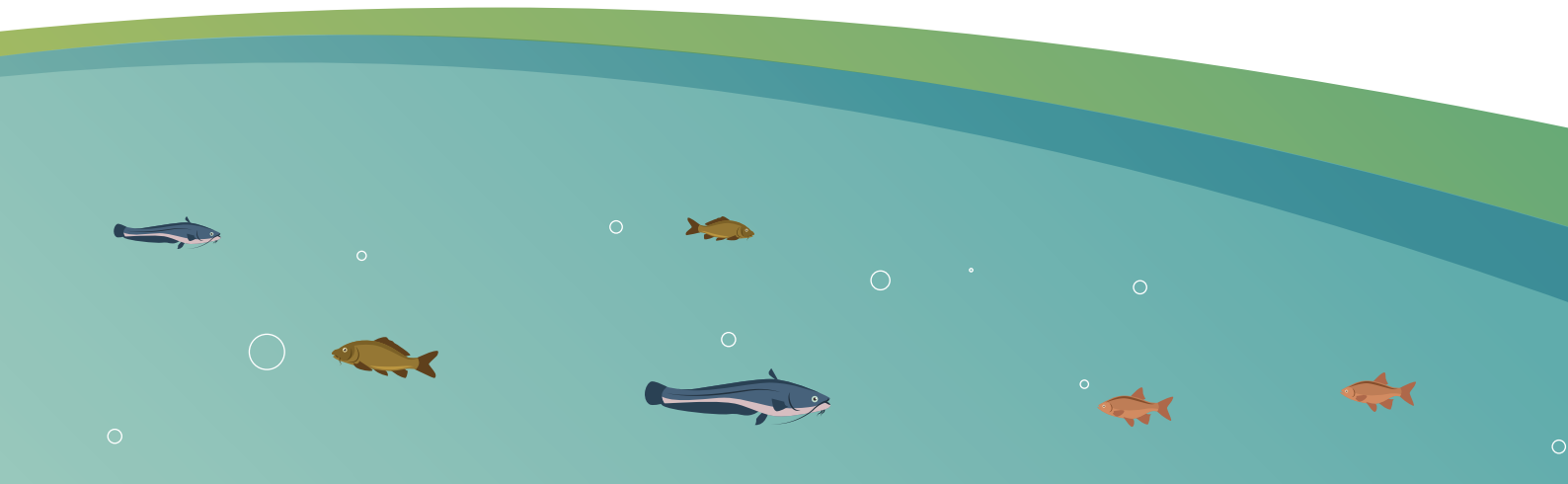
In 2015, in addition to a full review of the standards related to AMR, **the 180 Member Countries of the OIE officially committed during the 83rd General Session to combat AMR and promote the prudent use of antimicrobials in animals**[3]. The OIE World Assembly of Delegates stated its full support for the Global Action Plan on AMR. One year later, during the 84th General Session, the World Assembly of Delegates directed OIE to compile and consolidate all the actions to combat AMR into an OIE Strategy[4].

The structure of this OIE Strategy supports the objectives established in the Global Action Plan, and reflects the mandate of the OIE as described in its 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**

"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 of the OIE



The Objectives of the OIE Strategy

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. **OIE initiatives seek to increase awareness and understanding among Member Countries, veterinarians, farmers, stakeholders and citizens**, and in doing so, support the development and implementation of tools and policies that enhance animal health and welfare.

WORKPLAN

- Support Member Countries 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 AMR 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 **organizing 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 OIE 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 WHO and FAO** 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, OIE Performance of Veterinary Services (PVS) evaluation missions* have found that **antimicrobial drugs are widely available and their distribution and use is largely uncontrolled and unmonitored**. Despite Member Countries 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 OIE 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 harmonized approach, to measure trends over time and to evaluate actions taken to ensure responsible and prudent use of antimicrobial agents.

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

The OIE and its Reference Centers are also supporting coordinated national and international surveillance systems for organisms with AMR characteristics across animal production and along the food chain.

WORKPLAN

- **Support Member Countries 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 Member Countries 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 WHO and FAO efforts.

*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[5].

Objective 3: Support good governance and capacity building

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

The OIE works alongside international partners and stakeholders to improve Member Countries' capacity to build robust plans and policies to control AMR, to promote prudent use and good animal husbandry. 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.

WORKPLAN

- **Provide assistance and leadership to Member Countries 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 Member Countries in their AMR risk-assessment initiatives associated with antimicrobial agents and use in animals.
- Work alongside Member Countries to **ensure Veterinary Services have the capacity to implement OIE standards**, taking advantage of their engagement in the OIE PVS Pathway[7] .
- Support Member Countries to **develop and modernize legislation governing the manufacture, marketing authorisation, importation, distribution and use of veterinary products**.
- Engage Member Countries through regular training of **Focal Points on Veterinary Products**, establishing direct links and support processes.
- Ensure that **well-trained veterinarians and veterinary para-professionals 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

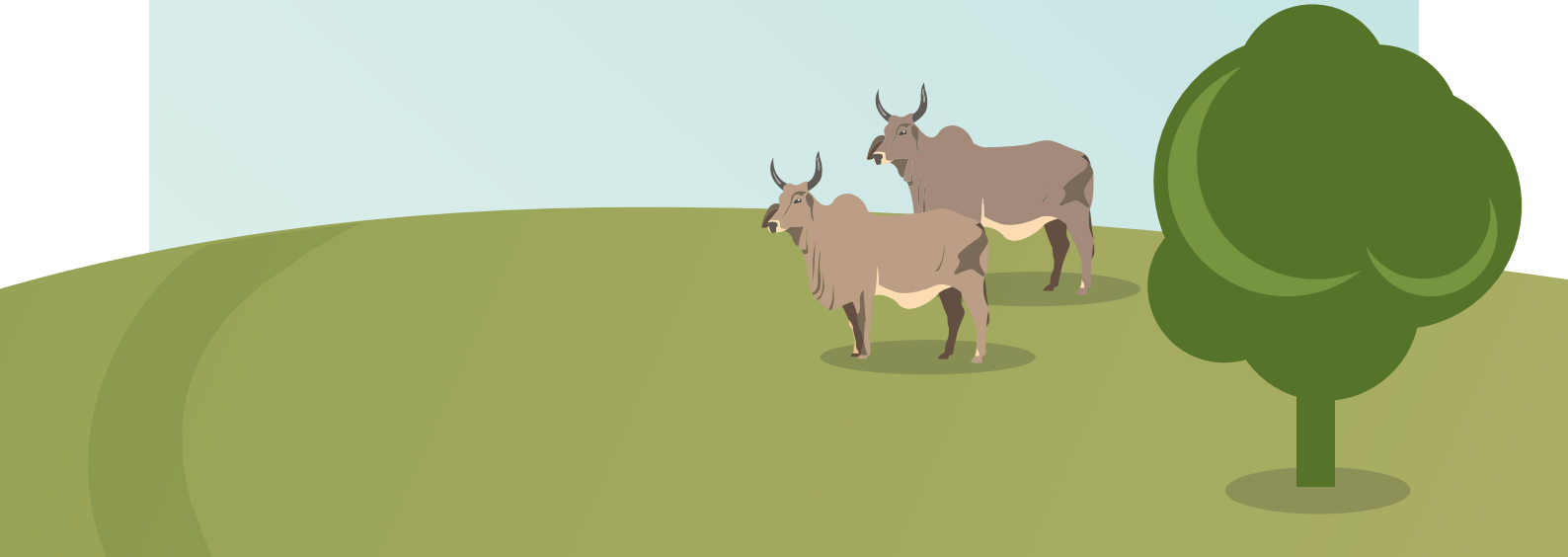
OIE standards and guidelines reflect the best available science and provide a global benchmark for consistent regulation of antimicrobials, for promoting responsible and prudent use, for risk analysis, surveillance and monitoring, and for reporting[8]. These activities are critical to building trust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

The OIE standards provide a framework to achieve consistent outcomes using equivalent methodologies adapted to local contexts. The adoption of OIE standards and their implementation enables Member Countries to improve biosecurity, to support animal health and welfare, and to support public health. Further, this enables Member Countries 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.

WORKPLAN

- **Support individual Member Countries in their efforts to implement OIE international standards** for 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 OIE List of Antimicrobials of Veterinary Importance[9].
- **Strengthen multilateral suppor**t for implementation of OIE 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 OIE 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 WHO and FAO 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.



The OIE 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
- Advocacy materials

Member countries

Strengthen knowledge through surveillance and research

AMR National Action Plans

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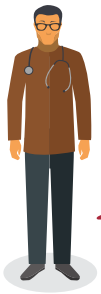
Monitoring and surveillance systems

- Report trends in antimicrobial use
- Emergence of organisms with AMR characteristics

GLOBAL THREAT

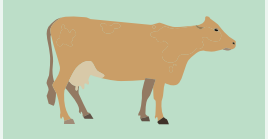


Veterinary Services play a critical role

Support good governance and capacity building

Well trained veterinarians

- Improve animal health and welfare



- Stewardship of antimicrobial products

Encourage implementation of international standards

OIE International Standards
Science-based
& adopted by 180 Member Countries

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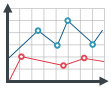
Improving worldwide

Production



Monitoring

Circulation

Use in animals

of antimicrobials

www.oie.int/antimicrobial-resistance

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