

# WOAH's Strategy on AMR and Prudent Use of Antimicrobials

AMR & Veterinary Products  
Department

Regional ANIMUSE Training for Middle East

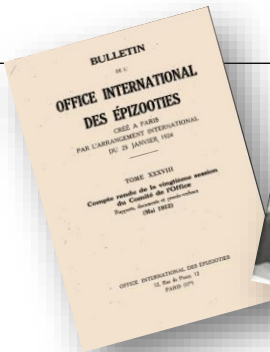
10-12 May 2023, Dubai, United Arab Emirates



World  
Organisation  
for Animal  
Health  
Founded as OIE

Organisation  
mondiale  
de la santé  
animale  
Fondée en tant qu'OIE

Organización  
Mundial  
de Sanidad  
Animal  
Fundada como OIE



— 776 —

2° Le praticien ne doit pas utiliser les antibiotiques au gré de sa fantaisie, mais en suivant les règles qui ont été fixées par l'expérience.

L'utilisation des antibiotiques contre des germes insensibles à leur action ou particulièrement résistants, l'emploi de doses trop faibles ou pendant un temps trop bref entraînent des dépenses inutiles, peuvent faire apparaître des germes résistants, retardent d'autant la mise en œuvre d'un traitement efficace et conduisent à des échecs qui nuisent à une méthode qui, lorsqu'elle a été judicieusement et correctement appliquée, a permis de sauver nombre de vies humaines et animales.

*“Practitioner must not use antibiotics at the discretion of his fantasy, but following rules that have been set by experience.*

*Use of antibiotics **against insensitive germs** or specifically resistant, utilization of **too weak doses** or through a **too short time frame**, can reveal resistant germs, delaying the set of an efficient therapy and lead to **treatment failures**, **harming a method that, when judiciously and correctly applied, has saved numerous human and animal lives”***

First international resolution around **AMR**, based on scientific evidences reported back in 1948

Alexander Fleming discovers **penicillin** at St. Mary's Hospital, London



## The World Organisation for Animal Health (WOAH)



2022

We are an intergovernmental organisation working across borders to improve the health of animals and therefore, our future .

Rinderpest outbreak in Belgium as a result of zebus originating from India and destined to Brazil. Numerous ravages in livestock and livelihoods across the globe

### Office International des Epizooties (OIE)

is created by agreement of 28 States, to improve animal health, and to ensure coordinated prevention, preparedness & response, in case of outbreaks

### Transparency

Ensure transparency in the global animal disease situation

### Sanitary safety

Safeguard world trade by publishing health standards for international trade in animals and animal products

### Scientific information

Collect, analyse and disseminate veterinary scientific information

### Promotion of veterinary services

Improve the legal framework and resources of national Veterinary Services

### International solidarity

Encourage international solidarity in the control of animal diseases

### Food safety and animal welfare

To provide a better guarantee of food of animal origin and to promote animal welfare through a science-based approach

Our Worldwide Network

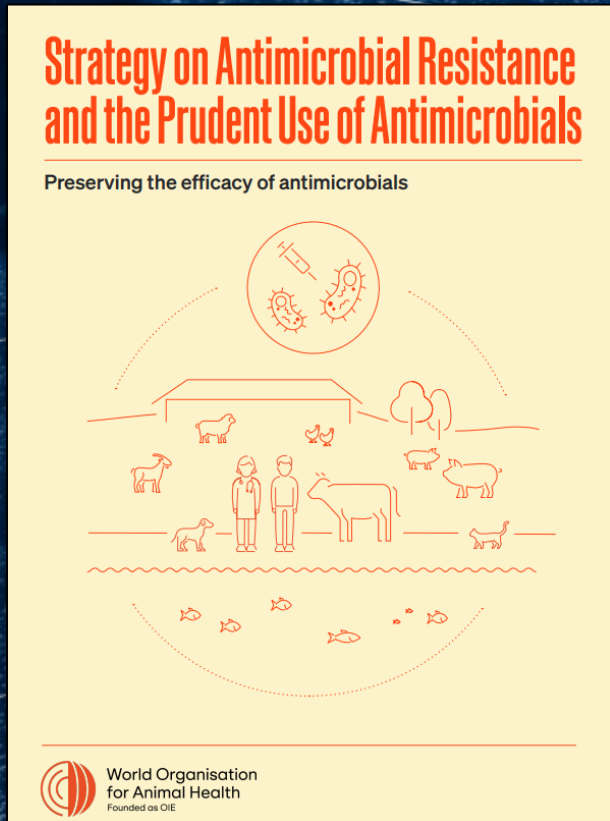
- 182 Members
- 1 Headquarters in Paris, France
- 75+ official partners
- 13 Regional and Sub-regional Representations
- 300+ Reference Centres of expertise





# • WOAHA Strategy on AMR and the Prudent Use of Antimicrobials

- The WOAHA Strategy supports the objectives established in the Global Action Plan on antimicrobial resistance and reflects the mandate of WOAHA, 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

[WOAHA Strategy on AMR](#)



## 1 Improve awareness and understanding

- Development of **targeted communications and advocacy materials**
- Awareness of AMR to **encourage a professional culture** that supports the responsible and ethical use
- Professional development goals by **conducting workshops, conferences and symposia**
- Expand the portfolio of **guidance, education and scientific reference materials**
- **Collaborate with WHO and FAO and UNEP**

## 2 Strengthen knowledge through surveillance & research

- Developing and implementing **monitoring and surveillance systems**
- Collecting **data on the use of antimicrobial agents** in food-producing and companion animals
- Developing **use and functionality of WAHIS**
- **Guide and support research into alternatives**
- Identify and pursue **public-private partnerships** in AMR research and risk management

## 3 Support good governance and capacity building

- Assist in implementing **National Action Plans**, promoting a “One Health” approach
- Provide **tools and guidance**
- Ensure **Veterinary Services capacity** through PVS Pathway
- Develop and modernise **legislation**
- Provide training of **Focal Points**
- Ensure that well-trained **veterinarians and veterinary para-professionals** are at the forefront



## 4 Encourage implementation of WOH standards

- Support Member Countries in their efforts to **implement WOH standards**
- Encourage adoption of recommendations in the **List of Antimicrobials of Veterinary Importance**
- **Strengthen multilateral support** among policy makers
- Continue our **framework of quality, science-based standards**
- **Collaborate with WHO and FAO and UNEP** to develop an aligned framework of standards and guidelines



# Improving awareness and understanding of AMR

## Improve awareness and understanding

- It is important to involve all relevant stakeholders- from veterinarians to the general public: everybody has a role when addressing AMR
- It is important to use common terminology across sectors
- Communicate in a language and via media that is adequate to the target audience and country context



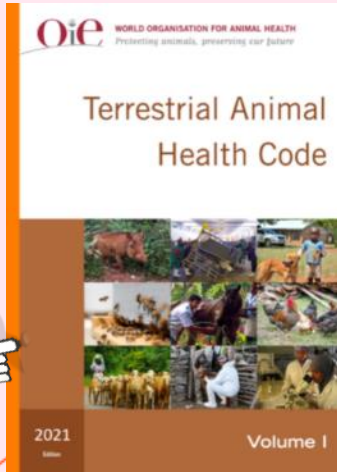
[WOAH Fighting AMR: Responsible AMU](#)



[WOAH chicken farming & AMR](#)



## Terrestrial Animal Health Code



- Ch.6.7. **Introduction** to the recommendations for controlling antimicrobial resistance
- Ch.6.8. Harmonisation of national AMR **surveillance and monitoring** programmes (updated in May 2018)
- Ch.6.9. **Monitoring of the quantities and usage patterns** of antimicrobial agents used in food-producing animals (Agreement on definitions)

- Extension to non-food producing animals
- Strengthening environmental impact of antimicrobial use
- Reinforcing NAPs design & implementation under One Health
- Clarifying and detailing responsibilities & actions for all concerned actors
  - Competent authorities
  - Pharmaceutical industry
  - Wholesale & retail distributors
  - Veterinarians
  - Animal feed manufacturers
  - Food animal producers
  - Owners of non-food producing animals

- Ch.6.10. **Responsible and prudent use** of antimicrobial agents in veterinary medicine
- Ch.6.11. **Risk analysis** for AMR arising from the use of antimicrobial agents in animals

## Aquatic Animal Health Code



- Ch.6.2. Principles for **responsible and prudent use** of antimicrobial agents in aquatic animals
- Ch.6.3. **Monitoring of the quantities and usage patterns** of antimicrobial agents used in aquatic animals
- Ch.6.4. Development and harmonisation of national AMR **surveillance and monitoring** programmes for aquatic animals
- Ch.6.5. **Risk analysis** for AMR arising from the use of antimicrobial agents in aquatic animals



## WOAH's list of antimicrobials of veterinary importance

### Criterion 1. Response rate to the questionnaire regarding Veterinary Important Antimicrobial Agents

This criterion was met when a majority of the respondents (more than 50%) identified the importance of the antimicrobial class in their response to the questionnaire.

### Criterion 2. Treatment of serious animal disease and availability of alternative antimicrobial agents

This criterion was met when compounds within the class were identified as essential against specific infections and there was a lack of sufficient therapeutic alternatives.

On the basis of these criteria, the following categories were established:

- **Veterinary Critically Important Antimicrobial Agents (VCIA):** are those that meet **BOTH** criteria 1 **AND** 2
- **Veterinary Highly Important Antimicrobial Agents (VHIA):** are those that meet criteria 1 **OR** 2
- **Veterinary Important Antimicrobial Agents (VIA):** are those that meet **NEITHER** criteria 1 **OR** 2

### **Recommendations**

Any use of antimicrobial agents in animals should be in accordance with the OIE Standards on the responsible and prudent use laid down in the Chapter 6.9. of the *Terrestrial Animal Health Code* and in the Chapter 6.3. of the *Aquatic Animal Health Code*.

The responsible and prudent use of antimicrobial agents does not include the use of antimicrobial agents for growth promotion in the absence of risk analysis.

According to the criteria detailed above, antimicrobial agents in the OIE List are classified according to three categories, Veterinary Critically Important Antimicrobial Agents (VCIA), Veterinary Highly Important Antimicrobial Agents (VHIA) and Veterinary Important Antimicrobial Agents (VIA).

However, a specific antimicrobial/class or subclass may be considered as critically important for the treatment of a specific disease in a specific species (See specific comments in the following table of categorisation of veterinary important antimicrobial agents for food-producing animals).

For a number of antimicrobial agents, there are no or few alternatives for the treatment of some specified disease in identified target species as it is indicated in the specific comments in the OIE List. In this context, particular attention should be paid to the use of VCIA and of specific VHIA.

Among the VCIA in the OIE List, some are considered to be critically important both for human and animal health; this is currently the case for Fluoroquinolones and for the third and fourth generation of Cephalosporins. Colistin has been moved in 2016 to the WHO category of Highest Priority Critically Important Antimicrobials. Therefore these two classes and Colistin should be used according to the following recommendations:

- Not to be used as preventive treatment applied by feed or water in the absence of clinical signs in the animal(s) to be treated;
- Not to be used as a first line treatment unless justified, when used as a second line treatment, it should ideally be based on the results of bacteriological tests; and
- Extra-label/off label use should be limited and reserved for instances where no alternatives are available. Such use should be in agreement with the national legislation in force; and
- Urgently prohibit their use as growth promoters.

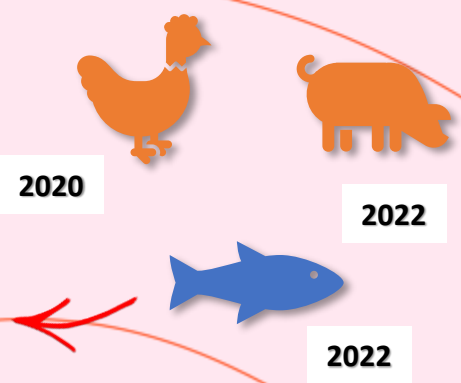
The classes in the WHO category of Highest Priority Critically Important Antimicrobials should be the highest priorities for countries in phasing out use of antimicrobial agents as growth promoters.

The OIE List of antimicrobial agents of veterinary importance is based on expert scientific opinion and will be regularly updated when new information becomes available.

Antimicrobial classes / sub classes used only in human medicine are not included in this OIE List. Recognising the need to preserve the effectiveness of the antimicrobial agents in human medicine, careful consideration should be given regarding their potential use (including extra-label/off-label use) / authorisation in animals.

## Technical Reference Documents

- **Scope:** Authorized antibiotics for food-producing fish and crustaceans
- **Methodology:** Developed by an Ad hoc Group and reviewed by external experts
- **Differences** with respect to main multispecies list
- **Criteria for inclusion** of pathogens, diseases and antimicrobial classes
- **Table of antimicrobial agents**

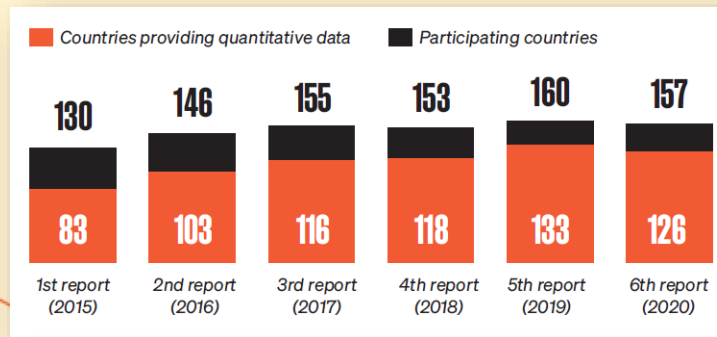
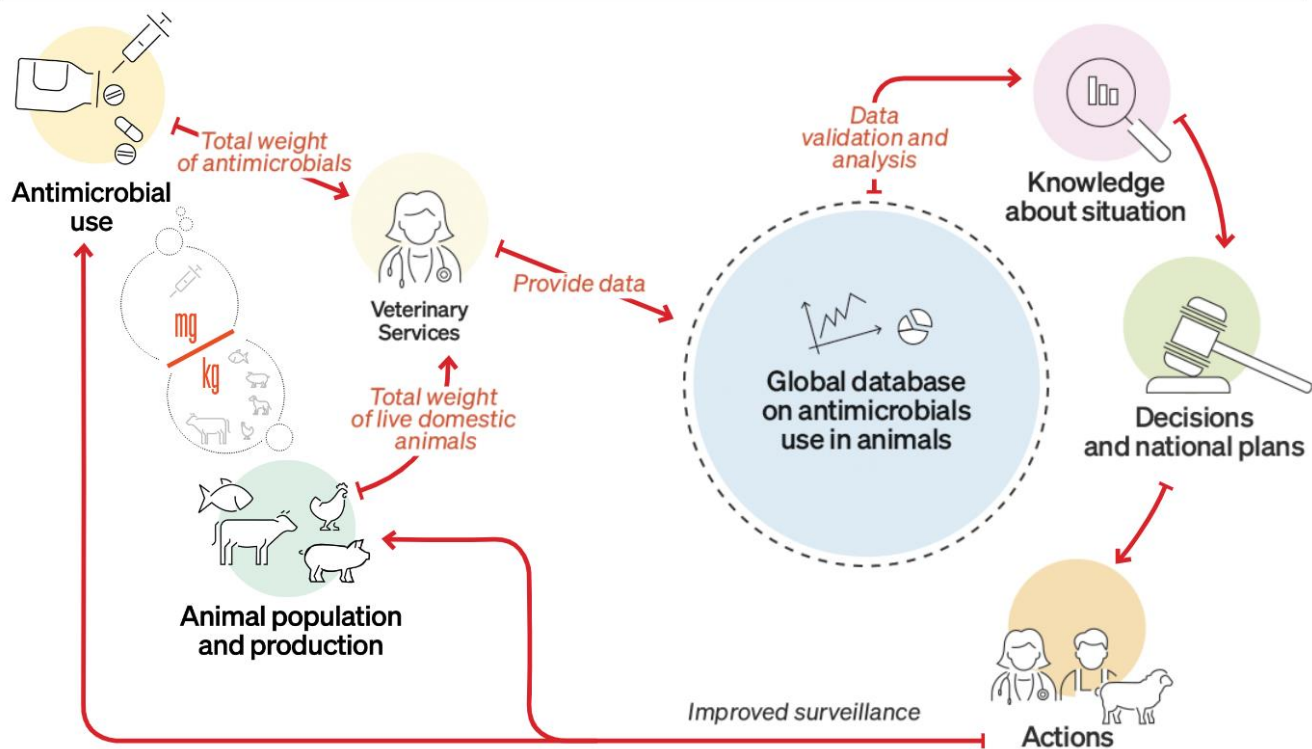






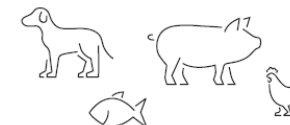
# ANIMUSE Global Database

## ANTIMICROBIAL USE: FROM DATA TO ACTION



The sixth annual report provides an analysis of data from 2018 covering:

**72%** of the world's domestic animal biomass



**Global antimicrobial use in animals has declined by 27% in 3 years**



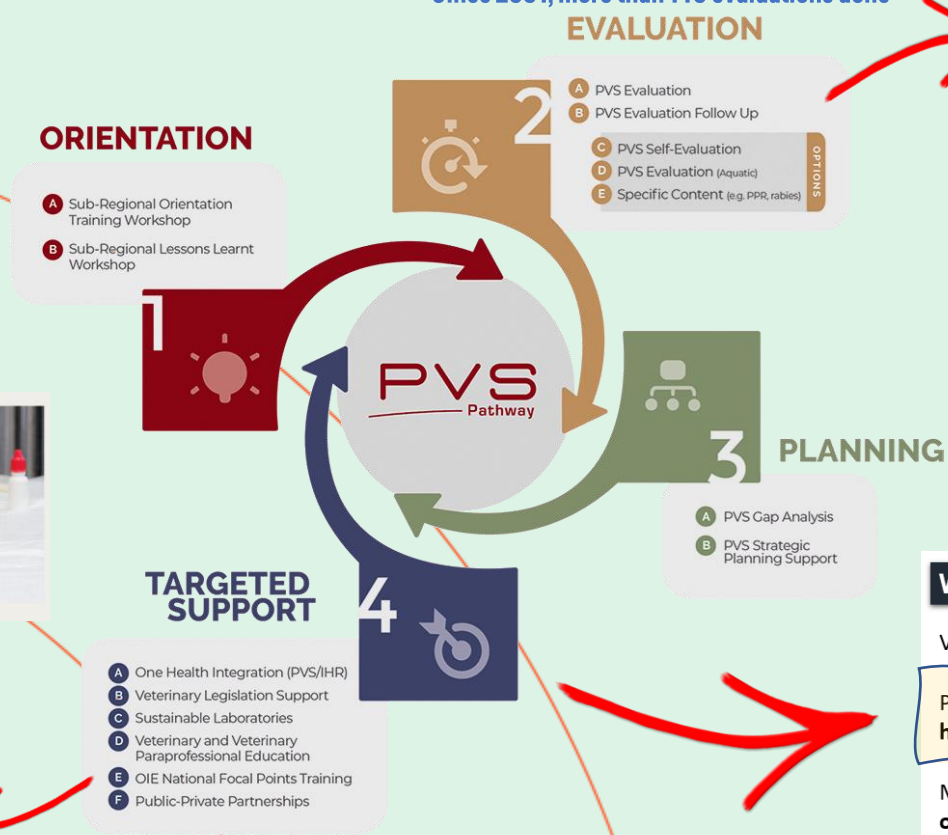




# Performance of Veterinary Services (PVS Pathway)

## A continuous process to sustainably improve national Veterinary Services

Since 2007, more than 140 evaluations done



II-9. ANTIMICROBIAL RESISTANCE (AMR) AND ANTIMICROBIAL USE (AMU)	
DEFINITION	LEVELS OF ADVANCEMENT
The authority and capability of the VS to manage AMR and AMU, and to undertake surveillance and control of the development and spread of AMR pathogens in animal production and animal origin food products, via a One Health approach <sup>16</sup> .	1. The VS cannot regulate or control AMR and AMU, and have not developed or contributed to an AMR action plan covering the veterinary domain.
	2. The VS are contributing or have contributed to a national AMR action plan. The action plan has initiated some activities to collect AMU/AMR data or control AMR e.g. awareness campaigns targeting veterinarians or farmers on the prudent use of antimicrobial agents (antimicrobials). The use of antimicrobials for growth promotion is discouraged.
	3. The VS have defined a national AMR action plan in coordination with the Public Health authorities and other stakeholders, and are implementing some AMU/AMR surveillance and regulations. The use of antimicrobials for growth promotion is prohibited.
	4. The VS are implementing a comprehensive AMR action plan based on risk, including AMR surveillance of the most important pathogens for animal health or food-borne diseases, the monitoring of AMU, and the prudent use of antimicrobials in animals (especially the use of critically important antimicrobials). The use of antimicrobials for growth promotion does not occur.
	5. An effective national AMR action plan covering the veterinary domain is regularly audited, reviewed and updated by the VS with the Public Health authorities and other stakeholders, using the results of AMU/AMR surveillance. The scale and type of antimicrobial usage in animals poses minimal risk of AMR and alternative solutions for the control of diseases in animals are being implemented.

Since 2019

<sup>16</sup> Recommended reading: WHO Global Action Plan (2015) at: <http://www.who.int/antimicrobial-resistance/global-action-plan/en/> and OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials (2016) at: [http://www.oie.int/fileadmin/Home/eng/Media\\_Center/docs/pdf/Portal/AMR/EN\\_OIE-AMRstrategy.pdf](http://www.oie.int/fileadmin/Home/eng/Media_Center/docs/pdf/Portal/AMR/EN_OIE-AMRstrategy.pdf)

### National Focal Points for Veterinary Products Training



- Since 2010, already seven cycles of training, worldwide
- Uninterrupted training through COVID-19 pandemics
- Reshaping programs to
  - ☐ Leverage the momentum and strengthen engagement with FPs
  - ☐ Customize Programs to better fit heterogeneity of needs
  - ☐ Leverage the expanded breadth of pedagogical and technological tools available

### WOAH PVS Veterinary Legislation Support Programme (VLSP)

VLSP = a targeted support of our PVS Pathway

PVS Evaluation reports show that ¾ of evaluated countries cannot regulate or have a limited capacity to regulate VMPs

- Most of PVS VLSP reports identify weaknesses that have or may have an impact on AMR, e.g.:
- Incomplete legal framework for VMPs
  - Competent Authority/ies for VMPs: lack in legislation of clear identification of responsibilities and powers + lack of expertise
  - Inadequate resources to ensure enforcement
  - Withdrawal times and maximum residue limits infrequently addressed
  - Inadequate AMU regulation for veterinarians and VPPs



# Development of a Joint One Health Assessment Tool for AMR-relevant Legislation

## One Health Assessment Tool for AMR-relevant Legislation

### Activities

- Development of a One Health Assessment Tool for AMR-relevant Legislation
  - Expert meeting
- **Piloting of the One Health AMR Legal Assessment Tool (in 3 countries)**
- National and regional workshops (training for trainers/capacity development)
- Validation



### Output

- Improved countries capacities for designing and implementing AMR related policy frameworks, investment plans and programmes

### Outcome

- Increased comprehensiveness and quality of the policy dialogue and practice

- Multi-Partner Trust Fund project
- Pilot currently running in Morocco
- PVS VLSP is part of the project
- Plans to bring UNEP in

## Implementation of the Tool on the National Level

### Objective

- Identification of legal weaknesses in all areas with an impact on AMR
- Identification of options to improve AMR governance and coordination
- Description and prioritization of legal reforms

### Methodology

- National legal consultant
- International mission (three experts from FAO, OIE and WHO)
- National workshop to present results and collect feedback

### Results

- One Health assessment of AMR-relevant legislation, with identification of gaps and weaknesses
- List of priority areas for legal reform
- Proposal for a One Health institutional mechanism for coordination

FAO  
Carmen Bullon  
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David Sherman  
Kelsey Galantich

OMS (WHO)  
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## Training of Focal Points for Veterinary Products and Aquatic Health

- Training of Focal Points of Members takes place every 1-2 years
- Training events held at regional level
- In 2022, a mapping exercise of training needs was conducted with the regions and sub-regions
- Topics covered include:
  - Pharmacovigilance;
  - Substandard & Falsified veterinary products;
  - Progress made, and updates on antiparasitic resistance;
  - Antimicrobial resistance (AMR) and antimicrobial use (AMU)
  - VICH general principles



6th Cycle Regional Training Seminar for OIE Focal Points for Veterinary Products

**How to set up a  
pharmacovigilance  
system for veterinary  
medicinal products**



## WOAH Platform for the training of the Veterinary Services

- Competency-based Training System
- One competency package dedicated to AMR
- 5 eLearning modules available by end of 2023 in 4 languages

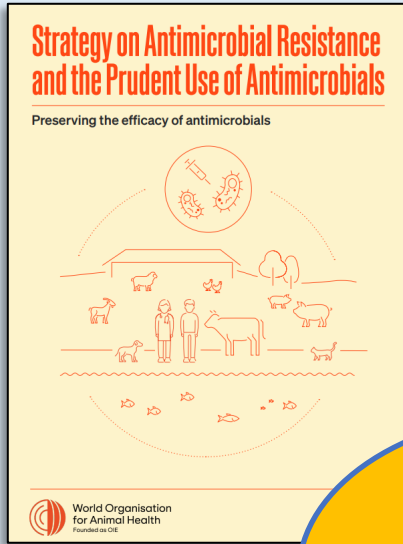
Education levels	Terrestrial animals	Aquatic animals
Day 1 and VPP level e-modules	General introduction to AMR, with WOAH's lens	
	Stewardships on AMR under One Health approach	
Day 2 level e-modules	Stewardships on AMR in terrestrial animals	Stewardships on AMR in aquatic animals
Expert level e-modules	Building a national AMR Action Plan focused on the terrestrial and aquatic animal health sector	



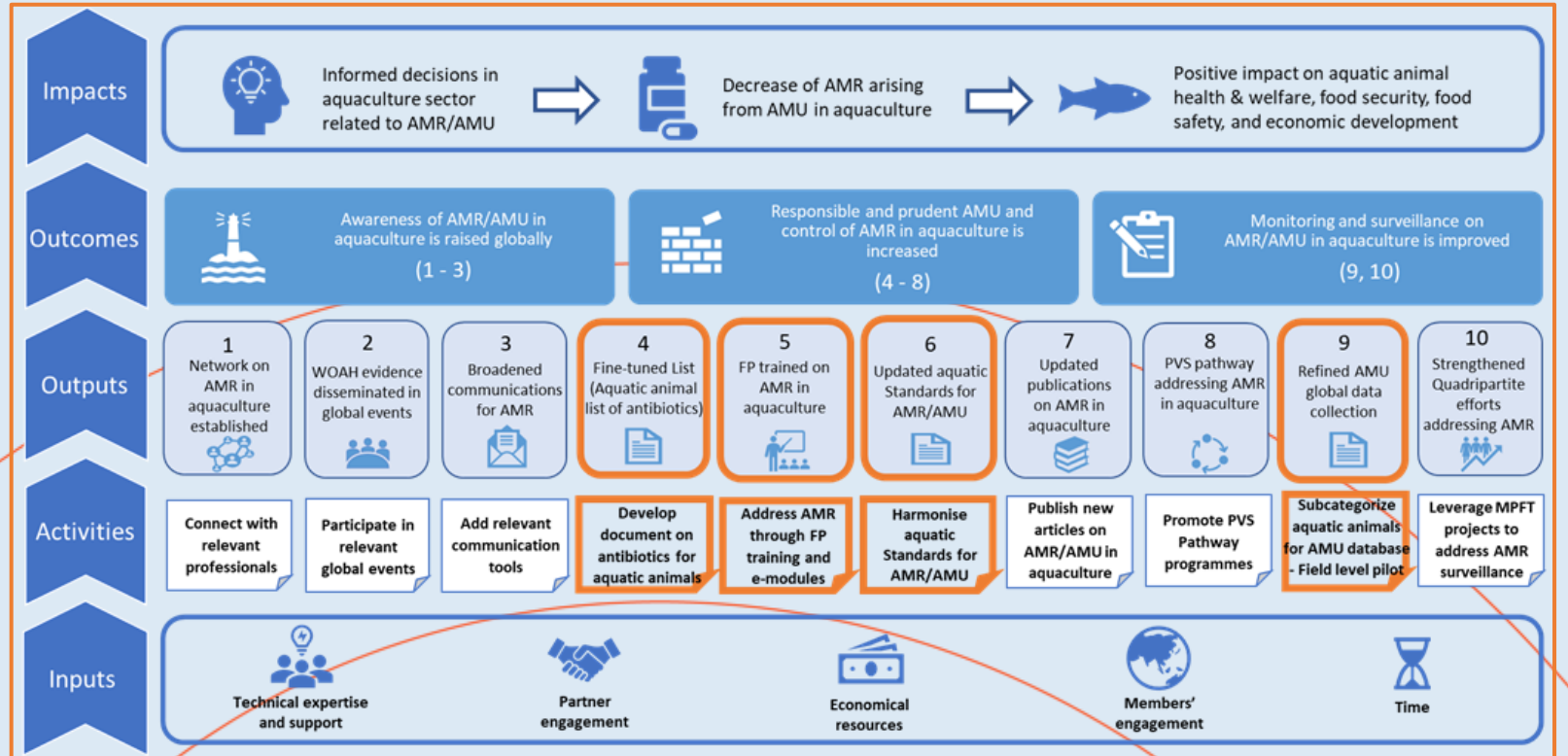




# Workplan AMR in Aquaculture



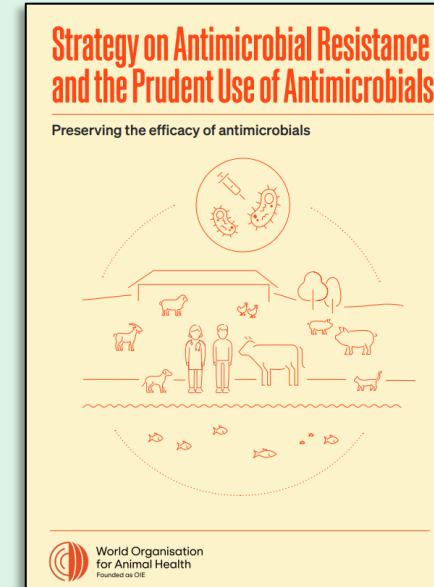
## Workplan AMR in Aquaculture 5 years



### Objective



- The Group was established by the Director General following the adoption of Resolution #14 at the 87<sup>th</sup> OIE General Session in 2019
- The Group assists in the implementation of
  - WOAHA Strategy on AMR and the Prudent Use of Antimicrobials
  - Recommendations of the 2<sup>nd</sup> OIE Global Conference on AMR and Prudent Use of Antimicrobials
- Biannual meetings
  - FAO and WHO attend as observers



[2<sup>nd</sup> OIE Conference on AMR](#)





# Thank you!

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Special thanks to those that contribute to WOAHA's work:

- WOAHA Members
- Collaborating Centres, partner organisations
- Ad-hoc groups
- Working Group on AMR
- Our colleagues in the Regions
- Quadripartite organisations

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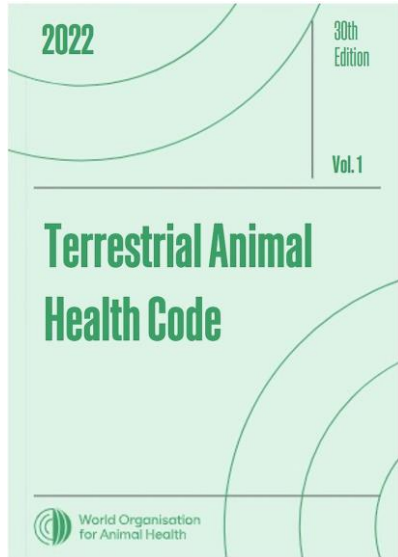
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## WOAH international standards, the basis for...



Ensuring transparency and enhancing knowledge of the worldwide animal health situation.



Development of national policies and national sanitary systems



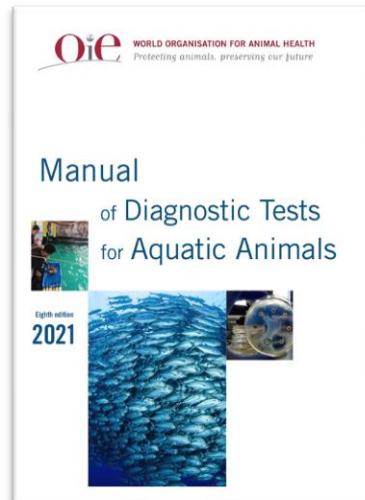
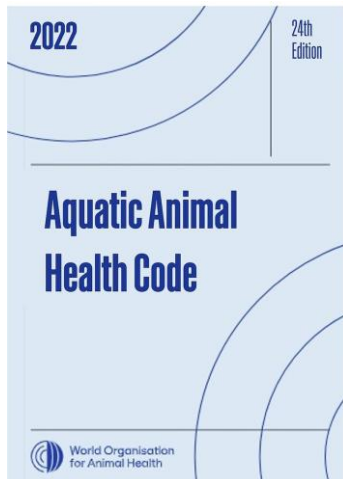
Assessment of potential trading partners and their health situation



Drafting of import sanitary measures, according to the commodity and their origin



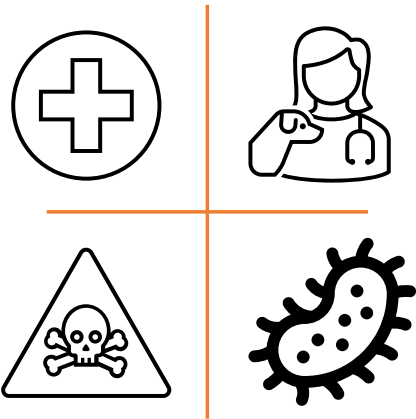
Veterinary certification and export/import procedures



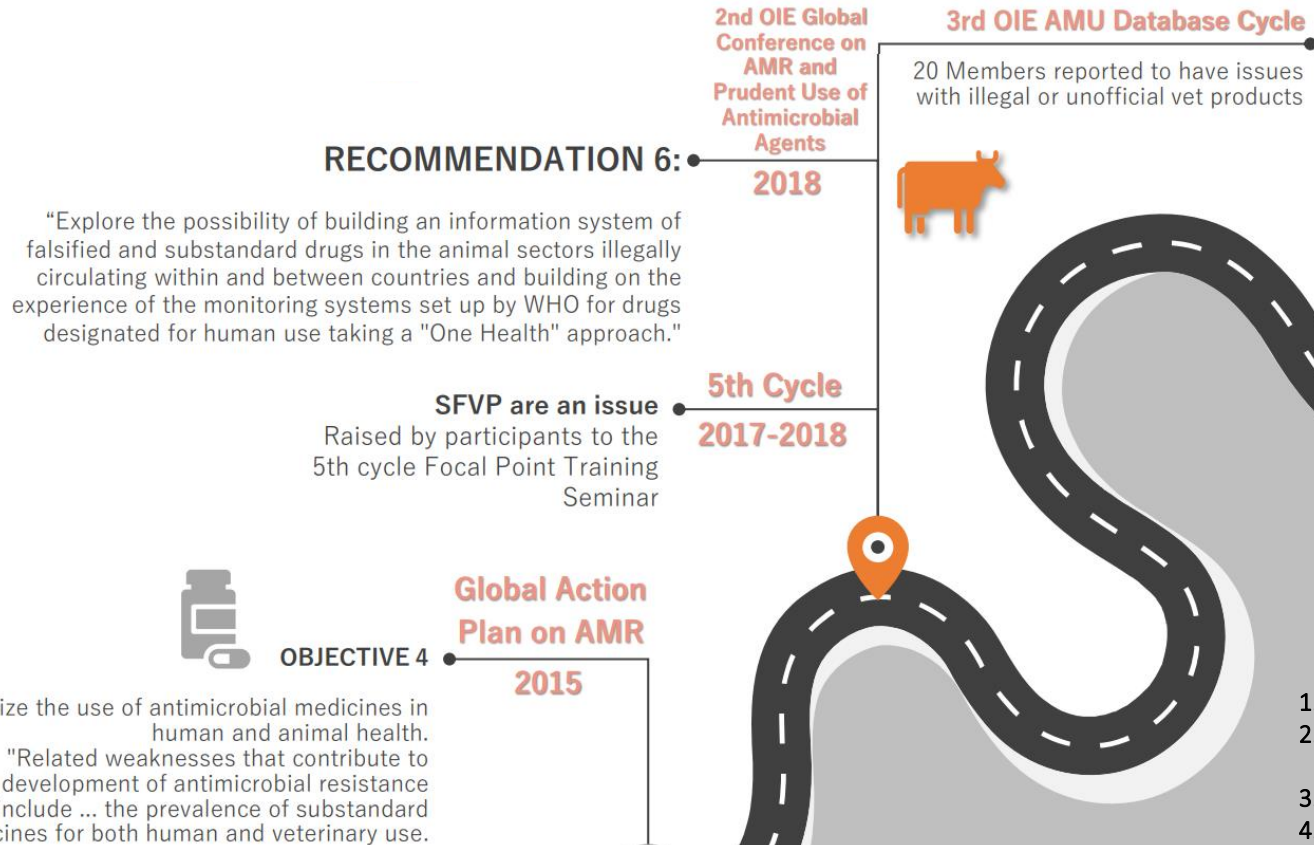
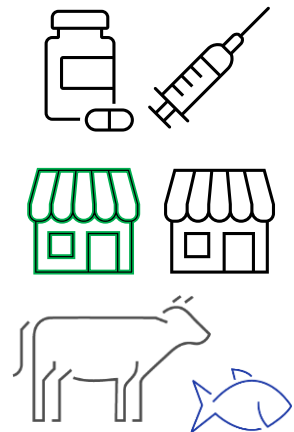




## Consequences of using SFVP



### Impact



### What happened since?

1. SFVP Situation Assessment
2. Evaluation of WHO System & WOA's feasibility
3. Engagement with WOAH Members
4. Project Proposal & Pilot