#### **Dr Elisabeth Erlacher-Vindel**

Head, Antimicrobial Resistance and Veterinary Products Department

# How can the animal sector contribute to addressing AMR ?

Advancing the One Health response to Antimicrobial Resistance (AMR) Webinar, 11.01.2021

WORLD ORGANISATION FOR ANIMAL HEALTH Protecting animals, preserving our future

# World Organisation for Animal Health (OIE)

- An Intergovernmental Organisation
- Formed in 1924 as the Office International des Epizooties (OIE)
- Mandate to Improve Animal Health, Welfare and Veterinary Public Health
- Sets international standards recognized by the WTO

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# The OIE Strategy on AMR and the Prudent Use of Antimicrobials

 The OIE Strategy supports the objectives established in the Global Action Plan on antimicrobial resistance and reflects the mandate of the OIE, through four main objectives:



http://www.oie.int/fileadmin/Home/eng/Media\_Center/docs/pdf/PortailAMR/EN\_OIE-AMRstrategy.pdf

# **OIE Standards and guidelines related to AMR**

### **Terrestrial Animal Health Code**



Volume

Volume II

recommendations for controlling antimicrobial resistance • Ch.6.8. Harmonisation of

Ch.6.7. Introduction to the

- national AMR surveillance and monitoring programmes (updated in May 2018)
- Ch.6.9<u>. Monitoring of the</u> <u>quantities and usage patterns</u> of antimicrobial agents used in food-producing animals (Agreement on definitions)
- 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. <u>Monitoring of the</u> <u>quantities and usage patterns</u> 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

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2020

2020

### **OIE Standards on Responsible and prudent use**

- Provides guidance for the responsible and prudent use of <u>antimicrobial agents</u> in veterinary medicine, with the aim of protecting both animal and human health as well as the environment.
- Covers all stages from authorisation, production, control and distribution to use
- Defines the respective responsibilities of the <u>Competent Authority</u> and stakeholders
- (veterinary pharmaceutical industry, <u>veterinarians</u>, animal <u>feed</u> manufacturers, distributors and food animal producers)



Terrestrial Code: Chapter 6.10: https://www.oie.int/index.php?id= 169&L=0&htmfile=chapitre\_antibi o\_use.htm



### **OIE List of Antimicrobial Agents of Veterinary Importance:**

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#### Criteria used for categorisation

List of antimicrobial agents

#### **OIE LIST OF ANTIMICROBIAL AGENTS OF VETERINARY IMPORTANCE** (July 2019)

The OIE<sup>1</sup> International Committee unanimously adopted the List of Antimicrobial Agents of Veterinary Importance at its 75th General Session in May 2007 (Resolution No. XXVIII).

#### Background

Antimicrobial agents are essential drugs for human and animal health and welfare. Antimicrobial resistance is a global public and animal health concern that is influenced by both human and non-human antimicrobial usage. The human, animal and plant sectors have a shared responsibility to prevent or minimise antimicrobial resistance selection pressures on both human and non-human pathogens.

The FAO2/OIE/WHO3 Expert Workshop on Non-Human Antimicrobial Usage and Antimicrobial Resistance held in Geneva, Switzerland, in December 2003 (Scientific Assessment) and in Oslo, Norway, in March 2004 (Management Options) recommended that the OIE should develop a list of critically important antimicrobial agents in veterinary medicine and that WHO should also develop such a list of critically important antimicrobial agents in human medicine.

Conclusion No. 5 of the Oslo Workshop is as follows:

5. The concept of "critically important" classes of antimicrobials for humans should be pursued by WHO. The Workshop concluded that antimicrobials that are critically important in veterinary medicine should be identified, to complement the identification of such antimicrobials used in human medicine. Criteria for identification of these antimicrobials of critical importance in animals should be established and listed by OIE. The overlap of critical lists for human and veterinary medicine can provide further information, allowing an appropriate balance to be struck between animal health needs and public health considerations

Responding to this recommendation, the OIE decided to address this task through its existing ad hoc Group on antimicrobial resistance. The terms of reference, aim of the list and methodology were discussed by the ad hoc Group since November 2004 and were subsequently endorsed by the Biological Standards Commission in its January 2005 meeting and adopted by the International Committee in May 2005. Thus, the work was officially undertaken by the OIE.

The OIE List of Antimicrobial Agents of Veterinary Importance:

- Addresses antimicrobial agents authorised for use in food-producing animals
- Does not include antimicrobial classes/sub classes only used in human medicine
- Does not include antimicrobial agents only used as growth-promoters
- · Focuses currently on antibacterials and other important antimicrobials agents used in veterinary medicine

**OIE: World Organisation for Animal Health** 

FAO: Food and Agriculture Organization of the United Nations

WHO: World Health Organization

OIE • 12, rue de Prony • 75017 Paris • France Tel.: 33 (0)1 44 15 18 88 • Fax: 33 (0)1 42 67 09 87 • www.ole.int • ole@ole.int

#### July 2019

#### 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 promotors.

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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 promotors.

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

LACIA: Materiana Collegit: Important A.

#### Abbreviations:

Animal species in which these antimicrobial agents are used are abbreviated as follows:

APE BOV: CAP: CAM:	bovine caprine camel	LEP: OVI: PIS: SUI:	Rabbit Ovine Fish Swine	VHIA: VIA:	Veterinary Highly Important Antimicrobial Agents Veterinary Important Antimicrobial Agents	
				-4	-	

https://www.oie.int/fileadmin/Home/eng/Our scientific expertise/docs/pdf/AMR/A OIE List antimicrobials July2019.pdf



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#### WHO ARE YOU?

- VETERINARY SERVICES
- POLICY MAKERS
- ▶ VETERINARIANS
- VETERINARY STUDENTS

► FARMERS

- PHARMACEUTICAL INDUSTRY
- WHOLESALERS AND RETAILERS

ANIMAL FEED MANUFACTURERS



WE NEED YOU to follow the "Five Only" rules to handle antimicrobials with care



# WE ALL HAVE A ROLE TO PLAY TO HANDLE ANTIMICROBIALS WITH CARE

Misuse and overuse of antimicrobials increase resistance risk, endangering both animal and human health and welfare.

https://oie-antimicrobial.com/

CONTACT US

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**ENGLISH** 

### OIE Standards: Monitoring of the quantities and usage patterns



https://www.oie.int/en/scientific-expertise/veterinary-products/antimicrobials/



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# Interaction with the Countries

#### Administrative validation



Delegate in copy

Right form of the questionnaire

Administrative validation

Submitting the questionnaire Technical validation



Technical validation

All fields answered



Coherence on the answers

Comparing country data over time Helping on the calculations of kg

of active ingredient

644 emails, 27 phone calls and 10 videoconferences exchanged with the Countries (mainly Focal Points for Veterinary Products)

- Africa: 194
- Americas: 190
- Asia, Far East and Oceania: 131
- Europe: 152
- Middle East: 14

Around 80% of the countries changed their original report after the clarifications:

- Data sources
- Quantities
- Antimicrobial growth promoters
- Reporting Option



### Future Development (AMU Database System)

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# Country Data Ownership

- Specific trend analysis
- Raised awareness
- Increased transparency



- Automatic calculations
- Data quality check
- Detailed data analysis



#### **Refinement of Information**

- Species level data
- Farm level data

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- Connection with other data sources:
  - ✓ OIE-WAHIS (World Animal Health Information System)
  - ✓ TISSA (Tripartite Integrated System for Surveillance on AMR and Antimicrobial Use)
  - ✓ PVS (Performance of Veterinary Services)

The OIE PVS Tool ( 2019 Edition)





# = A Critical Competency dedicated to AMR

### **IHR/PVS** National Bridging Workshops to have a greater focus on AMR





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### **Antimicrobial Resistance Multi-Partner Trust Fund**



#### Antimicrobial Resistance Multi-Partner Trust Fund

Combatting the rising global threat of AMR through a One Health Approach

### **Tripartite Project AMR MPTF**

Development and Piloting of a Tripartite One Health Assessment Tool **for AMR-relevant** Legislation

Key activities:

- 1. Development of a Tripartite One Health Assessment Tool for AMR relevant Legislation
- 2. Online experts meeting to discuss and finalize the Tool
- 3. Piloting the Tool at the national level
- 4. Multi-country workshops (one virtual, one field)
- 5. Finalization and validation 6. Publication and outreach

# Multi-Partner Projects appproved by the Steering Committee



The Steering Committee approved the following four global proposals in October 2020:

- (1) Legal frameworks,
- (2) Environment,
- (3) Monitoring & Evaluation,

(4) TISSA.

# **Tripartite publication**



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the use	of antimicrobials	
4.1 Im	plementation at the national level	
4.2 Tri	ipartite monitoring of standards implementation	
4.3 Mc	onitoring implementation of standards for human use	
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Annex I:	List of international instruments on the use of antimicrobials across	
	the human sector	
Annex II:	List of international instruments on the use of antimicrobials across	
	the animal sector	
Annex III:	List of international instruments on the use of antimicrobials across	
	the plant sector	
Annex IV:	Questions in TrACSS 4.0 (2019–2020) regarding standards on the use	
	of antimicrobials .	

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### Tripartite AMR Country Self-Assessment Survey (TrACSS)

WHO, FAO and OIE developed a monitoring questionnaire to review / summarise country progress, to contribute to global level reporting. The country responses also serve to guide follow-up actions and identify areas where support maybe required.

Amrcountryprogress.org

Launched in 2017: 4 rounds of TrACSS data available with 5<sup>th</sup> round to be launched in November.

Global Database for Antimicrobial Resistance Country Self Assessment					Fund and Agriculture Organization of the United Nations	Oie WORLD ORGANISATION FOR ANIMAL HEALTH	World Health Organization
Choose your question and filters:	Map View	Visualization View	Table View	Response Overview	Download Responses		Print
2018-19							
Question       4.1 Multi-sector and One Health       WHO     FAO       OIE     Income	<b>~</b>						
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Country All			7	1			
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# Tripartite TrACCS report 2019-20: Highlights

- NAPS: 88% (120/136 reporting countries) have a NAP developed and being implemented.
- **Multisectoral Coordination:** 93% (126/136 reporting countries) have representatives of human health and animal health in working groups.
- Surveillance for resistance: gradual increase countries collecting data on AMR.
  - 74% countries have national AMR surveillance activities for human health;
  - 100 countries have enrolled in the Global AMR and AMU surveillance System (GLASS) established by WHO.
  - 68.9% collect at least some AMR data on animals, and 41.7% of countries have systematic data collection on resistance in animals.
  - 69% of the countries collect at least some AMR data from the food sector (animal, plant), and 40.4% of countries have systematic data collection in the food production sector.

# Tripartite TrACCS report 2019-20: Highlights

- Surveillance of consumption / use: gradual increase in countries with a national monitoring system for antimicrobial sale and use in the human and animal health sectors, and antimicrobial pesticide use in plant production.
  - 83 countries for animal health (153 countries participating in OIE 5<sup>th</sup> round of AMU data collection)
  - 76 countries for human health
  - 49 countries had a monitoring system for collecting and reporting the total quantity of pesticides, including antimicrobial pesticides.
- Challenge Multisectoral coordination and collaboration:
  - Better communication and processes to strengthen collaboration across and within sectors
  - Validation discrepancies when triangulating Tripartite reporting mechanisms indicate gaps in communication and coordination efforts between sectors.

# Thank you for your attention





12, rue de Prony, 75017 Paris, France www.oie.int media@oie.int - oie@oie.int

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