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OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials in Animals Part I

2nd OIE Global Conference on Antimicrobial Resistance
and Prudent Use of Antimicrobial Agents in Animals
Marrakesh, Morocco, 29 - 31 October 2018



Agenda

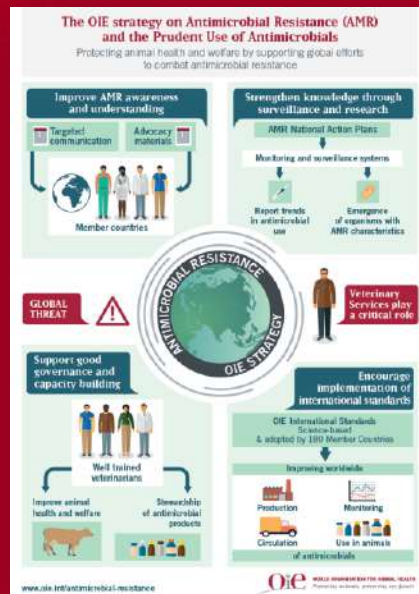
Part I

- Introduction
- OIE Strategy on AMR and the Prudent Use of Antimicrobials
- OIE International Standards and Guidelines related to antimicrobial resistance

Part II

- OIE tools and activities to strengthen the implementation of OIE standards relative to AMR

Introduction



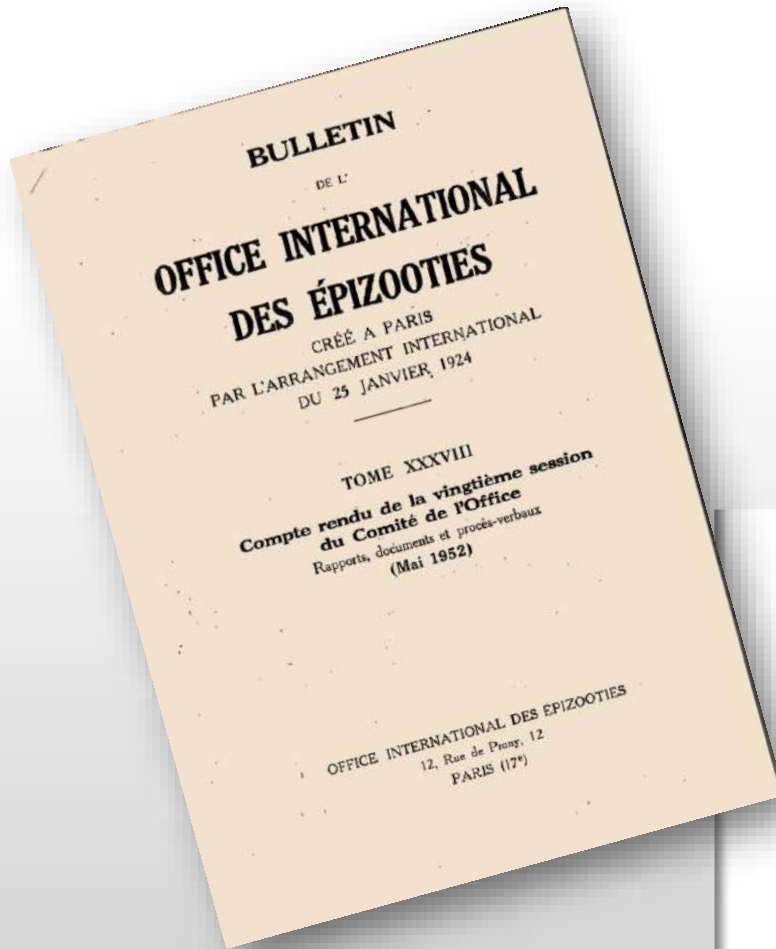
2nd OIE Global Conference on Antimicrobial Resistance and the Prudent use of Antimicrobials in Animals: *Putting Standards into Practice*



29-31 October 2018
Marrakesh, Morocco

- *Behaviour Change and Communications*
- *Responsible and Prudent Use*
- *Surveillance and Monitoring*
- *Private Sector Engagement*
- *Access to High Quality Antimicrobials*
- *Research and Future Developments*
- *International Partnerships*

Antimicrobial resistance was discussed in the 20th OIE Session in 1952 and makes reference to an earlier report of 1948



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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.

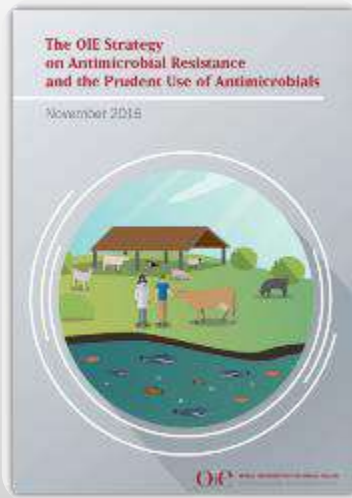
L'utilisation des antibiotiques contre des germes insensibles à leur action ou particulièrement résistants, l'emploi de doses trop faibles ou pendant un temps trop bref entraînent des dépenses inutiles, peuvent faire apparaître des germes résistants, retardent d'autant la mise en œuvre d'un traitement 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.



OIE Strategy on AMR and the Prudent Use of Antimicrobials

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:



Improve awareness and understanding



Strengthen knowledge through surveillance and research



Support good governance and capacity building



Encourage implementation of international standards

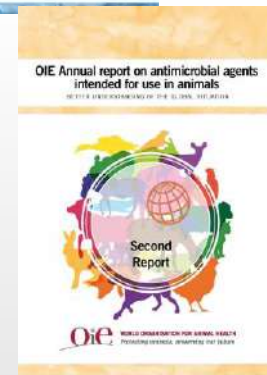
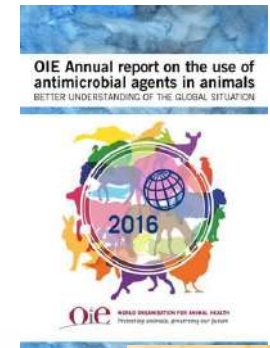
1 Improve awareness and understanding

- 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 **OIE guidance, education and scientific reference materials**
- **Collaborate with WHO and FAO**



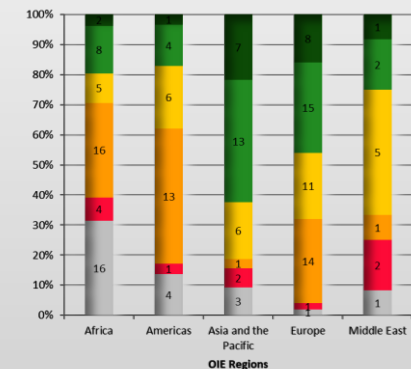
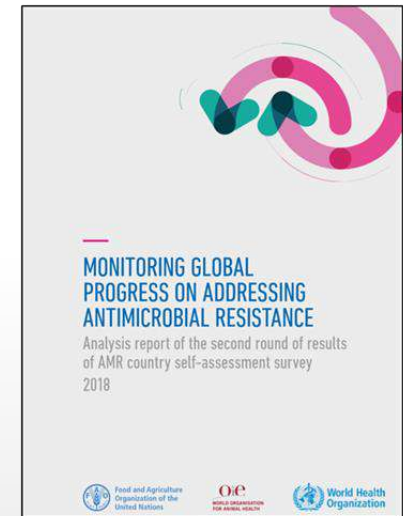
2 Strengthen knowledge through surveillance & research

- 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

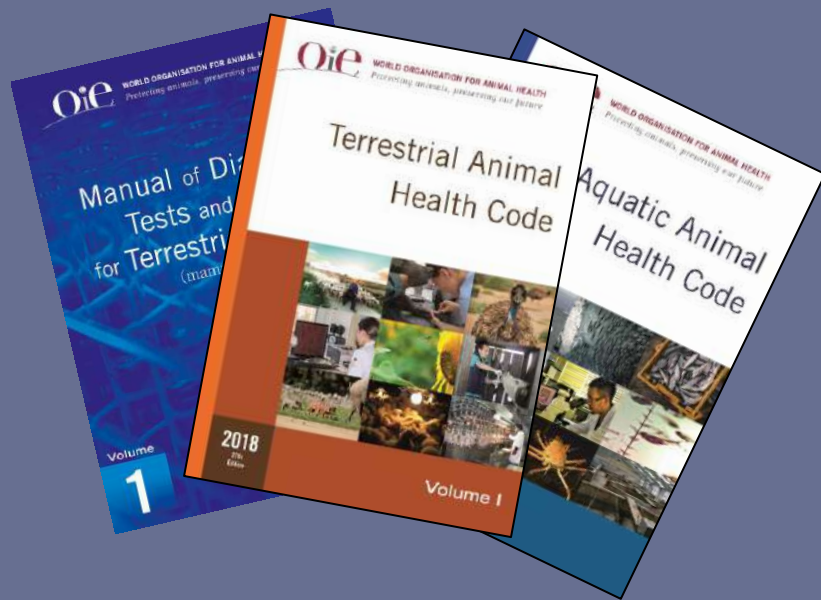
- assist in implementing **National Action Plans**, promoting a “One Health” approach
- provide **tools and guidance**
- ensure **Veterinary Services capacity** through PVS Pathway
- develop and modernise **legislation**
- provide training of **Focal Points**
- Ensure that well-trained **veterinarians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



4 Encourage implementation of OIE standards

- support Member Countries in their efforts to **implement OIE standards**
- encourage adoption of recommendations in the **OIE 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** to develop an aligned framework of standards and guidelines

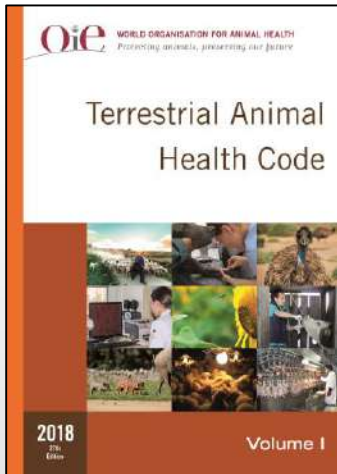




OIE standards and guidelines related to antimicrobial resistance (AMR)

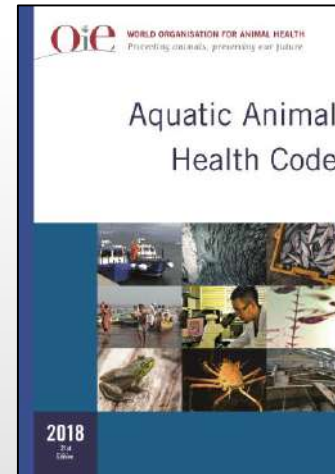
OIE Standards and guideline related to antimicrobial resistance

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)
- 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

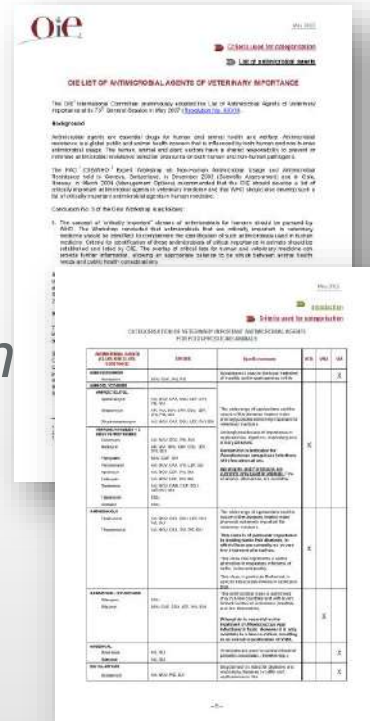
Terrestrial Code Chapter 6.9. : Definitions adopted in May 2018

- **‘Veterinary medical use of antimicrobial agents’**: means the administration of an [antimicrobial agent](#) to an individual or a group of [animals](#) to treat, control or prevent infectious disease:
- **‘to treat’**: means to administer an [antimicrobial agent](#) to an individual or a group of [animals](#) showing clinical signs of an infectious disease;
- **‘to control’**: means to administer an [antimicrobial agent](#) to a group of [animals](#) containing sick [animals](#) and healthy [animals](#) (presumed to be infected), to minimise or resolve clinical signs and to prevent further spread of the disease;
- **‘to prevent’**: means to administer an [antimicrobial agent](#) to an individual or a group of [animals](#) at risk of acquiring a specific [infection](#) or in a specific situation where infectious disease is likely to occur if the drug is not administered.

OIE List of Antimicrobial Agents of Veterinary Importance: additional recommendations adopted in May 2018

Recommendations

- Any use of antimicrobial agents in animals should be in accordance with OIE standards on responsible and prudent use. This does not include the use of antimicrobial agents for growth promotion in the absence of risk analysis.
- 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



http://www.oie.int/fileadmin/Home/eng/Our_scientific_expertise/docs/pdf/AMR/A_OIE_List_antimicrobials_May2018.pdf

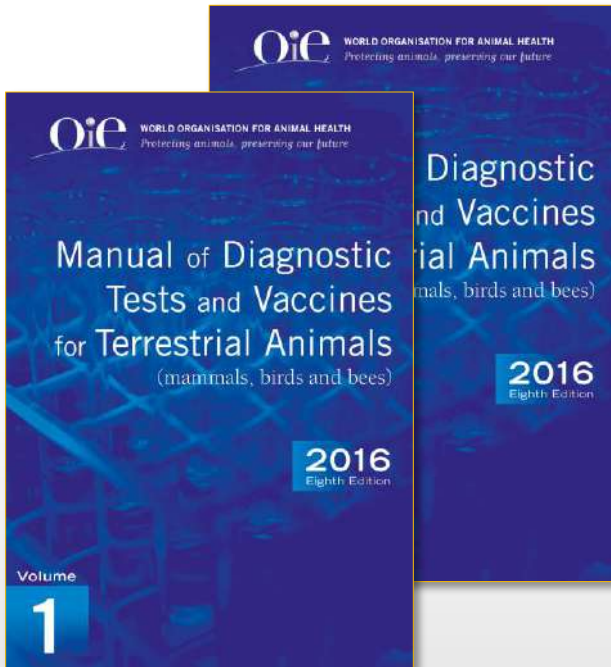
OIE List of Antimicrobial Agents of Veterinary Importance (May 2018)

Among the Veterinary **Critically Important** Antimicrobial Agents, **some are also of critical importance for human health** (third and fourth generation ***Cephalosporins***, and ***Fluoroquinolones***): ***Colistin*** has been moved in 2016 to the WHO category of Highest Priority Critically Important Antimicrobials.

Therefore these two classes and Colistin should

- **Not to be used** as preventive treatment in feed or water or in absence of clinical signs
- **Not to be used** as first line, unless justified and bacteriological test
- **Extra label/off label limited** and reserved for instances no alternatives are available

OIE Terrestrial Manual – Part 3 related to veterinary medicinal products



Specific Recommendations

- 3.1. Laboratory methodologies for bacterial antimicrobial susceptibility testing

Currently under update

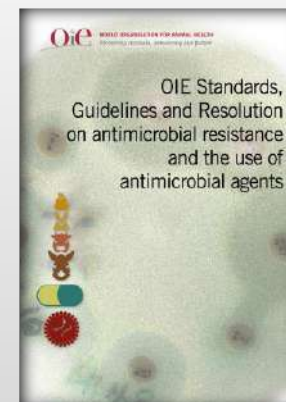
Latest version available online

<http://www.oie.int/en/international-standard-setting/terrestrial-manual/access-online/>

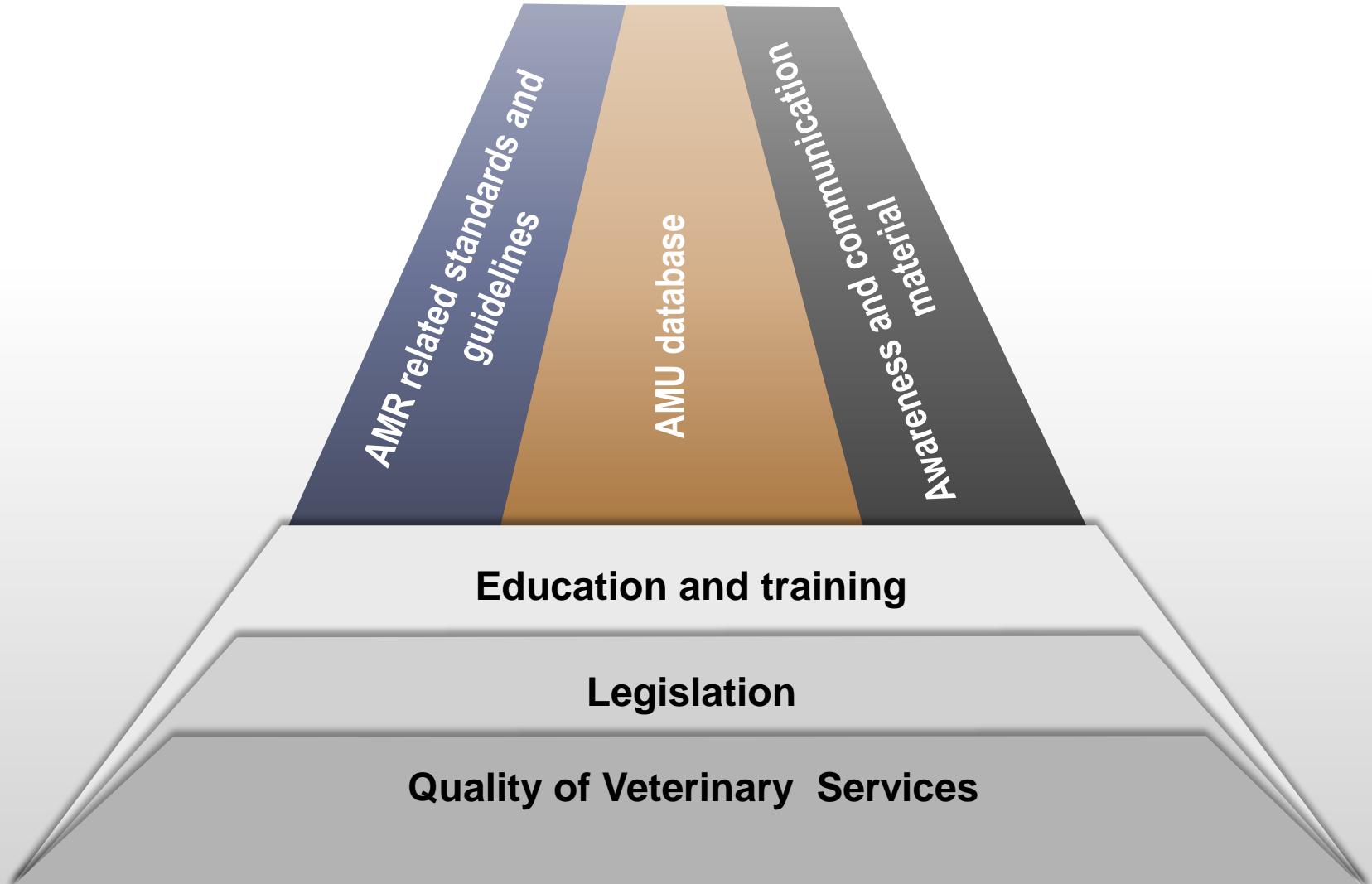
Terrestrial Code Chapter 6.10.

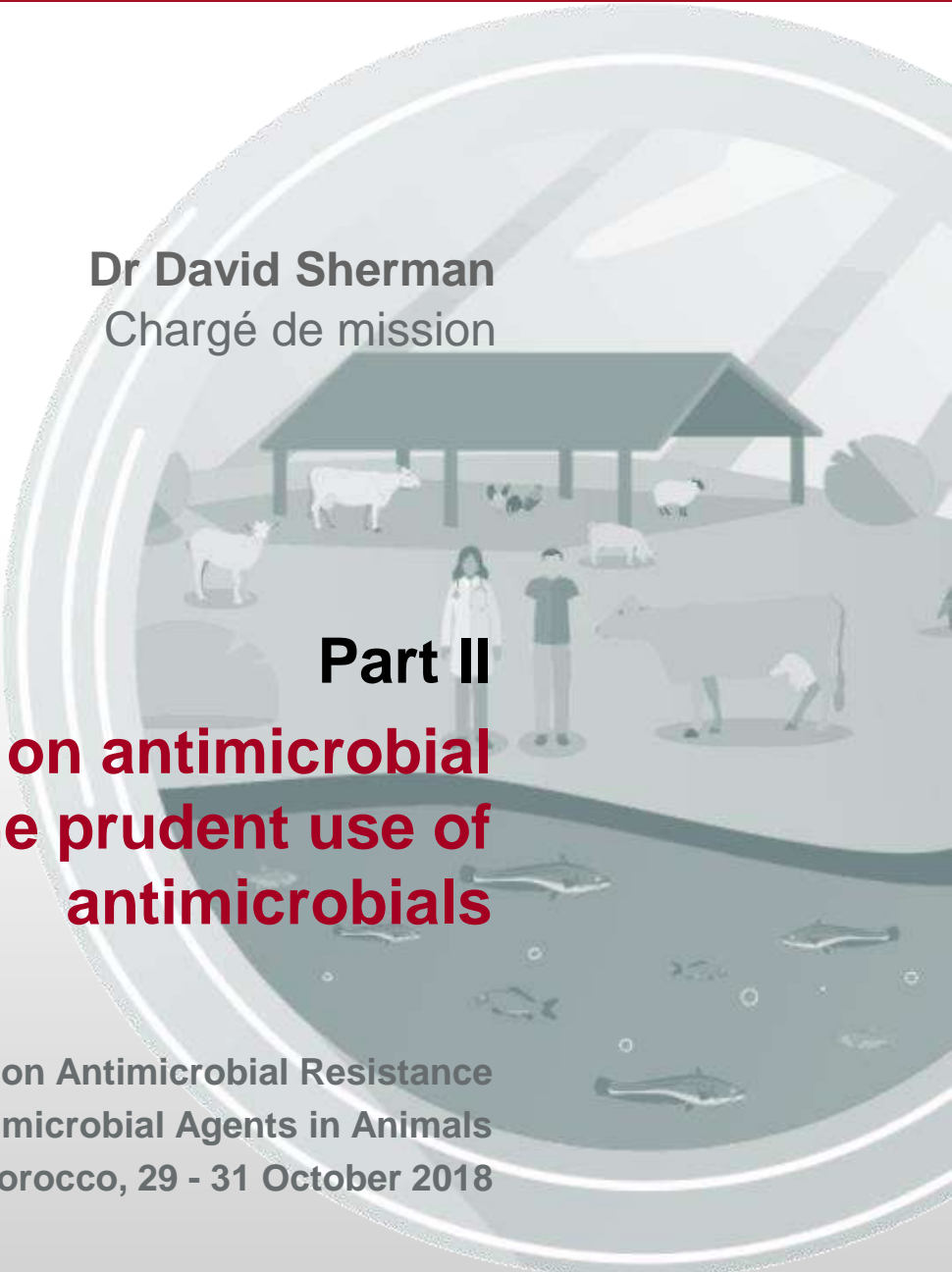
Responsible and prudent use of antimicrobial agents in veterinary medicine

- Determined by the quality of the antimicrobial and by the distribution, prescription and administration of veterinary medicinal products containing antimicrobial agents
- **Recommendations for each of the parties involved:**
 - regulatory authority
 - veterinary pharmaceutical industry
 - wholesale and retail distributors
 - veterinarians
 - food-animal producers
 - animal feed manufacturers



OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials





Dr David Sherman
Chargé de mission

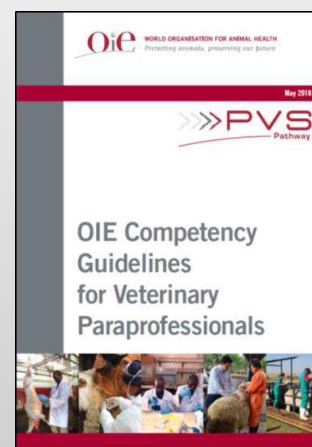
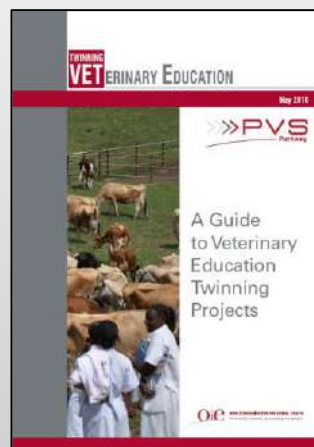
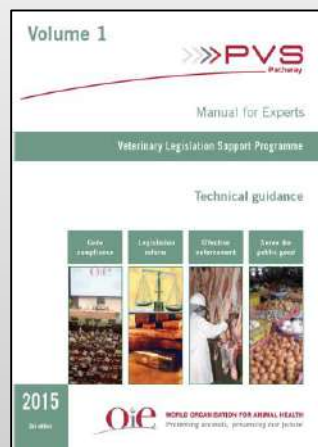
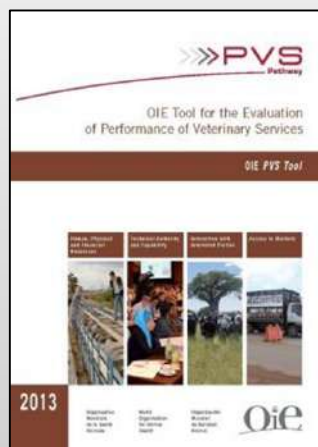
Part II

The OIE strategy on antimicrobial resistance and the prudent use of antimicrobials

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OIE tools and activities to strengthen the implementation of OIE standards relative to AMR

- Performance of Veterinary Services Pathway (PVS)
- Veterinary Legislation Support Programme (VLSP)
- Veterinary Education Establishment Twinnings (VEE)
- Ad hoc group on veterinary paraprofessionals (VPP)
- IHR – PVS National Bridging Workshops (NBW)



OIE PVS Pathway

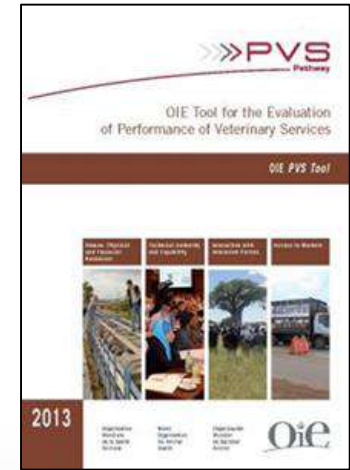
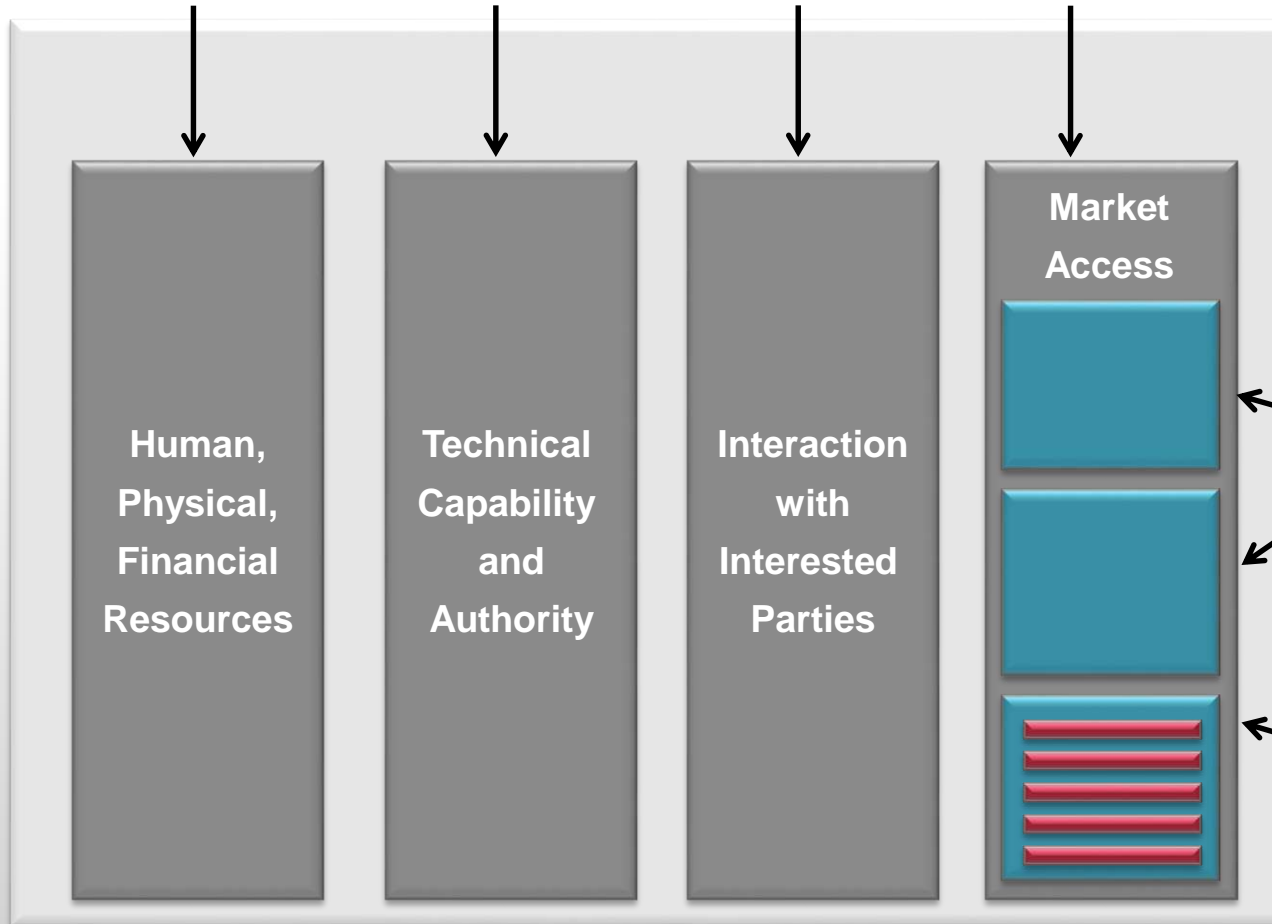
The OIE PVS Pathway is a continuous process to sustainably improve national Veterinary Services



OIE PVS Tool



4 fundamental components



Critical competencies (6 - 18)
47 in total

5 levels of advancement

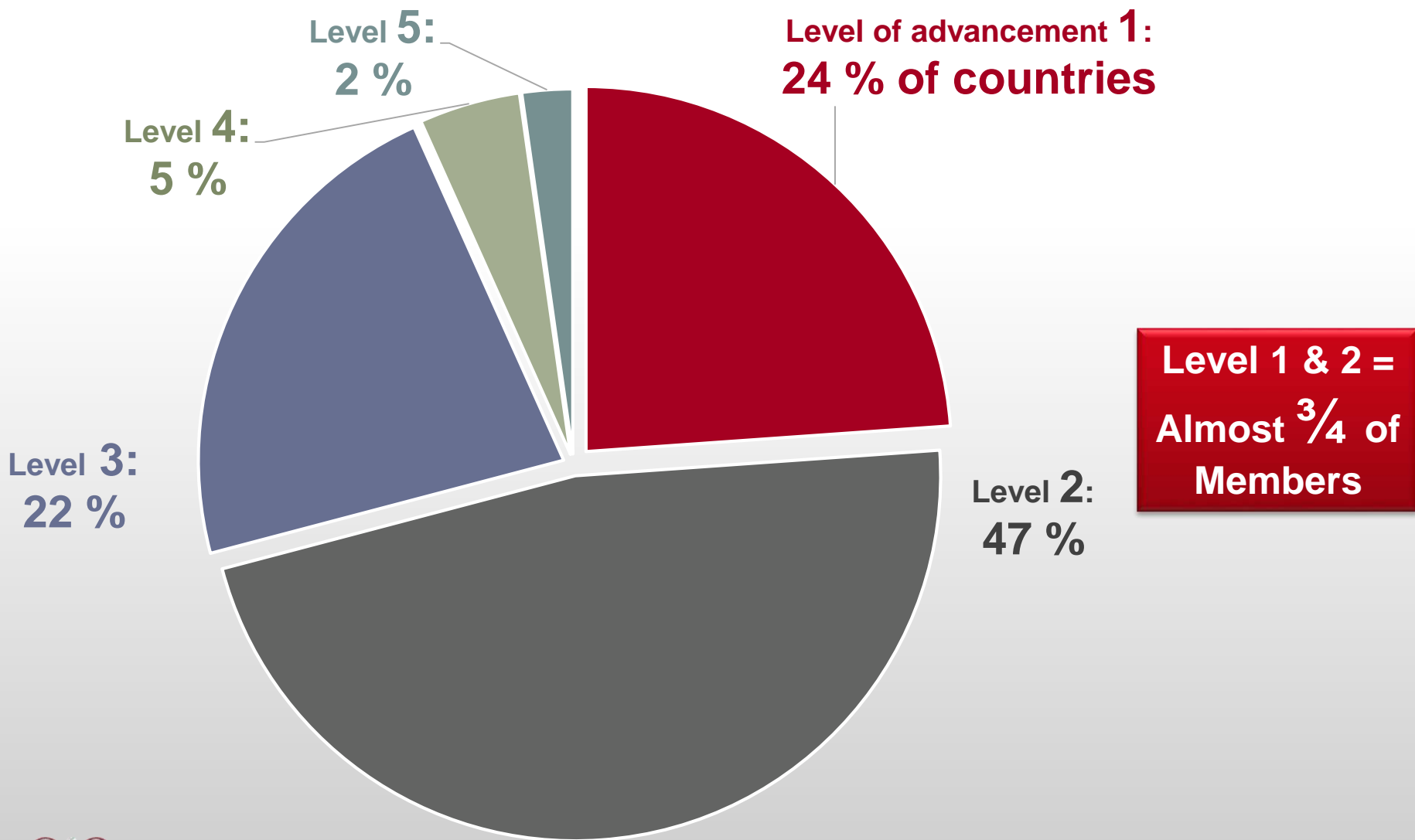
Relevant Critical Competency in PVS Tool - 2013

II-9 Veterinary medicines and biologicals	Levels of advancement
<p>The authority and capability of the VS to regulate veterinary medicines and veterinary biologicals, in order to ensure their responsible and prudent use, i.e. the marketing authorisation, registration, import, manufacture, quality control, export, labelling, advertising, distribution, sale (includes dispensing) and use (includes prescribing) of these products.</p>	<p>1. The VS cannot regulate veterinary medicines and veterinary biologicals.</p>
	<p>2. The VS have some capability to exercise regulatory and administrative control over veterinary medicines and veterinary biologicals in order to ensure their responsible and prudent use.</p>
	<p>3. The VS exercise regulatory and administrative control for most aspects related to the control over veterinary medicines and veterinary biologicals in order to ensure their responsible and prudent use.</p>
	<p>4. The VS exercise comprehensive and effective regulatory and administrative control of veterinary medicines and veterinary biologicals.</p>
	<p>5. The control systems are regularly audited, tested and updated when necessary.</p>

Global Summary of Assessments (134 PVS Evaluations 2006-2018)

II-9 Veterinary medicines and biologicals The authority and capability of the VS to regulate veterinary medicines and veterinary biologicals, in order to ensure their responsible and prudent use, i.e. the marketing authorisation, registration, import, manufacture, quality control, export, labelling, advertising, distribution, sale (includes dispensing) and use (includes prescribing) of these products.	Levels of advancement	Country levels (total 134)
	1. The VS cannot regulate veterinary medicines and veterinary biologicals.	32
	2. The VS have some capability to exercise regulatory and administrative control over veterinary medicines and veterinary biologicals in order to ensure their responsible and prudent use.	63
	3. The VS exercise regulatory and administrative control for most aspects related to the control over veterinary medicines and veterinary biologicals in order to ensure their responsible and prudent use.	30
	4. The VS exercise comprehensive and effective regulatory and administrative control of veterinary medicines and veterinary biologicals.	6
	5. The control systems are regularly audited, tested and updated when necessary.	3

PVS Evaluations 2006-2018: Assessment of CC II-9 “VMPs” in 134 Members



New AMR Critical Competency in PVS Tool - 2018

II.9. Antimicrobial Resistance (AMR) and Antimicrobial Use (AMU)	Levels of advancement	
<p>The authority and capability of the VS to manage AMU and AMR, 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.</p>	1.	<p>The VS cannot regulate or control AMR and AMU, and have not developed or contributed to an AMR action plan covering the veterinary domain.</p>
	2.	<p>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 antimicrobials. The use of antimicrobials for growth promotion is discouraged.</p>
	3.	<p>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.</p>
	4.	<p>The VS are implementing a comprehensive AMR action plan based on risk, including AMR surveillance on 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.</p>
	5.	<p>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 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.</p>

Veterinary Legislation Support Programme (VLSP)

- Early PVS Evaluation missions indicated a lack of capacity in drafting and enforcing legislation (CC IV-1 and CC IV-2)
- Guidelines on veterinary legislation developed and posted on the OIE website in 2008
- Standards on veterinary legislation developed and adopted as Chapter 3.4 of the OIE Terrestrial Code in 2012
- VLSP veterinary legislation identification missions conducted to identify gaps in country legislation relative to Chapter 3.4
- 61 missions completed to date – all assess VMP legislation
- 23 specifically address AMR, increasing after 2015

Weaknesses identified related to VMP/AMR

- Incomplete legal framework for regulating VMPs
- Competent Authority (CA) often outside the VS, with a tenuous legal basis for control in place
- Often the Ministry of Health has authority over all medicines for human and animal use BUT lacks veterinary expertise to properly fulfill its mandate on VMPs
- Inadequate enforcement and resources for enforcement
- Inadequate regulation of veterinarians and veterinary paraprofessions relative to the use of antimicrobials
- Withdrawal times and maximum residue limits infrequently addressed in legislation

Veterinary Legislation Support Programme: New initiatives on AMR

- **OIE working with the FAO Development Law Service** on development of the *Guidance Document for National Legal Consultants on legislation relevant to AMR and AMU in the food and agriculture sector*
- **VLSP Identification missions (1st VLSP stage)**
 - With an AMR-specific focus in collaboration with FAO
 - First pilot mission to Philippines planned for early 2019
- **VLSP Agreements (2nd VLSP stage)**
 - Assist countries in drafting new legislation for VMPs and AMR
- **Regional Workshops on Legislation and AMR with FAO**

Veterinary Educational Establishment (VEE) Twinning Programmes

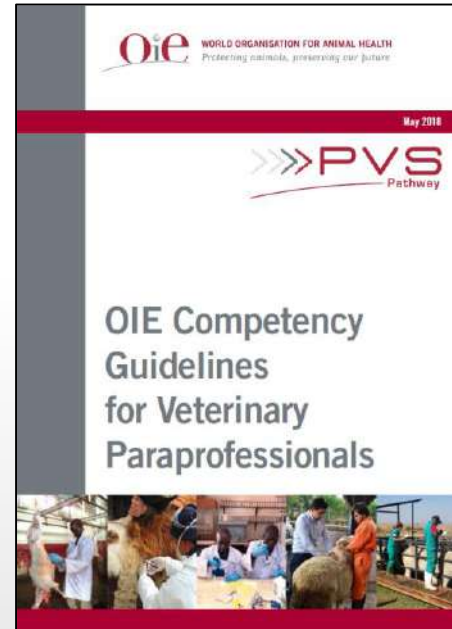
- Ad hoc group on veterinary education formed in 2010
- **Day 1 Competencies for Graduate Veterinarians** developed and published in 2012
- **Model Core Curriculum** to deliver the Day 1 Competencies developed and published in 2013
- **VEE Twinning** established (2013) to review and modernize curriculum in line with the Day 1 Competencies and OIE model curriculum.
- Parent VEE linked with beneficiary VEE
 - Parents – North America, Europe, Australia, New Zealand
 - Beneficiaries – Africa, Asia and Middle East

Veterinary Educational Establishment (VEE) Twinning Programmes

- 10 Twinning projects now completed or active
- 7 directly addressed AMR in one or more ways:
 - Identified gaps in curriculum on AMU and AMR
 - Initiated curricular reform to address gaps
 - Assessed graduates knowledge on AMR
 - Developed continuing education modules on AMR for field veterinarians
 - Embarked on collaborative research on AMR

Veterinary paraprofessional competencies & curricula

- OIE ad hoc group on VPPs established in 2016
- **OIE Competency Guidelines for VPPs** developed and published in 2018
- 3 tracks of VPPs recognized – animal health, veterinary public health & laboratory diagnosis
- 16 Spheres of Activity (SOA) encompassing **47 competencies for VPPs** were identified.
- Curricula for the three tracks to deliver the competencies is currently being finalised by the ad hoc group
- Among these SOA is the **proper use of veterinary medicinal products**, with 4 associated competencies



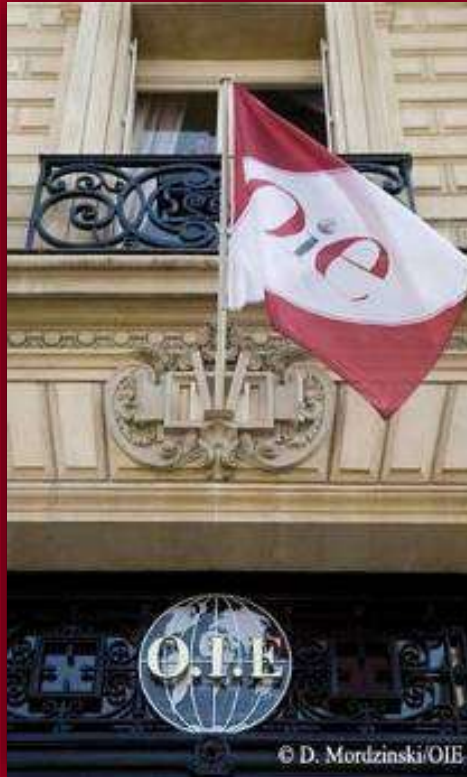
Veterinary Paraprofessionals Competencies & Curricula

- 2 of these competencies include specific reference to AMR
 - **Competency 2:** VPPs know the species of animals for which each drug is approved and its proper route of administration. They are able to reliably calculate the correct dosage of drug, determine period, condition of administration, and properly administer it for the prescribed period and communicate adverse effects, **including the development of antimicrobial resistance**
 - **Competency 4:** They are able to communicate to animal owners how the improper use of drugs can have adverse effects on public health, such as the importance of respecting drug withdrawal times and **how the improper administration of antimicrobials may contribute to the development of antimicrobial resistance.**

IHR – PVS National Bridging Workshops (NBW)

- In support of a One Health approach, OIE is collaborating with WHO and FAO to produce standard tools and guidance and to build capacities of countries to detect and respond to health threats at the human-animal interface.
- The IHR – PVS NBW is a 3 day workshop which brings together 50 – 90 staff from the veterinary and human health services to improve their collaboration at the human-animal interface.
- The intention is to identify strengths and weaknesses in the collaboration between human and animal health services to better address health events related to zoonotic diseases, food safety and AMR.
- 15 NBWs held to date. Going forward there is expected to be a greater focus on management of AMR during NBWs

Thank you for your attention



WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

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