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# Antimicrobial resistance: the challenges for animal health

21st Conference of the

OIE Regional Commission for Africa Antimicrobial resistance: the challenges for animal health Rabat, 17 Feb. 2015



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# Why is antimicrobial resistance (AMR) a global concern?

Antimicrobial agents are essential to ensure human health, animal health and welfare, and food security.

- AMR challenges control of infectious diseases
- AMR increases care costs
- AMR compromises health security and damages economies
- There is a lack of coherent global approaches to prevention and containment



## AMR – shared responsibility

- Antimicrobial resistance (AMR) is not a new phenomenon, but concerns are growing
- Antimicrobial agents are essential to ensure human health, animal health and welfare, and food security
- The human, animal and plant sectors have a shared responsibility to prevent or minimise the development of antimicrobial resistance by both human and non-human pathogens.



### The solution

- A holistic and coordinated management accross the animal, food and human sectors in different ecosystems and geographic locations
- Improved intersectoral collaboration where regulations of medicines are managed by different entities





High Level Technical Meeting, Mexico October 2011

Jointly addressing AMR (HLTM meeting report)



(http://www.oie.int/fileadmin/Home/eng/Media\_Center/docs/pdf/HLTM\_exec\_summary.pdf)



### Needs: actions at national level

- ➡ Governance
- Legislation
- ➡ Good quality information
- Capacity building
- Risk assessment
- Close cooperation







# Tripartite collaboration on antimicrobial resistance

- Technical Focal Points nominated
- Identified common areas for cooperation
- Use common messages



- Mutual participation in relevant ad hoc Groups, meetings and trainings
- Common country & subregional approaches and projects
- Invited at meetings of the WHO Strategic and Technical Advisory Group on Antimicrobial Resistance and to contribute to the AMR Global Action Plan





## OIEs approach to tackle AMR

- Antimicrobial resistance
  - Antimicrobials are a precious necessity for animal health and welfare and public health

Current status:

- No control of antimicrobial agent circulation in more than 100 countries
- Falsified product make up a majority of circulating antimicrobials
- Challenge in many countries: unrestricted access to antimicrobials by farmers without veterinary oversight







### Update on OIE Standards and Guidelines WHO and FAO participate in the ad hoc Group on AMR

Terrestrial and Aquatic Code "Chapters" cover

- Harmonisation of national antimicrobial resistance surveillance programmes
- Monitoring of the quantities and usage patterns
- Responsible and prudent use
- Risk assessment (linked the use of antimicrobial agents in animals)
- OIE List of Antimicrobial Agents of Veterinary Importance

Updated and adopted between 2012 and 2014







### Update on OIE Standards and Guidelines

A similar approach was taken for aquatic animals:

Adopted in May 2011 by OIE Member

Countries for inclusion in the Aquatic Code.

- Chapter 6.2. Introduction to the recommendations for controlling antimicrobial resistance and
- Chapter 6.3. Principles for responsible and prudent use of antimicrobial agents in aquatic animals



http://www.oie.int/en/international-standard-setting/aquatic-code/



### Update on OIE Standards and Guidelines

### Adopted in May 2012

- Chapter 6.4: Monitoring of the quantities and usage patterns of antimicrobial agents used in aquatic animals
- Chapter 6.5: Development and harmonisation of national antimicrobial resistance surveillance and monitoring programmes for aquatic animals





## **OIE Standard and Guidelines**

Part 3: General Guidelines:

3.1. Laboratory methodologies for bacterial antimicrobial susceptibility testing



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



### Update on OIE Standards and Guidelines

 OIE List of Antimicrobial Agents of Veterinary Importance: updated in 2014

to take into account concerns for human health (WHO and FAO participated in this task)

Recommendation

Any use of antimicrobial agents in animals should be in accordance with OIE standards on responsible and prudent use



http://www.oie.int/fileadmin/Home/eng/Our\_scientific\_expertise/docs/pdf/OIE\_list\_antimicrobials.pdf



# OIE List of Antimicrobial Agents of Veterinary Importance

For a number of Antimicrobial Agents there are no or few alternatives for the treatment of diseases in target species.

Among the Veterinary Critically Important Antimicrobial Agents, **some are also of critical importance for human health** (third and fourth generation Cephalosporins, and Fluoroquinolones):

- 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 bacteriolgical test
- Extra label/off label limited and reserved for instances no alternatives are available.







## History of Focal Point Seminars: Second cycle

- Second cycle for OIE National Focal Points for Veterinary Products
  - Africa (Senegal), Septembre 2011
  - Middle East and Africa (Morocco), Dec.2011
  - Africa (Kenya), Mars 2012
  - Asia (Thailand), July 2012
  - Americas (Brazil), October 2012
  - Europe (Austria), November 2012



### Second cycle

- Provided to participants the technical basis for
  - inspection system, monitoring plan, control of the distribution of veterinary products and the tracking and identification of counterfeit products
- Informed about VICH\*
- Strenghtened awarness of Focal Points on the importance of prudent and responsible use of veterinary drugs, in particular with regard to residues and antimicrobial resistance.



# History of Focal Point Seminars Third Cycle

- Algiers (Algeria), 1 3 October 2013
- Maputo, Mozambique, 3 5 December 2013
- Ottawa, Canada, 25 27 August 2014
- Ohrid, Macedonia, 18 20 November 2014
- Tokyo, Japan, 3-5 December 2014



# > Third Cycle

- Veterinary products in general and good governance
- Antimicrobial resistance
- Collection of quantitative data on the use of antimicrobial agents and the establishment of an OIE database
- Anti-parasitic drugs



### OIE GLOBAL CONFERENCE ON THE RESPONSIBLE AND PRUDENT USE OF ANTIMICROBIAL AGENTS FOR ANIMALS

International Solidarity to Fight against Antimicrobial Resistance

Paris (France), 13–15 March 2013

# Recommendations

### To the OIE Member Countries

3. To develop and set up an official harmonised national system for collecting data on the monitoring of antimicrobial resistance in relevant animal pathogens and quantities of antimicrobial agents used in food producing animals at the national level based on the OIE standards.

### To the OIE

7. To collect harmonised quantitative data on the use of antimicrobial agents in animals with the view to establish a global database.



OIE Global Conference on the Responsible and Prudent Use of Antimicrobial Agents for Animals International Solidarity to Fight against Antimicrobial Resistance

Paris (France) 13 - 15 March 2013







# OIE global database on the use of antimicrobial agents in animals

Based on chapter 6.8., information collected through a questionnaire and Focal Point training:

- to enhance Member Countries engagement in the initiative to prevent antimicrobial resistance
- to improve awareness and provide an overview of antimicrobial use in animals
- to measure trends in the use of antimicrobial agents in animals over time
- to assist risk managers to evaluate the effectiveness of efforts and mitigation strategies



# OIE global database on the use of antimicrobial agents in animals

Collection of baseline information and different reporting options









## Challenges for animal health

### To control antimicrobial use in animals we need:

- Support for developing countries to implement good governance aspects including veterinary legislation
- Quality veterinary services, including the private sector and laboratories
- Measures for controls on importation, production, distribution and use
- Involvement of all stakeholders
- More risk assessment and banning of non-priority practices in animals
- More public-private partnerships and research



## Challenges for animal health

- Awareness raising at all levels
- Animal health and welfare must be sustained
- Food security and food safety must be ensured
- Veterinary supervision for animal use is a priority
- No universal optimal solution for the delivery of antimicrobials at farm level worldwide,
- The well qualified veterinarian is the solution









### Information is available at the OIE website

### ANTIMICROBIAL RESISTANCE (AMR):

- http://www.oie.int/en/for-the-media/amr/
- http://www.oie.int/en/our-scientific-expertise/veterinaryproducts/antimicrobials/
- http://www.oie.int/en/conferences-events/all-oie-worldconferences/presentationsrecommendations











## Thank you for your attention



### World Organisation for Animal Health

Protecting animals, preserving our future



### Update on OIE Standards and Guidelines

Chapter 6.7. Harmonisation of national antimicrobial resistance surveillance and monitoring programmes

- Criteria for development of national antimicrobial resistance surveillance and monitoring programmes
- Harmonisation of existing programmes in food producing animals and in products for human consumption
- Surveillance and monitoring programmes of the prevalence of resistance in bacteria in animals, food and environment is a critical part of animal health and food safety strategy
- Monitoring of bacteria from products of animal origin intended for human consumption collected at different steps of the food chain are also considered.

