#### Dr Hirofumi Kugita

**OIE Regional Representation for Asia and the Pacific** 

## Overview of OIE Activities to Combat Antimicrobial Resistance



Workshop on Development of Surveillance Framework for Antimicrobial Resistance in Food Animals and Environment

August 3–4, 2017 India Habitat Center, New Delhi, India



## Agenda

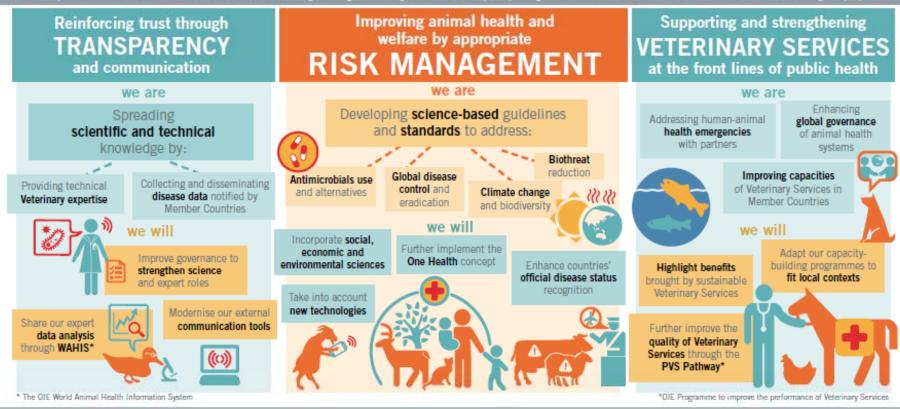
- OIE and it's 6th Strategic Plan 2016-2020
- OIE International Standards, Guidelines
- Monitoring the use of antimicrobials in animals
- OIE Strategy on AMR and the Prudent Use of Antimicrobials
- Ongoing activities and next steps
- Communication and advocacy





### 6TH STRATEGIC PLAN 2016-2020

We work to protect the health and welfare of animals globally, leading to economic prosperity as well as social and environmental well-being of populations







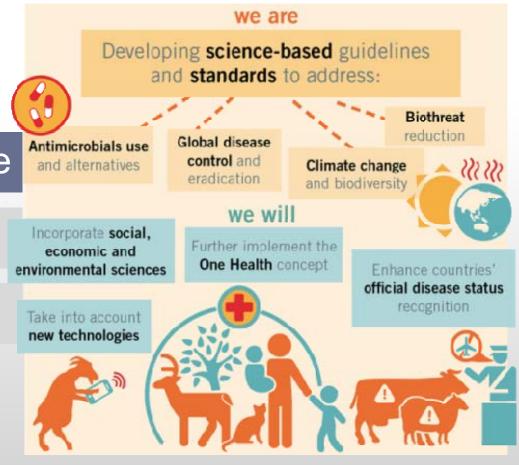
## OIE and it's 6th Strategic Plan 2016-2020

New global stratégies

Antimicrobial resistance

Global disease control

Animal welfare





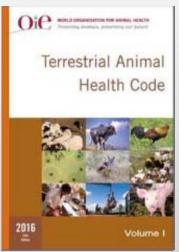
## OIE standards and guidelines

#### OIE Preserving the efficacy of antimicrobials intergovernmental standards Prescription and Monitoring of quantities Oversight by Controlling Market Distribution, Veterinary authorisation. restriction of administration used in animals, antimicrobial **Statutory Bodies** manufacture. antibiotic resistance free access resistance importation surveillance Veterinary legislation oie Oie ----Quality of Veterinary Terrestrial Animal Manual of Diagnostic Aquatic Animal Tests and Vaccines Health Code Health Code Services for Terrestrial Animals OIE List of antimicrobial agents of veterinary importance



#### Terrestrial Animal Health Code

- Ch.6.7. Harmonisation of national AMR surveillance and monitoring programmes
- Ch.6.8. Monitoring of the quantities and usage patterns of antimicrobial agents used in foodproducing animals
- Ch.6.9. Responsible and prudent use of antimicrobial agents in veterinary medicine
- Ch.6.10. Risk analysis for AMR arising from the use of antimicrobial agents in animals





#### Terrestrial Animal Health Code

 Ch.6.7. Harmonisation of national AMR surveillance and monitoring programmes

This chapter provides criteria for the:

- 1) development of national antimicrobial resistance surveillance and monitoring programmes,
- 2) harmonisation of existing national antimicrobial resistance surveillance and monitoring programmes,

in food producing animals and in products of animal origin intended for human consumption.

- Revised text of Ch.6.7. is proposed for Members' comments.
  - A number of amendments are included in response to the comments of Member Countries, including a proposal for animal bacterial pathogens for inclusion in monitoring programms



#### **Terrestrial** Animal Health Code

- Ch.6.8. Monitoring of the quantities and usage patterns of antimicrobial agents used in food-producing animals
  - For the purpose of this chapter, therapeutic use of antimicrobial agents means the administration of antimicrobial agents to animals for treating and controlling infectious diseases.
  - In order to evaluate antimicrobial exposure in food-producing animals, quantitative information should be collected to monitor usage patterns by animal species, antimicrobial agents or class, type of use (therapeutic or non-therapeutic) and route of administration.



#### PROPOSED Definitions:

- Preventive use: Administration of an antimicrobial agent targeted to animals at risk for a specific infection(s) or in a specific situation where disease is likely to occur if the drug is not administered, with an appropriate dose and for a limited duration
- Therapeutic use: Administration of an antimicrobial agent to animals to prevent, control or treat infection or disease. The Veterinary Medicinal Products (VMP) containing antimicrobial agents should only be used on the prescription of a veterinarian or other suitably trained person authorised to prescribe VMP containing antimicrobial agents in accordance with national legislation and under the supervision of a veterinarian.
- **Growth promotion:** Use of antimicrobial substances to increase the rate of weight gain and/or the efficiency of feed utilization in animals by other than purely nutritional means. The term does NOT apply to the use of antimicrobial agents for the specific purpose of treating, controlling, or preventing infectious diseases, even when an incidental growth response may be obtained.
  - (This definition is in line with the definition developed by Codex Alimentarius in CAC/RCP 61-2005)



#### Terrestrial Animal Health Code

## Chapter 6.9. Responsible and prudent use of antimicrobial agents in veterinary medicine

- "This document provides guidance for the responsible and prudent use of antimicrobial agents in veterinary medicine, with the aim of protecting both animal and human health as well as the environment".
- It defines the respective responsibilities of the actors involved in the authorisation, production, control, importation, exportation, distribution and use of veterinary medicinal products (VMP) 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



Terrestrial Animal Health Code

Chapter 6.9. Responsible and prudent use of antimicrobial agents in veterinary medicine

(Responsibilities of the Competent Authorities)

- "Training should focus on preserving the effectiveness of antimicrobial agents and include:
  - information on disease prevention, management and mitigation strategies;
  - the ability of antimicrobial agents to select for resistant microorganisms in animals and the relative importance of that resistance to public and animal health;
  - appropriate storage conditions, proper disposal of unused or expired VMP;
  - record keeping"

#### (Responsibilities of Veterinarians)

- carry out a proper clinical examination of the animal(s) and then:
  - administer or prescribe antimicrobial agents only when necessary and taking into consideration the **OIE list of antimicrobial agents of veterinary importance**;
  - make an appropriate choice of antimicrobial agents based on clinical experience and diagnostic laboratory information (pathogen isolation, identification and antibiogram) where possible
- ...should a first-line antimicrobial treatment fail or should the disease recur, a second line treatment should be based on the results of diagnostic tests....



Terrestrial Animal Health Code

Chapter 6.9. Responsible and prudent use of antimicrobial agents in veterinary medicine

#### (Responsibilities of veterinary pharmaceutical industry)

- Supply all the information requested by the national Competent Authority;
- Only licensed and officially approved VMP should be sold and supplied ...;

#### (Responsibilities of food animal producers)

"Use VMP containing antimicrobial agents only on the prescription of a veterinarian or other suitably trained person authorised to prescribe VMP containing antimicrobial agents in accordance with the national legislation and under the supervision of a veterinarian"

#### (Responsibilities of animal feed manufacturers)

"The supply of medicated feed containing antimicrobial agents to farmers keeping food-producing animals by animal feed manufacturers should be allowed only on the prescription"



## Standards and guideline on AMR

## List of Antimicrobial Agents of Veterinary Importance

- The OIE International Committee adopted at its 75th General Session in May 2007 (Resolution No. XXVIII).
- This List was further updated and adopted in May 2013 and May 2015 by the World Assembly of OIE. It will be reviewed, in particular regarding ionophores (Resolution No38-85 GS-2017)
- WHO and FAO will participate in the update of the list.

| VCIA | Veterinary Critically Important Antimicrobial Agents    |
|------|---|
| VHIA | Veterinary <b>Highly Important</b> Antimicrobial Agents |
| VIA  | Veterinary Important Antimicrobial Agents               |





## Standards and guideline on AMR

#### Recommendations

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 use should be limited and reserved for instances no alternatives are available.



## **OIE International Standards on AMR**

### 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



2016

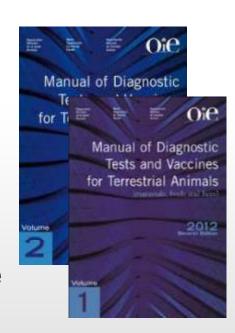
Aquatic Animal

Health Code

## **OIE Standard and Guidelines**

### Manual of Diagnostic Tests and Vaccines for Terrestrial Animals

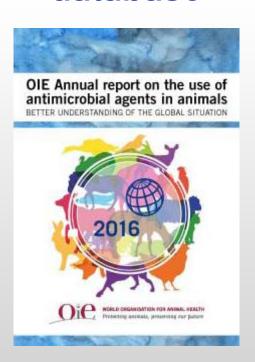
- Part 3: General Guidelines:
  - 3.1. Laboratory methodologies for bacterial antimicrobial susceptibility Testing
  - → revision will be needed in light of veterinary pathogen resistance surveillance





## Monitoring the use of antimicrobials in animals

## OIE global database



A system where all can contribute

That safeguards information

 That is pragmatic regarding the data collected

 That will help to get comparable data and to measure trends



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

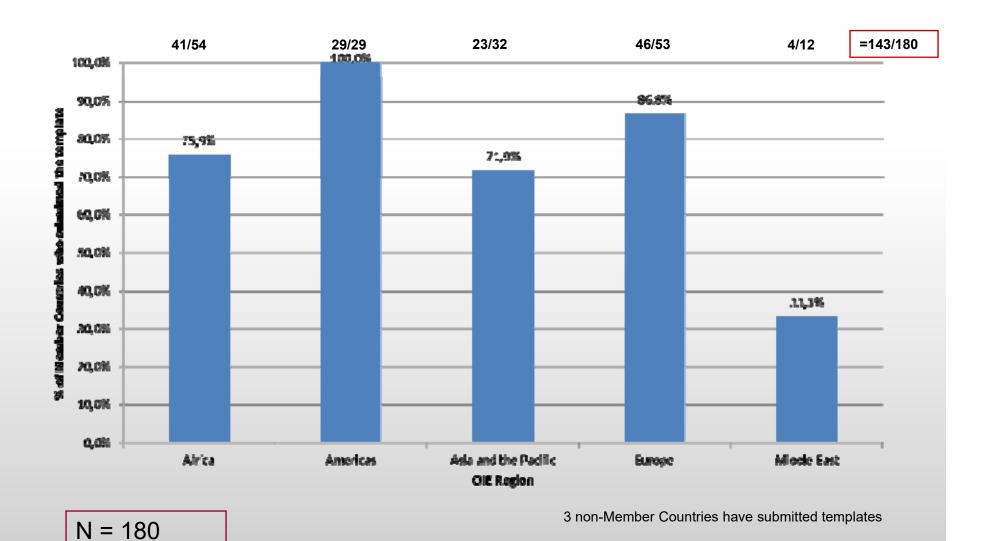
#### **Baseline information and 3 reporting options:**

| Reporting options |  |
|-------------------|--|
| 1                 | Overall amount sold for/used in animals by antimicrobial class; with the possibility to separate by type of use  |
| 2                 | Overall amount sold for/used in animals by antimicrobial class; with the possibility to separate by type of use and species group                          |
| 3                 | Overall amount sold for/used in animals by antimicrobial class; with the possibility to separate by type of use, species group and route of administration |

■ 130 of 180 Members replied to the first phase



## Second phase of data collection, submissions by OIE Region



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## Surveillance of Antimicrobial Resistance

- Surveillance of resistance of animal pathogens is another important element to assess the level and the evolution of AMR in animals.
- Currently, very little information is available worldwide on pathogens relevant to animal diseases.

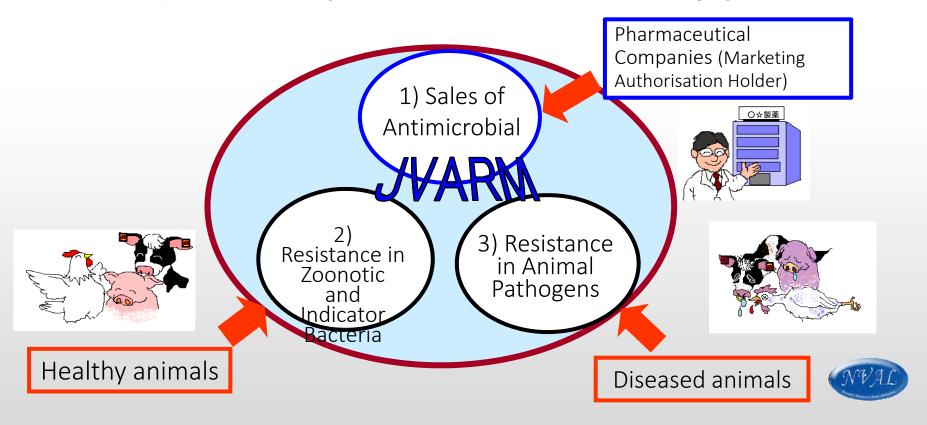
AMU data + Surveillance data + Population data

**AMR RISK ANALYSIS AND PLANNING PURPOSES** 



## **Example: National AMR Surveillance / Monitoring (1/3)**

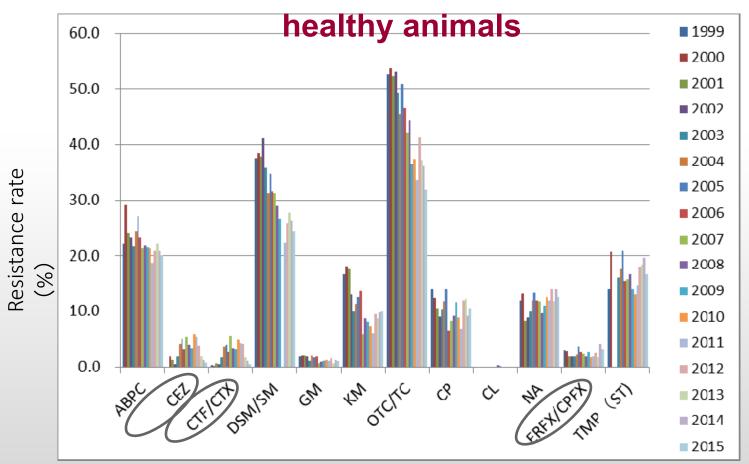
JVARM
Japanese Veterinary Antimicrobial Resistance Monitoring System





## **Example: National AMR Surveillance / Monitoring (2/3)**

### Resistance rate in *E. coli* isolated from

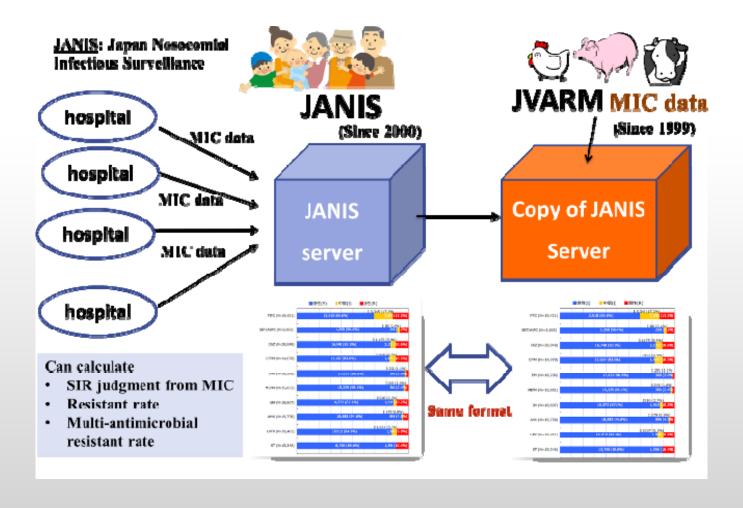






## **Example: National AMR Surveillance / Monitoring (3/3)**

## Integration of human and animal data





## OIE strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials

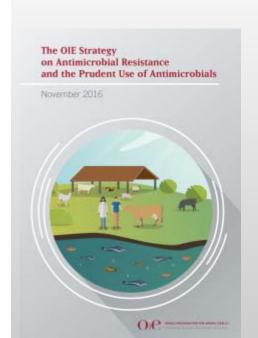
#### Context

- 2015 Global Action Plan (GAP) on AMR and the Tripartite Partnership (WHO-FAO-OIE)
- OIE Resolutions on AMR in 2015 and 2016



Consolidated work programme under **4 key objectives** aligned with the GAP

### **Strategy**



Improve awareness and understanding

Strengthen knowledge through surveillance and research

Support governance and capacity building

Encourage implementation of international standards

## Ongoing activities and next steps

- Capacity of Veterinary Services
- Prudent use by veterinarians and veterinary para-professionals
- Update the OIE List of Antimicrobial Agents of Veterinary Importance
- Legislation and regulatory systems for veterinary medicines
- Data on antimicrobial use
  - OIE National Focal Points on Veterinary Products-to be continued
  - Support & progress on reporting options to OIE database (collection & analysis)
  - Work on the "denominator" estimating animal biomass and future refinement
  - Enhancement of WAHIS
  - Further work on definitions of preventive and therapeutic use
  - Next OIE ad hoc Group on Antimicrobial Resistance, which will be held at the OIE Headquarters in Paris, from 29 to 31 August 2017.



## The Tripartite: FAO-OIE-WHO Collaboration







Global leader for food and agriculture

Global leader for animal health and welfare standards

Global leader for human health

#### Joint priorities including on AMR

- WHO Global Action Plan: developed in close collaboration with FAO & OIE
- National Action Plan (NAP) development support tools
  - Manual for developping NAP
  - Checklist to be used to assist with the development of NAP
- Communication tools
  - Joint media statements
  - Antibiotic Awareness Week
  - Common trainings and presentations





## The Tripartite united against AMR



## HIGH-LEVEL MEETING ON ANTIMICROBIAL RESISTANCE



21 SEPTEMBER 2016, UN HEADQUARTERS, NEW YORK

"Effective and accessible antibiotics are as vital for protecting animal health and welfare and good veterinary medicines as they are for human health"

> Dr Monique Eloit, OIE Director General UNGA 71st Session, New York, September 2016



#### Draft political declaration of the high-level meeting of the General Assembly on antimicrobial resistance

We, Heads of State and Government and representatives of States and Governments, meeting at United Nations Headquarters in New York on 21 September 2016, in accordance with General Assembly resolution 70/183, in which the Assembly decided to hold a high-level meeting in 2016 on antimicrobial

- Reaffine that the blueprint for melding antimicrobial resistance is the World Health Organization global action plan on antimizrobial resistance<sup>1</sup> and its five overarching strategic objectives developed by the World Health Organization in collaboration with, and subsequently adopted by, the Food and Agriculture Organization of the United Nations and the World Organization for Animal Health;
- 2. Also reaffion that the 2030 Agenda for Sustainable Development<sup>2</sup> offers framework to ensure healthy lives, and recall commitments to fight malaria. HIV/AIDS, tuberculosis, hepatitis, the fibrils virus disease and other communicable diseasos and epidemics, including by suldressing growing antimizrobial resistance and neglected discuses affecting developing countries in particular, while reiterating that antimicrobial resistance challenges the austamability and effectiveness of the public health response to these and other diseases as well as gains in health and development and the attainment of the 2030 Agenda.
- delinowledge that the resistance of bacterial, viral, parasitic and florgal microorganisms to antimicrobial medicines that were previously effective for treatment of infections is mainly due to: the inappropriate use of antimicrobial medicines in the public health, unimal, food, agriculture and aquaculture sectors; lack of access to health services, including to diagnostics and laboratory capacity. and antimicrobial residues into soil, crops and water within the broader context of ordinicrobial resistance, resistance to antibiation, which are not like other medicines, including medicines for the treatment of tuberculosis, in the greatest and most argent global risk, requiring increased attention and coherence at the international, national and regional levels;
- Also acknowledge that, due to antimicrobial resistance, many ochievements of the twentieth sentary are being gravely challenged, in particular, the reduction in illness and death from infectious diseases achieved through social and economic development, access to health services and to quality, usife, officacious and offendable medicines, hygiene, sofe water and sociation, disease prevention in community and health-care settings, including immunization, matrition and healthy food, improvements in human and veterinary medicine, and the introduction of new antimicrobial and other medicines.
- 5. Recognite that the above achievements are now gravely challenged by ommicrobial resistance, including: the development of resilient health systems and progress towards the goal of universal health coverage, treatment options for HIV and sexually transmitted infections, tuberculosis and malaria as well as other infections acquired in community and health-core settings, gains in infection prevention and control in community and health-care settings; advances in

See World Bealth Organization, document WIIA64/2013/RECVL, stance 3 Resolution 70%.



## IACG Interagency Coordination Group on Antimicrobial Resistance

#### FIRST MEETING OF THE INTERAGENCY COORDINATION GROUP ON ANTIMICROBIAL RESISTANCE 2-3 May 2017, New York

3 MAY 2017

Reporting back to the 73rd Session of the United Nations – June 2019

- Mapping activities against the Global Action Plan for Tripartite, other UN agencies, and the wider stakeholder community (NGOs, private sector)
- Monitoring framework for Global Action Plan and National Action Plans
- Stakeholder management system to provide channels for dissemination of information and coordination of activities
- Effective advocacy to retain awareness of AMR at the highest international and national political levels



## Codex work on AMR in food

## OIE is actively engaged in this work

- A Codex physical working group (pWG) meeting was held in London, United Kingdom, in December 2016 to undertake tasks assigned to it at the 39<sup>th</sup> session of the Codex Alimentarius Commission.
- The pWG reviewed and revised the following project documents:
  - ✓ Proposal for new work on the revision of the Code of Practice to Minimise and contain Antimicrobial Resistance (CAC/RCP 61 - 2005); and
  - ✓ Proposal for new work on the Guidance on Integrated Surveillance of Antimicrobial Resistance.
  - ✓ Terms of Reference for the Provision of Scientific Advice on Antimicrobial Resistance.
- The revised project documents were recently adopted at the 40<sup>th</sup> session of the Codex Alimentarius Commission.
- An electronic working group will be formed in August 2017 to prepare the proposed draft texts for comments and consideration by the Ad hoc Codex Intergovernmental Task Force on Antimicrobial Resistance prior to its physical meeting to be held in Korea from 27 Nov to 1 December 2017.



## Asia-Pacific Workshop on Multisectoral Collaboration









- Since 2010, six annual regional workshops have been organized by the tripartite to update and advance zoonoses control and prevention as well as AMR management.
- 6th Workshop was held in Sapporo, Japan, in October 2015.
- 7<sup>th</sup> Workshop will be held in Manila, Philippines, in September 2017





## **Activities of OIE RRAP**

- OIE Regional Seminar for National Focal Points on Veterinary Products
  - > 4<sup>th</sup> cycle: Mar. 2016, Tokyo, Japan
  - > 5<sup>th</sup> cycle: Mar. 2018 (To be confirmed)
- OIE Regional Short-term Training on AMR in collaboration with National Veterinary Assay Laboratory, Japan
  - ➤ 1<sup>st</sup> (Basic course): Nov. 2016

    Participants: Cambodia, Chinese Taipei, Hong Kong SAR, China, Mongolia, Myanmar, Philippines, Thailand, Vietnam
  - ➤ 2<sup>nd</sup> (Pre-advanced course): Nov. 2017
  - > 3<sup>rd</sup> (Advance course): Nov. 2017



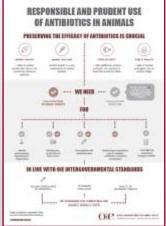


## Communication and advocacy <a href="http://www.oie.int/en/for-the-media/amr/">http://www.oie.int/en/for-the-media/amr/</a>

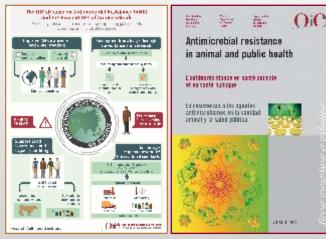


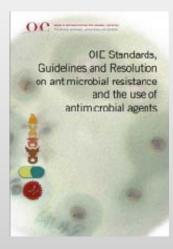












Fact sheet, infographics, videos and scientific publications







ORGANISATION MONDIALE DE LA SANTÉ ANIMALE

Proteger les animans, préserver notre aventr

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