



# Journey of the

# AMU Data Collection

Regional **ANIMUSE** Training for Middle East  
10-12 May 2023, Dubai, United Arab Emirates





## 1952 – 20<sup>th</sup> OIE Session



— 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.

## 2013 – 1<sup>st</sup> Global Conference on Antimicrobial Resistance (AMR)



WOAH Members agreed to collect **harmonised AMU data** in animals with the view to submit them to the **WOAH** and to establish a **global database**

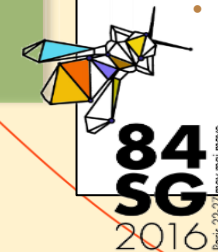
### Resolution 26 “Combating AMR and Promoting the Prudent Use of Antimicrobial Agents in Animals”

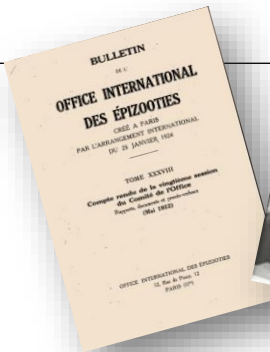
- The OIE develops a procedure and standards for data quality for **collecting data annually** from OIE Member Countries **on the use of antimicrobial agents in food-producing animals** with the aim of **creating an OIE global database...**



### Resolution 36 “Combating AMR through a One Health Approach: Actions and OIE Strategy”

- The OIE actions to be compiled and consolidated within the OIE Strategy on antimicrobial resistance include:
  - The **establishment and the management of a database for the collection of data on the use of antimicrobial agents in animals** as well as the development of interpretation indicators





— 776 —

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*“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

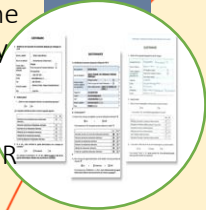
**85% Participation  
(152 Members)**

## 2013 - 1<sup>st</sup> Global Conference on AMR



## 2012 - Survey on the implementation of Chapter 6.9 of the Terrestrial Animal Health Code

Some of the objectives were:  
To determine what actions are needed and to help the OIE to develop its strategy regarding AMU  
To prepare the 1st OIE Global Conference on AMR



## 2014 – OIE AMU Template

Created by the experts of the OIE ad hoc Group on AMR – based on Chapters 6.9 and 6.3 of the Terrestrial and Aquatic Codes, respectively.

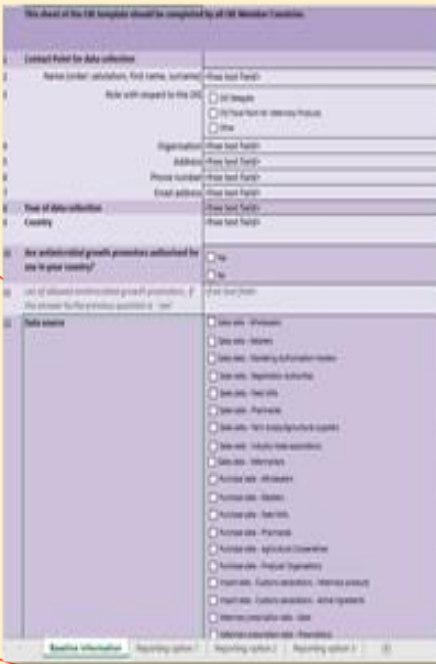
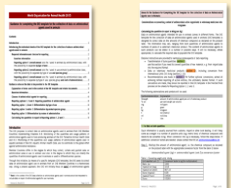


## 2014 – National Focal Points for Veterinary Products (FPVP)

Documents were discussed with the OIE National FPVP in the Americas; Europe; and Asia, Far East and Oceania regions; Africa was asked by email.



## 1<sup>st</sup> Round Launched in 2015





## Based on WOAH Standards

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**8 Rounds**



**6 Reports Published (soon 7...)**



**157 Members Participated in the 7<sup>th</sup> Round**

### Terrestrial Animal Health Code

- Chapter 6.9. Monitoring of the quantities and usage patterns of antimicrobial agents used in food-producing animals

### Aquatic Animal Health Code

- Chapter 6.4. Monitoring of the quantities and usage patterns of antimicrobial agents used in aquatic animals

0 500 1000 1500 2000 2500 km





## INTERACTIONS

*Each round,*

**+30** teleconferences &  
videoconferences

**650** emails exchanged

## PROGRESS

*Since 1st round,*

**+ 20%** Participation

**+120 %** Reporting Option 3

## UNDERSTANDING

*Each round,*

**80%** of Members amend their  
dossiers after interacting with WOH  
AMU Team

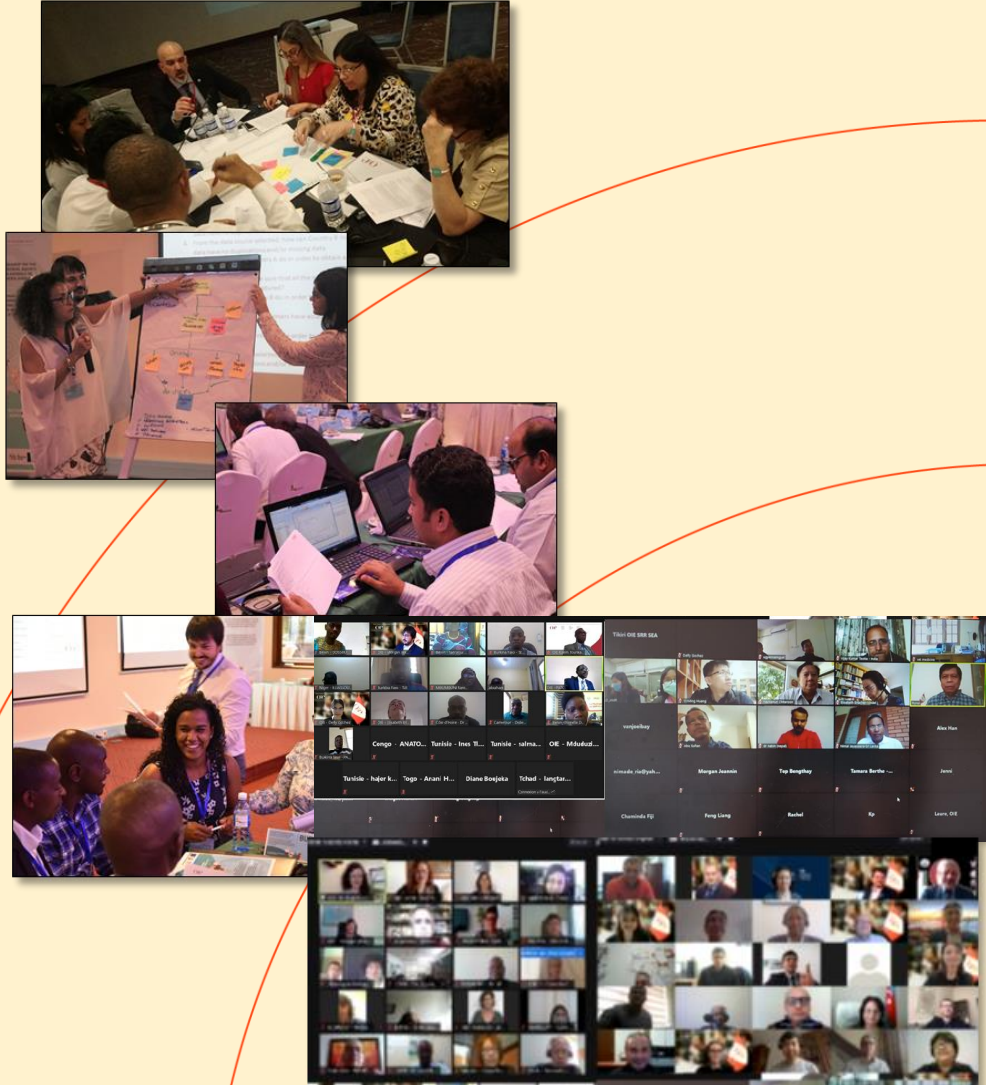
## TRAININGS

*Since 5th round,*

**615** participants were trained  
through in-person or virtual trainings



## Identified countries' needs



## Among all needs, these were present in many Members

- ✓ IT Tools to collect and calculate AMU data
- ✓ Access to historical data
- ✓ Trends on time
- ✓ Analysis of AMU data

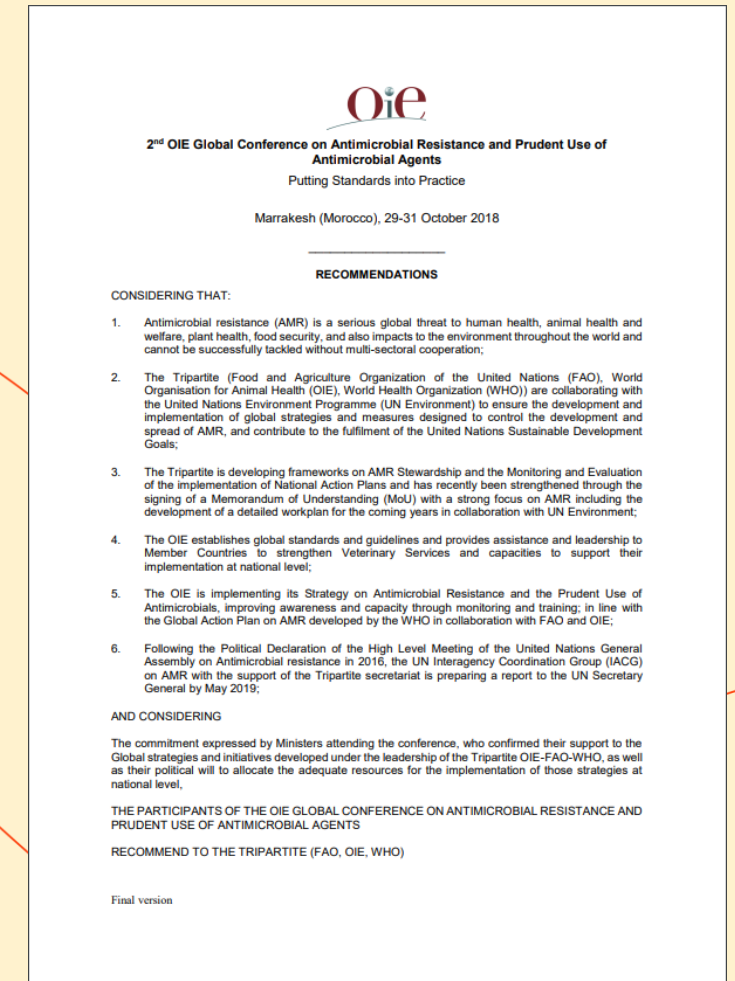




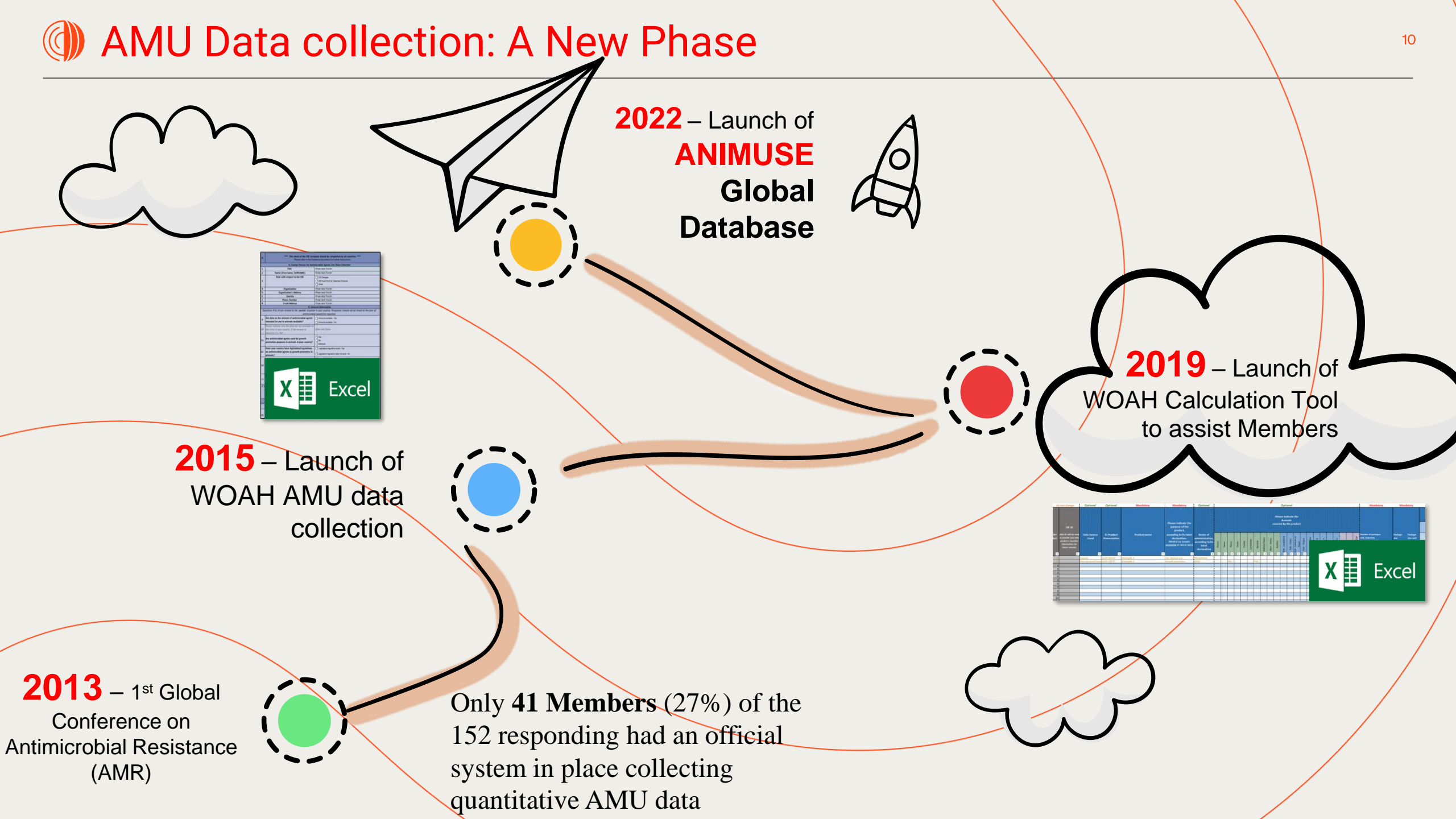
# Recommendation n°4 of the 2<sup>nd</sup> OIE Global Conference on Antimicrobial Resistance – October 2018



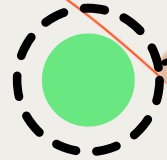
To further develop the OIE data collection on Antimicrobial Agents Intended for Use in Animals, **converting the current spreadsheet format to a database system**, able to accommodate data submissions by animal species, and its connection to the World Animal Health Information System (WAHIS) and also allowing addition of data from field studies



# AMU Data collection: A New Phase

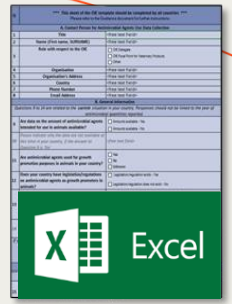
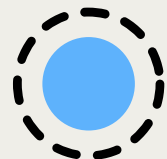


**2013** – 1<sup>st</sup> Global Conference on Antimicrobial Resistance (AMR)

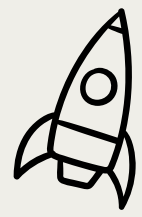
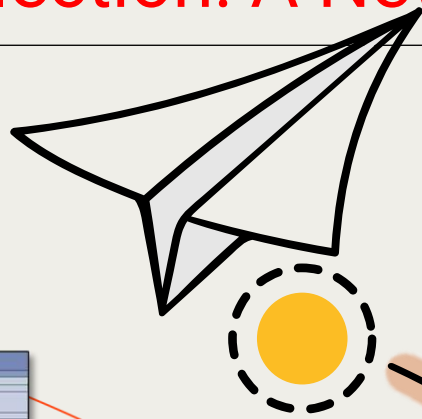


Only **41 Members** (27%) of the 152 responding had an official system in place collecting quantitative AMU data

**2015** – Launch of WOAH AMU data collection

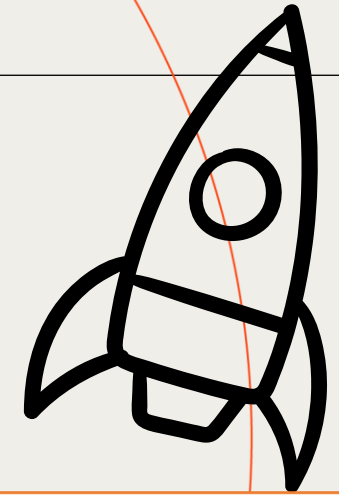


**2022** – Launch of **ANIMUSE** Global Database



**2019** – Launch of WOAH Calculation Tool to assist Members





World Organisation for Animal Health  
Founded as OIE

ANIMUSE

Search Country

EN FR ES

HOME DATA VISUALISATION FAQ ADMINISTRATION RESOURCES USER SUPPORT

## Welcome to your national portal

**Data Collection Round**

Follow the advancement of your AMU dossier here

Continue

- Round opened
- In progress**
- Submitted
- Pending clarification
- Validated

## Data dashboard

EXPORT

Country Participation

Calculation

Need help to calculate the antimicrobial quantities?  
Enter your information by

If the data are **public**, the last two columns ANIMUSE public portal. They are shown here

A system designed for **YOU**

To calculate antimicrobial quantities with the **Calculation module**



Allows **online access** to complete the antimicrobial use (AMU) **questionnaire** and upload data collected offline.



Access **historical data** and generate professional outputs for **data visualisation**



From 2015...

**GLOBAL ACTION PLAN  
ON ANTIMICROBIAL  
RESISTANCE**

**Adopted in 2015** by all countries through decisions in the World Health Assembly, the Food and Agriculture Organization of the United Nations (FAO) Governing Conference and the World Assembly of World Organisation for Animal Health (OIE) Delegates. **Countries agreed to have a national action plan on AMR that is consistent with the Global Action Plan**, and to implement relevant policies and plans to prevent, control and monitor AMR. **This action plan underscores the need for an effective “one health” approach** involving coordination among numerous international sectors and actors, including human and veterinary medicine, agriculture, finance, environment, and well informed consumers.

...to 2022

**ONE HEALTH  
JOINT PLAN OF ACTION  
(2022-2026)**

**WORKING TOGETHER FOR  
THE HEALTH OF HUMANS, ANIMALS,  
PLANTS AND THE ENVIRONMENT**

## Memorandum of understanding signature



OHHLEP, as an independent advisory group to the Quadripartite, has issued a comprehensive definition of One Health, which the Quadripartite embraces in this OHPA (Adisasmito et al., 2022):

*One Health is an integrated, unifying approach that aims to sustainably balance and optimize the health of humans, animals, plants and ecosystems. It recognizes the health of humans, domestic and wild animals, plants and the wider environment (including ecosystems) are closely linked and interdependent.*

*The approach mobilizes multiple sectors, disciplines and communities at varying levels of society to work together to foster well-being and tackle threats to health and ecosystems, while addressing the collective need for clean water, energy and air, safe and nutritious food, taking action on climate change, and contributing to sustainable development.*

## One Health's definition

## AMR is embedded as one action track

FIGURE 3: THE SIX OH JPA ACTION TRACKS



**2014 - Netherlands** (Ministries of Health and Agriculture) - 17 countries → **accelerated political commitment and action to the realization of the WHO Global Action Plan on AMR as well as the UN General Assembly High level Meeting on AMR in September 2016.**

**2019 – Netherlands** (Ministries of Health and Agriculture) - 40 countries → **twining initiative among countries from the North and South in the implementation of National Action Plans and the establishment of the AMR Multiparter Trust Fund with 5M USD initial financial commitment from the Government of Netherlands.** By June 2022, the AMR Trust Fund mobilized 26M USD with additional donors including the Governments of UK, Germany and Sweden and supports 11 countries in the implementation of One Health NAPs on AMR.

**2022 – Muscat, Oman** (Ministries of Health and Agriculture) – Endorsed by 47 countries (attended by 28 Ministers of Health and 14 Ministers of Agriculture)

## Muscat Manifesto



Reviewing, updating or revising our **National Action Plans for AMR** with all relevant stakeholders for implementation with financial resources, milestones and national targets, including the Sustainable Development Goal indicators on AMR in the human health sector, taking into consideration the One Health approach;

Strengthening national, regional, and global **surveillance** systems through improved data management, private sector engagement, implementation of data-driven practices, and the reporting of data to the WHO Global Antimicrobial Resistance Use Surveillance System (GLASS), the WOAHA Animal Antimicrobial Use system (ANIMUSE), and the Quadripartite Tracking AMR Country Self-Assessment Survey (TrACSS);

**Reducing the total amount of antimicrobials used in the agri-food system by at least 30-50% from the current level by 2030;**

**Zero use of medically important antimicrobials for human medicine in animals for non-veterinary medical purposes or in crop production and agri-food systems for non-phytosanitary purposes;**

**Ensuring that ACCESS group antibiotics comprise at least 60% of overall antibiotic consumption in humans by 2030.**

**Coming soon (2024) – United Nations General Assembly (UNGA 2024)– AMR Side Event &**

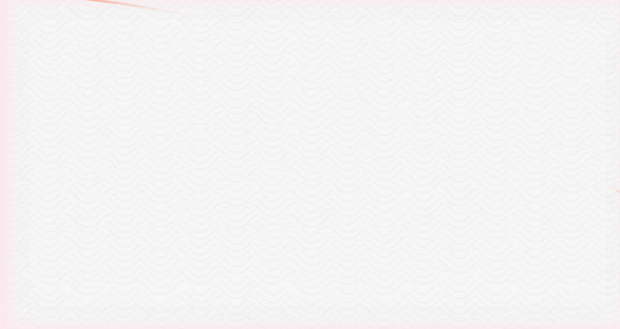
**Fourth High-Level Inter-Ministerial Conference on AMR (Saudi Arabia)**



# Muscat Manifesto: Recommendations for countries

Reviewing, updating or revising our NAPs for AMR with all relevant stakeholders for implementation with financial resources, milestones and national targets, (...) taking into consideration the **One Health** approach;

**Strengthening national**, regional, and global **surveillance systems** through **improved data management**, private sector engagement, implementation of **data-driven practices**, and the reporting of data to WHO (GLASS), **WOAH Animal Antimicrobial Use system (ANIMUSE)**, and the Quadripartite Tracking AMR Country Self-Assessment Survey (TrACSS);



**Target 1:** Reducing the **total amount of antimicrobials** used in the agri-food system by at least **30-50%\*** from the current level **by 2030**;

**Target 2:** **Zero use of medically important antimicrobials (MIAs)** for human medicine in animals for **nonveterinary medical purposes** – CIA are of utmost priority to preserve.

**Target 3:** Ensure that **ACCESS group antibiotics** are at least **≥ 60% of overall antibiotic consumption in humans by 2023**.



\*Note: This **30-50%** measurement refers to a **population-weighted amount of antimicrobials reduction**



## Scientific and Technical Review vol. 41\*

# Antimicrobial use in animals: a journey towards integrated surveillance



*M. Jeannin, M. Magongo, D. Gochez, O. Valsson, E. Erlacher-Vindel, M. Arroyo Kuribreña & J. Yugueros-Marcos*

\*The paper are available online prior to being published in the *Scientific and Technical Review*. They have been peer-reviewed but have not yet been formatted for publication.



# Thank you