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Antimicrobial Resistance and Veterinary Products Department

# Overview of antibiotic use (AMU) in animal production

WEBINAR ON THE FAO-OIE-WHO ONE HEALTH APPROACH TO AMR MITIGATION AND SAFER  
FOOD IN THE ASIA PACIFIC REGION  
29 September 2021 - New Delhi, India (Virtual)



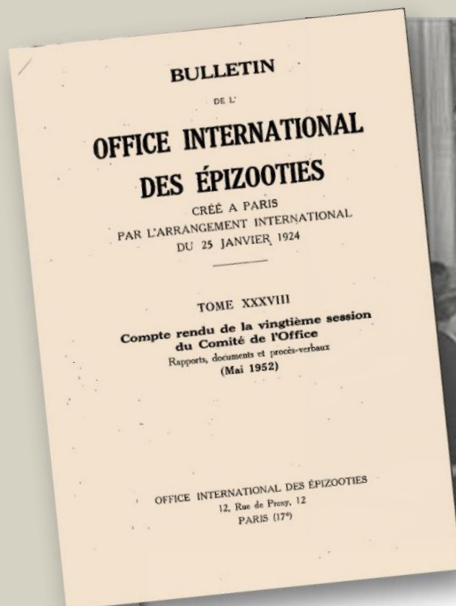
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# First approaches to AMR and AMU

## 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)



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

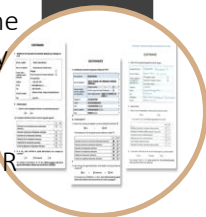


# The OIE AMU Template and Accompanying Documents

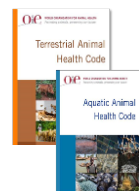
**85% Participation**  
(152 Member Countries)

## 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

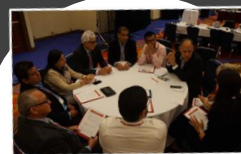


## 2013 - 1<sup>st</sup> Global Conference on AMR



## 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.

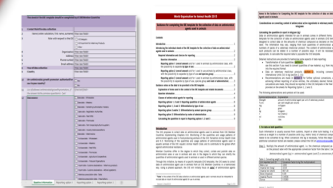


## 2014 – National Focal Points for Veterinary Products (FPVP)

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



# OIE General Sessions – May 2015 and May 2016

– 25 –

RESOLUTION No. 26

Combating Antimicrobial Resistance and Promoting the Prudent Use of Antimicrobial Agents in Animals

CONSIDERING

1. That antimicrobials also contribute to the development and other public health threats;
2. That antimicrobial resistance is a global public health threat;
3. That during the last decade, the use of antimicrobials has increased significantly, leading to the development of antimicrobial resistance;
4. The recommendation of the World Health Organization (WHO) regarding the prudent use of antimicrobials;
5. The recent update of the OIE Terrestrial Animal Health Code (TAHC) regarding antimicrobial resistance;
6. The tripartite agreement between the OIE, the WHO and the FAO regarding antimicrobial resistance;
7. The network of OIE Member Countries covering the global use of antimicrobials;
8. The importance of the OIE strategy for the control of antimicrobial resistance;
9. The importance of the OIE strategy for the control of antimicrobial resistance.

THE ASSEMBLY

RECOMMENDS

1. The OIE continue to develop and promote the prudent use of antimicrobials in animals;

## 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...**



– 1 –

RESOLUTION No. 36

Combating Antimicrobial Resistance through a One Health Approach: Actions and OIE Strategy

## 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**



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# OIE AMU Data Collection at a Glance



**7 Rounds**



**5 Reports Published**



**160 Members Participated in the 5<sup>th</sup> Round**

## Based on OIE Standards

### 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

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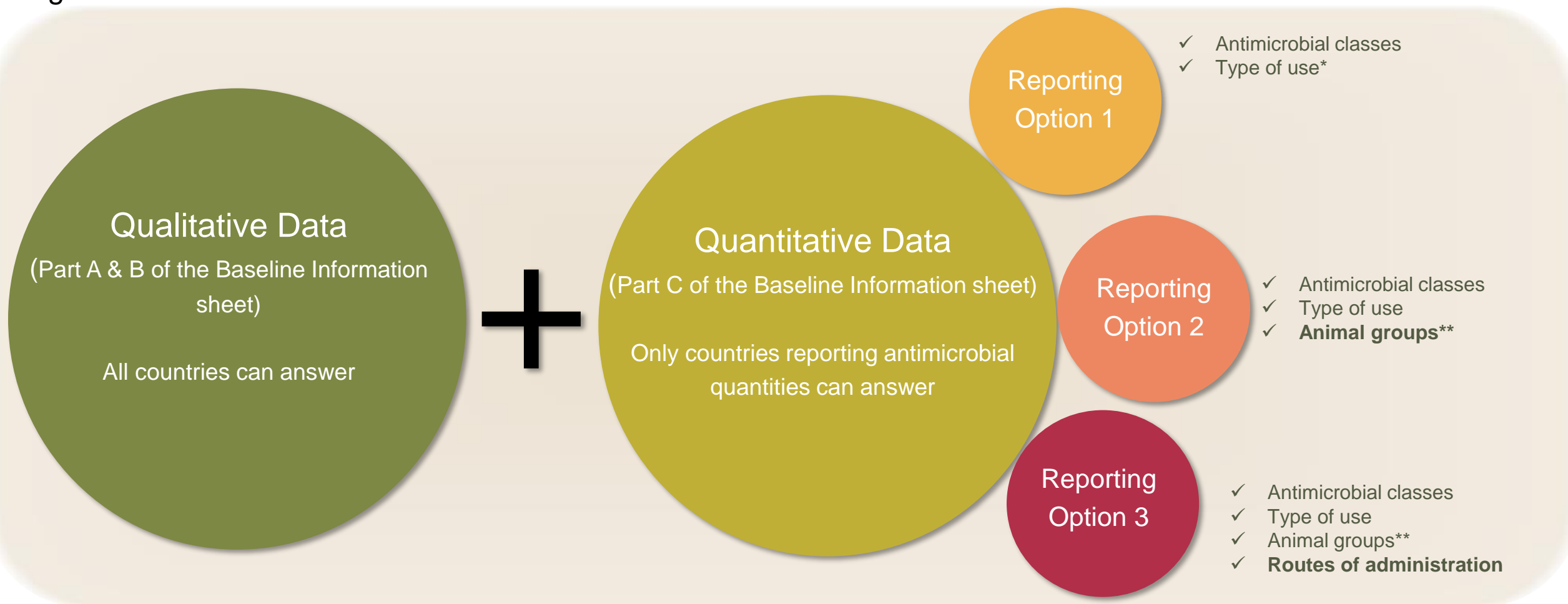
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# The OIE Reporting Options

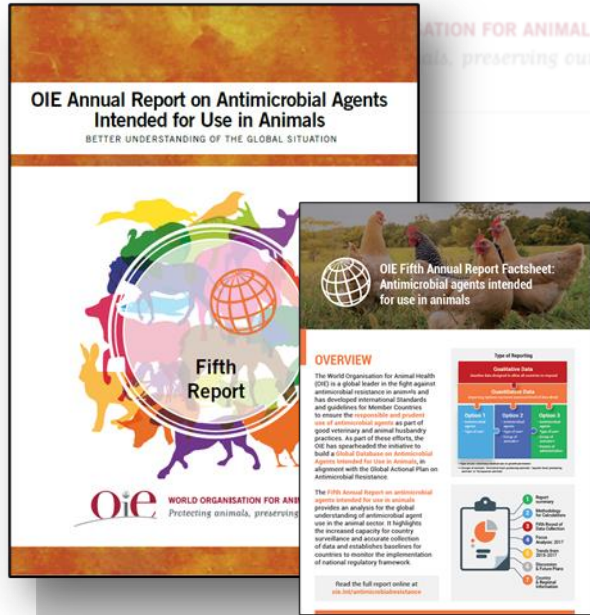
The sections of the OIE Template named 'Reporting Options' 1, 2 and 3, collect the quantities of antimicrobial agents intended for use in animals.



\* Type of use: veterinary medical use or growth promotion

\*\*For the purposes of the OIE database, animal groups means: 'terrestrial food-producing animals', 'aquatic food-producing animals' or 'companion animals'

# Documents on the OIE Website



The 5<sup>th</sup> Annual Report was published in April with three main sections:

1. Results of the 5<sup>th</sup> Round (**160** countries)
2. 2017 analysis of antimicrobial quantities (**103** countries)
3. Trends from 2015 to 2017 (**69** countries)

<https://www.oie.int/en/what-we-do/global-initiatives/antimicrobial-resistance/>

**OIE Template (questionnaire)**

**Guidance to complete the OIE Template**

**Annex to assist in calculations**



**All OIE AMU Reports**





# The 5<sup>th</sup> OIE AMU Annual Report



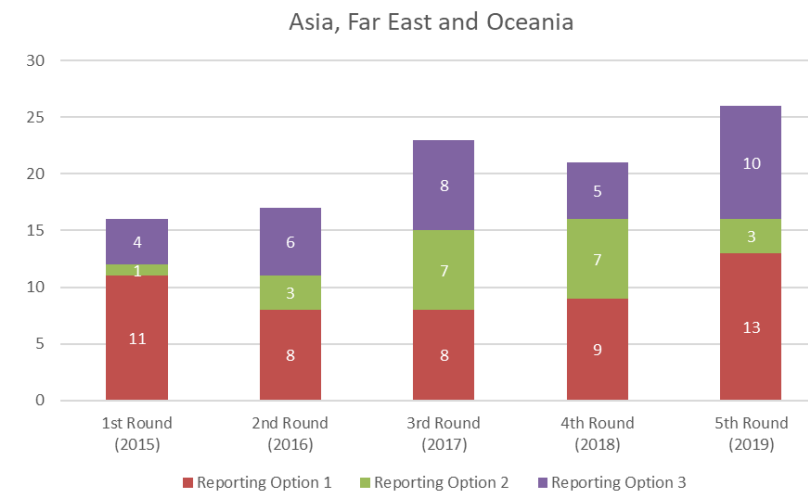
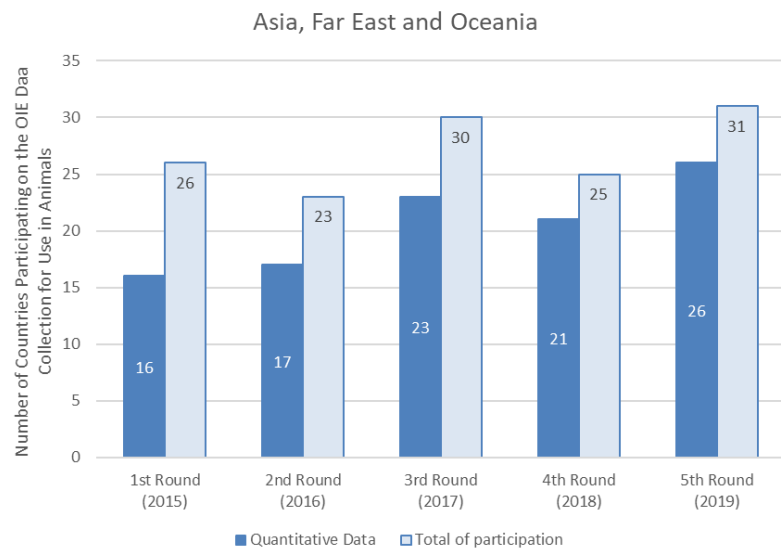
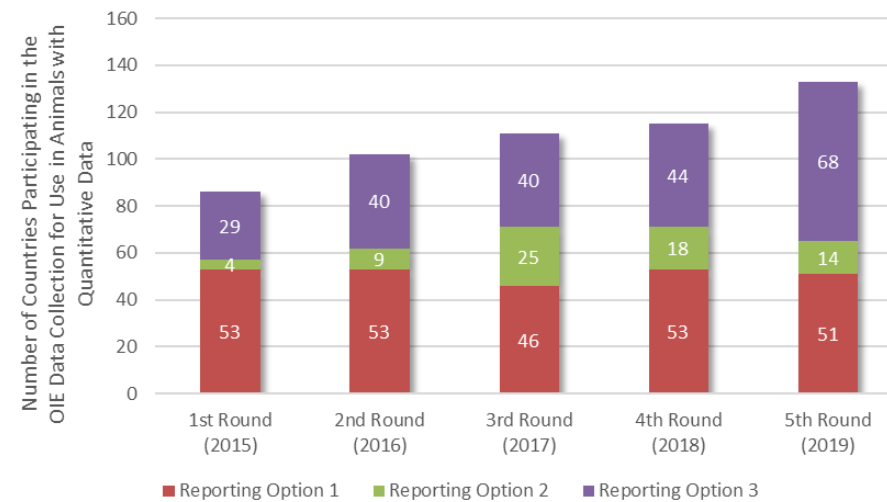
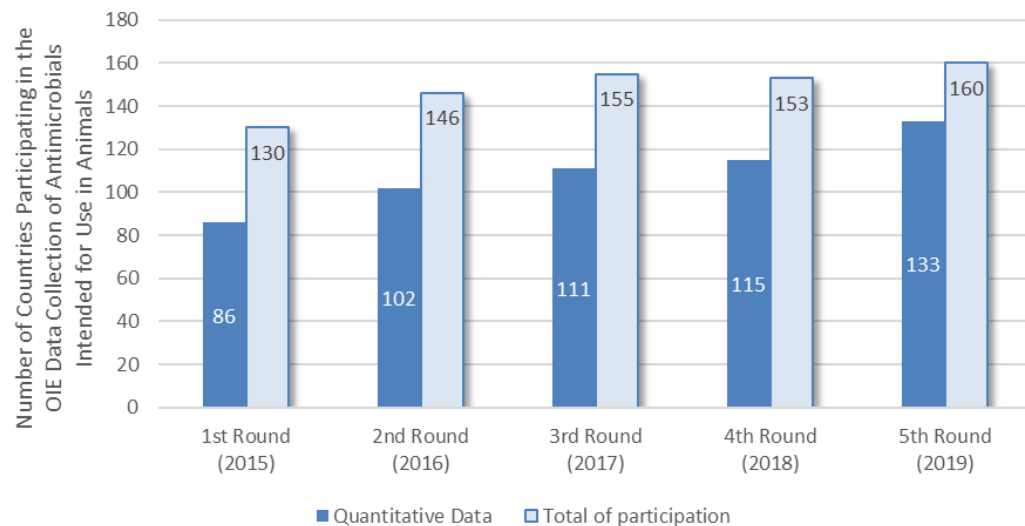
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# Type of data provided - Global



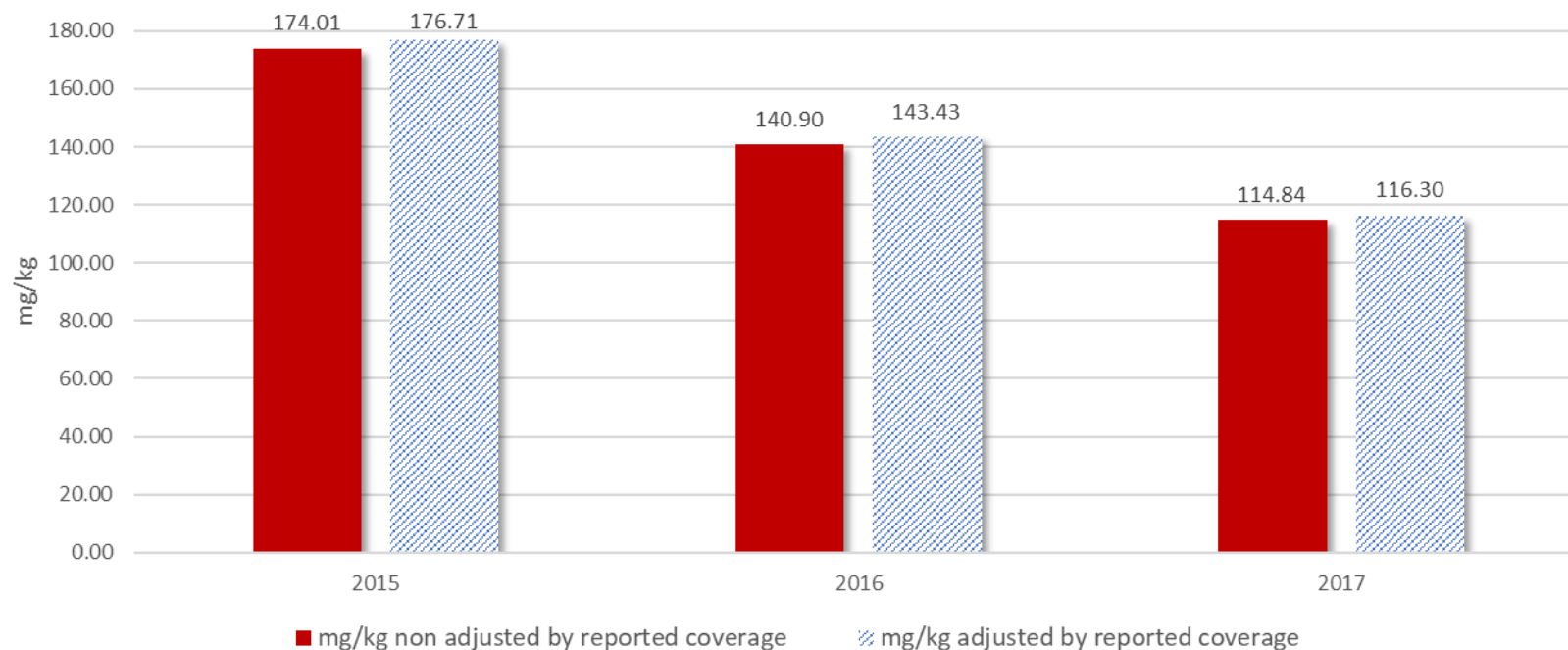
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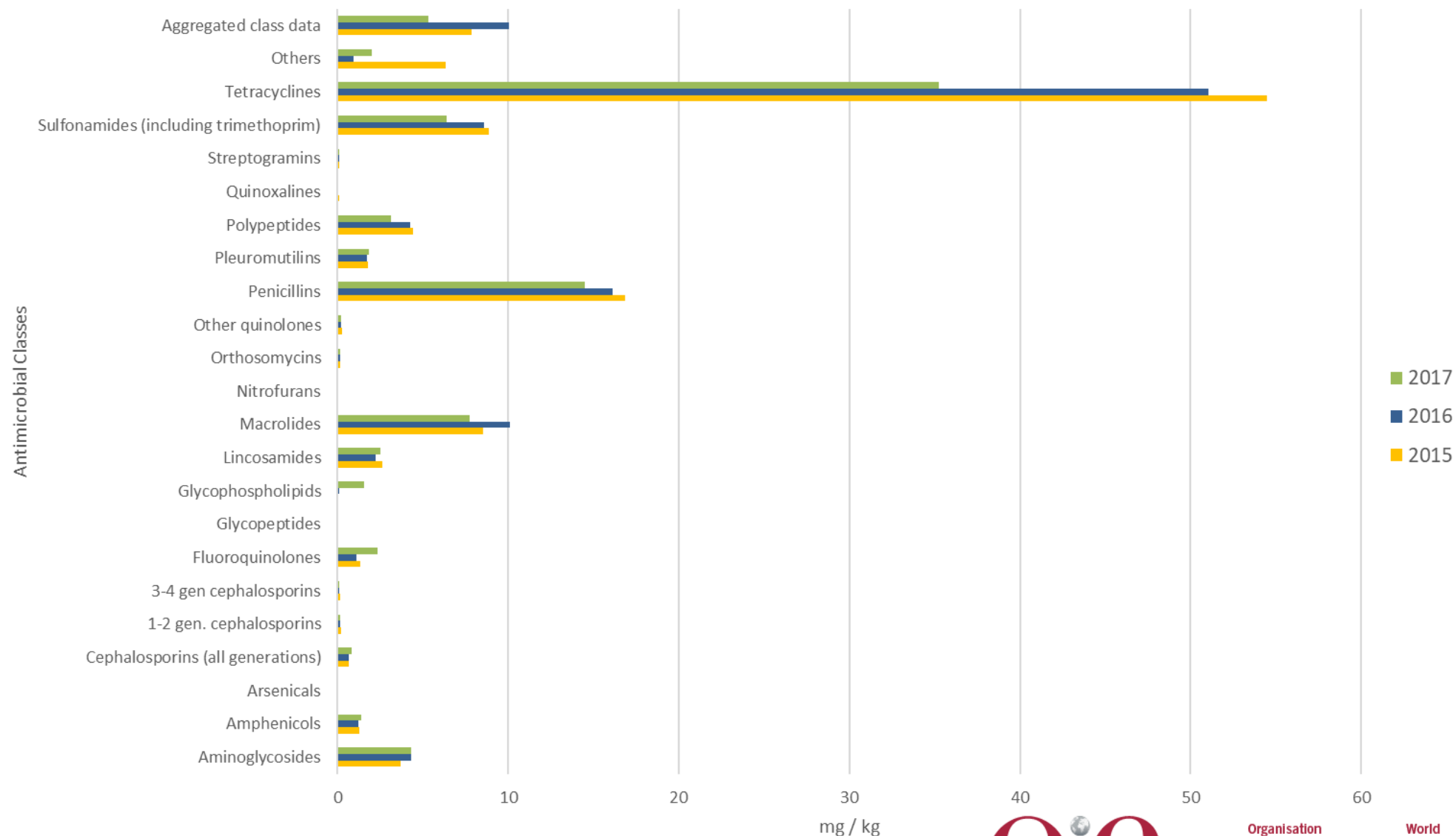
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## Trends on Time for the Global Quantities of Antimicrobial Agents Intended for Use in Animals Based on Data Reported by 69 Countries from 2015 to 2017, Adjusted by Animal Biomass (mg/kg)

- Debuting in the Fifth Report, the trend from 2015 to 2017 on global antimicrobial use data is included in the report. This new section presents the analysis of data from 69\* countries on the global mg/kg intended for use and by antimicrobial classes. Of the **69 countries** that provided data for **all years between 2015 and 2017**, an overall decrease in antimicrobial quantities of 34% was observed, indicating a positive trend over time in more prudent and responsible use of antimicrobials in the animal health sector.



# Trends over Time for the Antimicrobial Classes Reported by 69 Countries from 2015 to 2017, Adjusted by Animal Biomass (mg/kg)\*



\* For each antimicrobial class, the summed antimicrobial quantities reported (in mg) in all OIE Regions are divided by the total animal biomass (in kg)



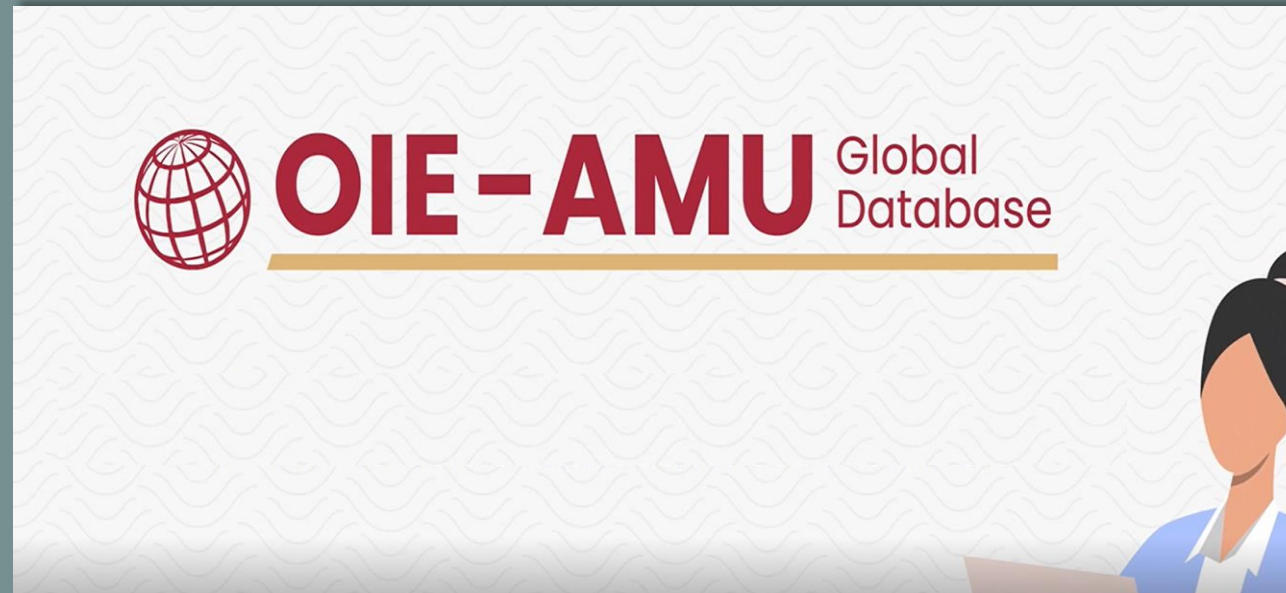
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## The future of the OIE AMU Data Collection



# Future of the OIE Database Collection



## Species Level Reporting

The future OIE Database System will allow Countries to report at species level

## OIE-WAHIS Integration

The integration of OIE-WAHIS will provide an analysis of the antimicrobial quantities (mg) adjusted by animal biomass (kg)



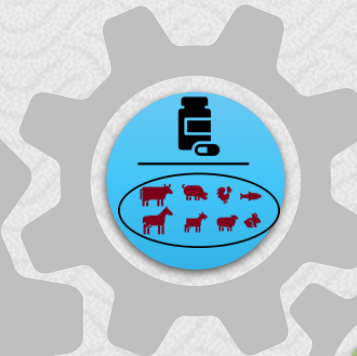
## Calculation Module

Formulas will be integrated in the System allowing Countries to calculate and report quantities thus improving the accuracy of data



## Data Ownership

Countries will have access to their own data which they can analyse and make informed decisions



## Business Intelligence Reporting

The system will be integrated with a Business Intelligence tool allowing faster and accurate data analysis and reporting



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**Thank you for  
your attention!**



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**[www.oie.int](http://www.oie.int)**