

Dr Dante Mateo

Chargé de mission with focus on aquatic animals

Antimicrobial Resistance and Veterinary Products Department

OIE global database on antimicrobial use in animals – aquatic animals' data



OIE Sub-Regional Workshop on AMR in Aquaculture
Durban, South Africa, 26-28 Nov. 2019

Monitoring the use of antimicrobials in animals based on OIE standards

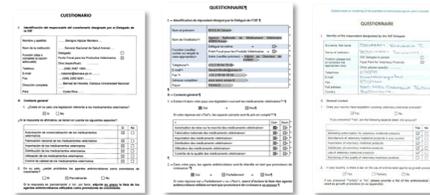
- 1 • A system where all can contribute
- 2 • That safeguards information
- 3 • That is pragmatic regarding the data collected
- 4 • That will help to collect comparable data

History of the OIE AMU Data Collection

OIE Questionnaire

2012

To determine what actions are needed and to help the OIE to develop its strategy in the AMU field; To prepare the 1st OIE Global Conference on AMR



85% Participation
(152 Member Countries)

1st OIE Global Conference on the Responsible and Prudent Use of Antimicrobial Agents for Animals

2013

Member Countries agreed to collect harmonised quantitative data on the use of antimicrobial agents in animals with the view to establish a global database and submit them to the OIE.

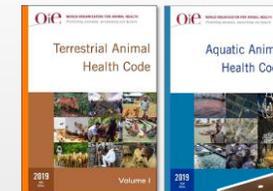


OIE Template and Accompanying Documents

2014

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.

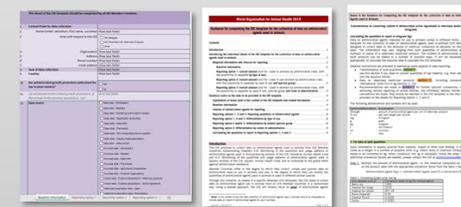
Documents were discussed with the OIE National Focal Points for Veterinary Products in the Americas; Europe; and Asia, Far East and Oceania regions; Africa was asked by email.



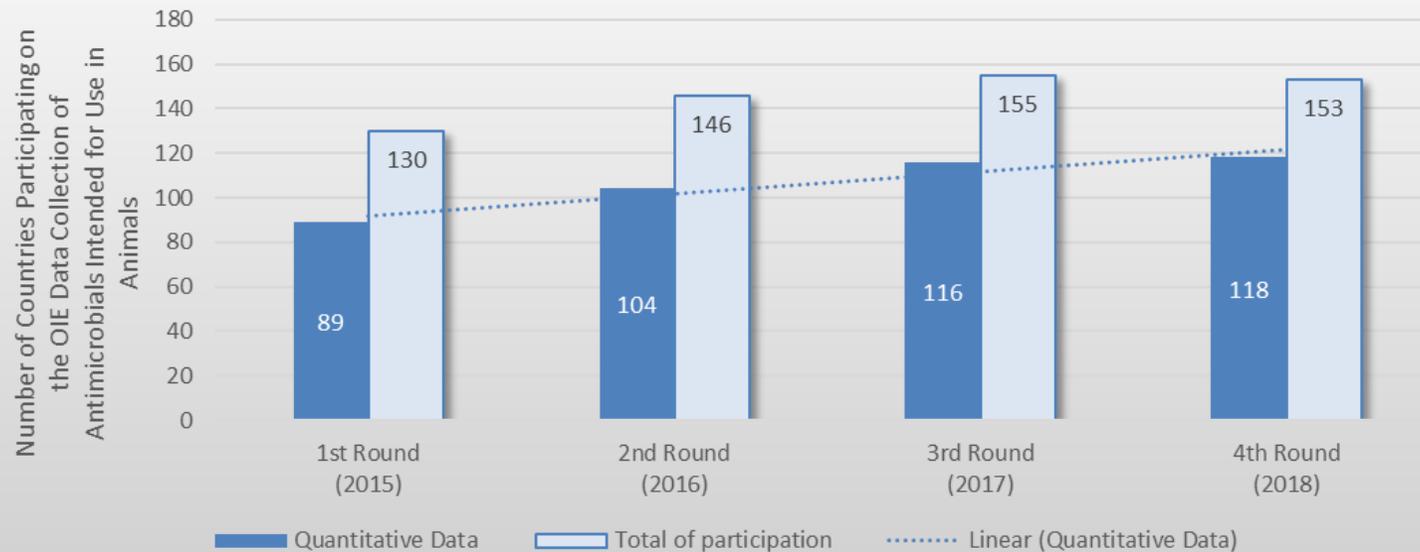
1st Round of the OIE AMU Data Collection

2015

Sent in October-November to all Member Countries.
Deadline was on 1st of December 2015.

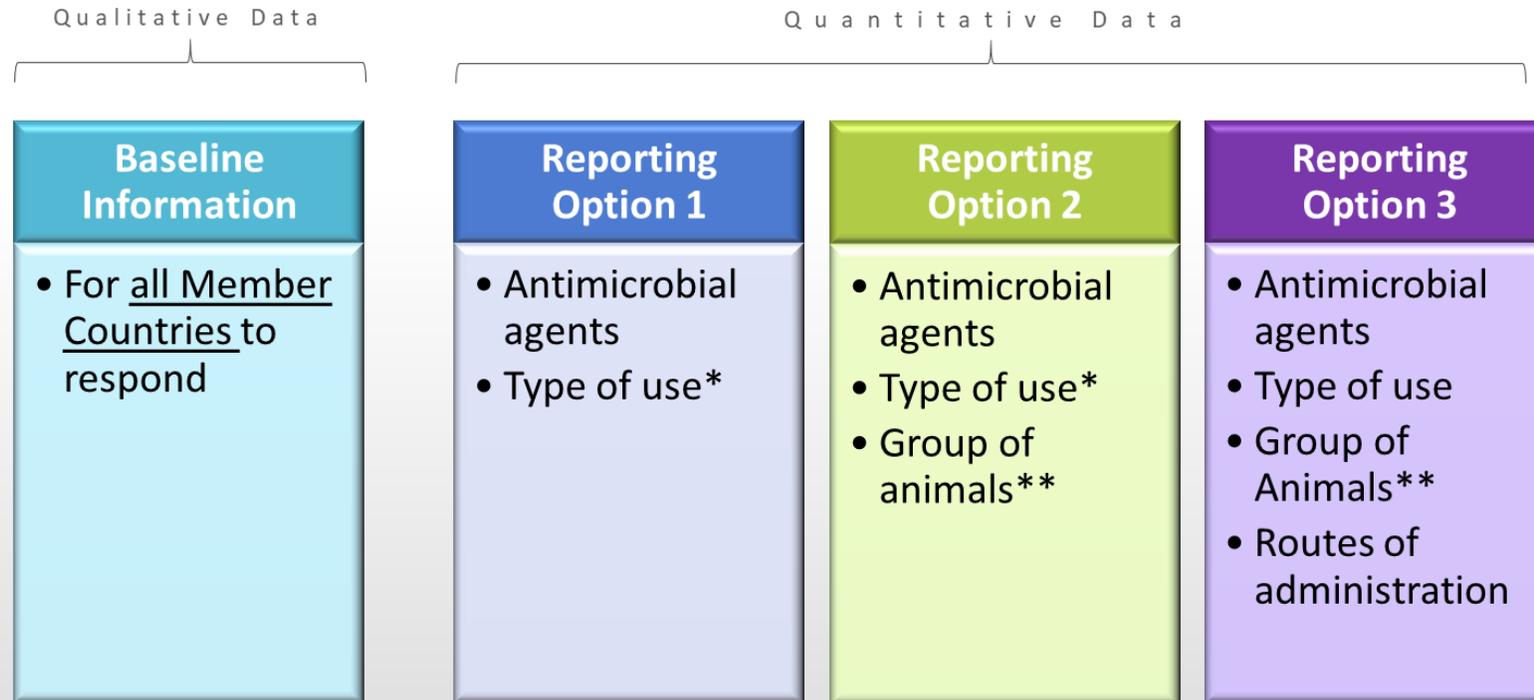


Years of Reported data



What data are being collected?

The sections of the OIE Template 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'

OIE Template

*** This sheet of the OIE template should be completed by all OIE Member Countries ***
Please refer to the Guidance document for further instructions.

A. Contact Person for Antimicrobial Agents Use Data Collection

1	Title	<free text field>
2	Name (First name, SURNAME)	<free text field>
3	Role with respect to the OIE	<input type="checkbox"/> OIE Delegate <input type="checkbox"/> OIE Focal Point for Veterinary Products <input type="checkbox"/> Other
4	Organisation	<free text field>
5	Organisation's Address	<free text field>
6	Country	<free text field>
7	Phone Number	<free text field>
8	Email Address	<free text field>

B. General Information

Questions 9 to 14 are related to the current situation in your country. Responses should not be linked to antimicrobial quantities reported.

9	Are data on the amount of antimicrobial agents intended for use in animals available?	<input type="checkbox"/> Amounts available - Yes <input type="checkbox"/> Amounts available - No
10	Please indicate why the data are not available at this time in your country, if the answer to Question 9 is 'No'	<free text field>
11	Are antimicrobial agents used for growth promotion purposes in animals in your country?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
12	Does your country have legislation/regulations on antimicrobial agents as growth promoters in animals?	<input type="checkbox"/> Legislation/regulation exists - Yes <input type="checkbox"/> Legislation/regulation does not exist - No
13	If your country has legislation/regulation on antimicrobial agents as growth promoters in animals, could you please indicate the appropriate case that applies in your country?	<input type="checkbox"/> All antimicrobial agents banned for use as growth promoters <input type="checkbox"/> Some antimicrobial agents banned for use as growth promoters <input type="checkbox"/> One or more antimicrobial growth promoters are authorised for use
14	Please provide a list of antimicrobial agents used or authorised as growth promoters, if any	<free text field>

If your response to Question 9 is 'No', please kindly send this template, once validated by the OIE Delegate or OIE Delegate in copy, to the OIE Antimicrobial Use Team at: antimicrobialuse@oie.int

If your response to Question 9 is 'Yes', please kindly complete Section C "Data Collection".

C. Data collection of Antimicrobial Agents Intended for Use in Animals

*** Please provide data for 2016 if you have data for another year, please select the year from the list below

15	Year for which data apply (Please select only one year per template)	<input type="checkbox"/> 2016 (target year) <input type="checkbox"/> 2017 <input type="checkbox"/> 2018
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Baseline Information | Reporting Option 1 | Reporting Option 2 | Reporting Option 3

25 Food-producing animal species covered by the information on antimicrobial quantities

- Cattle
- Pigs - commercial
- Pigs - backyard
- Sheep
- Goats
- Sheep and goats (mixed flocks)
- Layers - commercial production for eggs
- Broilers - commercial production for meat
- Other commercial/poultry
- Poultry - backyard
- Buffaloes (excluding Syncerus caffer)
- Cervidae (famed)
- Camelidae
- Equidae
- Rabbits
- Bees - Honey
- Fish - aquaculture production
- Crustaceans - aquaculture production
- Molluscs - aquaculture production
- Amphibians
- Reptiles (e.g. crocodiles)
- Other
- All

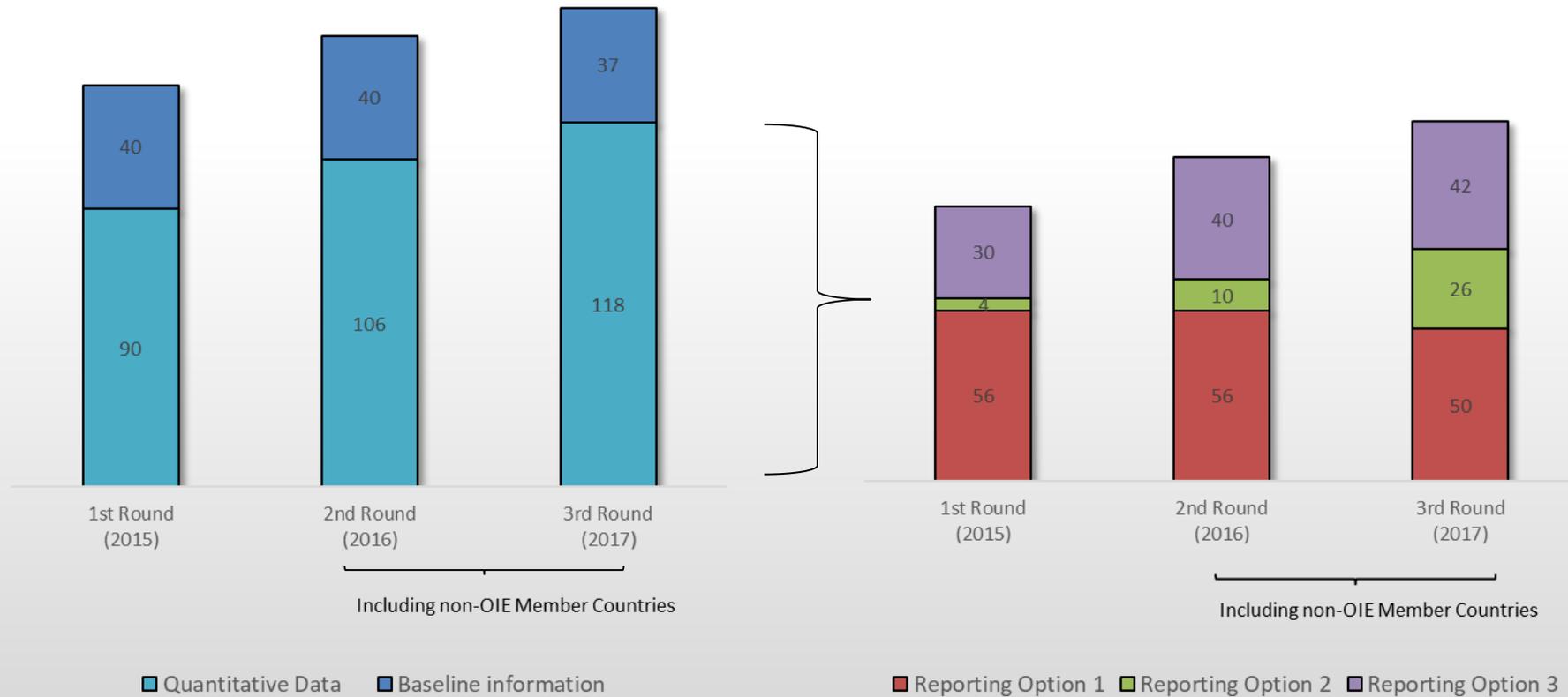
Antimicrobial Class	Overall Amount: Veterinary Medical Use + Growth Promotion	Amount: Veterinary Medical Use (including prevention of clinical signs)	Amount: Growth Promotion
	All animal species (kg)	All animal species (kg)	All animal species (kg)
Aminoglycosides	0		
Amphenicols	0		
Arsenicals	0		
Cephalosporins (all generations)	0	0	0
1-2 gen. cephalosporins	0		
3-4 gen cephalosporins	0		
Fluoroquinolones	0		
Glycopeptides	0		
Glycophospholipids	0		
Lincosamides	0		
Macrolides	0		
Nitrofurans	0		
Orthosomycins	0		
Other quinolones	0		
Penicillins	0		
Pleuromutilins	0		
Polypeptides	0		
Quinoxalines	0		
Streptogramins	0		
Sulfonamides (including trimethoprim)	0		
Tetracyclines	0		
Others	0		
Aggregated class data	0	0	0
Total kg	0	0	0

Antimicrobial Class	Overall Amount: Veterinary Medical Use + Growth Promotion	Amount: Veterinary Medical Use (including prevention of clinical signs)					Amount: Growth Promotion
	All animal species (kg)	All animal species (kg)	Companion animals (kg)	All Food-producing animals (terrestrial & aquatic) (kg)	Terrestrial Food-producing animals (kg)	Aquatic Food-producing animals (kg)	All Food-producing animals (terrestrial & aquatic) (kg)
Aminoglycosides	0	0	0	0	0	0	0
Amphenicols	0	0	0	0	0	0	0
Arsenicals	0	0	0	0	0	0	0
Cephalosporins (all generations)	0	0	0	0	0	0	0
1-2 gen. cephalosporins	0	0	0	0	0	0	0
3-4 gen cephalosporins	0	0	0	0	0	0	0
Fluoroquinolones	0	0	0	0	0	0	0
Glycopeptides	0	0	0	0	0	0	0
Glycophospholipids	0	0	0	0	0	0	0
Lincosamides	0	0	0	0	0	0	0
Macrolides	0	0	0	0	0	0	0
Nitrofurans	0	0	0	0	0	0	0
Orthosomycins	0	0	0	0	0	0	0
Other quinolones	0	0	0	0	0	0	0
Penicillins	0	0	0	0	0	0	0
Pleuromutilins	0	0	0	0	0	0	0
Polypeptides	0	0	0	0	0	0	0
Quinoxalines	0	0	0	0	0	0	0
Streptogramins	0	0	0	0	0	0	0
Sulfonamides (including trimethoprim)	0	0	0	0	0	0	0
Tetracyclines	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0
Aggregated class data	0	0	0	0	0	0	0
Total kg	0	0	0	0	0	0	0

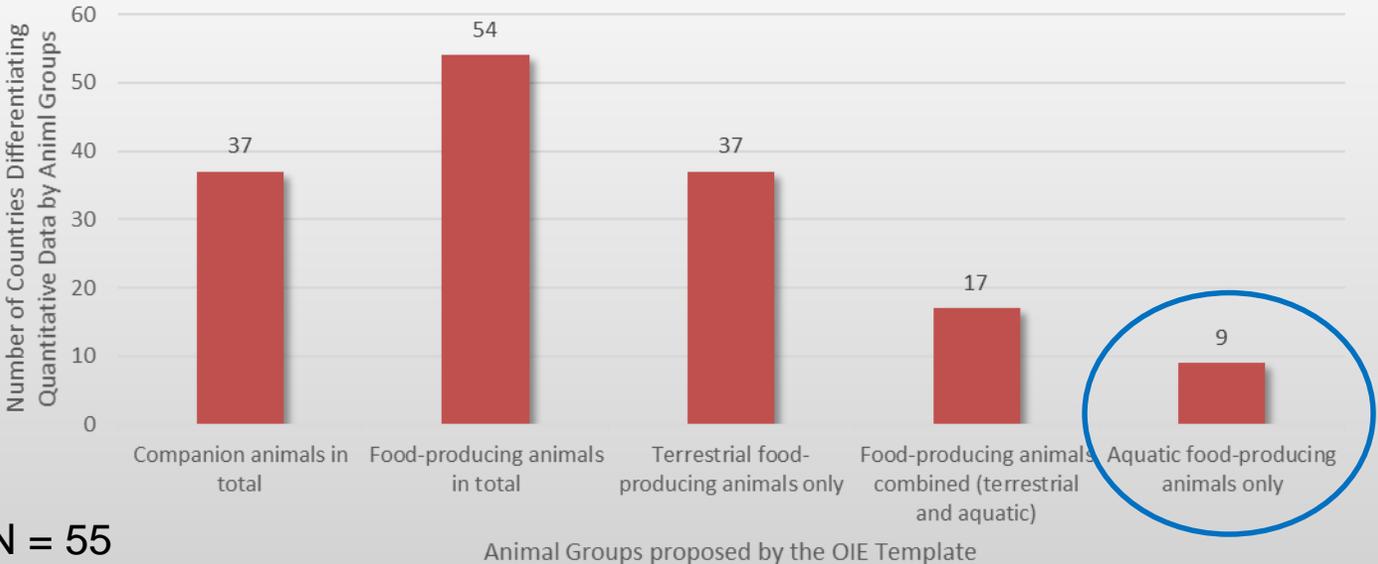
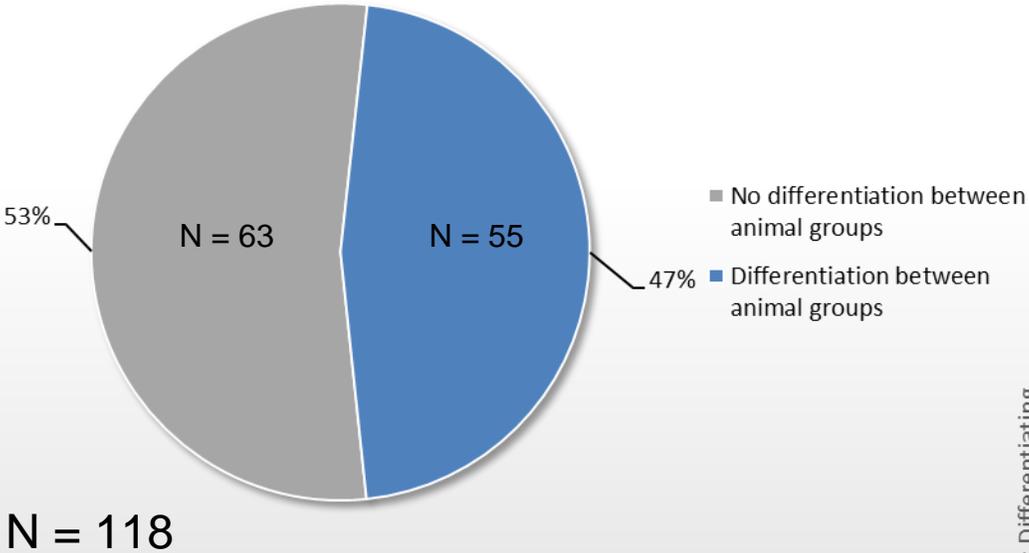
Antimicrobial Class	Overall Amount: Veterinary Medical Use + Growth Promotion	Amount: Veterinary Medical Use (including prevention of clinical signs)										Amount: Growth Promotion					
	All Animal Species	All animal species			Companion animals			All food-producing animals (terrestrial and aquatic)			Terrestrial food-producing animals			Aquatic food-producing animals			All food-producing animals (terrestrial and aquatic)
All routes (kg)	Oral route (kg)	Injection route (kg)	Other routes (kg)	Oral route (kg)	Injection route (kg)	Other routes (kg)	Oral route (kg)	Injection route (kg)	Other routes (kg)	Oral route (kg)	Injection route (kg)	Other routes (kg)	Oral route (kg)	Injection route (kg)	Other routes (kg)	All routes (kg)	
Aminoglycosides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amphenicols	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenicals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cephalosporins (all generations)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-2 gen. cephalosporins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3-4 gen cephalosporins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoroquinolones	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glycopeptides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Glycophospholipids	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lincosamides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Macrolides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrofurans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthosomycins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other quinolones	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Penicillins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pleuromutilins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polypeptides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Quinoxalines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Streptogramins	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfonamides (including trimethoprim)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetracyclines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aggregated class data	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



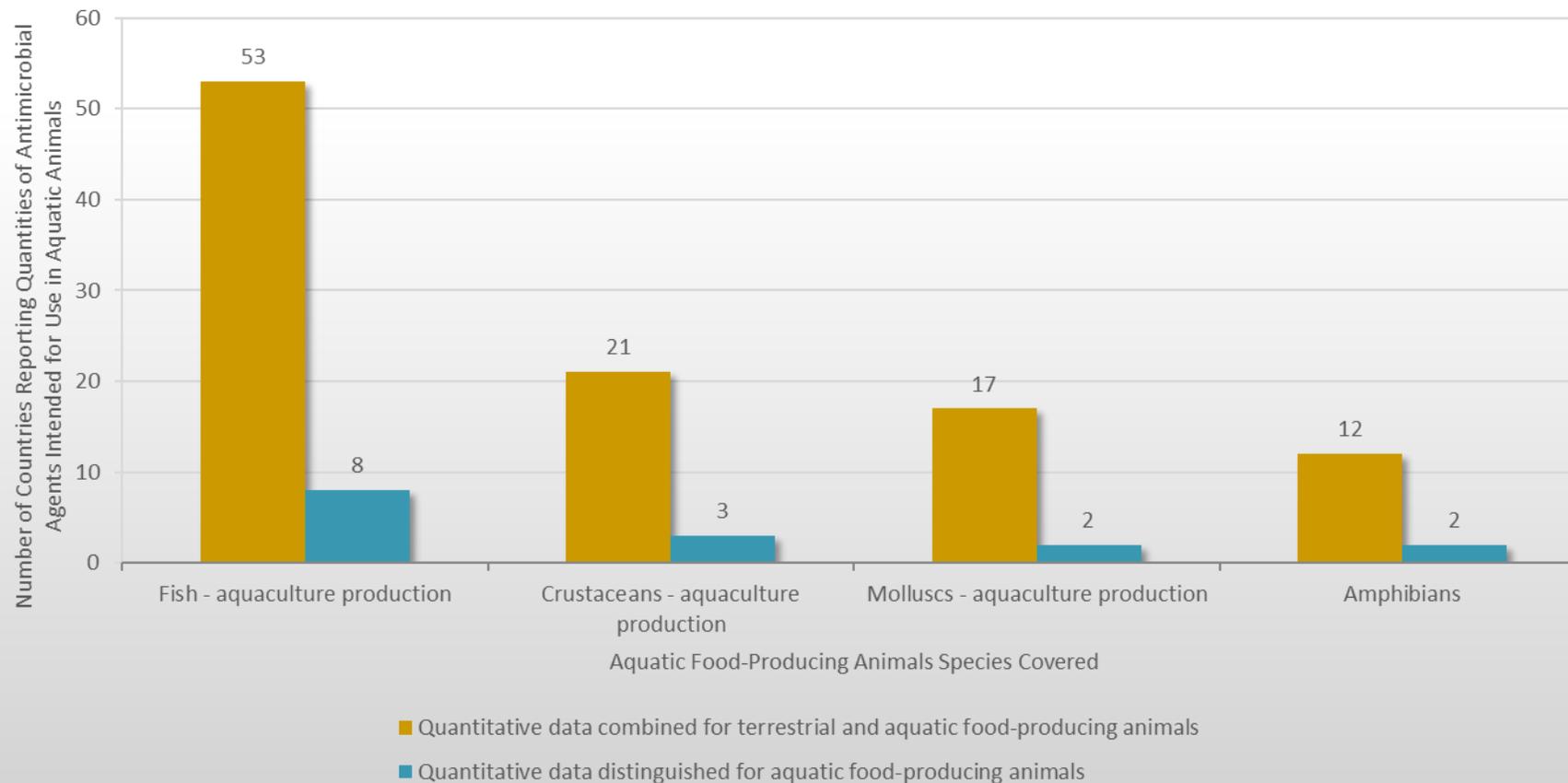
Data Types Reported in the OIE Data Collection



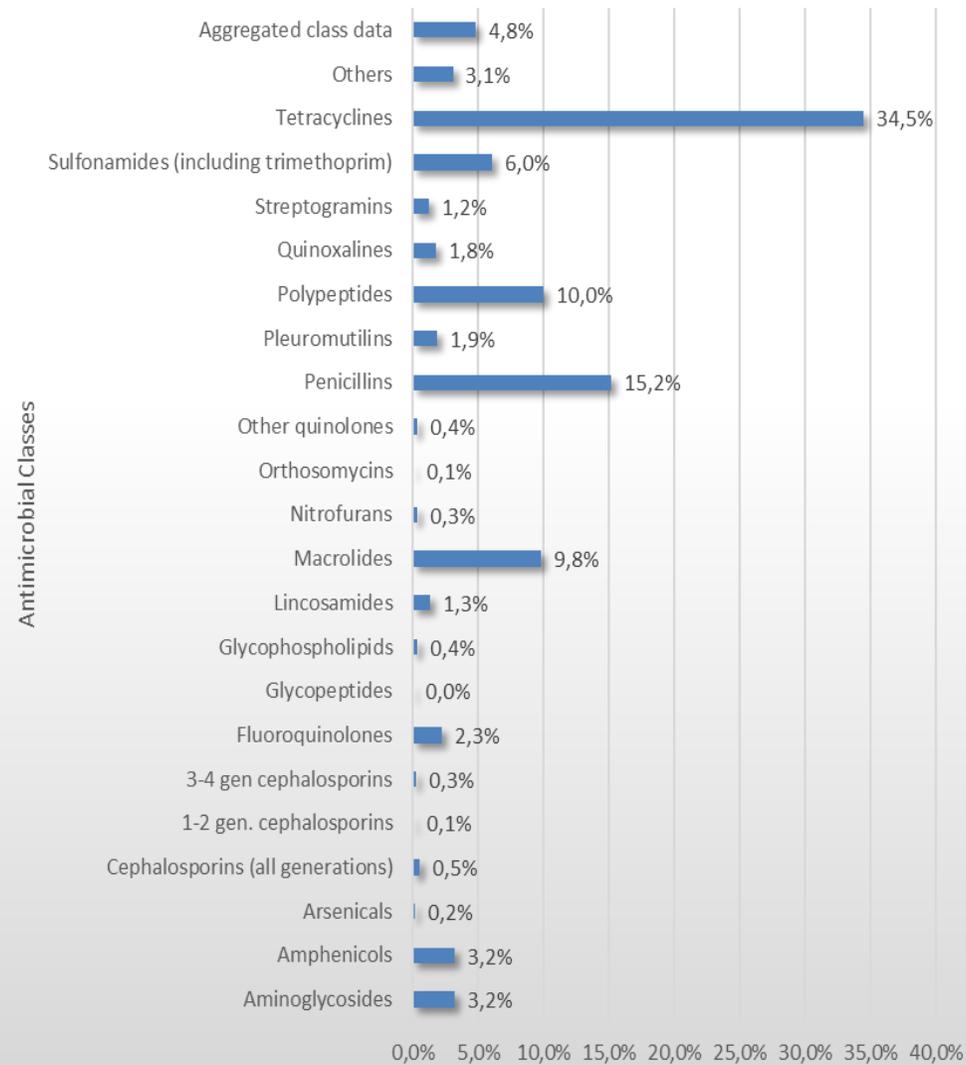
Differentiation by Animal Groups Among 118 Countries Reporting Quantitative Data from 2015 to 2017



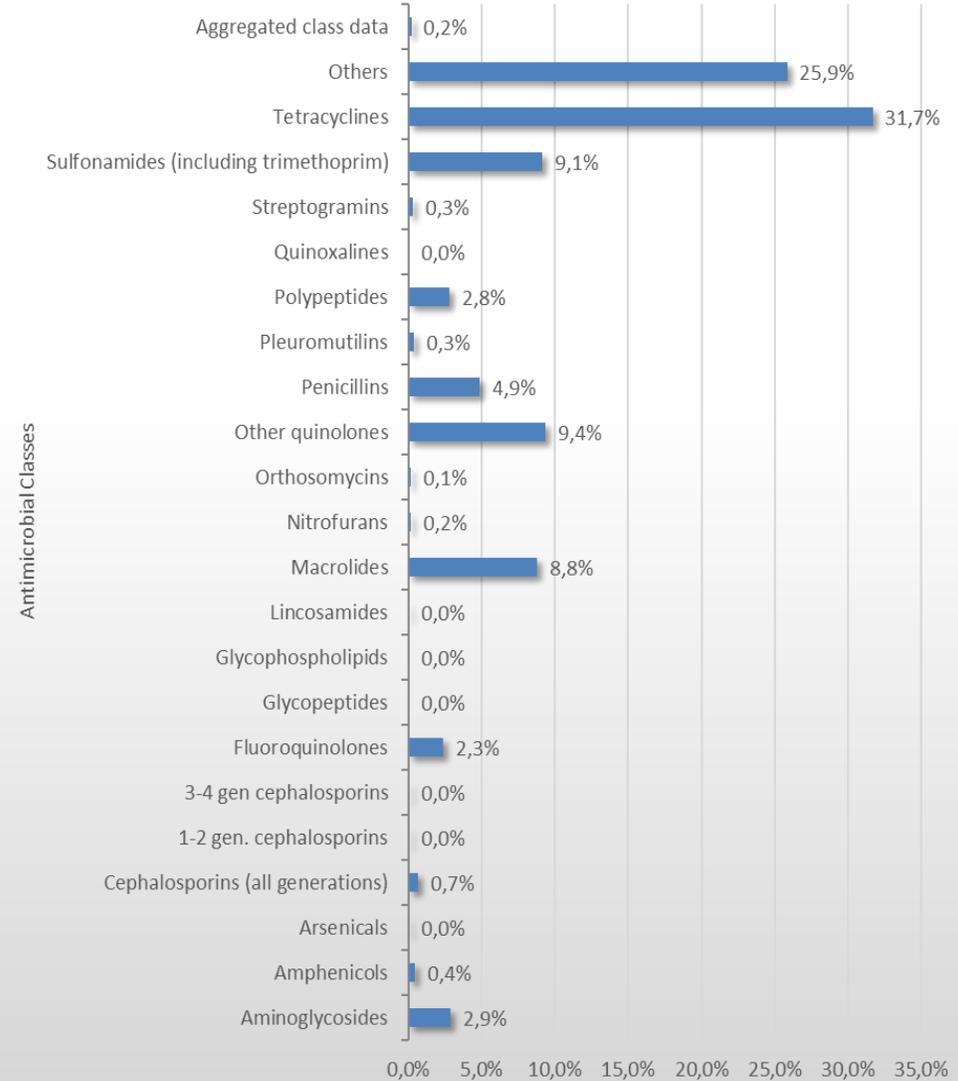
Aquatic Food-Producing Animals Included in Quantitative Data Reported by 62 Countries from 2015 to 2017



Proportion of Antimicrobial Quantities (by Antimicrobial Class) Reported for Use in Animals During the Third Round from 2015 to 2017

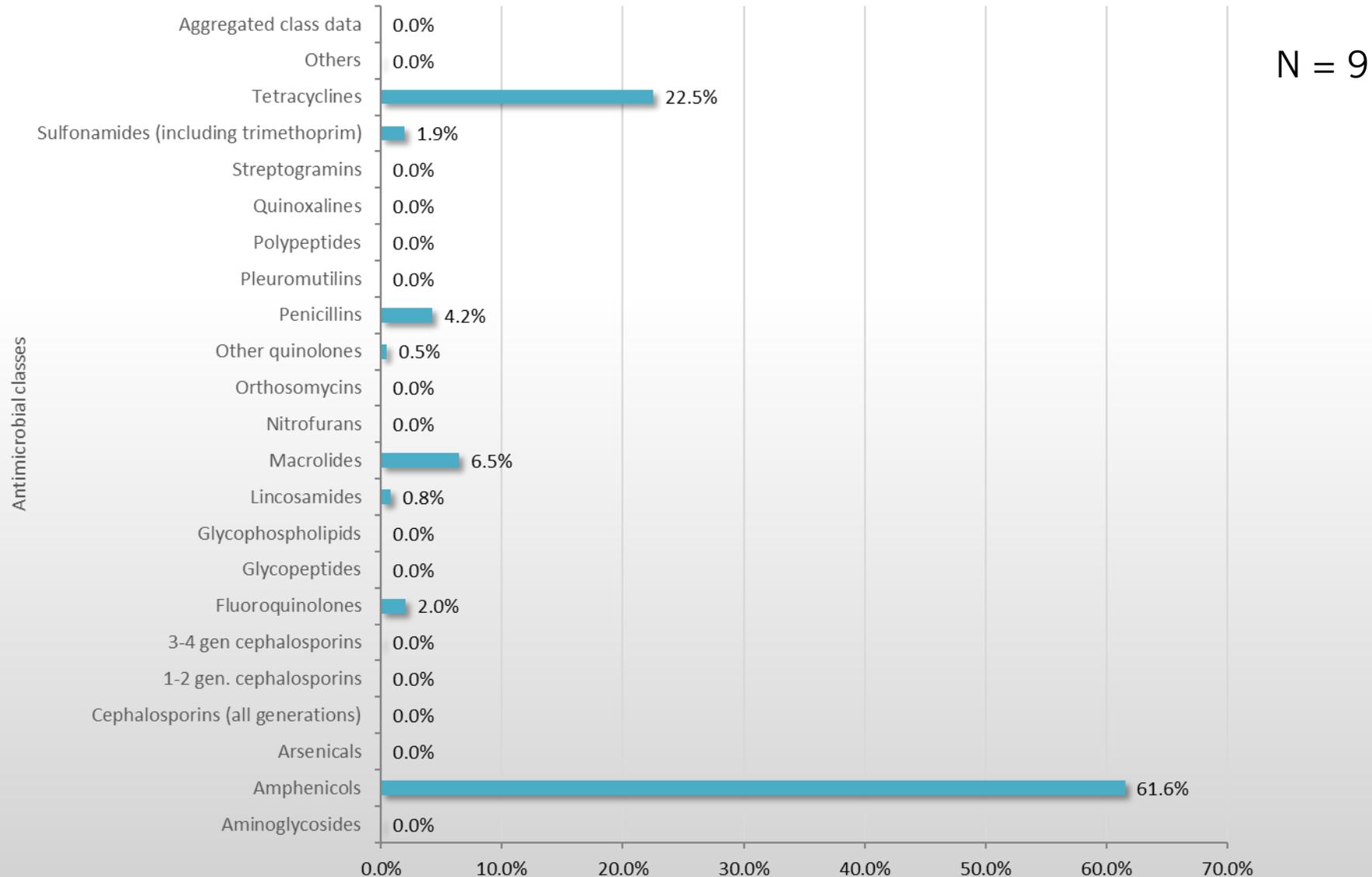


Global - Proportion of Antimicrobial Quantities Reported for Use in Animals by 116 Countries



Africa - Proportion of Antimicrobial Quantities Reported for Use in Animals by 32 Member Countries in Africa

Proportion of Antimicrobial Quantities (by Antimicrobial Class) Reported for Use in Animals During the Third Round from 2015 to 2017



% of reported quantities of antimicrobial agents used in animals by 9 Countries

■ Aquatic food-producing animals

Antimicrobial Agent Quantities

(mg)

Adjusted by Animal Biomass

(kg)

Antimicrobial agents (mg)

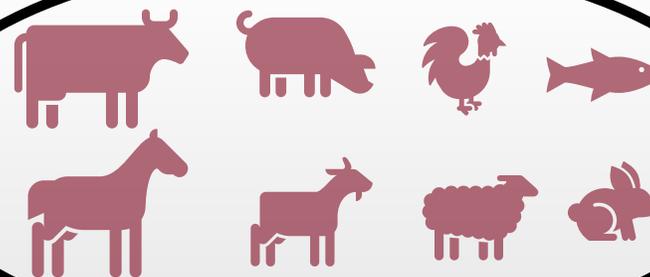


Animal biomass (kg)

=



As reported by the country to
the OIE data collection for the
target year

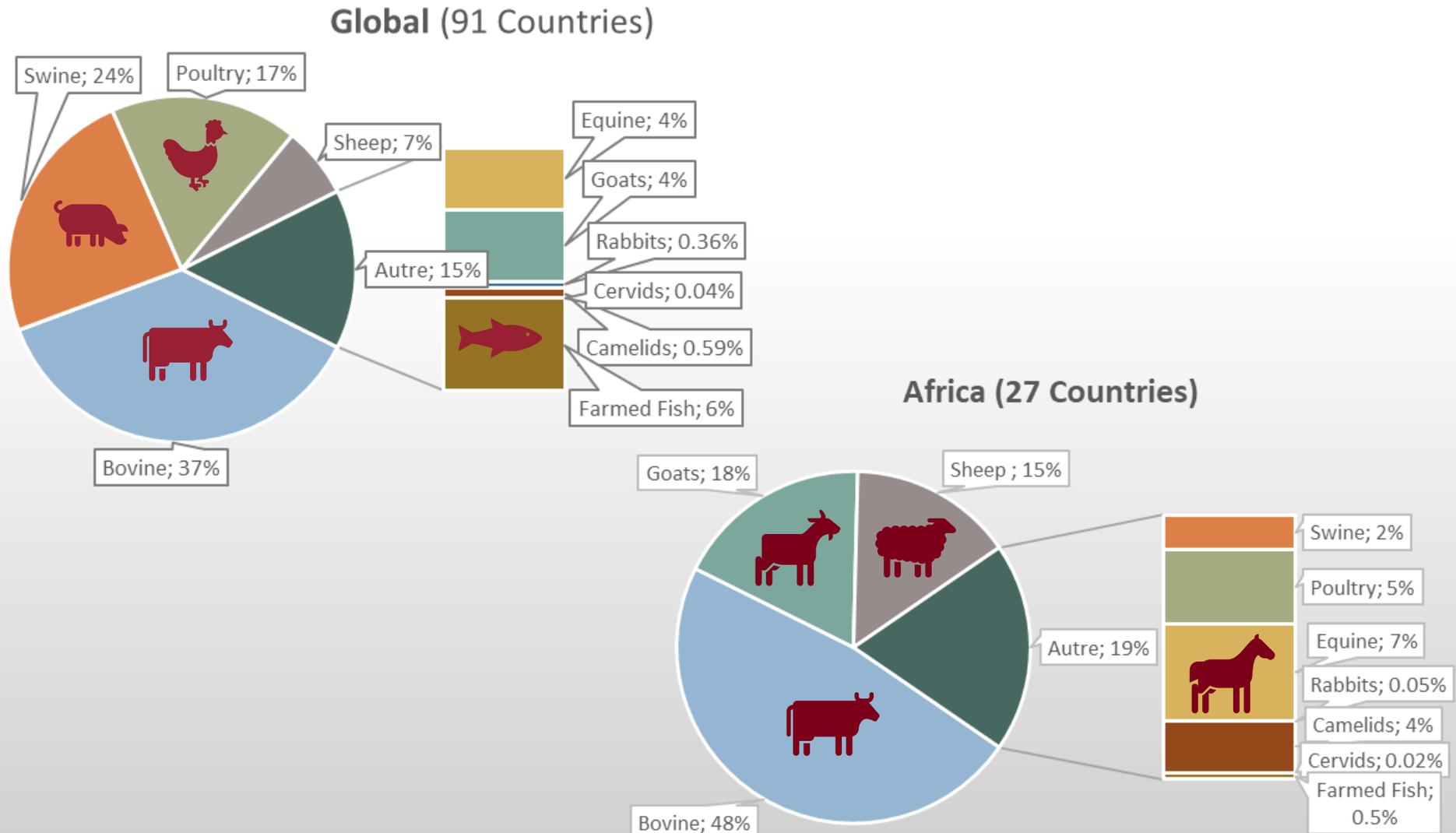


Total weight of food-producing animals in
the target year

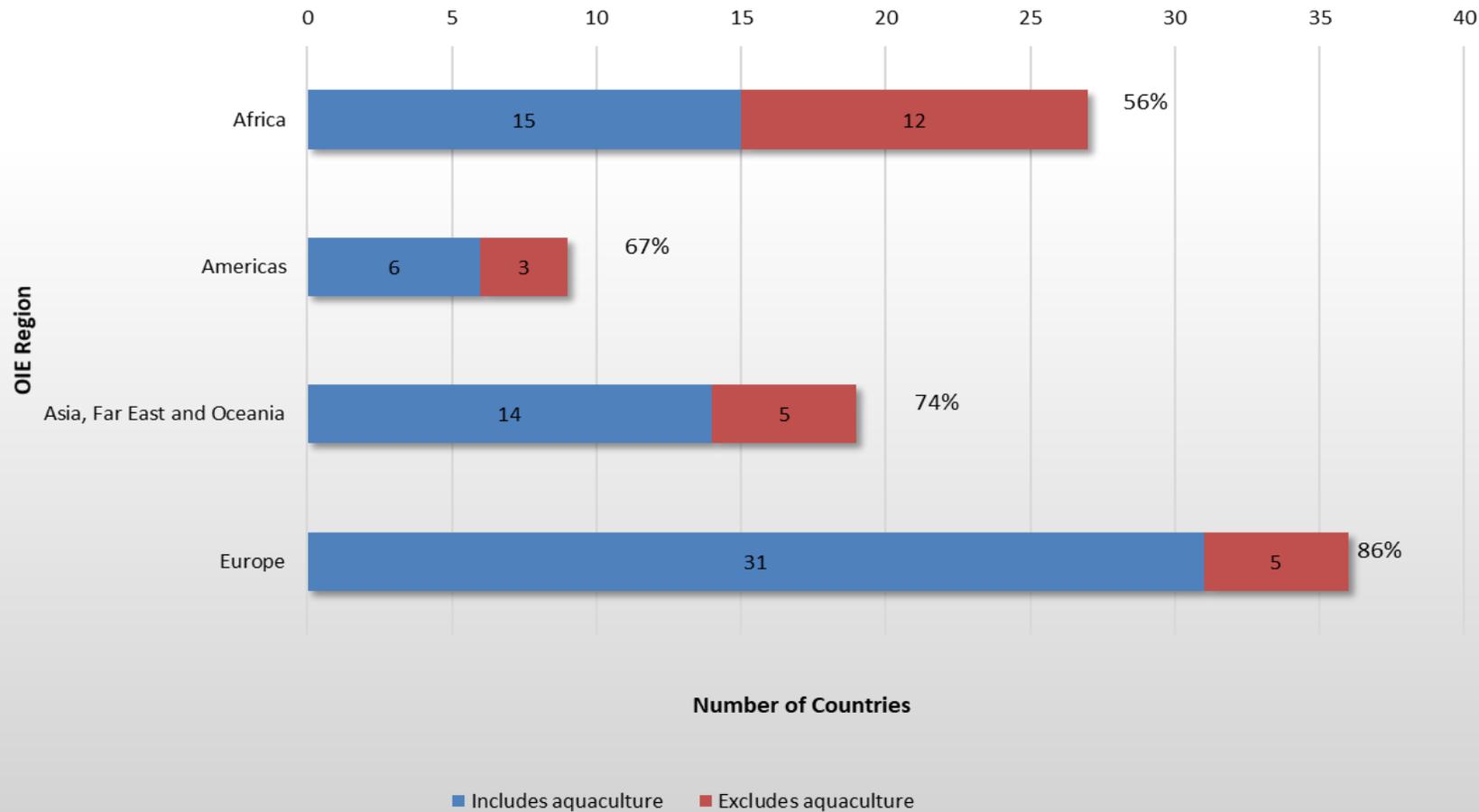


Calculated Animal Biomass of a country for the target year

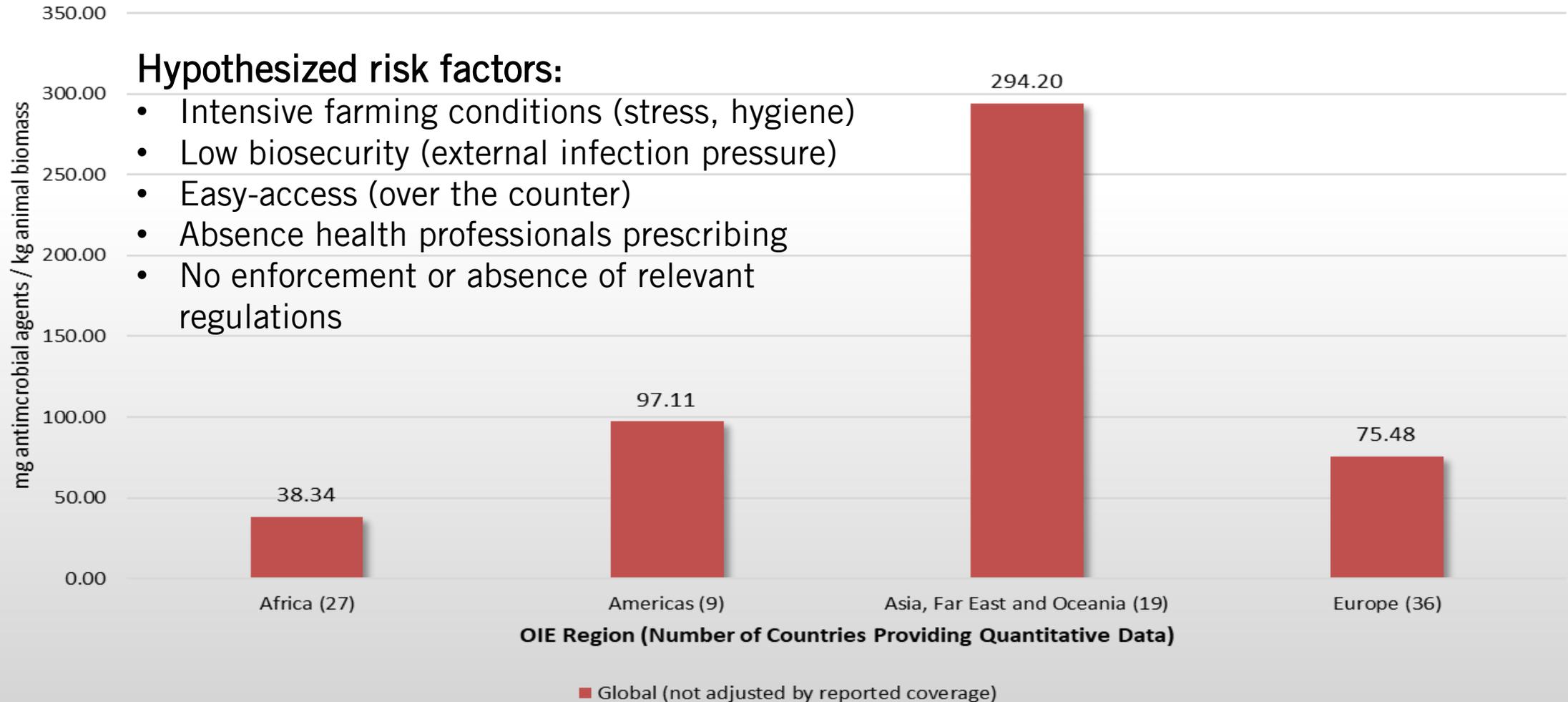
Species Composition in weight of Animal Biomass for Countries Reporting Quantitative Data for 2015



Countries Including Aquatic Food-Producing Animal Species in Quantitative Data for 2015



Regional Antimicrobial Use (mg / kg) 2015



Where can you find the reports?

1st Round

- 1st Report Published in Dec. 2016

2nd Round

- From Oct. 2016 to May 2017
- Data ranging from 2013 to 2016
- 2nd Report published in Dec. 2017

3rd Round

- From Oct. 2017 to May 2018
- Data ranging from 2015 to 2017
- 3rd Report published in Feb. 2019

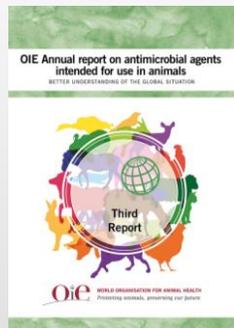
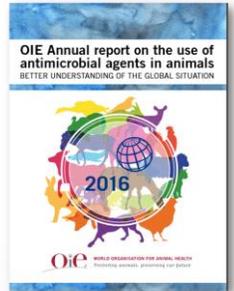
4th Round

- From Sept. 2018 to May 2019
- Focus analysis in 2016 data
- 4th Report will be published in early 2020

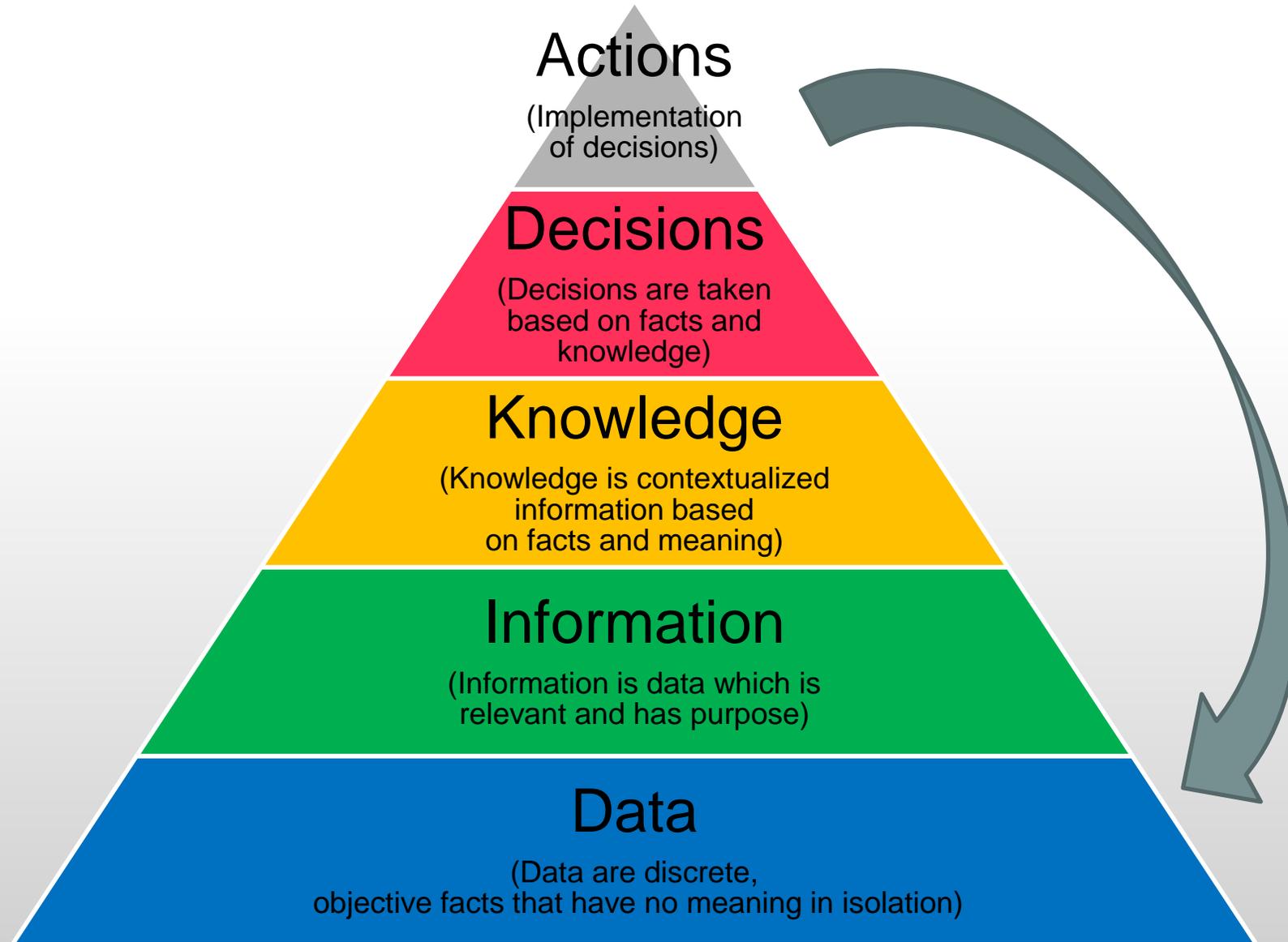
5th Round

- From Sept. 2019 to May 2020
- Focus análisis in 2017 data

Reports available at: <https://www.oie.int/en/scientific-expertise/veterinary-products/antimicrobials/>



What do we want to achieve?



Future of the OIE Database Collection

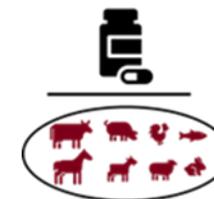


Species Level Reporting

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)



Integrated Formulas

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

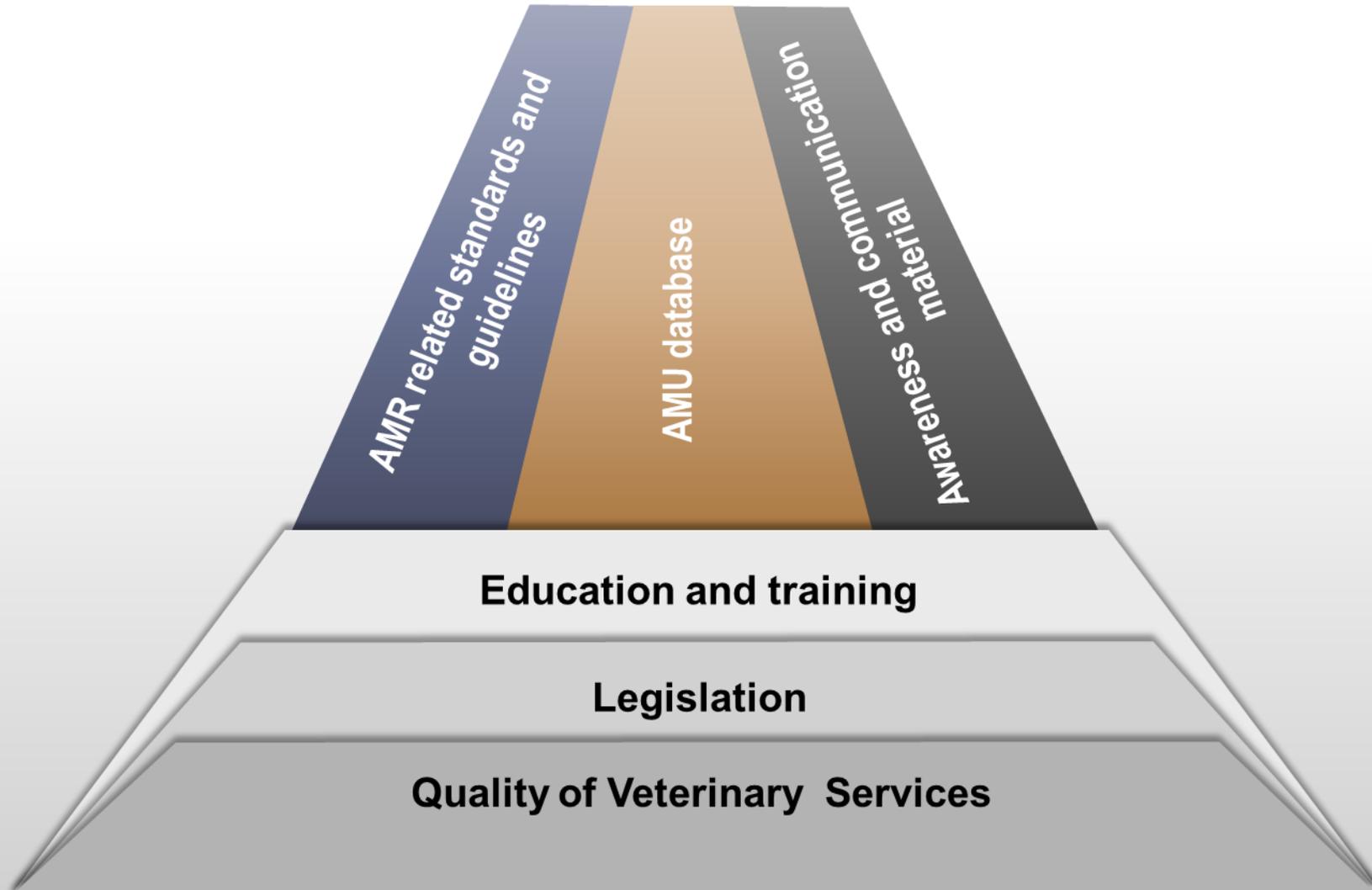


Business Intelligence Reporting

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



OIE Strategy on Antimicrobial Resistance and the Prudent Use of Antimicrobials



Thank you for your attention



Oie

WORLD ORGANISATION FOR ANIMAL HEALTH
Protecting animals, preserving our future

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