



# ANIMUSE – AMU Questionnaire and Common Errors

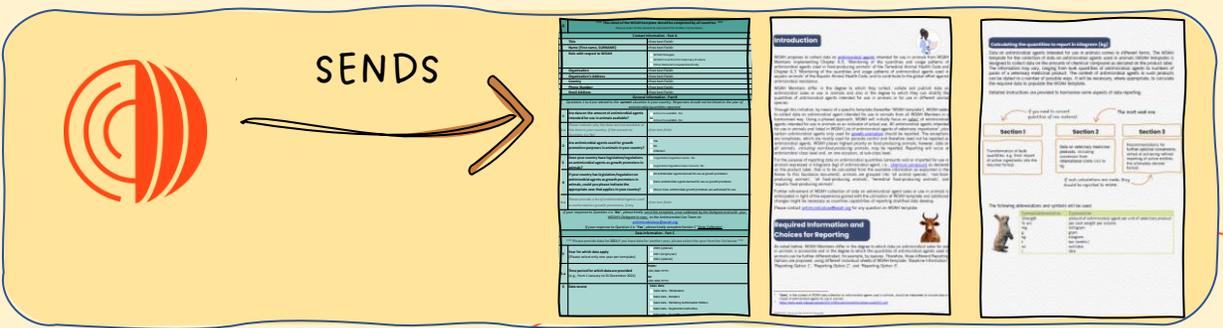


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Antimicrobial Resistance and Veterinary Products Department

Regional ANIMUSE Training for WOAH Focal Points for Veterinary Products  
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# WOAH's AMU data collection procedure

## Questionnaire, Guidance and Annex



## Exchanges to understand the data and share visuals

- All fields answered
- Coherence of answers
- Data over time
- Good calculations





# When are you expected to take action in ANIMUSE?

The screenshot shows a user interface for 'Data Collection Round'. On the left, there is a white box with the text 'Data Collection Round' and a red button labeled 'Start'. Below the title, it says 'Follow the advancement of your AMU dossier here'. On the right, a dark grey sidebar contains a vertical list of progress stages, each with an icon and a label: 'Round opened' (flag icon), 'In progress' (pencil icon), 'Submitted' (play button icon), 'Pending clarification' (document with question mark icon), and 'Validated' (checkmark icon). Hand-drawn orange arrows point from the 'Round opened', 'In progress', and 'Pending clarification' items to explanatory text on the right.

You need to start completing the AMU Questionnaire

You need to complete the AMU Questionnaire and submit it

You need to provide clarifications to WOH

You have a message from the Antimicrobial Use Team





# What Can I do If my Country Is Not Able to Provide Antimicrobial Quantities?

1 Are data on the amount of antimicrobial agents intended for use in animals available?

Yes

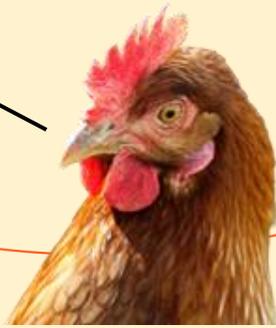
No

Please indicate why the data are not available at this time in your country, if your answer is no.

When you click 'no', you must provide us with all the relevant information that impedes you from reporting antimicrobial quantities. WOAAH is trying to analyse this information to find suitable solutions.

The Calculation Tool (now the Calculation Module in ANIMUSE) was a response to issues related with calculations and lack of IT systems that assist in the data collection procedure.

Remember, WOAAH's AMU Data Collection has been designed since its creation to allow the participation of EVERYONE





# What Type of Data Should I Submit?

1 Are data on the amount of antimicrobial agents intended for use in animals available?  Yes  No

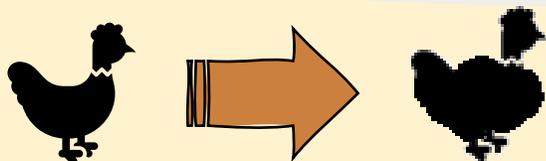
If quantitative data are partially available at national level, choose 'Yes'.  
If quantitative data are available for imports, sales, purchase, prescription, production or use at farm level, choose 'Yes'.

WOAH's AMU Data Collection accepts any type of data sources. All data sources accepted are listed in Question 6,



What is growth promotion?

Growth Promotion means the **administration of antimicrobial agents to animals only to increase the rate of weight gain or the efficiency of feed utilisation.**



What is NOT growth promotion?

- To **treat** diseases
- To **control** diseases
- To **prevent** diseases



Prevention means to **administer an antimicrobial agent to an individual or a group of animals at risk of acquiring a specific infection** or in a specific situation where infectious disease is likely to occur if the drug is not administered.

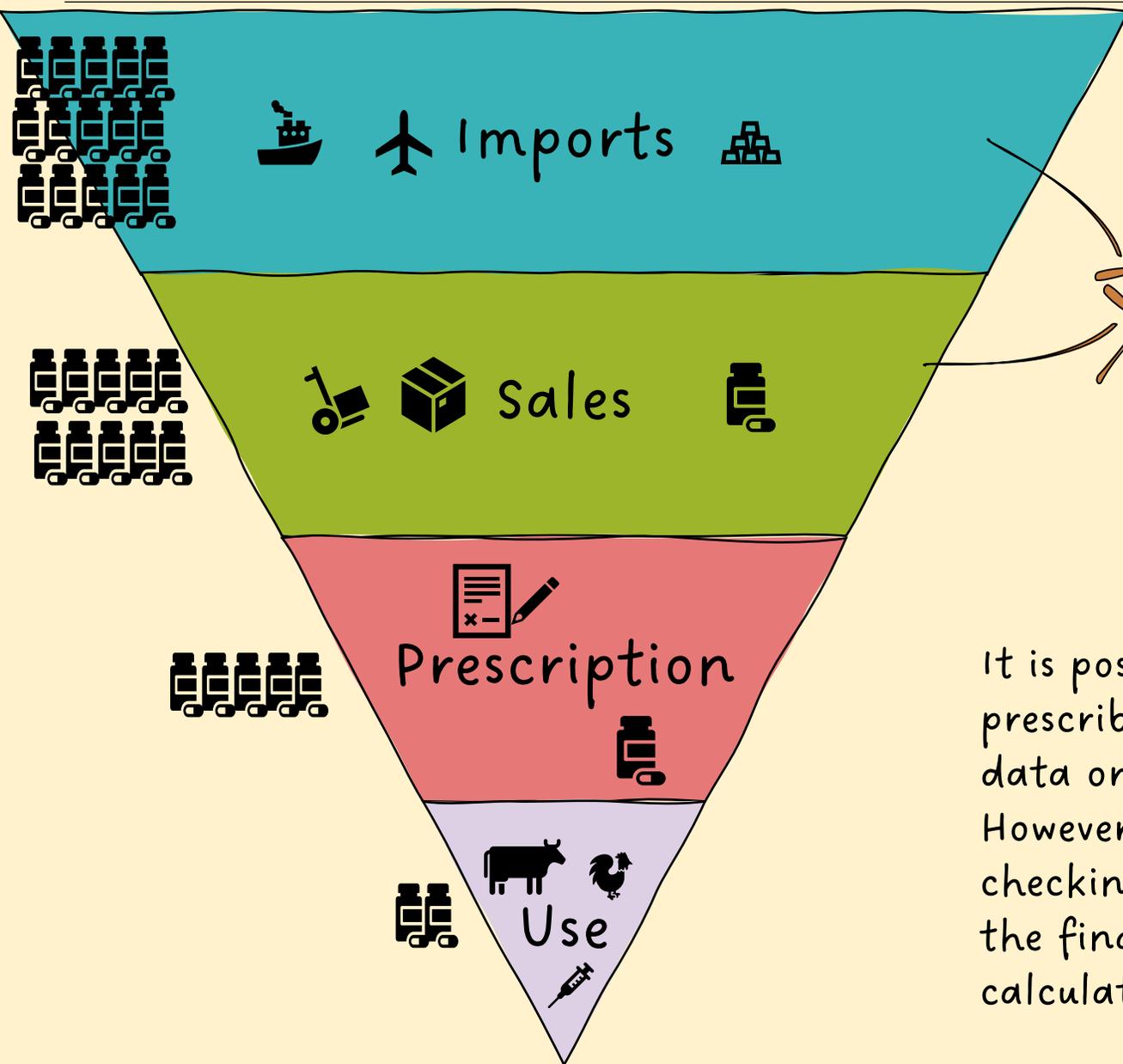


2 Are antimicrobial agents used for growth promotion purposes in animals in your country?  Yes  No  Unknown

Please indicate any known reason why this situation has changed from previous responses to WOAH.

If what you are answering is different from previous rounds, you should provide an explanation. You can also check previous responses in the History tab by clicking on the 'eye' 

Round	Reporting Option	Year	Submitted By	Profile	Email	Submission Date	Status	Date	Actions
7th Collection Round	Baseline data	N/A	Lilou Menesses	Other National Authority		2023-03-15	VALIDATED		  <input type="checkbox"/>
6th Collection Round	Baseline data	N/A	Delfy Góchez	Focal point		2023-03-15	VALIDATED		  <input type="checkbox"/>
5th Collection Round	Option 3	2017	Delfy Góchez	Focal point		2023-03-15	VALIDATED		  <input type="checkbox"/>



These are the main data sources reported at a global level and for the Middle East.

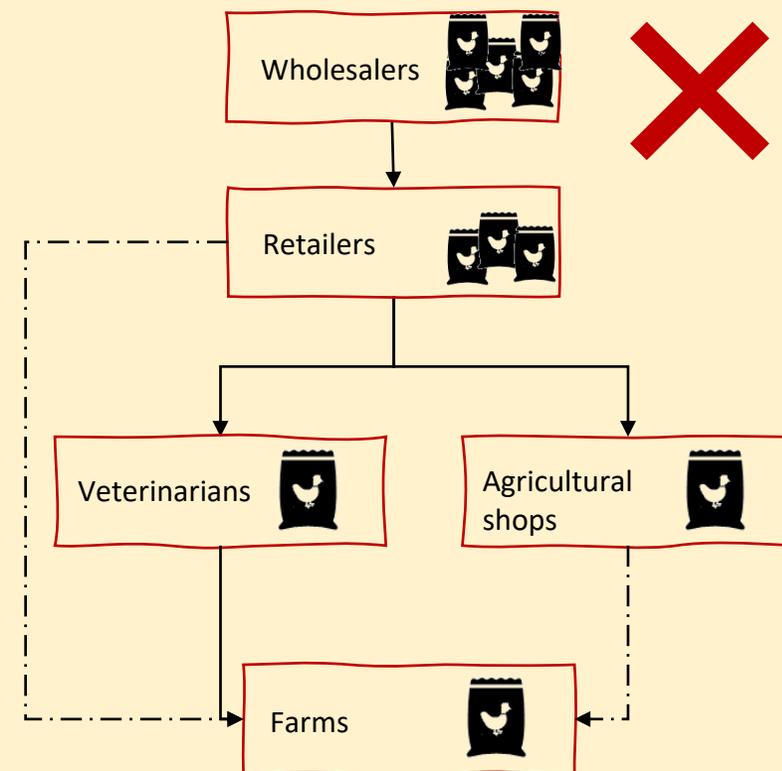
It is possible to estimate total usage by collecting sales data, prescribing data, manufacturing data, import and export data or any combination of these.

However, please put attention to any duplication when cross-checking data. Also, you might want to inform us which was the final data source that you used when performing the calculations.



# Risk of Duplication or Over-Estimation of Data Sources

Map the distribution of veterinary products. This will help you to evaluate if there are duplications in the data collection process.

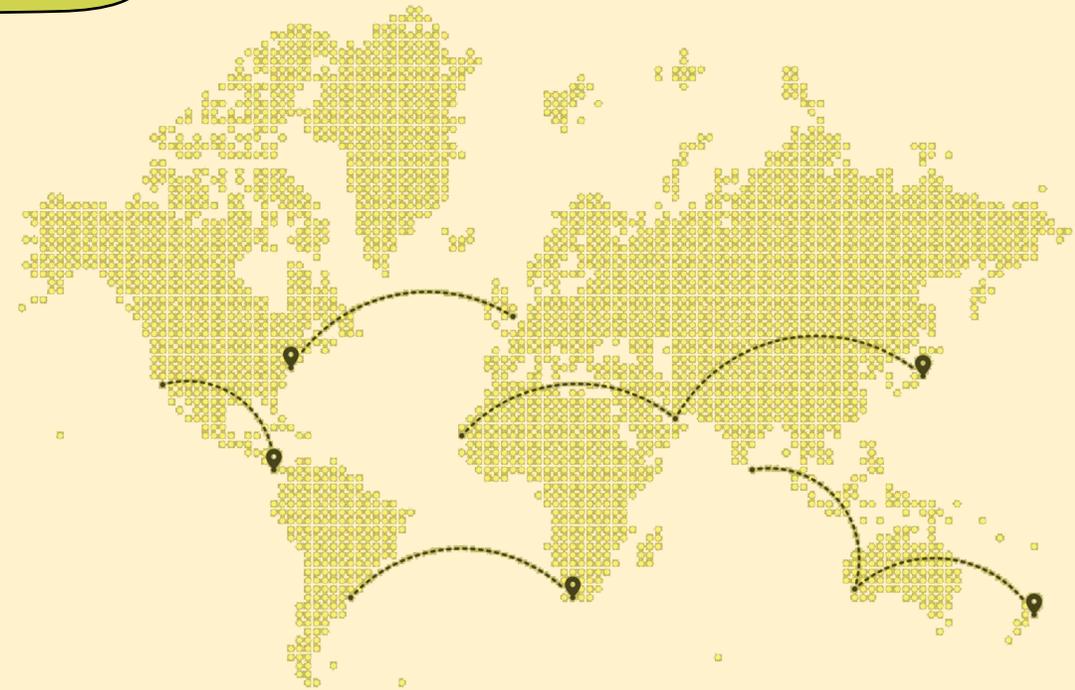




# How to Avoid Duplication or Over-Estimation of Data Sources?

Map the distribution of veterinary products. This will help you to evaluate if there are duplications in the data collection process.

If you are notifying imports or production, consider the exports





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You can use different data sources for different animal species (depending on the most suitable data source for that species).





# Use Visuals to Identify Potential Errors

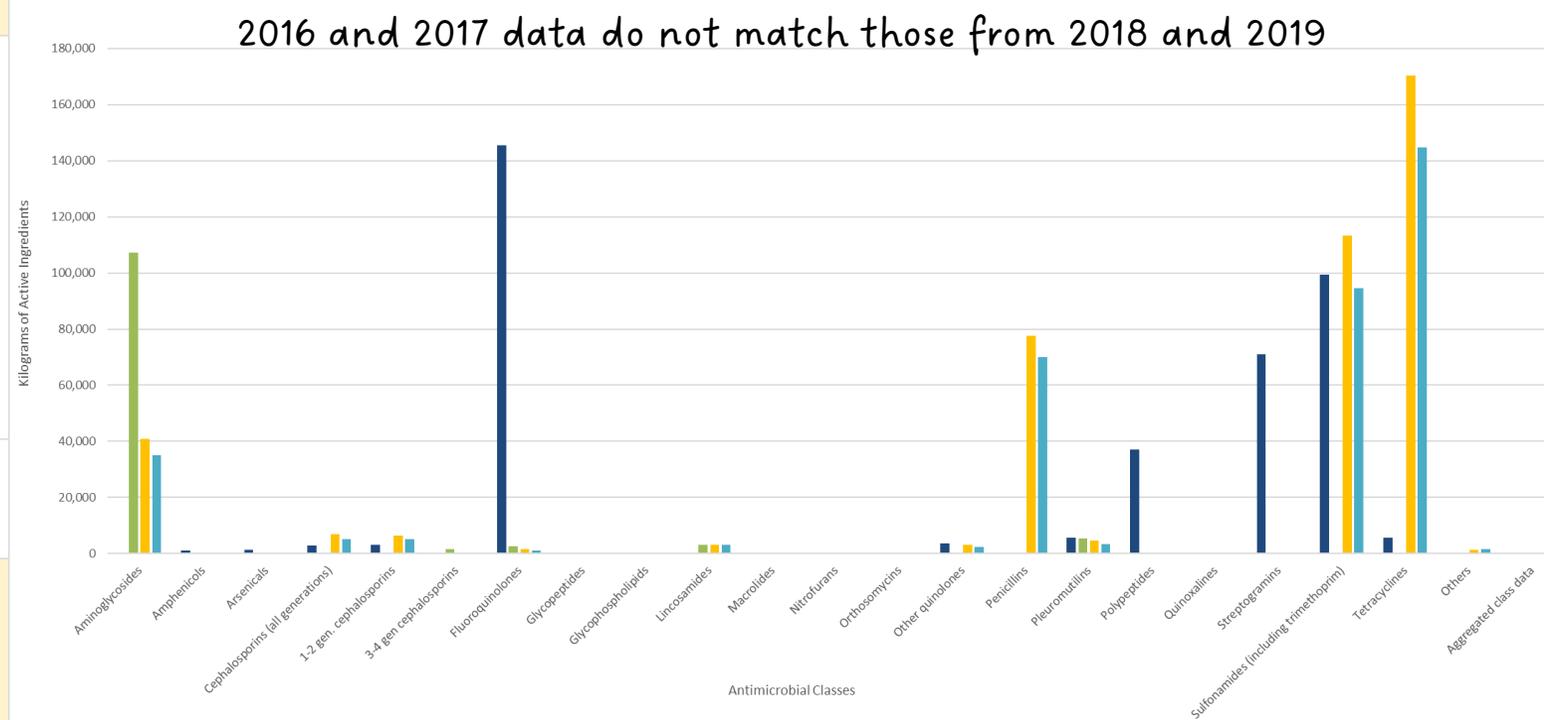
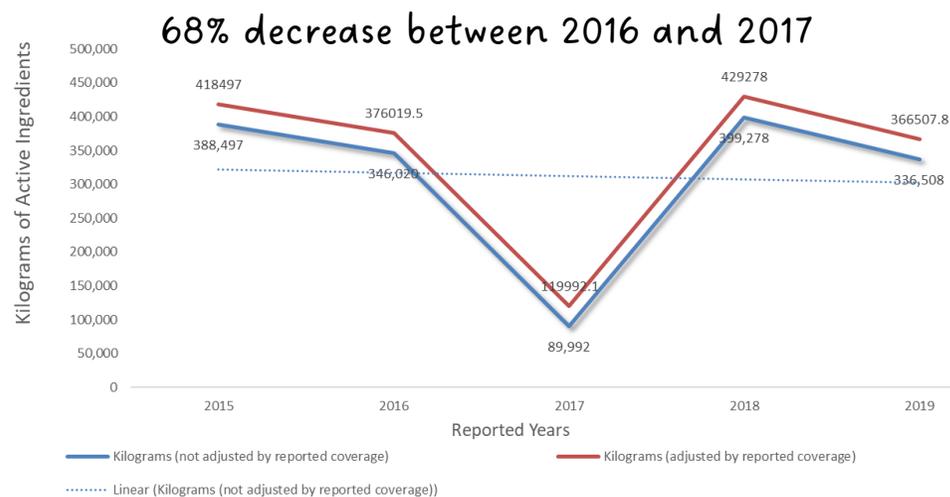
You can create your own visuals, but if needed, you can use the ones already created in ANIMUSE

DATA VISUALISATION ▾ HIST

Antimicrobial Quantities  
Calculation Module

In a chart, be attentive to the following things:

- Antimicrobial classes most used during the years
- Numbers of antimicrobial classes reported
- Percentage of change (%) from one year to another or in a period of time (more than  $\pm 25\%$  may indicate an error).
- Abrupt changes in the analysis of historical data





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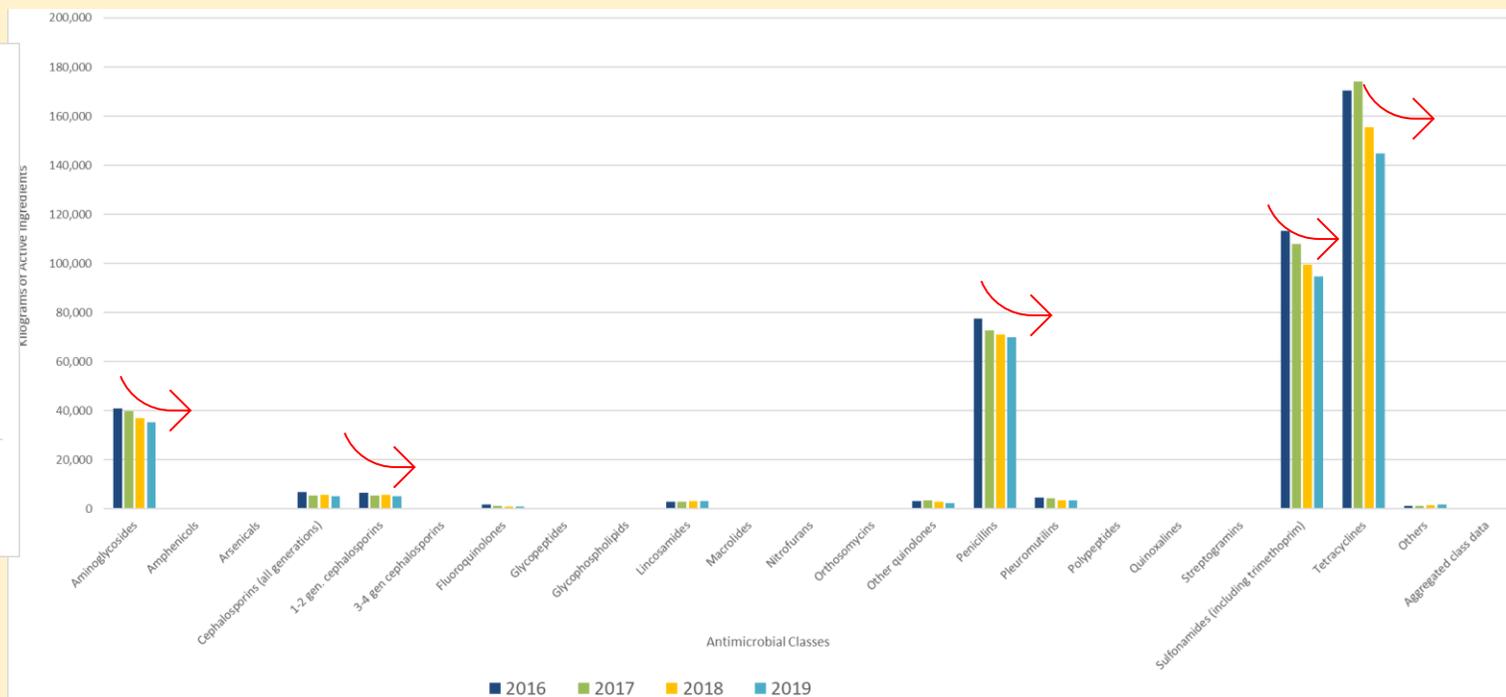
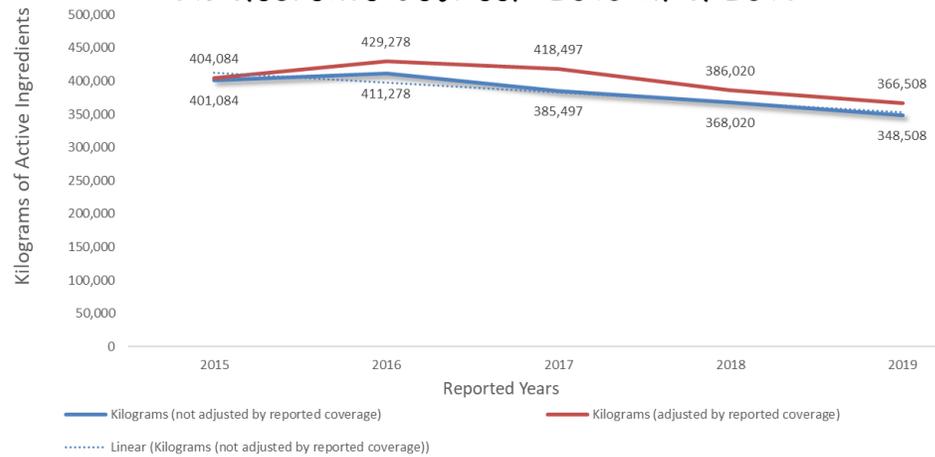
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% of change can be calculated as:

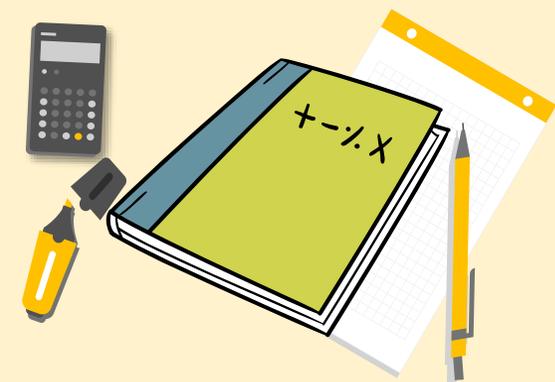
$$\frac{\text{Total of current year} - \text{Total of previous year}}{\text{Total of previous year}} \times 100$$

## 9% decrease between 2015 and 2019





# Avoiding Errors in the Calculations



1 Check WOA's recommendations for the calculations

2 Make sure you are using conversion factors when appropriate

3 Do not report WEIGHT of imported boxes, but KILOGRAM of CALCULATED active ingredients

4 You, as a National Authority, should have access to DISSAGREGATED data by molecules or veterinary products. Make sure you are able to validate the data notified by different stakeholders

**Annex: Content Conversion of Antimicrobial Active Ingredients in Veterinary Medicines into Kilograms**

**8th Round**

Antimicrobial agent in the veterinary medicine	WOAH units for reporting	International units per mg	Conversion factor to the equivalent
Amoxicillin	500	0.00048	
Amoxicillin	750	0.00072	
Amoxicillin (penicillin G)	1670	0.00095	
Chloramphenicol	1000	0.001	
Colistin methanesulfonate sodium (colistin methanesulfonate)	10000	0.000099	
Colistin sulfate	20000	0.000049	
Chlortetracycline	777	0.00119	
Erythromycin	500	0.00087	
Enrofloxacin	500	0.00019	
Kanamycin	750	0.001276	
Neomycin	750	0.00127	
Neomycin B (fructosyl)	750	0.00142	
Doxycycline	880	0.00114	
Paromomycin	750	0.00019	
Polymyxin B	8000	0.00019	
Ribavirin	800	0.00127	
Spectinomycin	3000	0.00019	
Spectinomycin	750	0.00127	
Tetracycline	980	0.00122	
Tetracycline	875	0.00142	
Tylosin	2000	0.001	

**2. (a) - content of antimicrobial agent (chemical compound as declared on the product label) in per cent (% weight per weight (w/w) or weight per volume (w/v) of content)**

The amount of antimicrobial agent contained in a veterinary medicine concerned may be stated in per cent weight per weight (% w/w) (example: 1 product X contains tylosin 100% w/w or, example 2, product Y contains amoxicillin 22.2% w/w) or in per cent weight per volume (% w/v) (example: product Z contains procaine benzathropenicycline 30% w/v). Such figures first need to be converted into mg/g, g/g, or mg/ml, followed by the calculations described under 3.

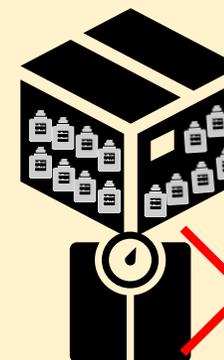
**Calculating % w/w:** Conversion calculations are performed by relating the content of antimicrobial agent to 1 g of the finished product. Divide the percentage value by 100 to obtain the amount of antimicrobial agent in g per g finished product.

**Initial antimicrobial agent in g per gram finished product =  $\frac{\text{percentage value}}{100} \times 1 \text{ g}$**

Example 1: Product X containing 100% w/w tylosin will contain  $100/100 \times 1 \text{ g} = 1 \text{ g}$  tylosin per g finished product.

Example 2: Product Y containing 22.2% w/w amoxicillin will contain  $22.2/100 = 0.222 \text{ g}$  amoxicillin per g finished product.

Continue with Step 1 - 5 of 10



~~The box weights 25 kg~~



Thank you <sup>15</sup>



For any question, contact us at [antimicrobialuse@woah.org](mailto:antimicrobialuse@woah.org)