



**MEDICINES CONTROL  
AUTHORITY OF ZIMBABWE**

**Country experience in prudent and  
responsible use of antimicrobials**

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**OiE National Focal Point for Veterinary Medicinal Products**



7/12/2017

# WHY PRUDENT USE OF AMs?.., short reminder of what can happen if things go **wrong**...



# Presentation Outline

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- ❑ Legislation on medicine regulation
- ❑ Medicines Regulatory mechanism in Zimbabwe
- ❑ Global Tripartite on AMR
- ❑ Activities conducted in Zimbabwe to ensure prudent use of antimicrobials in animals
  - *Establishing a multi-stakeholder 'One Health' AMR task force*
  - *Conducting a situational analysis*
  - *Drafting of the NAP on AMR*
  - *Training of veterinarians and para-professionals on prudent use of VMPs*
  - *Submission of antimicrobial use to OIE*
  - *Drafting of tailor made legislation for proper regulation of VMPs*
- ❑ Challenges and Way forward



# Legislation on Medicine Regulation in Zimbabwe

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## Acts of Parliament

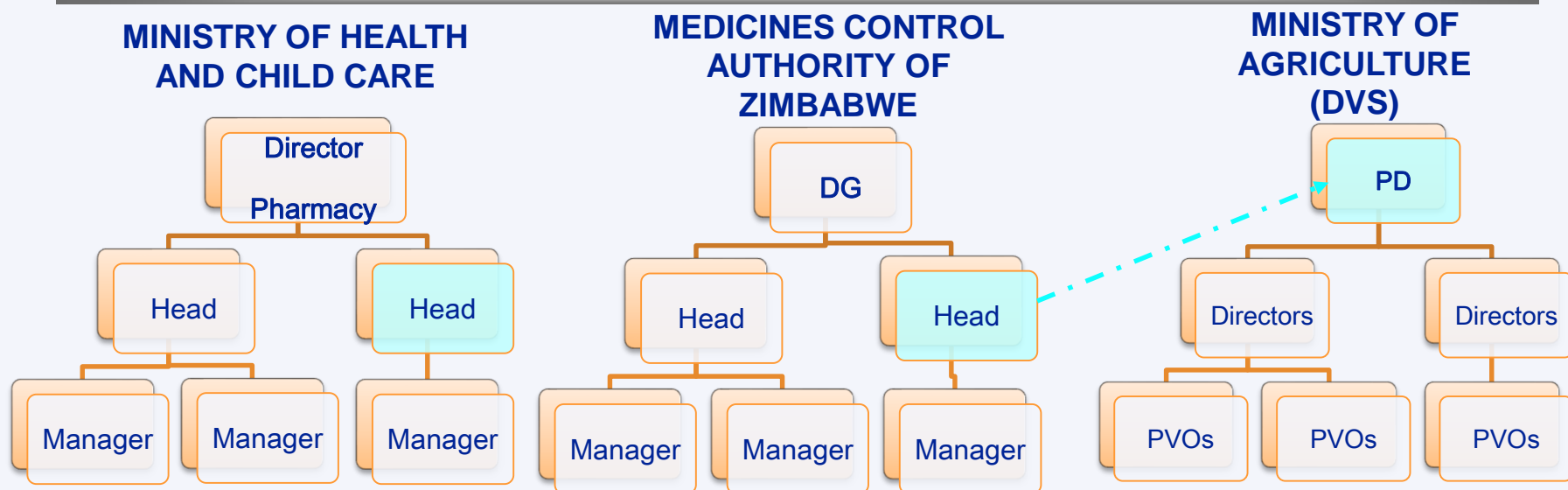
- ❑ Medicines and Allied Substances Control Act [15:03]
- ❑ Dangerous Drugs Act [15:02]

## Regulations

- ❑ Medicines and Allied Substances Control Regulations, SI 150 of 1991
- ❑ Dangerous Drugs Regulations, Rgn 1111 of 1975
- ❑ Import/Export Regulations, SI 57 of 2008
- ❑ *Veterinary Medicines and Allied Substances Regulations (Draft form)*



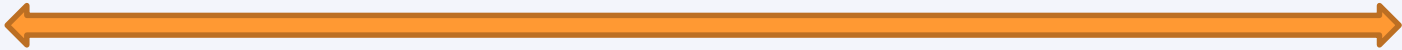
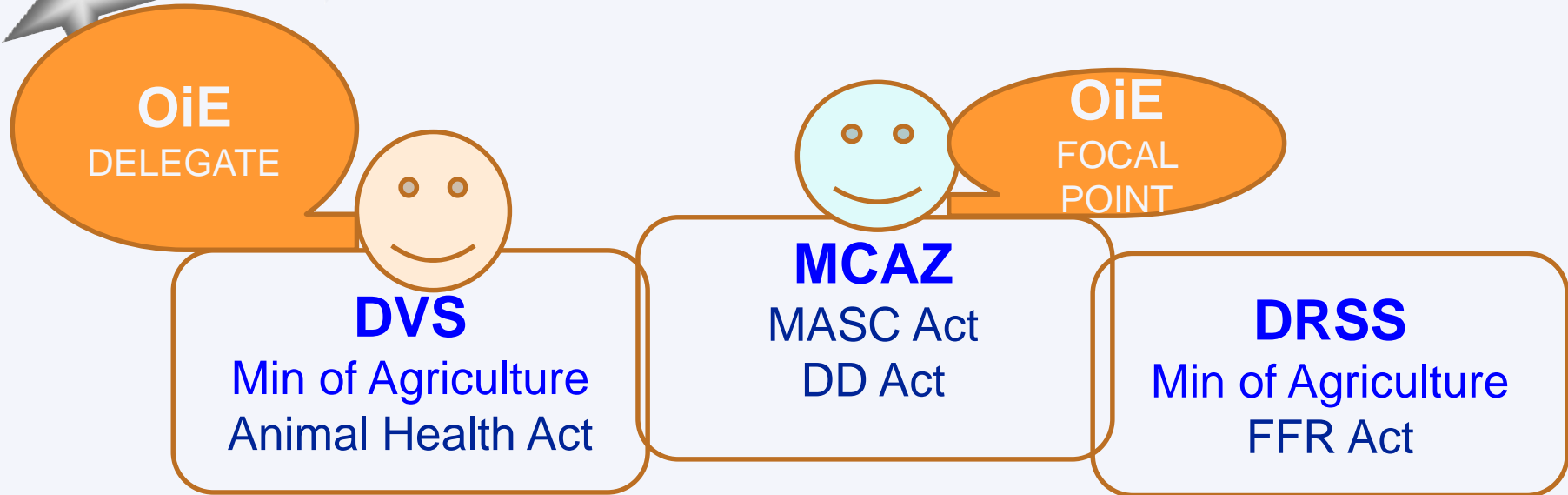
# National Tripartite on Medicine Regulation in Zimbabwe



Medicines Control Authority of Zimbabwe is the **OIE Focal Point for Veterinary Medicines**; give reports to Principal Director in the Division of Veterinary Services; the **OIE Delegate**.



# Veterinary Medicines Governing Bodies



**LIAISON IS KEY**



# Global Tripartite on AMR

FAO/OiE/WHO speak with one voice and take collective action to minimize the emergence and spread of AMR:

## AIM

- ❑ Ensure that antimicrobial agents continue to be effective and useful to cure diseases in humans and animals
- ❑ **Promote prudent and responsible use of antimicrobial agents**
- ❑ Ensure global access to medicines of good quality



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# Activities conducted in Zimbabwe to ensure prudent use of antimicrobials in animals





# One Health multi-stakeholder workshop, June 2016 'One Health Approach'

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**FAO Southern Africa**  
@faosfsafrica

"The time to act is now"- Min Zhanda ,  
Fighting Antimicrobial resistance as  
#Onehealth #UNFAO @263Chat  
@FAOnews



**Ministry of HealthZW**  
@MoHCCZim

Hon Musiiwa & Hon Zhanda pause for  
a group photo with participants at the  
AMR Workshop #FAO #Flemingfund  
#onehealth



**Ministry of HealthZW**  
@MoHCCZim

There are 110 participants attending  
the AMR workshop #FAO #WHO  
#Flemingfund

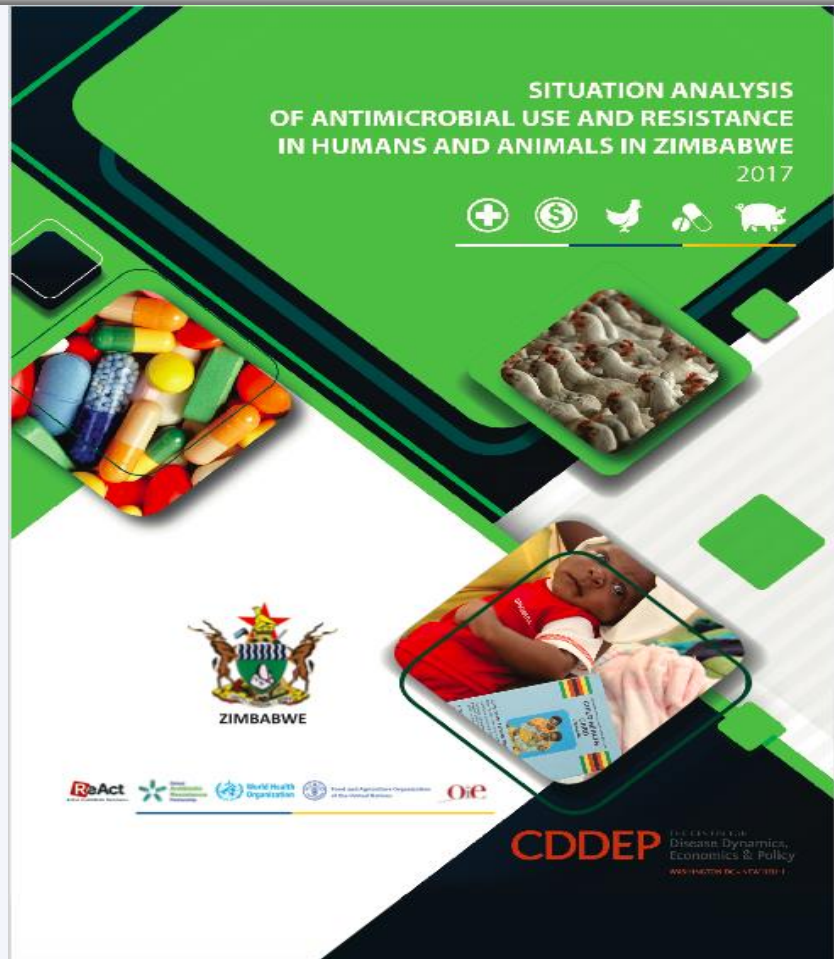


**FAO Southern Africa**  
@faosfsafrica

"It's important to develop strategies  
that deal with antimicrobial resistance  
"



# Establishing a Situational Analysis on AMR (2016-2017)



# Snapshot on AMR critical issues related to AM Use from the situational analysis

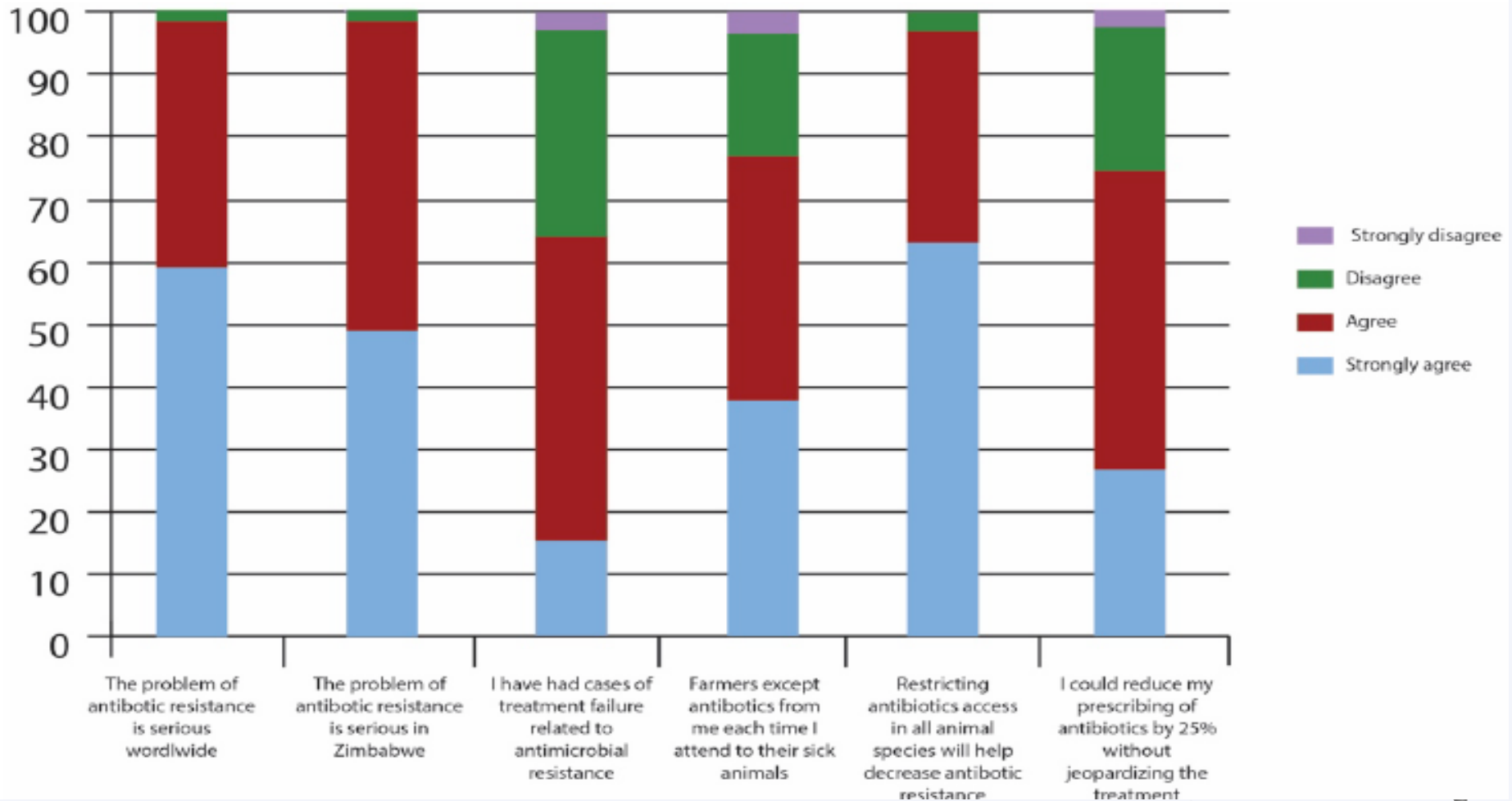
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- ❑ Lack of Harmonised legislation on the regulation of professionals, paraprofessionals, medicines, etc in the veterinary sector
- ❑ Public (*to some extent*) **professionals** unaware of AMR threat
- ❑ Absence of national guidelines on prudent use of veterinary medicines per spp level
- ❑ Dilapidated infrastructure (*animal health centres*) for storage of antimicrobials
- ❑ Circulation of poor quality medicines (*illegal vendors*) through porous borders



# KAP Study: Veterinary Surgeons

Figure 18 - Knowledge, attitudes and beliefs of veterinary doctors



# KAP Study: Public/Farmers

Chickens were the most animals that were kept as out of the 470 people that answered this question 299 (58%) kept chickens. Out of those that kept animals, chickens were the most exposed to antibiotic see Table 14

Table 14 - Giving of antibiotics to animals

Species	Yes often	Yes seldom	No
Chickens	104 (24%)	64 (15%)	259 (61%)
Cows	68 (22%)	14 (14%)	197 (87%)
Dogs	65 (22%)	33 (11%)	204 (68%)
Pigs	13 (6%)	15 (7%)	197 (87%)
Sheep/Goats	39 (14%)	15 (5%)	222 (80%)



# KAP Study: Public/Farmers

Table 13 - Antibiotic purchase sites

Site	Often	Sometimes	Never	Total
Hospital	56%	34%	10%	454
Clinic	34%	48%	18%	362
Pharmacy	60%	33%	7%	427
Doctor's rooms	20%	31%	49%	357
Market Place	3%	9%	88%	335
Hair Salon	6%	19%	75	359

- ❑ Circulation of poor quality medicines (*illegal vendors*) through porous borders
- ❑ <http://medicineaccess.pointofcarejournals.com/article/e1bb1b55-6954-4b74-9c9c-8533f645da76>



# Street deals on medicines



# Drafting a National Action Plan on AMR (2016-2017)



## THE ZIMBABWE 'ONE HEALTH' ANTIMICROBIAL RESISTANCE NATIONAL ACTION PLAN 2017-2022



### FOREWORD

Antimicrobials have been hailed as one of the most important discoveries in medical history as they have successfully treated many diseases promoting the health and well-being of individuals. However the gains achieved through the use of antimicrobials are now being threatened by development of resistance. By 2050 it has been estimated that antimicrobial resistance (AMR) will be causing 10 million deaths annually worldwide and this will cost the world 100 trillion dollars (O'Neill, 2014). If left unattended this crisis will have worse effects as compared to the HIV and TB pandemics combined.

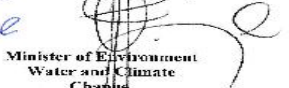
This situation analysis has gathered information about the current state of AMR, contributing factors and antimicrobial use in Zimbabwe from the human, animal, agricultural and environmental sectors. Data has been gathered from different sectors such as the general public, academia, the Ministry of Health and Child Care, the Ministry of Agriculture Mechanization and Irrigation Development and the Ministry of Environment, Water and Climate. It shows that AMR is a real concern in Zimbabwe and a threat to the health outcomes of humans, to the economic productivity of the livestock industry and a risk to the environment.

Specifically there is significant growing resistance to common infections such as TB, malaria, HIV, respiratory infections, sexually transmitted infections (STIs), urinary tract infections (UTIs), meningitis and diarrheal diseases. One major driver of resistance is increased antimicrobial consumption in both humans and animals. However the data on antimicrobial use in Zimbabwe is limited. Although the country's vaccination coverage rate for children under 1 year is good, more can be done to prevent infections, including general hygiene and sanitation, implementing infection prevention and control (IPC) measures in all health institutions as well as resorting to greater reliance on alternatives including preventive vaccination of livestock, biosecurity and a host of other good practices in the agriculture sector. More also needs to be done to improve incentives to appropriate antibiotic use and to create disincentives through sound legislation and policy to overuse of antibiotics. If no action is taken now, the country may not be able to treat common human primary and secondary infections with available resources and the agriculture sector will be severely undermined with consequences to public health food security and biodiversity.

Therefore, the three governmental departments whose responsibilities intersect on human, animal and environmental health outcomes, and therefore are responsible for implementing Zimbabwe's 'One Health' approach have committed themselves to investing resources in designing sound strategies and interventions to preserve the effectiveness of our antimicrobial agents, in order to ensure sustainable dependence on them. This situation analysis will assist the country in formulating a National Action Plan (NAP) on AMR that will be implemented by all sectors to significantly slow down the development of antimicrobial resistance.

  
Minister of Health  
and Child Care.  
Dr. David  
Parirenyatwa

  
Minister of  
Agriculture  
Mechanization and  
Irrigation  
Development  
Dr. Joseph Made

  
Minister of Environment  
Water and Climate  
Change  
Ms. Oppah Muchinguri-  
Kashiri

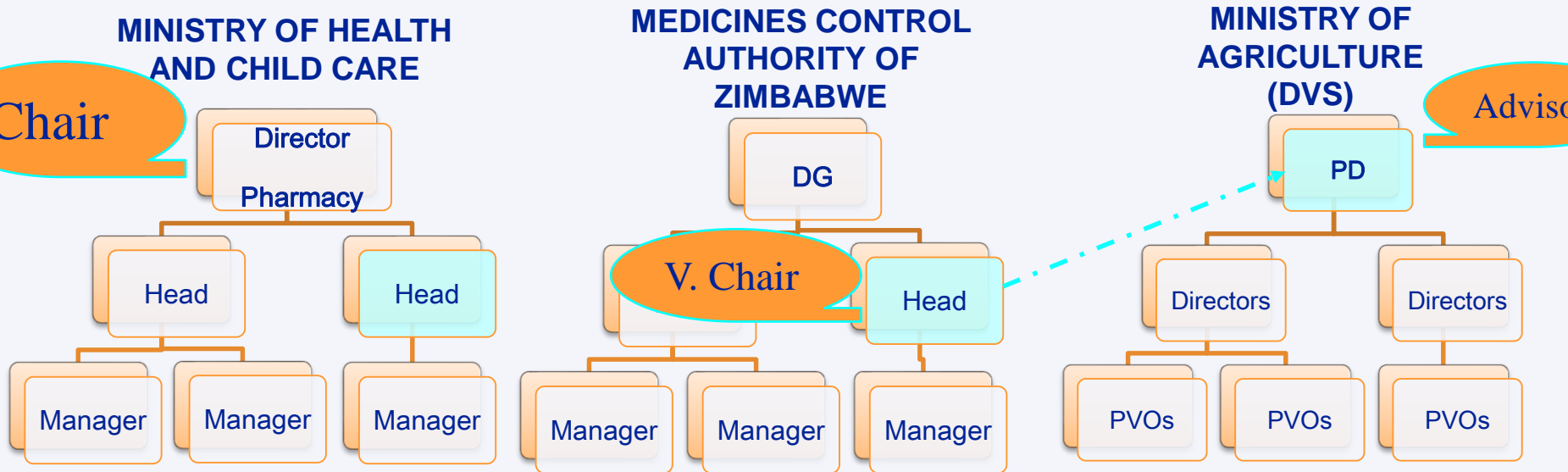
June, 2017





# National Tripartite on Medicine Regulation in Zimbabwe

## AMR Core Group: 'One Health'



Key members: DVS, MoHCC, MoE, Academia, FAO, MCAZ, Research institutions, Civil Society, NGOs



# Training of veterinarians and para-professionals on prudent use of VMPs since 2016

- ❑ Training of trainers (ToT) designed to educate veterinary field officers from all **districts** and **provinces**
- ❑ **Objective:** (1) prudent use of veterinary medicines, (2) laws governing the use, (3) sale and storage of VMPs
- ❑ Training was funded by FAO (*educational material distributed on flask sticks*)
- ❑ Trainers were expected to train personnel operating over the counter shops which sell medicine (*including antimicrobials*)
- ❑ Refresher training after every 3 years.



# Submission of antimicrobial use data to OiE started in 2013.....

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- ❑ Zimbabwe (2013) started compiling & sending AM consumption data to OiE database, based on import data from the NMRA (MCAZ)
- ❑ Years submitted 2011, 2012, **2013**, 2014, 2015



Animal census

AMU data

MCAZ



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# Drafting of Legislation on Veterinary Medicines



# Evolution of veterinary medicine legislation— ZIMBABWE

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# Implementation of the AMR National Action Plan 2018 onwards

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- ❑ Veterinary Legislation review and harmonisation
- ❑ Prudent use guidelines development in consultation with OiE prudent use norms and standards
- ❑ Laboratory capacitation
- ❑ Animal health centre refurbishment
- ❑ Improvement of enforcement activities by Regulators to prevent circulation of poor quality medicines and counterfeits.



# Way forward

- ❑ Implementation of procedures in AMR NAP
- ❑ e.g. Implementation of WHO/OiE tools and AMR NAP tools to monitor use in humans and animals (**ONE Health**)
- ❑ Control of distribution and use of antimicrobials in animals
- ❑ **OIE** List and WHO List of critically important antibiotics to ensure that vets can continue to access 2<sup>nd</sup> and 3<sup>rd</sup> generation fluoroquinolones for **therapeutic** treatment of animals (**dogs, cats, poultry**)
- ❑ Implementation of the WHO-AGISAR project:
- ❑ *An integrated foodborne antimicrobial resistance laboratory surveillance system for humans, animals and food sectors in Zimbabwe*  
*E. coli* and *Salmonella* spp



# Challenges

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- ❑ Limited human resources (**only ¼ of posts are filled in DVS**)
- ❑ Limited National Budget allocation to animal health and agriculture
- ❑ Limited funding to conduct extensive surveillance of AMU in animals, we rely on import data (**no automated systems yet**)
- ❑ Lack of centralized system or repository for a national AMU database





# ASANTE SANA!

MEDICINES SHOULD BE **SAFE**, **EFFECTIVE** AND  
OF GOOD **QUALITY**

