



# OUTLINE

1. **BRIEF PRESENTATION OF AU-PANVAC**
2. **IMPACT OF ANIMAL DISEASES ON PUBLIC HEALTH**
3. **AU-PANVAC SUPPORT ON THE “ONE HEALTH CONCEPT”**
  - ZOONOTIC DISEASES**
  - AMR**
  - SUPPORT OF COVID CONTROL**
  - COLLABORATION WITH Af.CDC ON THE SUPPLY AND PREQUALIFICATION OF REAGENTS & KITS**
  - GUIDELINES FOR TRANSPORT OF DANGEROUS INFECTIOUS GOODS**
4. **CONCLUSION**

# **BRIEF PRESENTATION OF AU-PANVAC MISSION**

# BRIEF PRESENTATION OF AU-PANVAC MISSION

- PANVAC was established due to the proliferation of poor-quality vaccines in most African countries
- Use of poor-quality Rinderpest vaccines made control efforts to last over 70 years in Africa
- Rinderpest disease finally disappeared after the implementation of vaccine QC by PANVAC in the 90s
- In recognition, PANVAC became institutionalized under the AU in 2004



# AU-PANVAC MISSION

“To promote the use of **good quality vaccines** and **diagnostic reagents** for the control and eradication of animal diseases in Africa.”

# BRIEF PRESENTATION OF AU-PANVAC...

- **AU-PANVAC General Mandates**

- QC of all Veterinary vaccines produced or imported into Africa
- Production of essential Biological Reagents for Animal disease surveillance and Control

- **Specific Mandates**

- Maintaining Africa free from rinderpest
  - Sequestration of rinderpest
  - Continental vaccine bank
- Harmonization of vaccine registration

# BRIEF PRESENTATION OF AU-PANVAC...

1.



**Collaborating Centre - May 2013**

2.



**Reference Centre - May 2015**

3.

**FAO/OIE Rinderpest Holding Facility - May 2015**

4.

**ISO 9001-2015 Certified- February 2017**

5.

**ISO 17025 Accredited - November 2018**

# BRIEF PRESENTATION OF AU-PANVAC...

## ❖ AU-PANVAC Quality Management System

☐ ISO 9001:2015 Certified

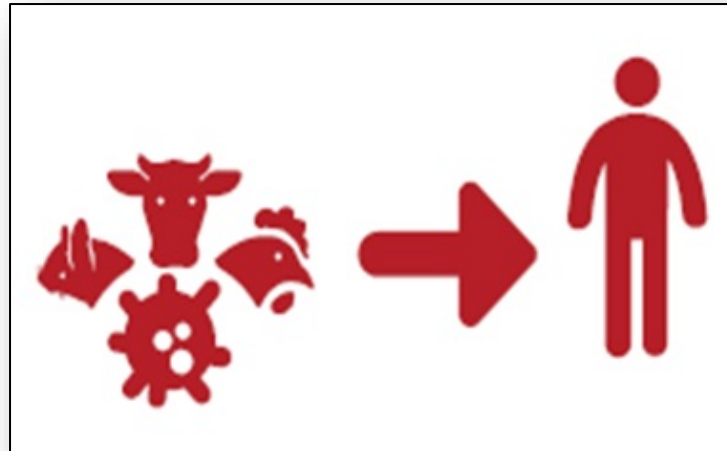
☐ ISO/IEC 17025 Accredited





# IMPACT OF ANIMAL DISEASES ON PUBLIC HEALTH

- **60% of human pathogens** are zoonotic (OIE)
  - **Zoonosis:** *disease or infection which is naturally transmissible from animals to humans (OIE Terrestrial Code)*
- **75% of emerging infectious diseases** of humans have an animal origin (OIE)



# AU-PANVAC SUPPORT TO ONE HEALTH CONCEPT

# ZOONOTIC DISEASES

- The one health concept is expected to be a pillar in mitigating against all zoonotic disease
- The major zoonotic diseases in Africa are:
  - Anthrax
  - Brucellosis
  - Rabies
  - Rift Valley Fever

**Zoonotic diseases can be controlled through vaccination....**

# ANTI-MICROBIAL RESISTANCE

- AU-PANVAC is part of the African Union Antimicrobial resistance joint task force
- Vaccination can help to reduce the usage of anti-microbials in livestock production
- Vaccines certified by PANVAC help to prevent bacterial diseases such as Anthrax, CBPP, CCPP, Brucella...

# SUPPORT TO THE CONTROL COVID-19



# SUPPORT TO THE CONTROL COVID-19

- ❑ OIE guidance for veterinary laboratories in support of COVID-19 control
  1. Veterinary laboratories to provide support
    - I. quality assurance,
    - II. biosafety and biosecurity, and
    - III. high throughput testing for the surveillance and control of infectious diseases in animals – **COVID-19**
  2. Veterinary Services to provide expertise in the fields of epidemiology, risk assessment, training and risk communication.

# SUPPORT TO THE CONTROL COVID-19

## Biorisk Management System in AU-PANVAC

- ❖ **OIE:** Biosafety and biosecurity: standard for managing biological risk in the veterinary laboratory and animal facilities
- ❖ **WHO:** Biorisk Management Laboratory biosecurity guidelines
- ❖ **FAO:** Biosafety dossier, Biosecurity principles and components
- ❖ **ISO 35001:2019** Biorisk Management for laboratories

# SUPPORT TO THE CONTROL COVID-19

## SERVICES PROVIDED

- **AUMSD collect the samples** (*AU staff, Member state Embassy, AU Consultants, AU Summits and Meetings Delegates, Partners & Int'l Organizations: AfDB, IFRC, GIZ, etc. ; Non-African Embassies; e.g., Kuwait, Vatican, Brazil, Portugal, Palestine, UAE, Saudi Arabia...*).
- **PANVAC (samples testing Services):**
  - Real time PCR testing for COVID-19
  - **Result compilation and reporting** to AU medical – **within the day** of sample receipt
  - May 2020-Oct. 2021: More than 28 000 samples tested
  - Support in the Genotyping characterisation of SARS-Cov-2 virus variants



# SUPPORT TO THE CONTROL COVID-19

## ❑ **COLLABORATION WITH AFRICA CDC for DEVELOPMENT OF SEROLOGY TESTS**

- AU-PANVAC has capacity to develop and evaluate diagnostic test kits
- Work has started on the development of Covid19 diagnostic ELISA tests
- Discussions ongoing on setting up prequalification of diagnostic tests

## ❑ **COLLABORATION WITH ETHIOPIA MTI**

- Work is ongoing with the Ministry of Technology and Innovation on “The effect of herbal extract on covid 19 virus”

# **TRANSPORT OF INFECTIOUS SUBSTANCES AND BIOLOGICAL SPECIMENS**

# GUIDELINES FOR TRANSPORT OF INFECTIOUS SUBSTANCES AND BIOLOGICAL SPECIMENS

- In collaboration with FAO, AU-IBAR, and Af.CDC, AU-PANVAC is developing guidelines for Africa for shipment of infectious substances and biological specimens
- All AU-PANVAC technical staff are certified shippers
- 4 of them are certified trainers and are providing training to various institutions.



# CONCLUSION

- By ensuring that the vaccines used in the field are of good quality, AU-PANVAC is helping control the spread of zoonotic diseases and reducing the use of antimicrobials
- AU-PANVAC will continue to work with partners on the One Health Initiative
- AU-PANVAC is committed to continue improving animal health for a positive impact on human lives



# INAUGURAL **ONE HEALTH** CONFERENCE

1 - 3 November 2021

# THANK YOU

[WWW.AUPANVAC.ORG](http://WWW.AUPANVAC.ORG)

*Adding value to animal health and human lives!!*