ANTIMICROBIAL RESISTANCE AND ONE HEALTH
Antimicrobial Resistance

▪ Our bodies are more microbe than human
  ▪ >50% of cells, >90% of nucleic acid are microbial
▪ Any use of antimicrobials in humans, animals, or environment selects for resistant microbes
▪ Antimicrobials are a limited resource, shared by humans for the benefit of humans, animals, and environment
▪ Increasing recognition that AMR presents an urgent threat to health and wealth
Challenge Similar to Climate Change

- Natural phenomenon accelerated by human behavior
- Complex to measure and monitor
- Immediate threat manageable
- Distant threat catastrophic
- Actions paid by human, animal, environment sectors
- Benefit does not accrue directly or immediately to sectors/institutions taking action and incurring cost
Antimicrobial Resistance in Africa

- Well-documented problem for big “3”: TB, malaria, HIV
- Gram-negative bacteria – in selected settings
Developing an African Union Framework for AMR Control, 2020-2025

**2017**
- January: Africa CDC inaugurated
- March: Africa CDC convenes strategic planning meetings; AMR identified as high priority for action
- October: Africa CDC releases Framework for AMR Control

**2018**
- April: Africa CDC convenes Member States, regional economic communities, partners → strong recommendation to develop AU-wide Framework with One Health approach
- June: AU agencies endorse concept of AU AMR Task Force
Developing an African Union Framework for AMR Control, 2020-2025

**2019**
- April: AU Framework drafted
- June-July: Framework under review by AU agencies, Member States, and partners
- August: Endorsed by Ministers of Health
- October: Endorsed by Ministers of Agriculture, Environment

**2020**
- January: Publish and implement
African Union Framework for Antimicrobial Resistance, 2020-2025

- Primary goals
  - Improve surveillance of AMR organisms among humans, animals, and plants
  - Delay emergence
  - Limit transmission
  - Mitigate harm among patients infected with AMR organisms

- Critical underlying principles
  - Know enough to act now
  - Must act across all sectors
  - All agencies and civil society have a role to play
African Union Framework for Antimicrobial Resistance, 2020-2025

- AU uniquely position to create enabling environment through policy, advocacy, coordination
- Framework focused on actions that AU agencies will perform
- With close consultation and support from Member States
- In close partnership with WHO, FAO, OIE, other partners
Major AMR Initiatives Underway

- African Common Position
- Assimilate and analyze data from laboratories
- Model Legal Framework for Safe Healthcare Facilities
- African Standardized Treatment Guidelines for Common Infections
- Training of civil society organizations working on human, animal, and environmental issues
- Convene AU Task Force with inclusion of WHO, FAO, OIE, and regional economic communities
One Health

- **Concept**: transdisciplinary approach to making Africa safer and healthier for people, animals, plants, and their shared environment

- **Objective**: promote collaboration across sectors to ensure approaches are maximally effective and beneficial

- **Practice**: focus on conditions that most impair human health and require a One Health approach
  - Antimicrobial resistance
  - Zoonotic disease control
  - Food safety
  - Biosafety/security
Africa CDC Framework for One Health Practice in NPHIs

- Major challenges
  - Few human health agencies actually invest time and resources in One Health practice
  - Current guidance vague and not Africa-specific
- Framework seeks to answer question: What are the minimum activities an NPHI should perform to consider itself practicing One Health?
- Framework includes:
  - Minimal objectives, aligned with core NPHI functions
  - Proposed activities within those objectives
  - Measurement that mirrors Africa CDC NPHI “scorecard”
Framework Focuses on Zoonotic Diseases

- Easiest entry point to start One Health collaboration
- Other high priority One Health areas already have separate Africa CDC initiatives, e.g., antimicrobial resistance, biosafety/security
- Prioritizes rabies and influenza
  - African countries have selected both in prioritization workshops conducted across continent
  - Proven mortality and control measures (rabies), economic and health risk (influenza)
Development of Framework

- February – July 2019: Expert team drafted
- August – October 2019: Review by Africa CDC and Member States
- November 2019: continent-wide meeting
- Accepting comments from Member States until 31 December
- Target to revise, review, translate, and release by March 2020
Safeguarding Africa's Health