

ANTIMICROBIAL RESISTANCE AND ONE HEALTH

IANPHI Meeting 5 December 2019 Addis Ababa, Ethiopia

- 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



5 Ways Antibiotic Resistance Disrupts the Sustainable Development Goals No Poverty AMR could push an additional 24 million people into extreme poverty by 2030 Zero Hunger stock production in lowa high AMR-impact scenar productivity might be lost i protein plays an importar

Good Health and Well-being

Reduced inequality

Decent work and economic growth

nutrition for children and wom

AMR's impact on global GDP might be as large as the 2008–2009 global financial crisis, amounting to losses of \$3.4 trittion by 2030.

Developing an African Union Framework for AMR Control, 2020-2025

<u>2017</u>

- 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

<u>2018</u>

- 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

<u>2019</u>

- 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

<u>2020</u>

January: Publish and implement

African Union Task Force on AMR



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

- <u>Concept</u>: transdisciplinary approach to making Africa safer and healthier for people, animals, plants, and their shared environment
- <u>Objective</u>: promote collaboration across sectors to ensure approaches are maximally effective and beneficial
- <u>Practice</u>: 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

