



# **KENYAN NATIONAL ACTION PLAN ON ANTIMICROBIALS**

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# Outline

- ▶ Background
- ▶ Process of Policy formulation
- ▶ The National Action Plan on AMR

# Background



## Why Now?

- Increasingly serious global public health threat
  - Untreatable infections, prolonged hospital care
  - 2 million Americans ill from resistant infections
  - 25,000 deaths/yr across EU
  - Desperation over "dry pipeline"

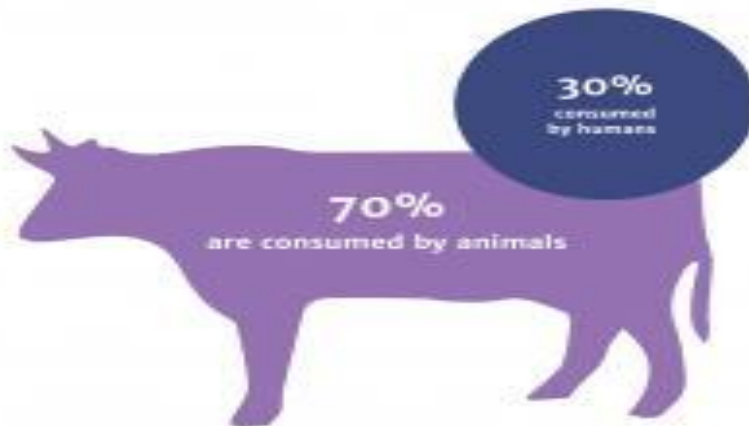
# Background



- Economic burden
  - Negative impact on food security
  - 1, 5 billion euros per year in EU
  - In 2050 costing the world up to \$100 trillion
- Growing awareness and commitment
  - Political, professional, public



**ANIMALS IN THE USA CONSUME MORE  
THAN TWICE AS MANY MEDICALLY  
IMPORTANT ANTIBIOTICS AS HUMANS**



Source: American Veterinary Association, American Medical Association, and the Institute of Medicine. The figures are rounded from 71% and 29% respectively.

Review of  
Antimicrobial  
Resistance

50% of antibiotic  
consumption in  
humans is reported  
to be un-necessary



- It is estimated that by 2050 AMR will contribute to the highest global mortality of 10 million with cancer at 8.2 million and Diabetes at 1.5 million and diarrhoeal diseases at 1.4 million



## Addressing AMR is a shared responsibility



# Antimicrobial Resistance

## WHO, FAO, and OIE unite in the fight against Antimicrobial Resistance

**THE FACTS**

Antimicrobial agents:

- are essential to treat human and animal diseases;
- should thus be considered as a public good.

Some microbes have demonstrated full or partial resistance to different antimicrobial agents. It is an inevitable consequence of antimicrobial use both in humans and animals. This phenomenon called antimicrobial resistance, AMR, is an increasing global concern for human and animal health.

**The need for a 'One Health' approach**

Addressing the rising threat of AMR requires a holistic and multisectoral ('One Health') approach because antimicrobials used to treat various infectious diseases in animals may be the same or be similar to those used in humans. Resistant bacteria arising either in humans, animals or the environment may spread from one to the other, and from one country to another. **AMR does not recognize geographic or human/animal borders.**

**A public good to protect**

The discovery of antibiotics and their development to treat bacterial infections in humans and animals was one of the most important achievements of the 20th Century. Since antimicrobials were first commercially produced, initially for use in human medicine and subsequently in veterinary medicine, their use has been associated with the risk of emergence of AMR. At the same time as the world has observed accelerated emergence of resistance, the discovery and development of new antimicrobial drugs has slowed down. The effectiveness of the existing antimicrobials should therefore be preserved as much as possible.

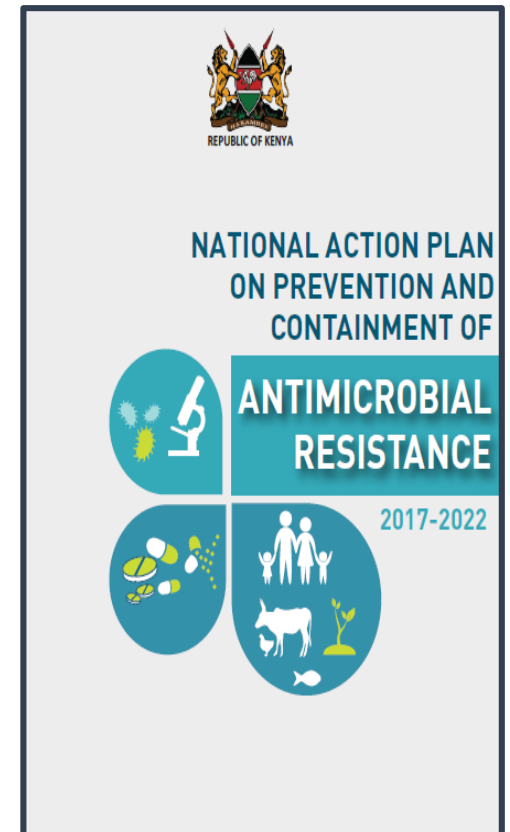
**AMR does not recognize geographic or human/animal borders**

**AMR jeopardizes progress on health outcomes**

**Logos:**

- FAO: Food and Agriculture Organization of the United Nations
- OIE: WORLD ORGANISATION FOR ANIMAL HEALTH. Protecting animals. preserving our future.
- World Health Organization







## Process of NAP formulation

Based on the National Policy on the prevention and containment of AMR



# NAP Objectives



- ▶ **Objective 1:** Improve awareness and understanding
- ▶ **Objective 2:** Strengthen the knowledge and evidence base of the AMR through surveillance and research
- ▶ **Objective 3:** Reduce the incidence of infection
- ▶ **Objective 4:** Optimize the use of antimicrobials in human, animal and plant health.



# NAP Objectives

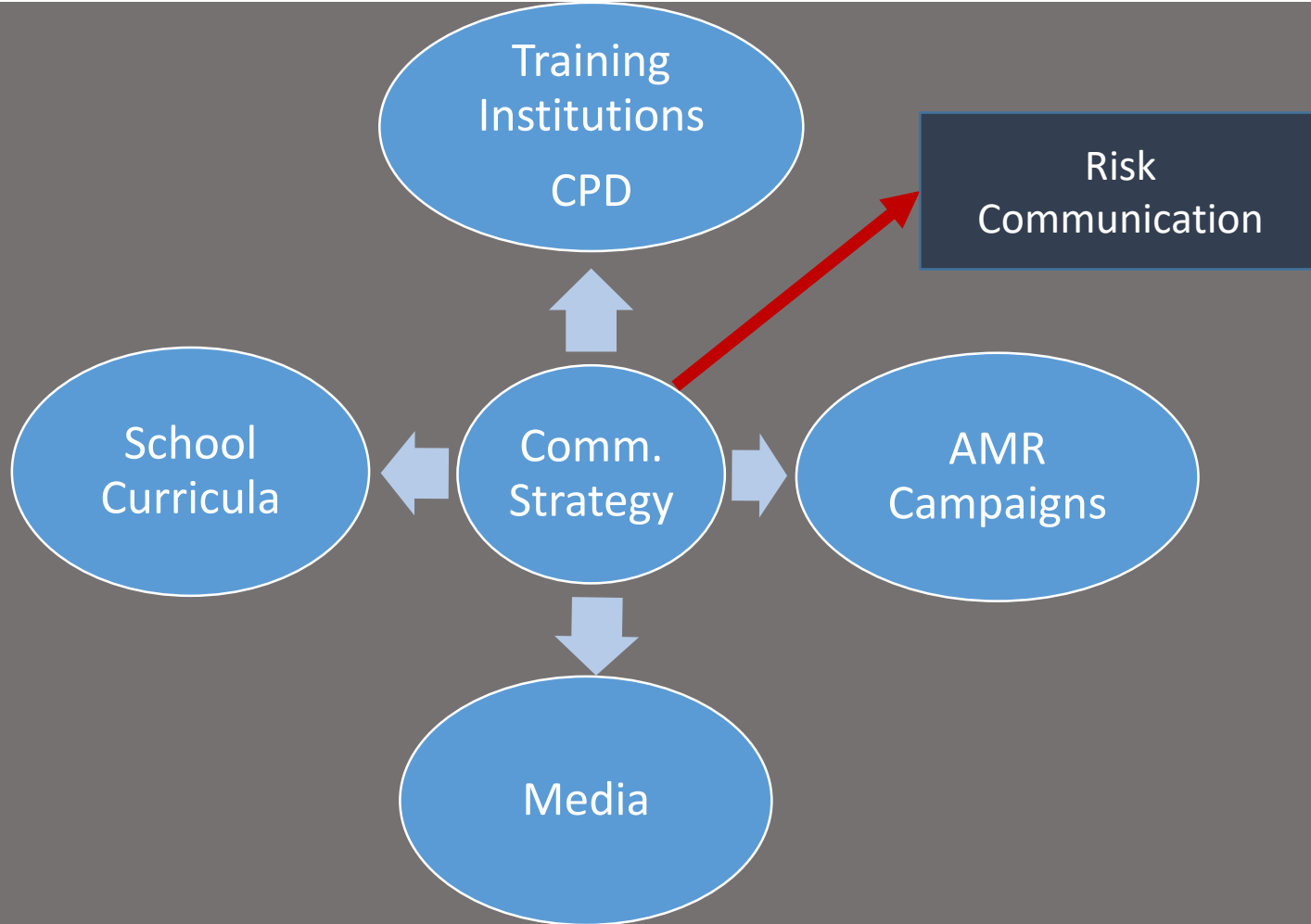


- ▶ **Objective 5:** To support sustainable investment that takes account of the needs of Kenya, and increase investment in new medicines, diagnostic tools, vaccines and other interventions



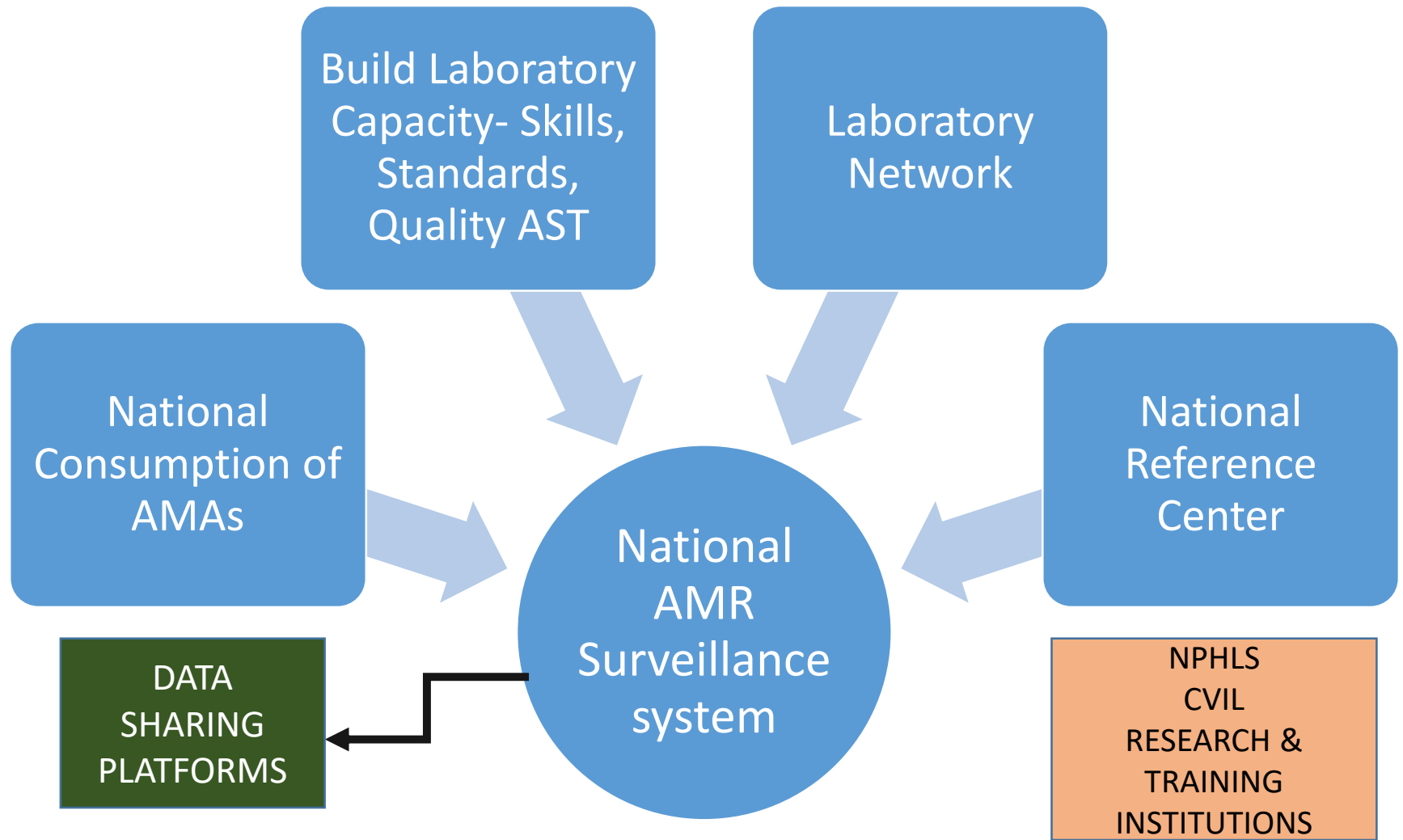


# Improve awareness and understanding of AMR





## Surveillance and research





# Reduce the incidence of infection through effective IPC

## Implement the IPC Strategy

Monitor Hand Hygiene Adherence

Establish a National HAIs surveillance system

Develop and/or review accreditation system and quality assurance standards



Republic of Kenya

Ministry of Health

National Strategic Plan for  
Infection Prevention and Control  
for Health Care Services in Kenya  
2014 – 2018



# Optimize the use of antimicrobials

## Regulatory Capacity

- Establish the Kenya Food and Drug Authority
- Registration, market authorization, marketing, PMS
- Mandatory reporting on consumption of antimicrobials
- Regulatory control over the manufacture and use of antibiotics in animals

## Appropriate use

- Establish Antimicrobial Stewardship programs
- Publish a schedule of antimicrobials per level of care
- Publish list of antimicrobials classified as critical for use in humans
- Integrate Antimicrobial Stewardship into training curriculum, CPD, accreditation standards

## Access

- Ensure continuous availability of quality essential antimicrobial agents
- Evidence based prescribing and dispensing through improved diagnostics





# Sustainable investment through research & development

Measure the Burden of AMR (Socio-Economic impact assessment)

Develop and Pilot new technologies (Diagnostics, Medicines, Vaccines)

Research & Development

Collaboration with Research and Training Institutions

Financing Research In AMR-NACOSTI

## Action/Facilitation



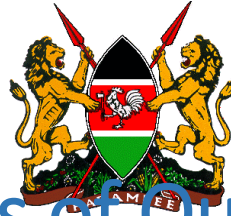
- GOK has set up a **National Research Fund**
- GOK has set up a **multisectoral Antimicrobial Steering Committee** and a **National Antimicrobial Advisory Committee (NASAC)**
- Technical Working Groups (**TWG**) to address each of the objectives are in place
- National Medicines and Therapeutics Committee (**NMTC**)
- Hospital Medicines and Therapeutics Committees (**MTC**)



## Potential Measures of Outcome

- Extent of reduction in **national human consumption** of antibiotics and **reduction in the volume** of antibiotic use in food production.
- Extent of **reduction in the prevalence of antimicrobial resistance** based on data collected through surveillance.
- Extent of **reduction in the prevalence of preventable infections**, and in particular the incidence of drug resistant infections in health care settings.





## Potential Measures of Outcome

- Extent of **reduction in national human consumption of antibiotics**, the consumption of antibiotics used in food production and the use of medical and veterinary antimicrobial agents for applications other than human and animal health.
- Extent of increase in sustainable investment in R&D



# CASE FOR KNH



- FUNCTIONAL MEDICINES AND THERAPEUTIC COMMITTEE
- MTC ANTIMICROBIAL STEWARDSHIP SUB-COMMITTEE
- THE KNH GUIDE TO ANTIMICROBIAL THERAPY IN CRITICAL CARE UNITS ,
  - Hand Hygiene Technique (pictorial)
  - Antibiotic prescribing algorithm (knh)
  - Patient risk stratification (4 Categories)

# CASE FOR KNH



**Antibiotic Protocols for ;** Bloodstream infections , Pneumonia ( Riders. All these patients must have a TB test. Duration of therapy no more than 5days) , Urinary tract infections ,Skin and soft tissue and Intra-abdominal infections.

- Standard dosages of commonly used antimicrobials





Kenya encourages partnerships that address  
antimicrobial stewardship activities

WELCOME





**MOH**

**MALF**

**FAO**

**CDC**

**WHO**

**University of Maryland**

**GARP**

**IPNET, ReAct**



*Thank  
you*

