



## Antimicrobial Resistance... a global crisis

### Rationale

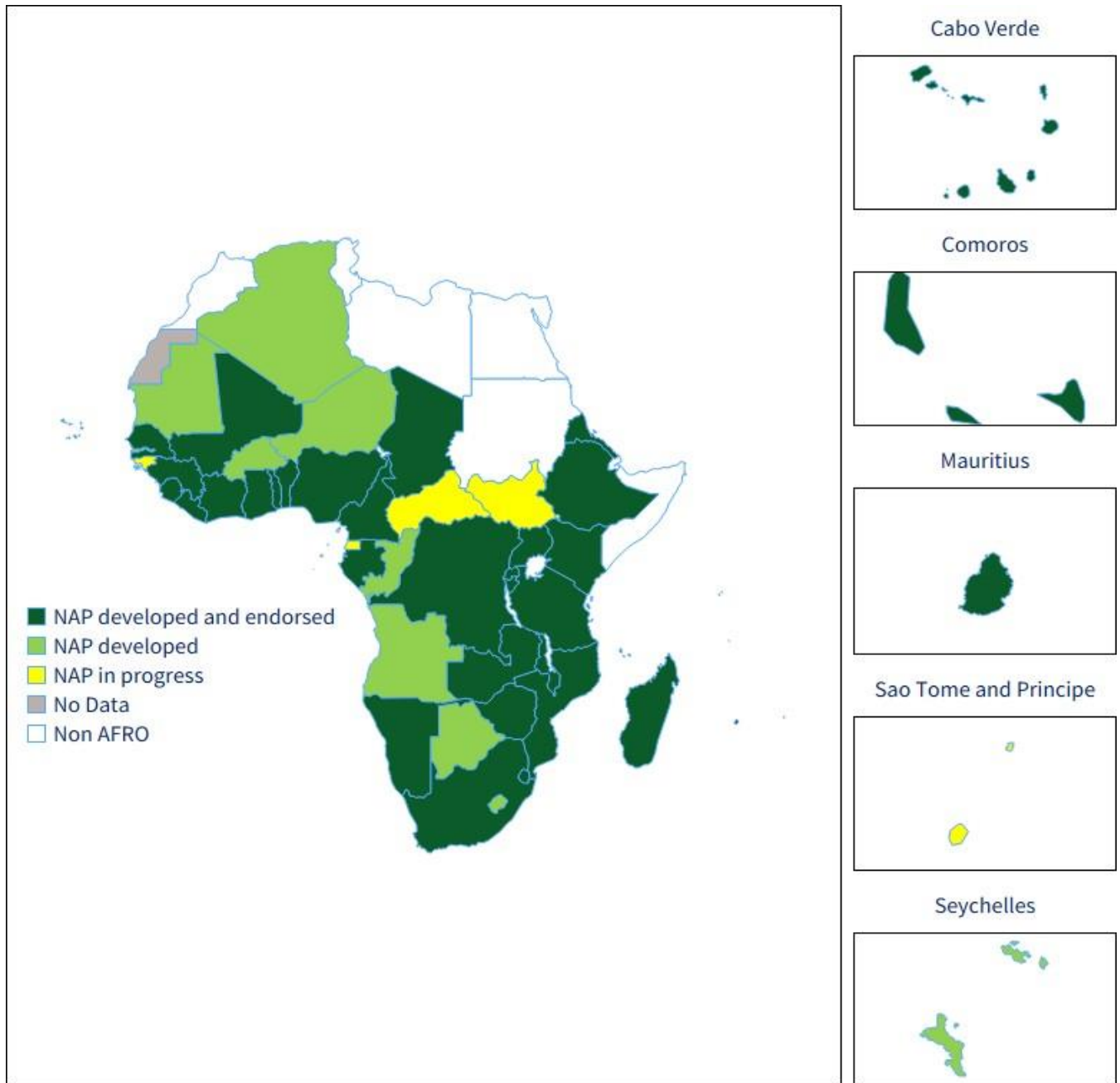
AMR is one of the top 10 global public health threats currently facing humanity. **Antimicrobials** – a collective term for antibiotics, antivirals, antifungals and antiparasitics – are medicines used to prevent and treat infections in humans, animals, and plants. **Antimicrobial Resistance (AMR)** occurs when bacteria, viruses, fungi, and parasites change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death. As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective and infections become increasingly **difficult or impossible to treat**. Antimicrobial resistance (AMR) imposes a **huge burden** on **patients and health care systems** in Africa. In fact, Overuse, and misuse, as well as lack of access, to quality-assured antimicrobials are the main drivers of AMR.

### Key Messages

- AMR could kill **4.1 million people** across Africa by 2050.
- Developing countries across Africa could **lose up to 5% of their GDP** as a result of AMR.
- **1 in 10 medicines** circulating around the world is substandard or does not contain the active ingredient at all
- **42 (89%) of countries** developed a **national action plan (NAP)**.
- **42 (89%) of countries** contributed to **Tracking AMR Country Self-Assessment Survey 2022– a Quadripartite initiative**.
- **11(23%) of countries** implemented context-based **AMR campaigns**.
- **6 (13%) of countries** implemented **AMR stewardship interventions**.
- **33 (70%) of countries** enrolled into **WHO Global AMR/Use Surveillance System (GLASS)**.
- **6 (13%) of countries** implemented the integrated AMR surveillance in the context of One Health Approach.

# I. Multisectoral coordination & partnership

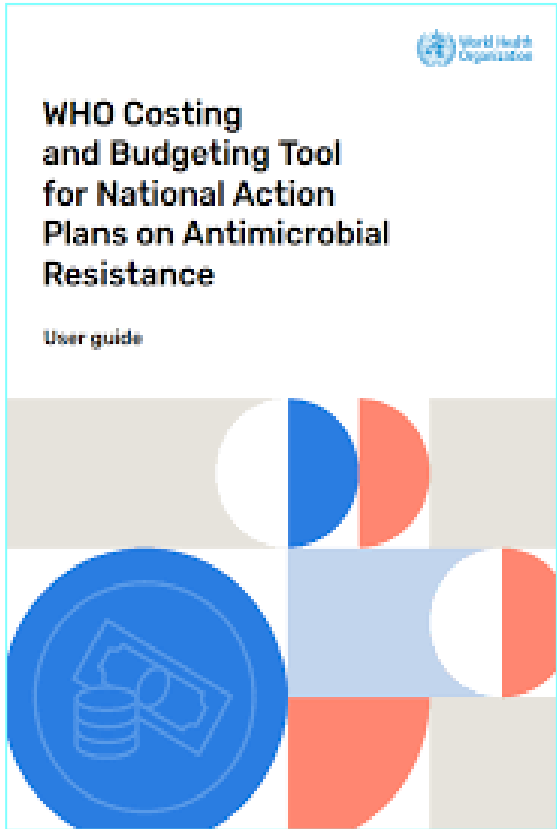
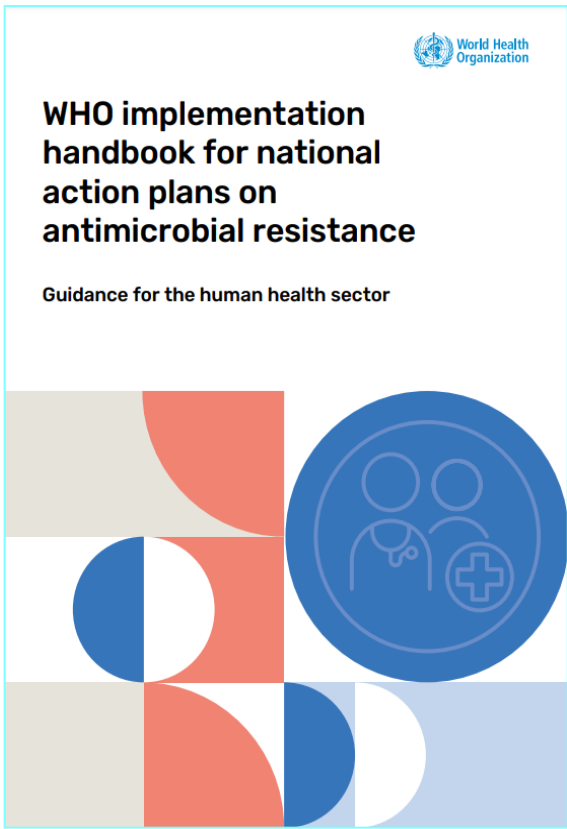
**Figure I:** National Action Plans (NAP) on AMR



**42** (89%) of countries developed a **national action plan (NAP)**

**42** (89 %) of countries contributed to **Tracking AMR Country Self - Assessment Survey**

**Figure 2:** AMR NAP Resources, including 6 Steps for Sustainable National action plans implementation



## 2. AMR awareness & understanding

One of the key objectives of the plan is to improve **awareness and understanding** of AMR through effective **communication, education, and training**.

**World Antimicrobial Awareness Week (WAAW)** is a global campaign that is celebrated annually to improve awareness and understanding of AMR and encourage best practices among the public, One Health stakeholders and policymakers, who all play a critical role in reducing the further emergence and spread of AMR.

As of 27 September 2021,  
in the WHO African Region

**Over  
1200**  
participants for  
WAAW 2021

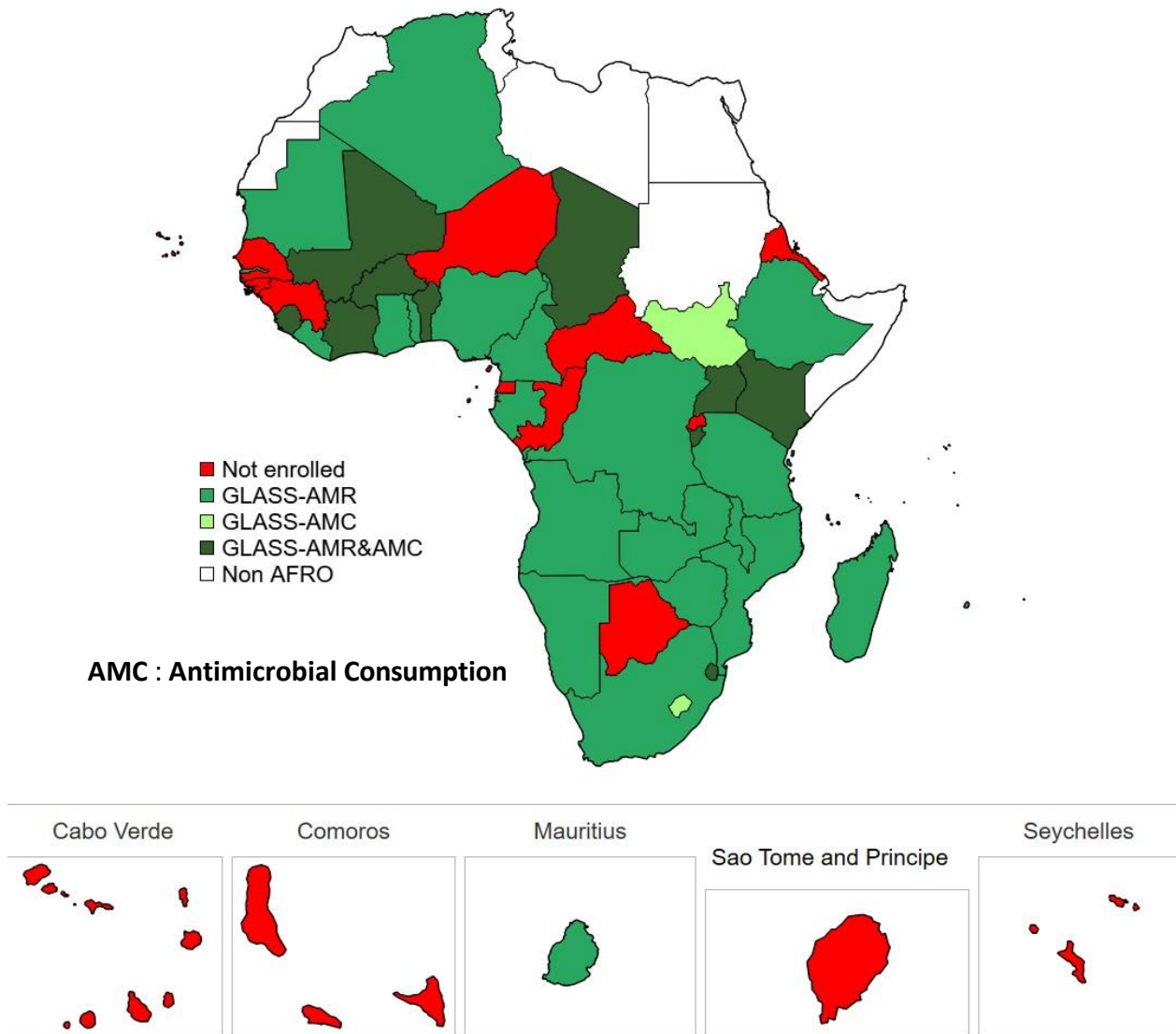
**170**  
regulators  
trained to mainstream AMR  
into regulatory  
product inspections

**11**  
countries implemented  
context based  
**AMR**  
campaigns



### 3. AMR/Use Surveillance

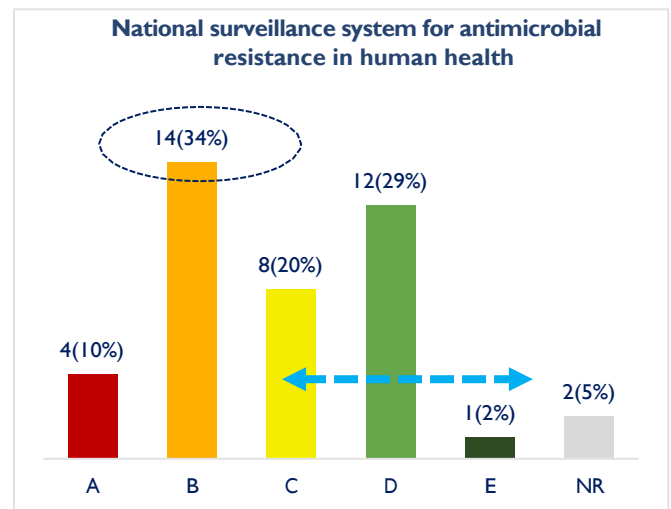
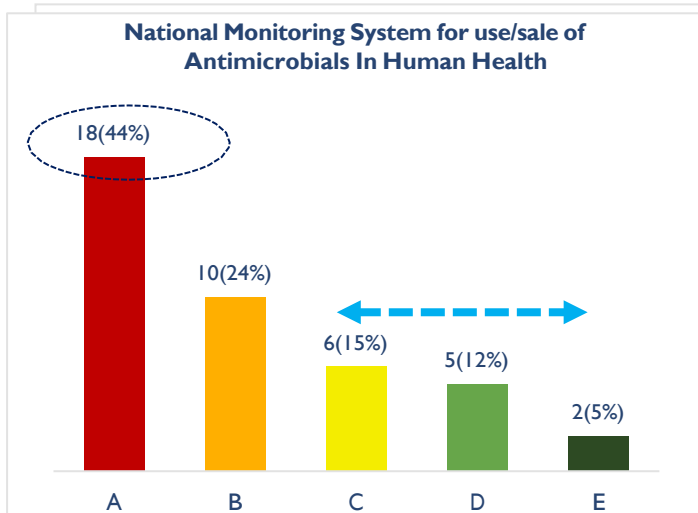
**Figure 3:** Enrollment in GLASS in the WHO African Region as of 2022.



The Status of WHO African countries enrolment into the **Global Antimicrobial resistance and use Surveillance System (GLASS)**

**33 countries** in the African Region are enrolled in **GLASS** as of 2022

**Figure 4 and 5:** Snapshot from the TrACSS 2021 results on national monitoring systems for antimicrobials and national surveillance systems. Countries should be aiming to reach levels C- E on all TrACSS indicators.



- A** No national plan or system for monitoring use of antimicrobials.
- B** System designed for surveillance of antimicrobial use, that includes monitoring national level sales or consumption of antibiotics in health services.
- C** Total sales of antimicrobials are monitored at national level and/or some monitoring of antibiotic use at sub-national level.
- D** Prescribing practices and appropriate antibiotic use are monitored in a national sample of healthcare settings.
- E** On a regular basis (every 1 or 2 years) data is collected and reported on:
  - a) Antimicrobial sales or consumption at national level for human use; and
  - b) Antibiotic prescribing and appropriate/rational use, in a representative sample of health facilities, public and private.

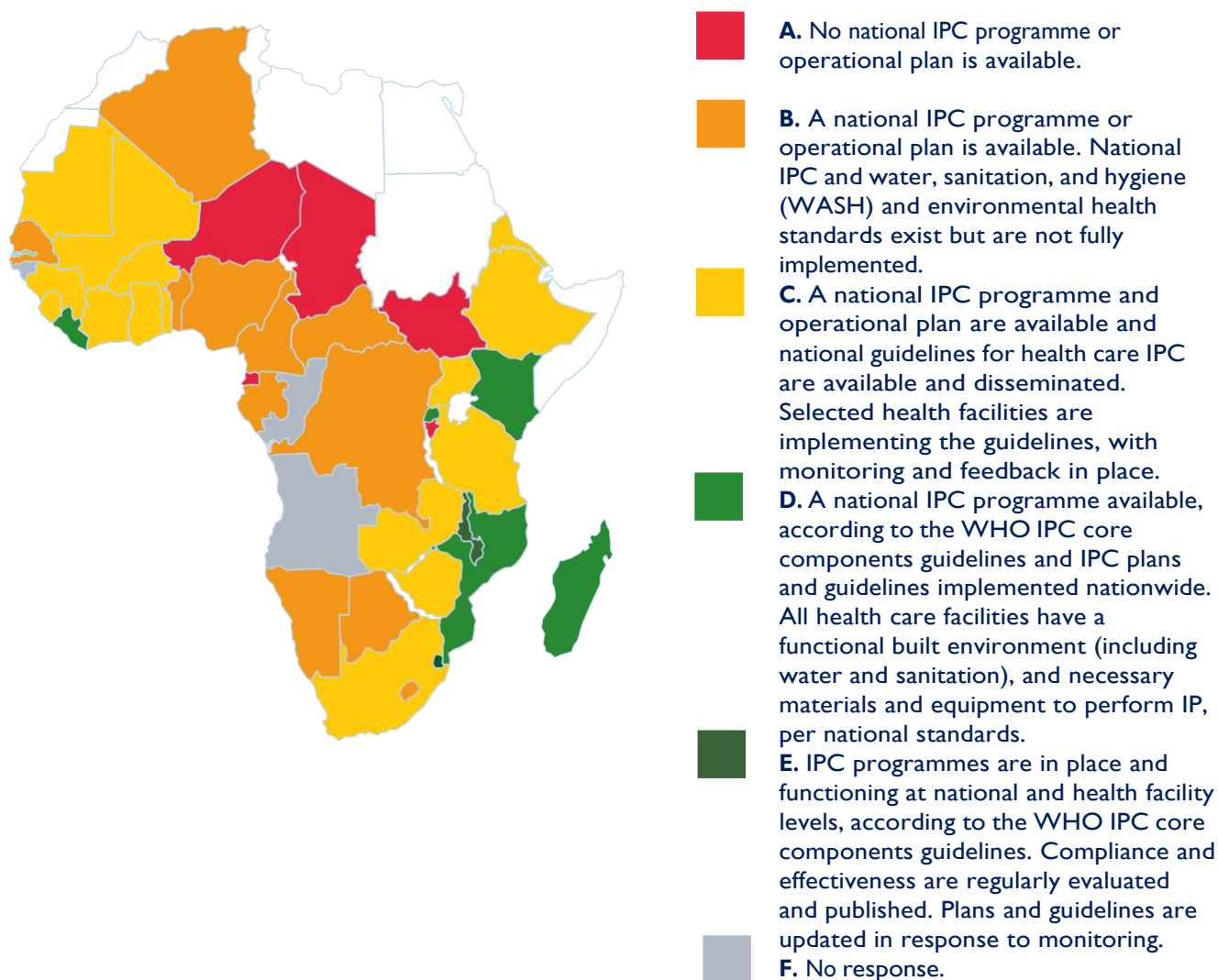
- A** No capacity for generating data (Antibiotic susceptibility testing and accompanying clinical and epidemiological data) and reporting on ABR.
- B** AMR data is collated locally for common bacterial infections in hospitalized and community patients\*, but collection may not use a standardized approach & lacks national coordination and/or quality management.
- C** AMR data are collated nationally for common bacterial infections in hospitalized and community patients, but national coordination and standardization are lacking.
- D** Standardized national AMR surveillance system collecting data on common bacterial infections in hospitalized and community patients, with established network of surveillance sites, designated national reference laboratory for AMR, and a national coordinating centre reports on AMR.
- E** The national AMR surveillance system links AMR surveillance with antimicrobial consumption and/or use data for human health#.

## 4. Infection Prevention & Control (IPC)

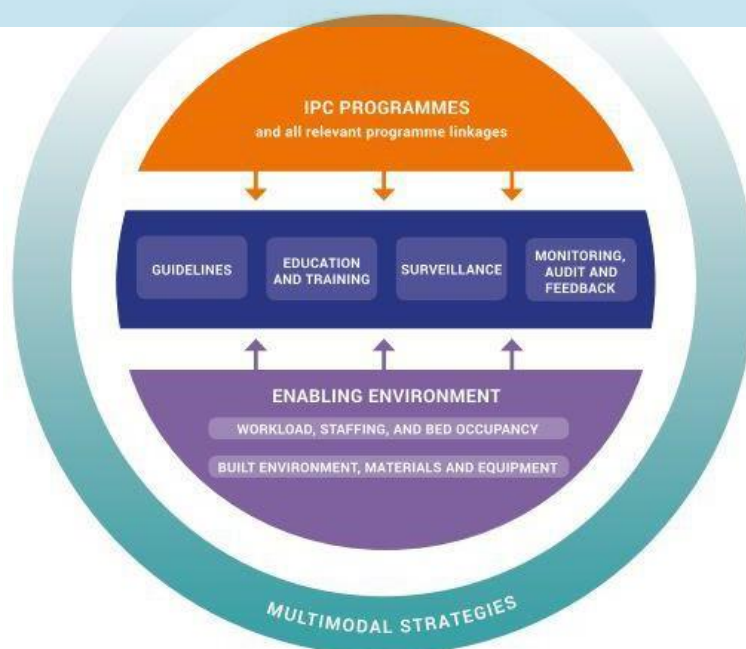


- In 2002, WHO AFRO supported 15 member states to develop their national IPC strategic plan according to the WHO guidelines on core components of IPC programmes.
- Data from 2021-2022 global survey when compared to similar survey conducted in 2017–2018, showed that 16 countries registered improvements in the following critical indicators: having an appointed IPC-trained national focal point, a budget dedicated to IPC and in-service IPC curriculum; developing a national programme or plan for HAI surveillance; using multimodal strategies for IPC interventions; establishing hand hygiene compliance as a key national indicator.
- A policy brief for an IPC legal framework was recently issued by the Africa Centres for Disease Control and Prevention was developed in collaboration with WHO and other partners, it describes the regulatory approach to promoting compliance, evidenced based approach to preventing harm caused by infection to patients and health workers and allow the African Union Member States to develop their national public health law or legal framework that will guide and underpin the operations of IPC.
- Short term key interventions include Training and education on IPC, elaboration and dissemination of national IPC guidelines.

**Figure 6:** Country progress in implementation of IPC and WASH programmes in African Region, 2020-2021.



**Figure 7:** Core components of infection prevention and control guidelines





## 5. Optimized use of antimicrobial medicines

Overuse and misuse, as well as lack of access, to quality-assured antimicrobials are the main drivers of AMR.

To optimize use of antimicrobial medicines, the World Health Organization provides

- Practical guidance such as the **WHO Integrated Antimicrobial Stewardship toolkit**,
- The **Aware Campaign** for helping policy makers reduce resistance without penalizing patients
- Tailored country-level support through the **implementation of antimicrobial stewardship (AMS) programmes**.

### Status on AMR stewardship in the African Region (2021):

- **6 countries** implementing **AMR stewardship interventions**
- **19 (61.3%) countries** have integrated **Aware Categorization** into the **national essential medicines list/ formulary**
- **12 (38.7%) and 11 (34.5%) countries** have incorporated **AMS principles and WHO AWaRe classification** in to **national clinical guidelines for management of infections**



[ADOPTAWARE.ORG](https://adoptaware.org)

60%

### Increase Access

To reduce resistance, WHO evidence shows that at least **60% of all antibiotics consumed should come from the Access category.**

60 by 2023

60 ×  
2023

**The 60% target is important to reach by 2023.** Ultimately, all countries should reach this target swiftly so that patients still get treatment and the most critical antibiotics are preserved.

## 6. Framework for action on antimicrobial resistance

### Priority interventions and actions

- Support countries to develop, cost, implement and monitor national plans
- Build/Strengthen laboratory capacity for microbiology testing for detection and characterization of Antimicrobial-Resistant pathogens.
- Improve antimicrobial surveillance systems to provide the evidence for interventions and advocacy by collecting and sharing information on AMR rates aggregated by Member States across sectors in the context of the One Health approach.
- Use AMR data at National and Health care facility level to implement evidenced based interventions to optimize use of antimicrobials.
- Ensure regional framework for collaborative surveillance of antibiotic resistance.
- Establish national and/or regional policy platforms for management of antibiotic resistance in countries.
- Strengthen national medicines regulatory capacities in the African Region

### Antimicrobial resistance is a global crisis



WHO's AWaRe tool can help countries tackle it by prioritizing how antibiotics should be used.



#### ACCESS

should be  
always available

**Access** category antibiotics should be the preferred choice for common and serious infections.



#### WATCH

must be  
used sparingly

**Watch** and **Reserve** category antibiotics are either at higher risk of resistance or too precious to use all the time.



#### RESERVE

only as  
a last resort

## References

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## Sources

Data on Antimicrobial Resistance (AMR) come from World Health Organization ([Integrated African Health Observatory](#))

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