iAHO Integrated African Health Observatory

World Health Organization African Region

Analytical Fact Sheet
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AMR Team

Tracking AMR Country Self-Assessment Survey (TrACSS) 2022 Results: Perspectives from the WHO African Region - Human Health Indicators

Rationale

Antimicrobial Resistance (AMR) is one of the top 10 global public health threats facing humanity. In May 2015, the World Health Assembly adopted a Global Action Plan (GAP) on AMR and called for Member States to develop country specific One Health AMR national action plans (Resolution WHA 68.7). As part of this effort, the Quadripartite (World Health Organization-WHO, Food and Agriculture Organization of the United Nations- FAO, World Organization for Animal Health-WOAH, and United Nations Environment Program-UNEP) collaborates to accelerate coordinated strategy on addressing antimicrobial resistance, including in monitoring and evaluation of the progress made with the implementation of the Global Action Plan on AMR.

The Tracking AMR Country Self-Assessment Survey (TrACSS) is a component of the global monitoring and evaluation framework and specifically addresses monitoring the implementation of multisectoral AMR national action plans (AMR NAPs). There have been six rounds of the TrACSS so far. This fact sheet provides results of the TrACSS 2022 for the human health sector in the WHO African Region, along with recommendations for country action.

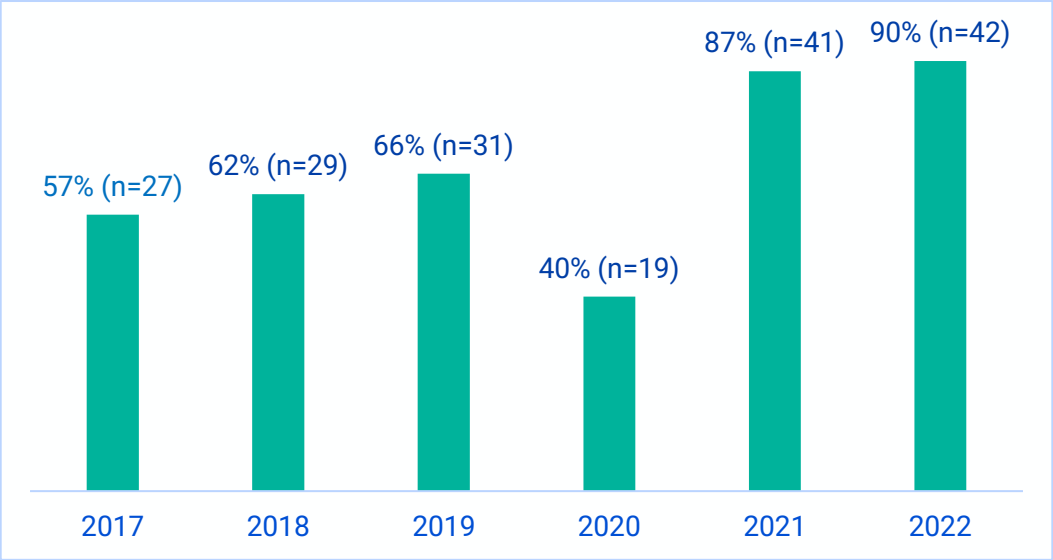
Key Findings

- 38 (91%) countries have developed National Action Plans for AMR.
- 34 (81%) countries report their AMR NAPs are linked to at least one other national plan or strategy
- 15 (36%) countries with functional AMR multisector coordination mechanisms.
- 35 (84%) countries report having regulations on antimicrobial sale.
- 24 (58%) countries have limited or small-scale AMR awareness campaigns.
- 18 (44%) countries collate AMR data nationally for common bacterial infections.
- 21 (51%) countries have no system for monitoring use of antimicrobials.
- 7 (17%) countries have nationwide implementation of national IPC program.
- 20 (49%) countries have national guidelines for appropriate use of antimicrobials and implementing in some healthcare facilities.

Participation in the annual TrACSS

Over the past 6 years, the WHO African Region Member States have participated in the annual TrACSS. Forty-two (90%) Member States in the region responded to the sixth round of the 2022 TrACCS survey, the highest participation rate of all the six years. Individual country reports are also available here.

Figure 1: African Region Member States Six-year TrACSS participation trend

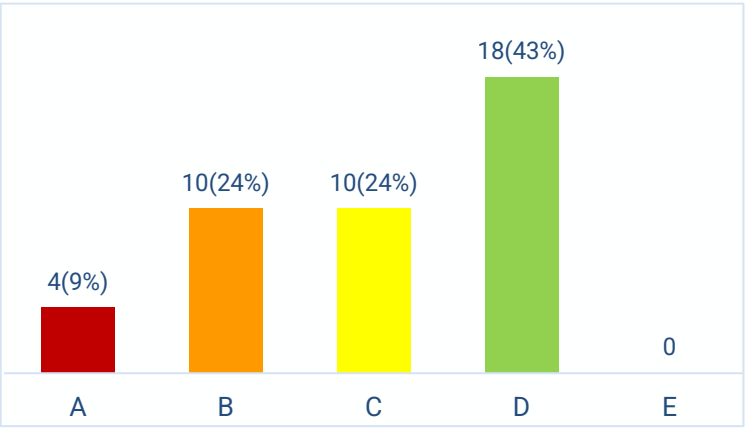


42 (90%) countries responded to the 2022 TrACSS

Development and implementation of AMR National Action Plans (NAPs)

• In the 2022 TrACSS, 38 (91%) countries have developed National Action Plans for AMR using the "One Health" approach, of which 28 (67%) were approved by government and are being implemented (C-E).

Figure 2: Country progress with development and implementation of AMR NAPs (TrACSS 2022)

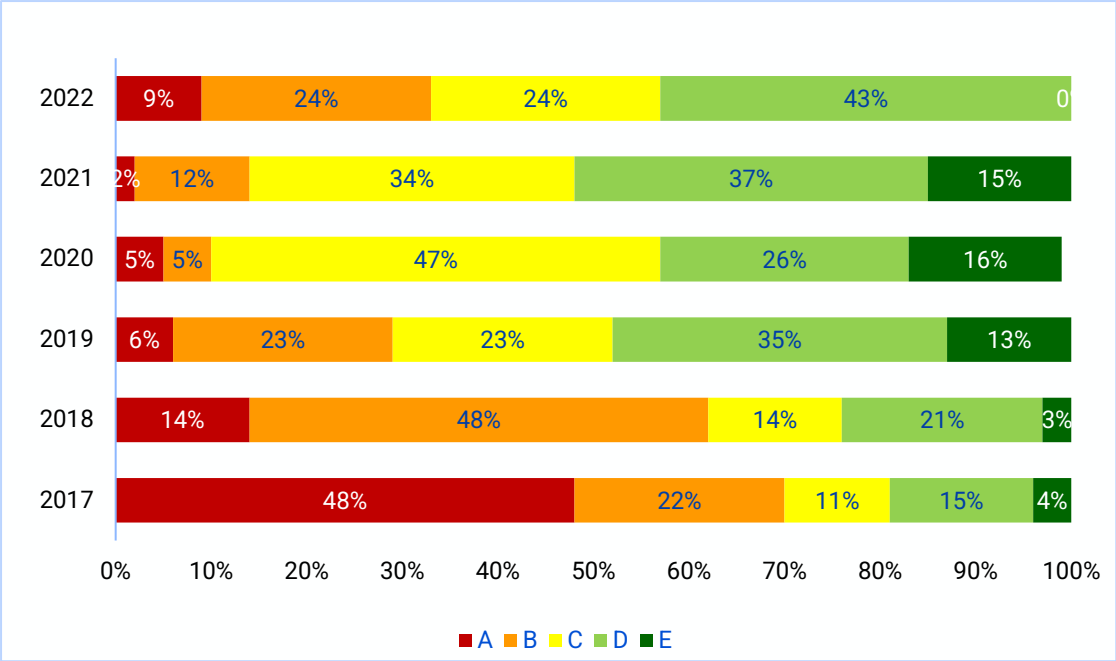


A	No national AMR action plan or plan under development.
B	National AMR action plan developed.
C	National AMR action plan approved by government and is being implemented.
D	National AMR action plan has costed and budgeted operational plan and has monitoring mechanism in place.
E	Financial provision for the National AMR action plan implementation is included in the national plans and budgets.

- 18 (43%) countries have costed and budgeted operational plan.
- 28 (67%) countries have a monitoring and evaluation plan for the national AMR action plan.
- 34 (81%) of responding countries reported that COVID-19 negatively impacted NAP implementation through reduced government resourcing, prioritization of COVID19 response and differed AMR multisectoral committee meetings.

Trends over the past six years indicate an increase in the number of countries developing NAPs.

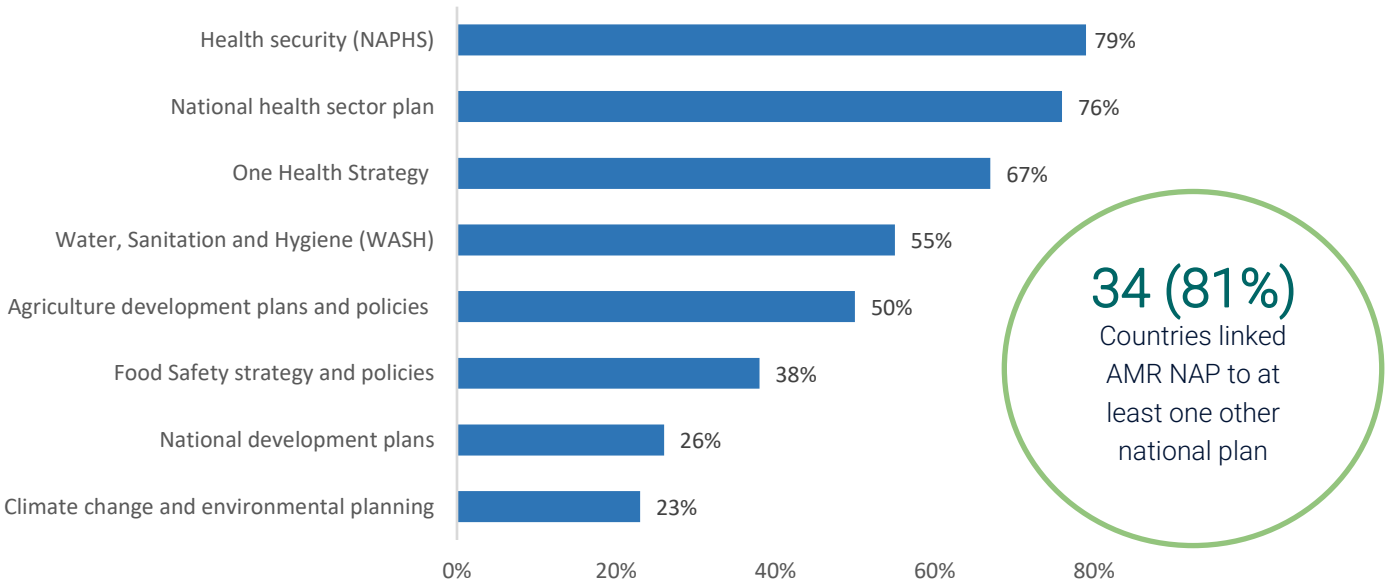
Figure 3: Development and Implementation of AMR NAPs over six years



AMR NAP integration with other national plans

- Mainstreaming AMR into strategies and budgets of other national plans helps with sustainability of AMR response in countries. 34 (81%) of countries report their AMR NAPs linked to at least one other national plan or strategy.

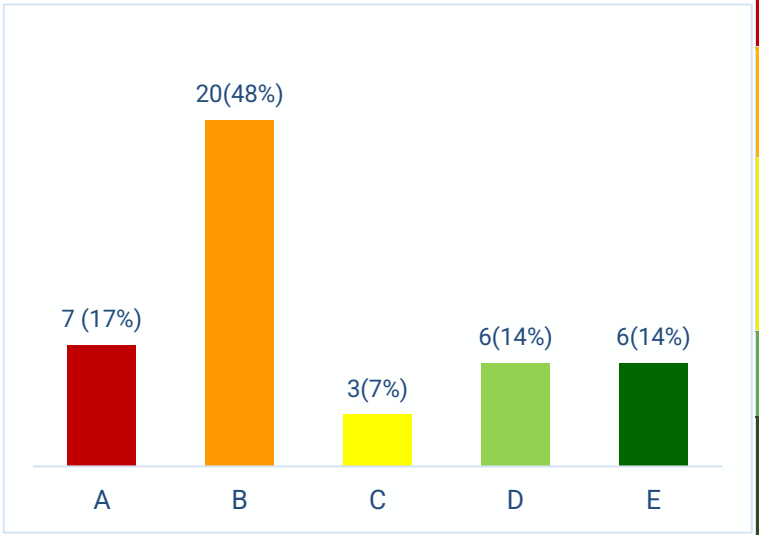
Figure 4: AMR NAP integration with other national plans (TrACSS 2022)



Multi-sector and One Health collaboration/coordination

Majority 35 (84%) countries have established AMR multisector coordination mechanisms with government leadership (B-E). However, only 15 (36%) countries have a functional multisector working group with clear terms of reference, regular meetings, and funding (C-E).

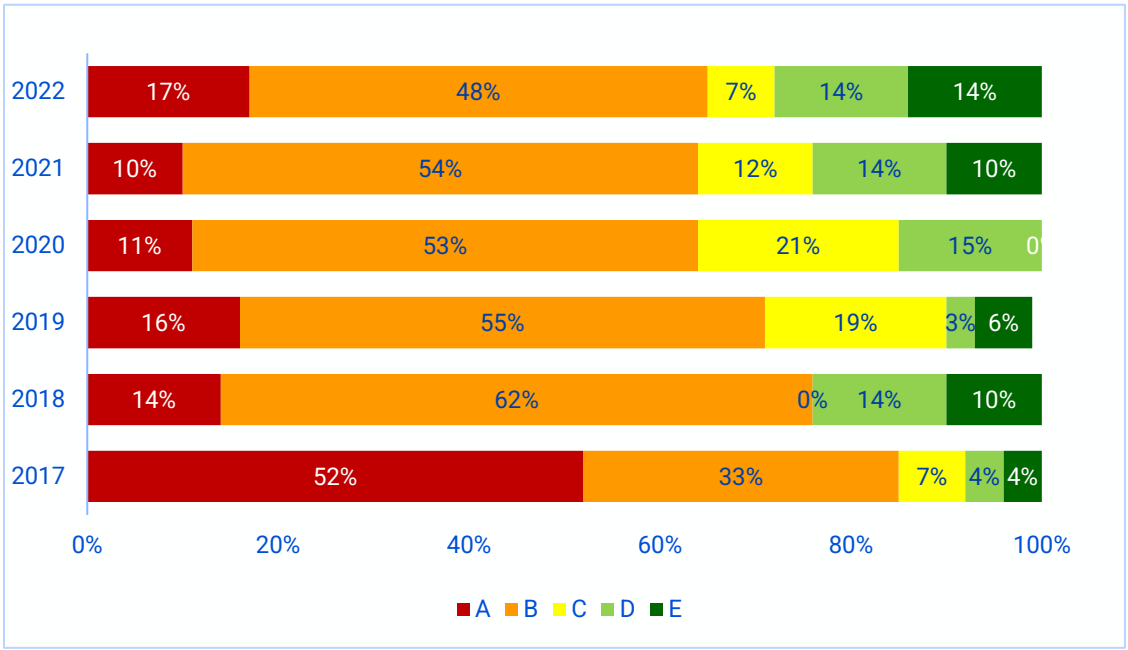
Figure 5: Establishment of AMR multisector coordination mechanisms (TrACSS 2022)



A	No formal multi-sectoral governance or coordination mechanism on AMR exists.
B	Multi-sectoral working group(s) or coordination committee on AMR established with Government leadership
C	Formalized Multisector coordination mechanism with technical working groups established with clear terms of reference, regular meetings, and funding for working group(s) with activities and reporting/accountability arrangements defined.
D	Joint working on issues including agreement on common objectives.
E	Integrated approaches used to implement the national AMR action plan with relevant data and lessons learned from all sectors used to adapt implementation of the action plan.

- In 2022, 38 (91%) countries, human and terrestrial animal health are the sectors most actively involved in the multisector coordination mechanism.
- 6-year trends show the need to support countries to move from establishing multi-sectoral working groups (B) to having them fully functional (C-E).

Figure 6: Multisector coordination over six years

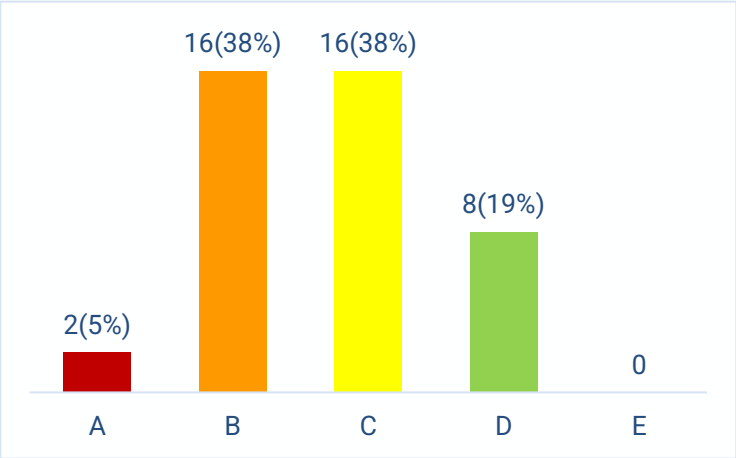


Awareness and understanding of AMR

Awareness and understanding of AMR is central to ensuring an all of society engagement that identifies and targets all critical sectors of society as it will significantly contribute to mitigating the impact of AMR on lives and livelihoods.

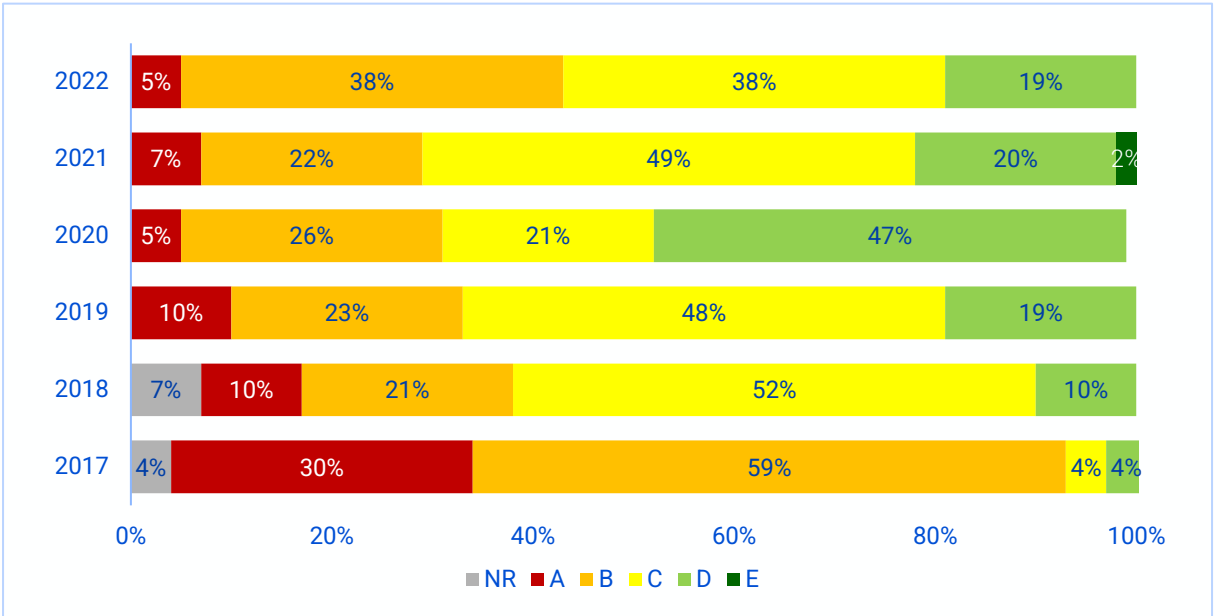
- A total of 24 (58%) reporting countries had limited or small-scale antimicrobial resistance awareness campaigns targeting some priority stakeholder groups (Level C-E).
- 8 (19%) countries have government supported nationwide AMR awareness campaigns (Level D-E)
- The data highlight the need for additional for targeted, nationwide government supported AMR campaigns targeting key stakeholders.
- Six years trend show that there is **no consistent improvement on this indicator** over the years.

Figure 7: Raising awareness and understanding on AMR (TrACSS 2022)



A	No significant awareness-raising activities on relevant aspects of risks of antimicrobial resistance
B	Some activities to raise awareness about risks of antimicrobial resistance and actions that address it.
C	Limited or small-scale antimicrobial resistance awareness campaign targeting some but not all relevant stakeholders.
D	Nationwide, government-supported antimicrobial resistance awareness campaign targeting all or the majority of priority stakeholder groups, based on stakeholder analysis, utilizing targeted messaging accordingly within sectors.
E	Routine targeted, nationwide government-supported activities regularly implemented to change behavior of key stakeholders within sectors, with monitoring undertaken over the last 2-5 years.
NR	No response

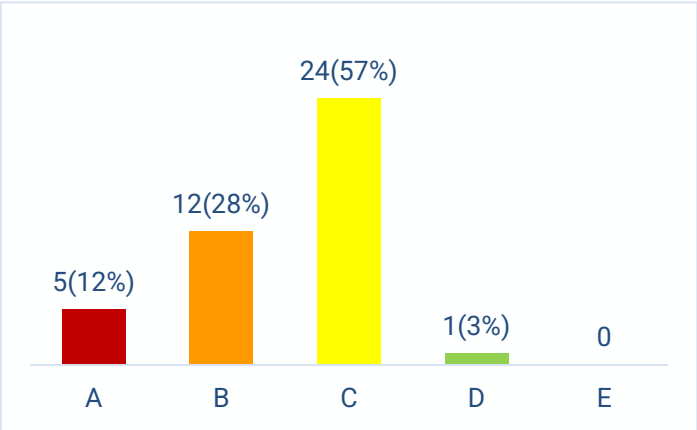
Figure 8: Raising awareness on AMR over six years



Training and professional education on AMR

- In 2022, 25 (60%) of responding countries offer at least some human health related pre-and in-service training on AMR for human health workers (Level C-E).
- **There is a need to enhance youth education on AMR. In majority of the responding countries 35 countries (84%) school-going children and youth (primary and secondary) do not receive education on antimicrobial resistance, as a long-term investment in mitigating AMR.**

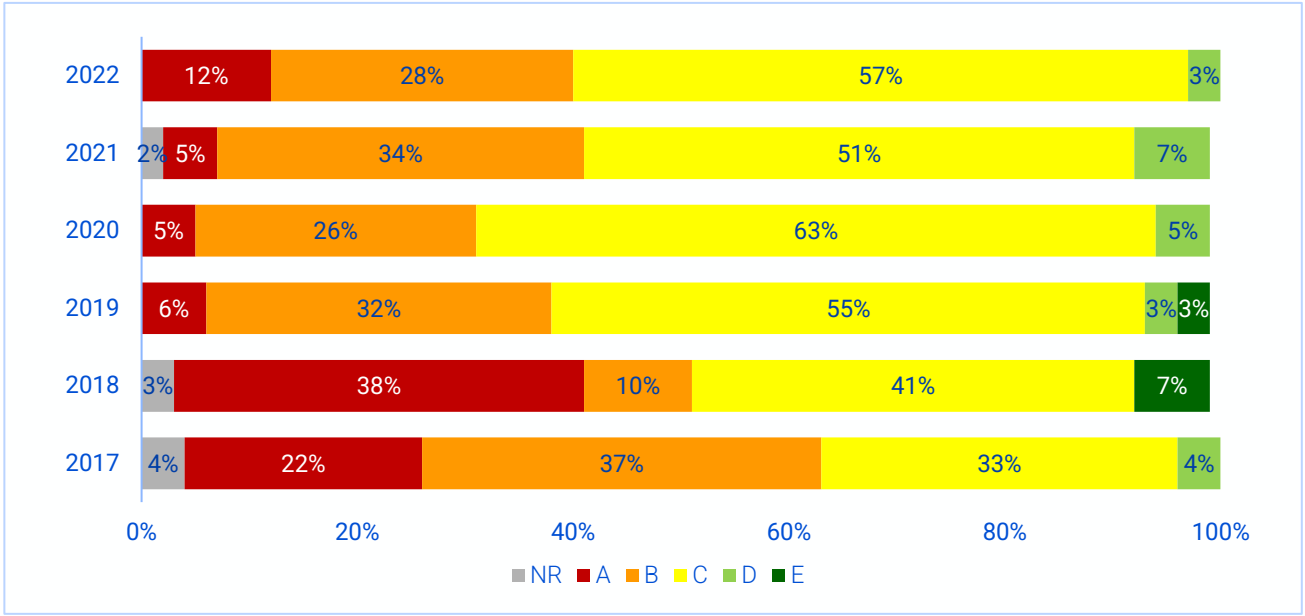
Figure 9: Training and professional education on AMR for human health (TrACSS 2022)



A	No training for human health workers on AMR.
B	Ad hoc AMR training courses in some human health related disciplines.
C	AMR is covered in 1) some pre-service training and in 2) some in-service training or other continuing professional development (CPD) for human health workers.
D	AMR is covered in pre-service training for all relevant cadres. In-service training or other CPD covering AMR is available for all types of human health workers nationwide.
E	AMR is systematically and formally incorporated in pre-service training curricula for all relevant human health cadres. In-service training or other CPD on AMR is taken up by relevant groups for human health nationwide, in public and private sectors.
NR	No response

- Over the 6 years, countries are providing some pre- and in-service training on AMR in human health (level C); more focus should be placed in providing AMR in pre-service training for all cadres and systematically incorporating it into training curricula (level D-E).

Figure 10: AMR training in human health over six years

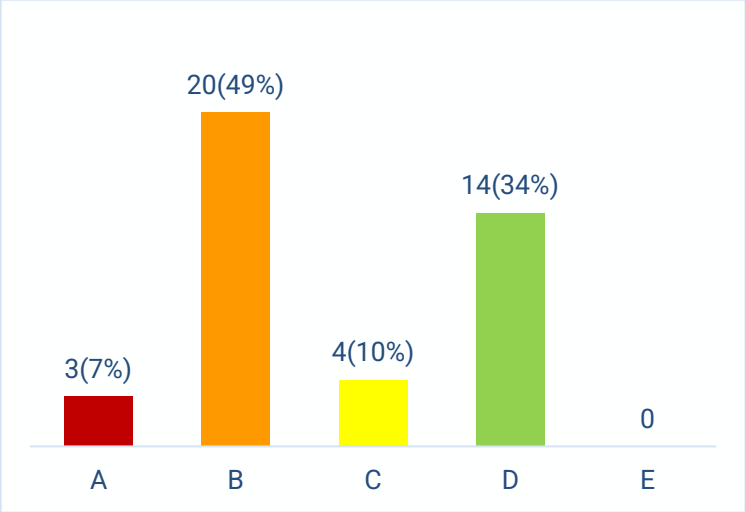


Strengthen the knowledge and evidence base through surveillance and research

AMR surveillance is essential to understanding the AMR burden and articulating an evidence-based response.

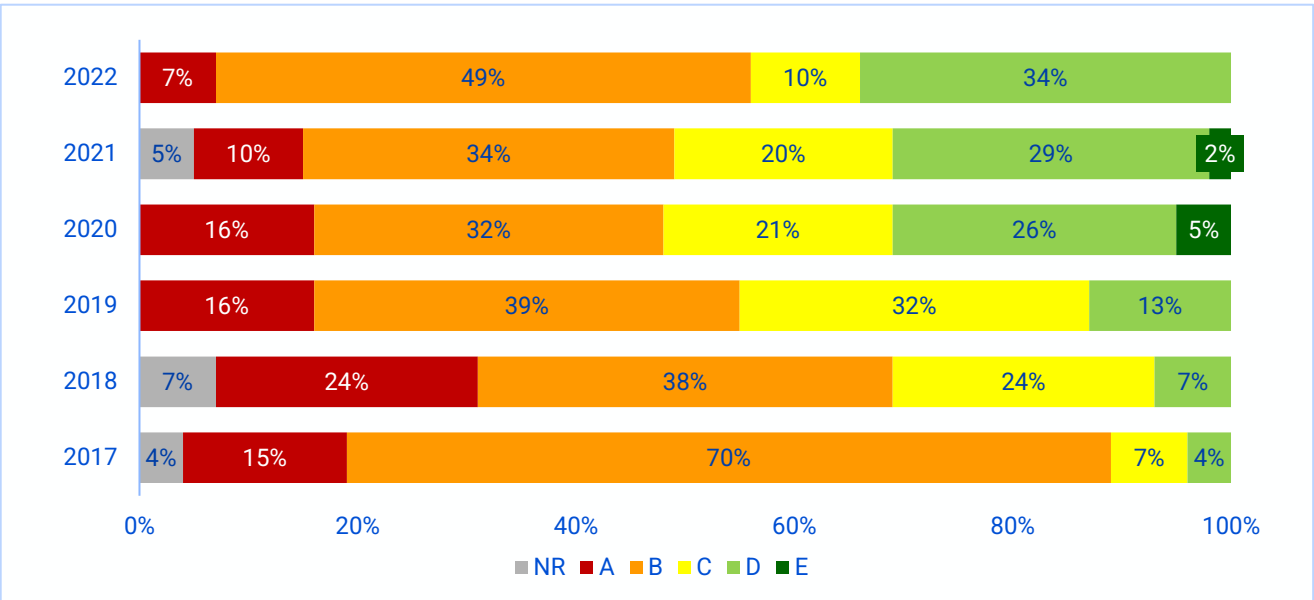
- A total of 18 (44%) responding countries are collating AMR data nationally for common bacterial infections (Leve C-E) of which, 14 (34%) have standardized national AMR surveillance system and a national coordinating centre producing reports on AMR (level D-E).
- **Six years trend show that there is an increase in countries with a standardized national AMR surveillance system (D - E) over the years.**

Figure 11: National surveillance systems for AMR in human health (TrACSS 2022)



A	No capacity for generating data (antibiotic susceptibility testing and accompanying clinical and epidemiological data) and reporting on antibiotic resistance.
B	AMR data is collated locally for common bacterial infections in hospitalized and community patients*, but data collection may not use a standardized approach and 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	There is a 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 producing reports on AMR.
E	The national AMR surveillance system links AMR surveillance with antimicrobial consumption and/or use data for human health#.
NR	No response

Figure 12: AMR surveillance in human health over six years



Assessment of capacities related to clinical bacteriology laboratory services.

- 20 (48%) countries use standardized Antimicrobial Susceptibility Testing (AST) guidelines in the National Bacteriology Reference Laboratory (NBRL) and some other clinical bacteriology laboratories.
- 22 (53%) countries have no mechanism in place to report stock-outs of reagents/consumables for the diagnosis of bacterial infections.

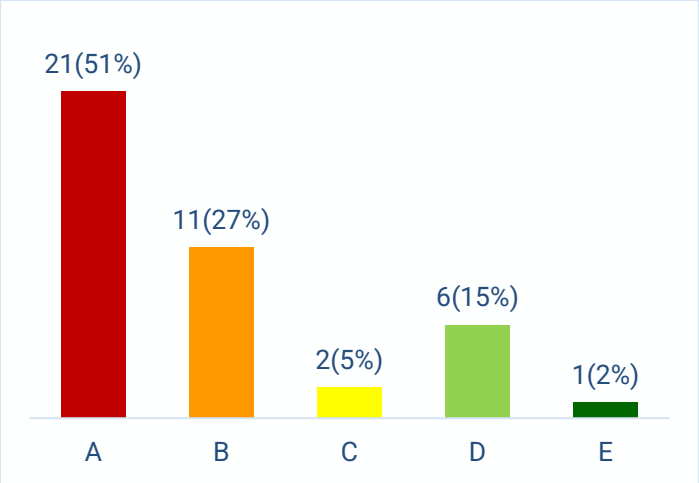
Use of data to inform operational decision making and amend policies

- 15 (36%) countries are using relevant antimicrobial resistance (AMR) surveillance data to inform operational decision making and amend policies.
- 14 (33%) countries are using antimicrobial consumption/use (AMC/U) data to inform operational decision making and amend policies.

Monitoring system for antimicrobial consumption and use

- Majority 21 (51%) of responding countries do not have a national plan or system to monitor the use of antimicrobials (Level A).
- Only 9 (22%) countries monitor total sales of antimicrobials at national level (Level C-E).

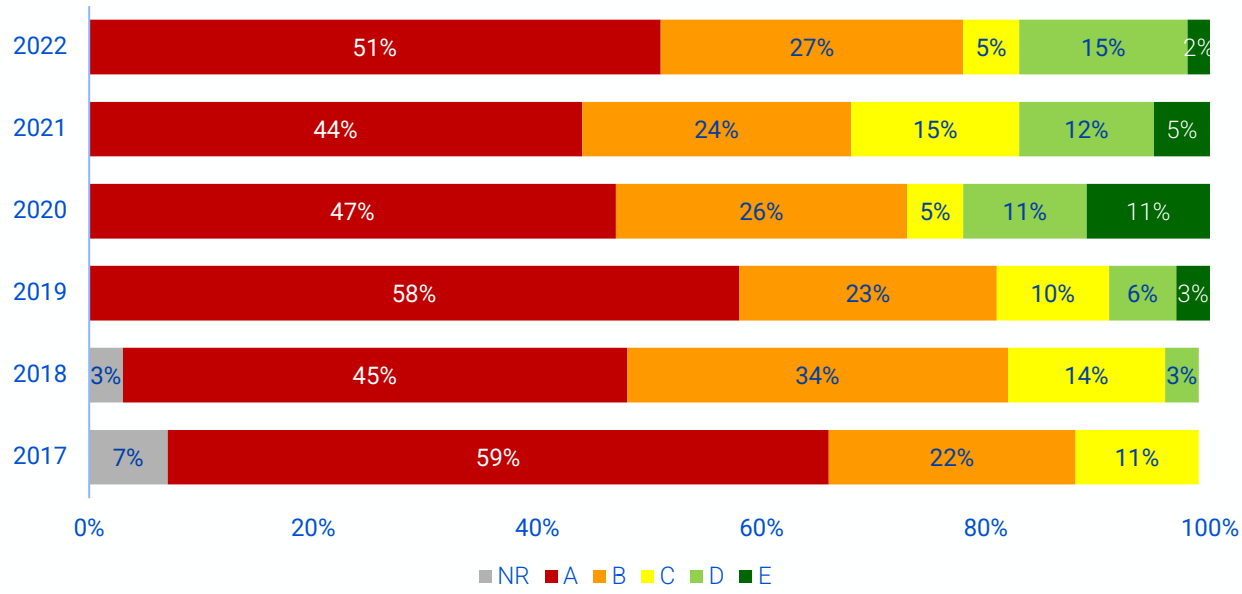
Figure 13: National monitoring for antimicrobial consumption in humans



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 year/two 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.
NR	No response

Six years trend show that, this indicator has had the highest % of countries still at level A across the years i.e., no national plan in place for monitoring antimicrobial use.

Figure 14: Monitoring system for antimicrobial use in humans over six years

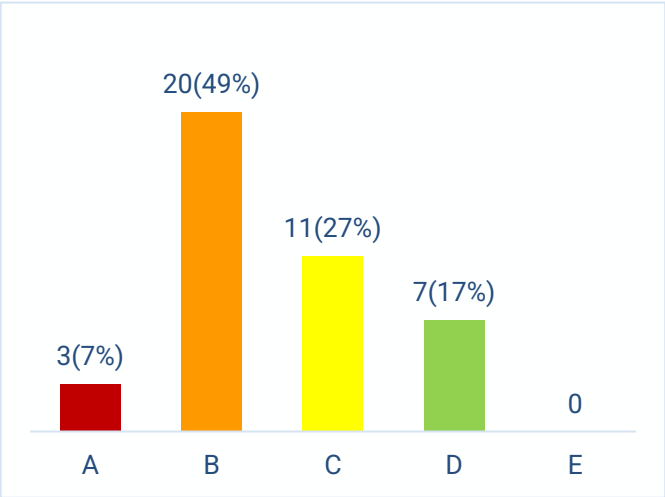


Infection Prevention and Control (IPC)

Infection Prevention measures are instrumental to preventing and mitigating infectious diseases and AMR risk and threat of healthcare-associated infections (HAI) across sectors.

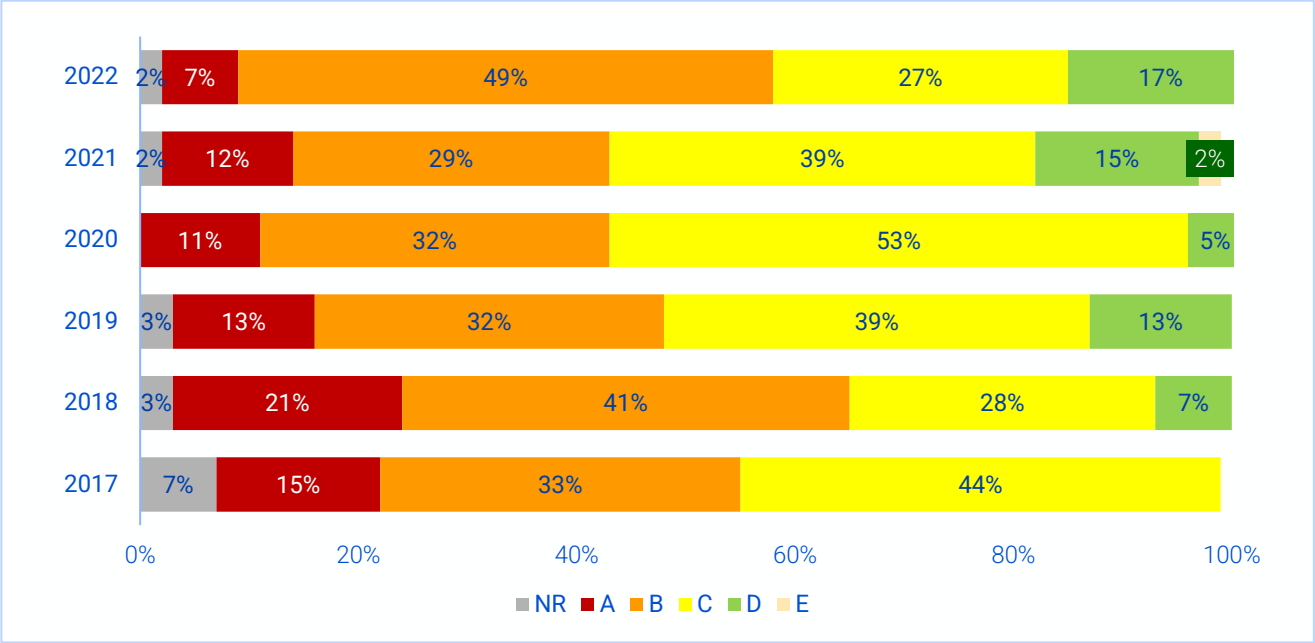
- Most countries reported being at level B, where 20 (49%) of countries reported that a national IPC program, operational plan and guidelines for IPC were available, but are not fully implemented.
- 18 (44%) countries reported having IPC programs being implemented at select facilities and there are guidelines available with monitoring/feedback in place (level C-E).
- 7 (17%) countries have nationwide implementation of national IPC program according to the WHO IPC core components guidelines (Leve D – E)
- **Six years trend show that there is no consistent improvement on this indicator over the years, but there have been modest increases in nationwide implementation of IPC program (D-E).**

Figure 15: Infection Prevention and Control (IPC) in human healthcare (TrACSS 2022)



A	No national IPC program or operational plan is available.
B	A national IPC program or operational plan is available. National IPC and water, sanitation and hygiene (WASH) and environmental health standards exist but are not fully implemented.
C	A national IPC program and operational plan are available and national guidelines for health care IPC are available and disseminated. Selected health facilities are implementing the guidelines, with monitoring and feedback in place.
D	National IPC program available according to the WHO IPC core components guidelines* and IPC plans and guidelines implemented nationwide. All health care facilities have a functional built environment (including water and sanitation), and necessary materials and equipment to perform IPC, per national standards.
E	IPC programs are in place and functioning at national and health facility levels according to the WHO IPC core components guidelines. Compliance and effectiveness are regularly evaluated and published. Plans and guidance are updated in response to monitoring.

Figure 16: IPC in human health care over six years

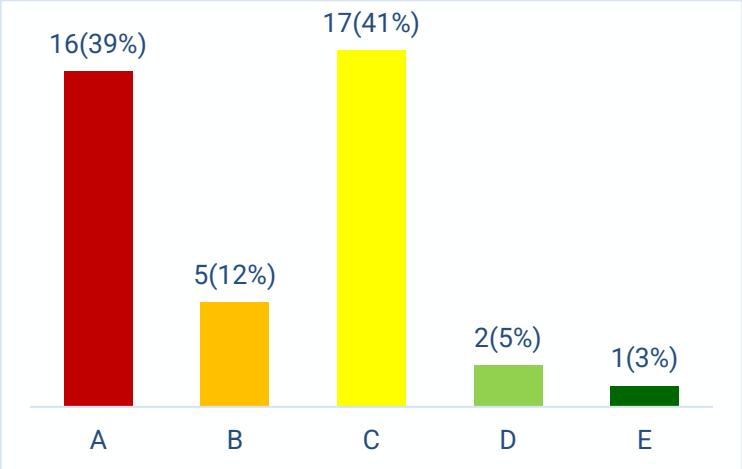


Optimizing antimicrobial use

Optimization of antimicrobial treatment is a cornerstone in the fight against antimicrobial resistance.

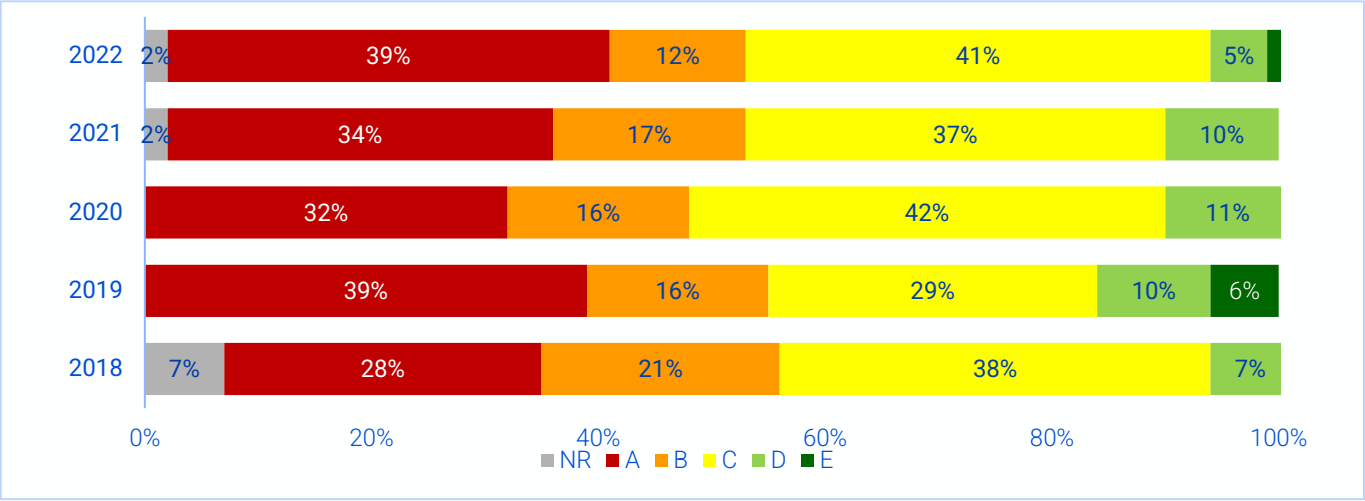
- 20 (49%) countries have national guidelines for appropriate use of antimicrobials and implementing antimicrobial stewardship in some healthcare facilities (Level C-E).
- 35 (84%) countries reported having laws or regulations on prescription and sale of antimicrobials for human use.
- Overall, 5-year trend shows that not much movement on this indicator over the past few years. However, it shows the need to support member states to develop national policies for appropriate antimicrobial use.

Figure 17: Optimizing antimicrobial use in human health



A	No/weak national policies for appropriate antimicrobial use including availability, quality, and disposal of antimicrobials.
B	National policies promoting appropriate antimicrobial use/antimicrobial stewardship activities developed for the community and health care settings.
C	National guidelines for appropriate use of antimicrobials are available and antimicrobial stewardship programs are being implemented in some healthcare facilities
D	National guidelines for appropriate use of antimicrobials are available and antimicrobial stewardship programs are being implemented in most health care facilities nationwide. Monitoring and surveillance results are used to inform action and to update treatment guidelines and essential medicines lists.
E	National guidelines on optimizing antibiotic use are implemented for all major syndromes and data on use is systematically fed back to prescribers.
NR	No response

Figure 18: Optimize use of antimicrobials in human health over five years

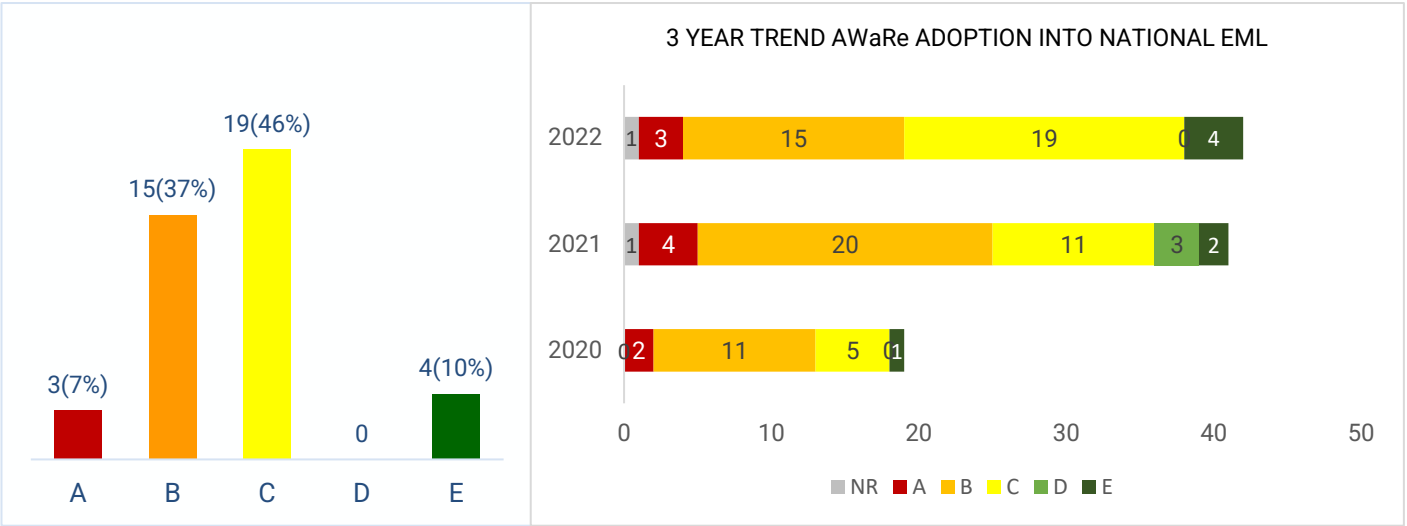


Adoption of "AWaRe" classification of antibiotics in the national essential medicines list

AWaRe classifies antibiotics into three groups (Access, Watch and Reserve) to guide antimicrobial stewardship activities and emphasize the importance of their optimal uses and potential for developing drug resistance. It is a tool for countries to better support antibiotic monitoring and the optimal use of antibiotics.

In 2022, 23 countries (56%) have adopted the AWaRe classification of antibiotics in their National Essential Medicines List in 2022 (Level C-E) compared to 5 countries in 2020 and 11 countries in 2021.

Figure 19: Adoption of AWaRe classification national EML (TrACSS 2022)



A	Country has no knowledge or information about the AWaRe classification of antibiotics.
B	Country has knowledge about the AWaRe classification of antibiotics but has not yet adopted it.
C	Country has adopted the AWaRe classification of antibiotics in their National Essential Medicines List.
D	Country has adopted the AWaRe classification of antibiotics in their National Essential Medicines List and is monitoring its antibiotic consumption and reporting it according to the AWaRe classification.
E	Country has adopted the AWaRe classification of antibiotics in their National Essential Medicines List, is monitoring its antibiotic consumption and reporting it according to the AWaRe classification and has incorporated AWaRe into its antimicrobial stewardship strategies (e.g. treatment guidelines).

Recommendations for country action

Ensure AMR NAPs have been prioritized, costed, and have an operational plan with monitoring in place for successful implementation. Furthermore, to ensure its sustainability, AMR national planning should also be integrated into existing national strategies and budgets.

Build leadership capacity to ensure the effective functioning of AMR multisectoral coordination mechanism - only 15 (36%) countries report having functional multisector coordination mechanisms.

Consider youth (primary and secondary) education on antimicrobial resistance, as a long-term investment in mitigating AMR - Less than 16% countries report having this intervention in place.

Utilize national data on antimicrobial resistance (AMR) and antimicrobial consumption/use (AMC AMU) to inform operational decision making and inform policies

Strengthen capacity for nationwide implementation of IPC/WASH programs – only 17% countries report having nationwide implementation of the program.

There is need to develop and implement national guidelines for appropriate use of antimicrobials.

Limitations: Self-assessment surveys such as the TrACSS come with intrinsic limitations, including issues of self-response bias, or exaggerated responses.

References

WHO, Global Database for Tracking Antimicrobial Resistance (AMR) Country Self- Assessment Survey (TrACSS), 2023.

WHO, Global action plan on antimicrobial resistance, 2015.

WHO, Global action plan on antimicrobial resistance, 2016.

WHO, Supporting countries with national action plan implementation, 2023.

WHO, TrACSS 2022 Country Reports, 2023.

WHO, Tripartite AMR Country Self-assessment Survey – TrACSS (6.0), 2022.

Sources

The Integrated African Health Observatory (iAHO) supported the production of the factsheet.

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