World Health Organization

2021 TrACSS Country Report on the Implementation of National Action Plan on Antimicrobial Resistance (AMR)

WHO REGION:
Eastern Mediterranean Region

WORLD BANK INCOME CLASSIFICATION:
Low income

POPULATION:
17 500 657

Antimicrobial resistance (AMR) occurs when pathogens become resistant to the drugs that were used against them, making infections harder and more expensive to treat, increasing healthcare costs and undermining decades of progress in countless health programmes and modern medical procedures.

In a call to action against AMR, Member States adopted the Global Action Plan on AMR (GAP-AMR) in 2015, pledging to develop and implement AMR national action plans (NAP) based on the five objectives of the GAP. The Tripartite AMR Country Self-Assessment Survey (TrACSS) monitors the implementation of these AMR national action plans and is administered annually. It is currently in its fifth iteration, which saw the highest response rate so far with 163 of 194 (84%) of Member States participating in the survey. However, more than 90% of those countries noted that COVID-19 had had a negative impact on development and implementation of national plans to tackle AMR. Globally, the data from TrACSS indicates an urgent need to strengthen political commitment, to make more resources available, and to build awareness about AMR.

This report focuses on the country's individual TrACSS responses to human health indicators and provides a 5-year overview of country TrACSS responses, and benchmarks country responses against regional and global levels on eight key AMR indicators.

Summary of AMR Governance in 2021

Country has developed NAP — ✔

Country is implementing their AMR NAP — ✘

Country has functional multisectoral working groups on AMR — ✘

Country has laws/regulations on prescription/sale of antimicrobials for human use — ✔

Country uses antimicrobial resistance/consumption data to amend national strategy and inform decision making in human health — ✘

Sectors involved in NAP development and implementation

Human Health — ✔

Animal Health — ✘

Plant Health — ✘

Food Production — ✘

Food Safety — ✘

Environmental Health — ✘

Resources

AMR resource pack: https://www.who.int/activities/supporting-countries-with-national-action-plan-implementation

WHO implementation handbook for NAPs on AMR: https://www.who.int/publications/i/item/9789240041981

TrACSS Database: https://amrcountryprogress.org

Email: tracss@who.int

World Health Organization

Overview of country responses to 2017 – 2021 TrACSS Questionnaire

no capacity **A**	yes **Y**
limited capacity **B**	no **N**
developed capacity **C**	don't know **?**
demonstrated capacity **D**	no data **Ø**
sustained capacity **E**	question not asked this year ●

		2017	2018	2019	2020	**2021**
AMR Governance and Coordination						
4.1	Multisector and One Health coordination	B	A	A	B	B
5.1	Country progress with development of a national action plan on AMR	C	A	B	C	C
GAP Objective 1 – Improve awareness and understanding of AMR						
6.1	Raising awareness and understanding of AMR risks and response	B	A	B	C	C
6.2	Training and professional education on AMR in the human health sector	B	A	A	C	B
6.3	Training and professional education on AMR in the veterinary sector	Ø	A	A	B	B
6.4	Training and professional education on AMR in farming, food, the environment sectors	●	A	A	B	B
GAP objective 2 – Strengthen knowledge through surveillance and research						
7.1	National monitoring system for consumption and rational use of antimicrobials in human health	A	A	A	B	B
7.2	National monitoring system for antimicrobials sale or use for animals (sales/use)*	●	A	A	B	Y
7.3	National monitoring system for pesticide use in plant production including antimicrobial pesticides	●	●	A	B	B
7.4	National surveillance system for AMR in humans	A	B	A	B	C
7.5.a	National surveillance system for AMR in animals	●	Ø	B	B	B
7.5.c	National surveillance system for AMR in food (animal and plant origin)	●	Ø	Ø	C	C
GAP objective 3 – Reduce the incidence of infection						
8.1	Infection Prevention and Control (IPC) in human health care	B	D	A	C	C
8.2	Good health, management and hygiene practices to reduce the use of antimicrobials and minimize development and transmission of AMR in animal production	●	●	B	B	B
8.3	Good management and hygiene practices to reduce the development and transmission of AMR in food processing	●	●	B	B	B

* Response format changed in 2021

World Health Organization

Overview of country responses to 2017 – 2021 TrACSS Questionnaire

no capacity	**A**	yes	**Y**
limited capacity	**B**	no	**N**
developed capacity	**C**	don't know	**?**
demonstrated capacity	**D**	no data	**Ø**
sustained capacity	**E**	question not asked this year	●

	2017	2018	2019	2020	**2021**

GAP Objective 4 - Optimize the use of antimicrobials

	2017	2018	2019	2020	2021
9.1 Optimizing antimicrobial use in human health	●	D	A	B	B
9.1.1 Adoption of "AWaRe" classification of antibiotics in the National Essential Medicines List	●	●	●	B	B
9.2 Optimizing antimicrobial use in animal health (terrestrial and aquatic)	●	●	●	B	B
9.3 Optimizing antimicrobial pesticide such as bactericides and fungicides use in plant production	●	●	●	B	B

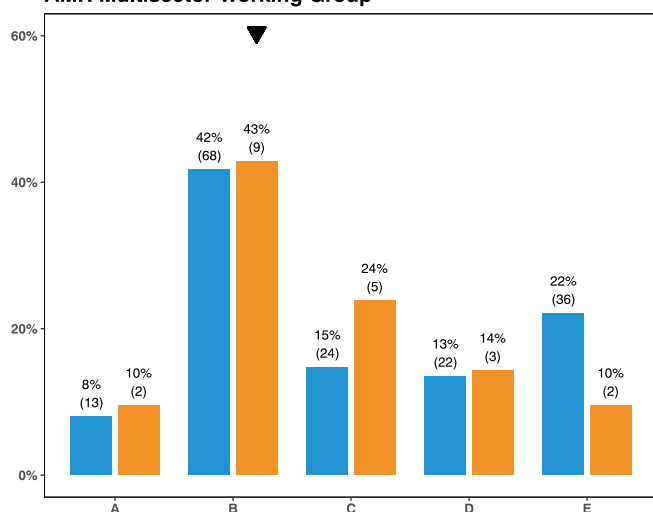### Use of data and regulations to address AMR (Yes/No)

	2017	2018	2019	2020	2021
5.4.1 Country has laws on prescription and sale of antimicrobials, for human use	●	●	Y	Y	Y
5.4.2 Country has laws on prescription and sale of antimicrobials for animal use	●	●	Y	Y	Y
5.4.3 Country has laws that prohibits the use of antibiotics for growth promotion in the absence of risk analysis	●	●	Y	Y	Y
5.4.4 Country has legislation on marketing of pesticides including antimicrobial pesticides, used in plant production	●	●	●	Y	Y
7.6.a Country uses relevant AM consumption and/or AMR data to amend national strategy in human health including WASH	●	●	●	N	N
7.6.b Country uses relevant AM consumption and/or AMR data to amend national strategy in animal health	●	●	●	N	N

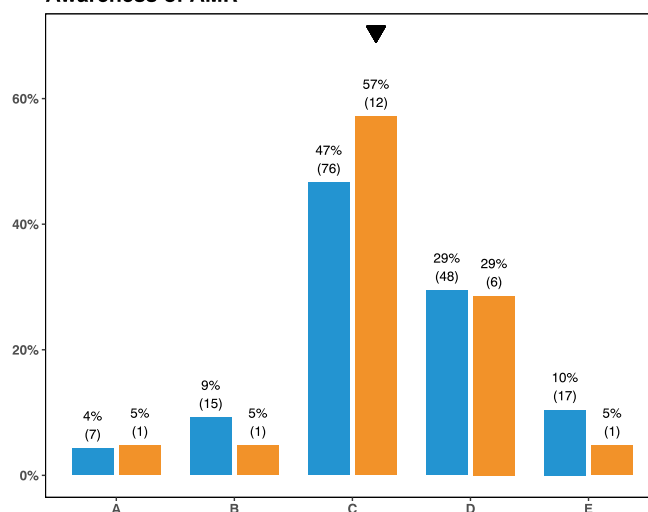# Global, Regional and National Responses in 2021

TrACSS asks for a rating of national capacity and progress on a five-point scale (A to E), with the levels A-B representing limited capacity, and levels C-E representing nationwide implementation for most indicators. Countries should be aiming to reach levels C-E on all indicators.

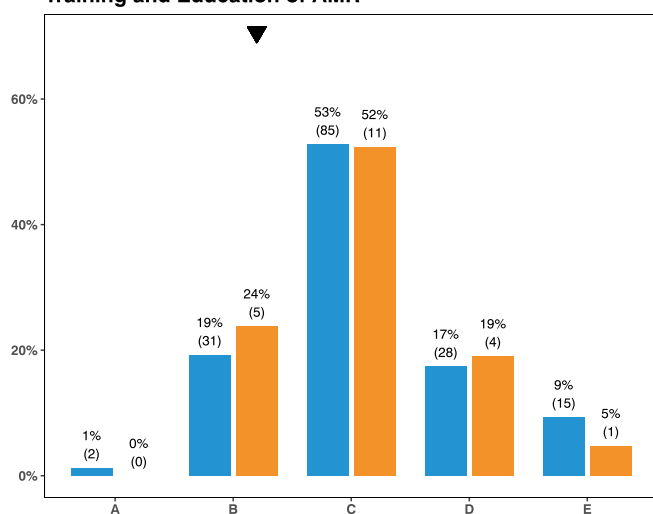■ Global

■ Eastern Mediterranean Region

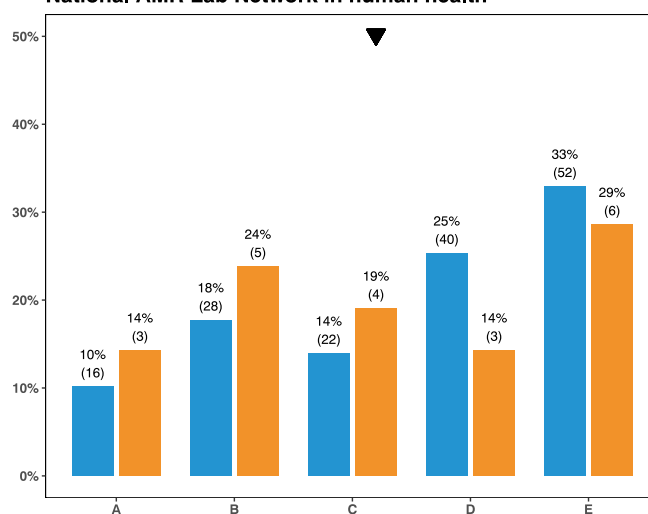▼ Country response

AMR Multisector Working Group

	A	B	C	D	E
Global	8% (13)	42% (68)	15% (24)	13% (22)	22% (36)
Eastern Mediterranean Region	10% (2)	43% (9)	24% (5)	14% (3)	10% (2)

Country response: ▼ (at B)

Awareness of AMR

	A	B	C	D	E
Global	4% (7)	9% (15)	47% (76)	29% (48)	10% (17)
Eastern Mediterranean Region	5% (1)	5% (1)	57% (12)	29% (6)	5% (1)

Country response: ▼ (at C)

Training and Education of AMR

	A	B	C	D	E
Global	1% (2)	19% (31)	53% (85)	17% (28)	9% (15)
Eastern Mediterranean Region	0% (0)	24% (5)	52% (11)	19% (4)	5% (1)

Country response: ▼ (at B)

National AMR Lab Network in human health

|	A	B	C	D	E
Global	10% (16)	18% (28)	14% (22)	25% (40)	33% (52)
Eastern Mediterranean Region	14% (3)	24% (5)	19% (4)	14% (3)	29% (6)

Country response: ▼ (at C)

World Health Organization

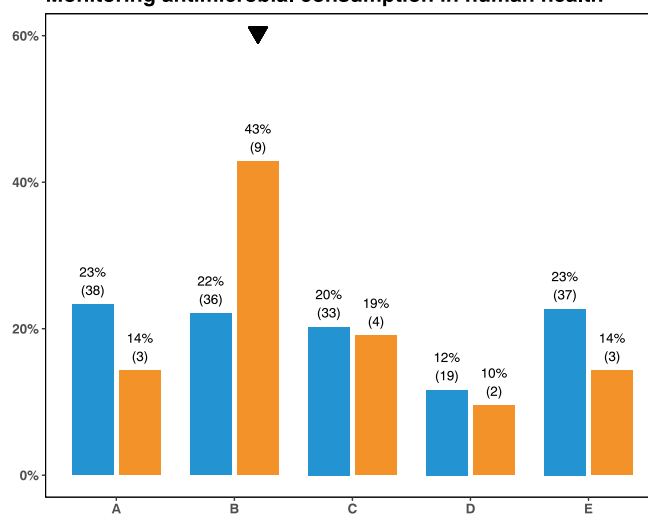## Global, Regional and National Responses in 2021

TrACSS asks for a rating of national capacity and progress on a five-point scale (A to E), with the levels A-B representing limited capacity, and levels C-E representing nationwide implementation for most indicators. Countries should be aiming to reach levels C-E on all indicators.
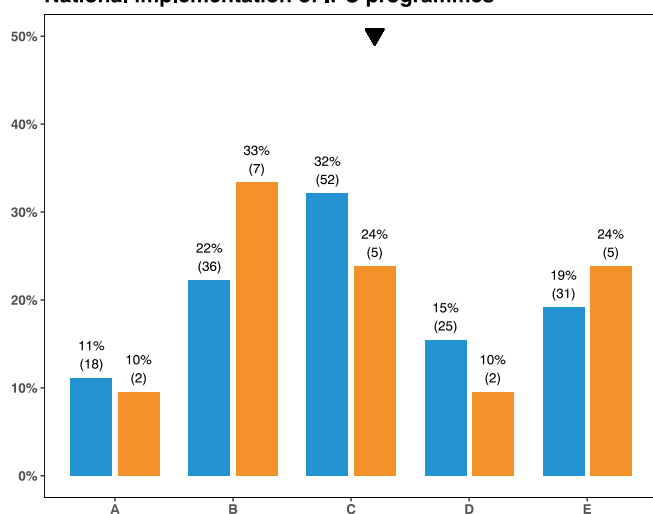
■ Global

■ Eastern Mediterranean Region

▼ Country response
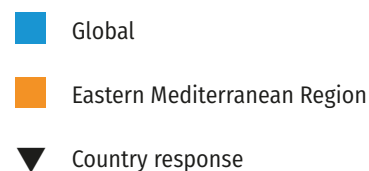
AMR surveillance activities in human health

- A: 3% (5), 5% (1)
- B: 23% (36), 33% (7)
- C: 19% (31), 19% (4)
- D: 43% (69), 29% (6)
- E: 11% (18), 14% (3)
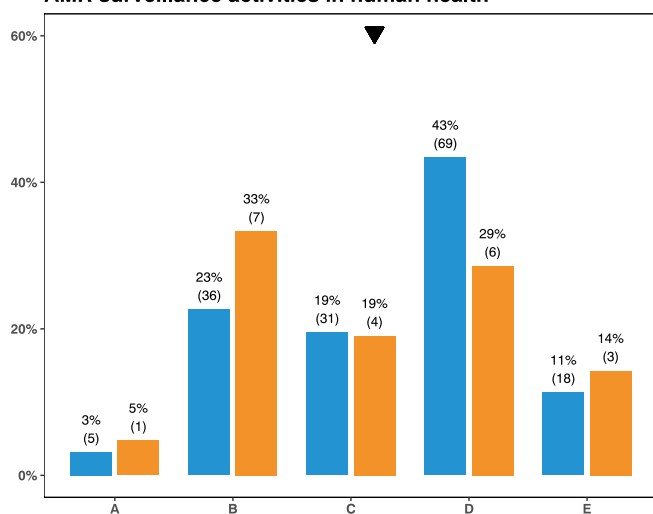
Monitoring antimicrobial consumption in human health

- A: 23% (38), 14% (3)
- B: 22% (36), 43% (9)
- C: 20% (33), 19% (4)
- D: 12% (19), 10% (2)
- E: 23% (37), 14% (3)

National implementation of IPC programmes

- A: 11% (18), 10% (2)
- B: 22% (36), 33% (7)
- C: 32% (52), 24% (5)
- D: 15% (25), 10% (2)
- E: 19% (31), 24% (5)

Adoption of AWaRe classification into national EML

- A: 11% (17), 14% (3)
- B: 53% (85), 71% (15)
- C: 20% (33), 14% (3)
- D: 6% (10), 0% (0)
- E: 10% (16), 0% (0)
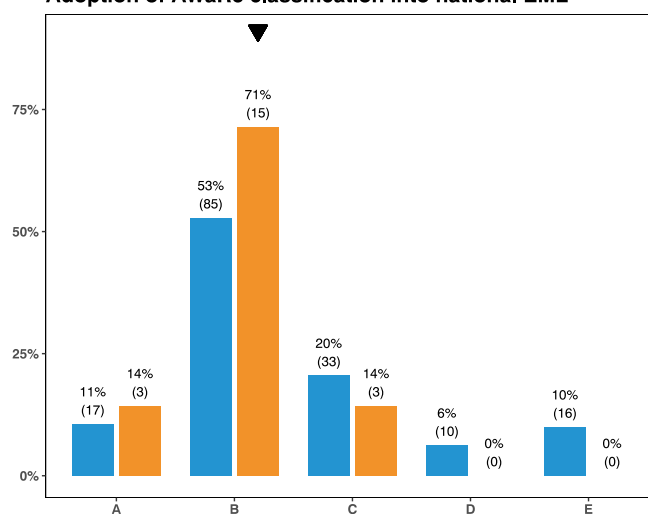
Moving forward: Global messages for action

While a holistic and a people-centred approach is needed to ensure effective implementation of NAPs (human health sector) in countries, targeted efforts are also required in areas where global progress has been uneven over the past five years:

Implementing AMR NAP – majority of countries have developed AMR NAPs, but there is an urgent need expedite the prioritization, costing, funding, implementation, and monitoring of NAPs. AMR NAPs should also be linked to national health sector strategies and health security plans and budgets, and other development plans, including the United National Sustainable Development Cooperation Framework (UNSDCF).

Establishing functional multisector working groups – countries need to build capacity to ensure the effective functioning of AMR multisectoral coordination structures. These structures underpin AMR NAP prioritization, implementation, and monitoring, through periodic review of data, including from TrACSS.

Advancing awareness and education on AMR - systemic and formal inclusion of AMR in health workforce curricula is needed to enhance knowledge among key groups, as are targeted awareness campaigns for key stakeholders, including primary and secondary school students.

Establishing monitoring systems for Antimicrobial consumption – build and strengthen capacity for monitoring of antimicrobial consumption/use in countries. Almost half (45%) of countries report having either no plan or an unimplemented plan for monitoring antimicrobial consumption.

Enhance data quality and use - strengthen lab and diagnostic capacity, including quality assurance and uninterrupted supply of consumables that is essential for the collection of AMR surveillance data. This data can be used to revise treatment guidelines, strengthen IPC measures in healthcare facilities, and strengthen antimicrobial stewardship efforts.

Implementing national IPC programmes – strengthen country capacity for nationwide implementation of infection prevention and control (IPC) programmes developed based on WHO guidelines. Scaling up of water, sanitation, and hygiene (WASH) measures in healthcare facilities and routine immunization efforts are also integral parts of addressing AMR.