

Outcome of the FAO/OIE/WHO survey conducted in the context of the monitoring of the Global Action Plan on AMR

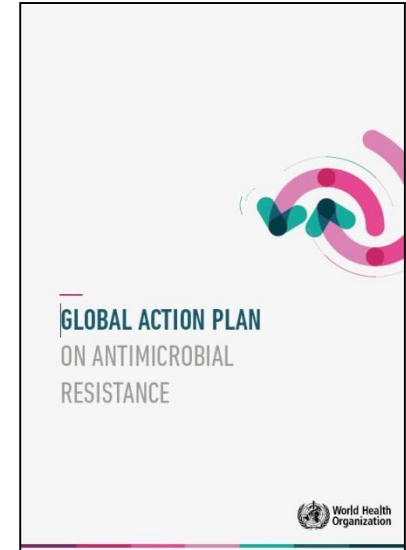
Dr Danilo Lo Fo Wong
Programme Manager for Control of Antimicrobial Resistance



Global AMR Action Plan - Strategic Objectives

<http://who.int/antimicrobial-resistance/global-action-plan/en/>

1. Improve awareness and understanding
2. Strengthen knowledge and evidence base
3. Reduce incidence of infection
4. Optimize use of antimicrobial medicines
5. Develop economic case for sustainable investment



Global activities

- World Antibiotic Awareness Week (2015)
- Global AMR Surveillance System (GLASS) (2015)
- Global Antibiotic Research & Development Partnership (GARDP) (2016)
- Infection Prevention and Control core components (2016)
- Global Priority Pathogens List of Antibiotic-Resistant Bacteria (2017)
- Updated Essential Medicines List update (2017)
- Global Framework for Development & Stewardship



* Priorities include Reproductive, Maternal, Newborn, and Child Health (RMNCH) and are subject to review for inclusion in the prioritization exercise as it is already a globally established priority to which resources are targeted in a significant way.
* Essential medicines include: Vitamins, minerals, vaccines, antibiotics, antidiabetic drugs, cardiac drugs, anti-cancer drugs, and reproductive drugs.

Monitoring global progress on AMR

- 2nd global tri-partite self-assessment survey
- 154 out of 194 Member States responded
 - Response rate 79.4%
 - Representing 91.3% of world population
 - Representing 95.9% of global GDP
- 50 out of 53 European Member States responded
- Report available online
- Global Database for AMR Country Self Assessment



Global Database for Antimicrobial Resistance Country Self Assessment



Choose your question and filters:

Survey year

Country

Map View Visualization View Table View **Response Overview** Documents

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← Scroll table to see all results →

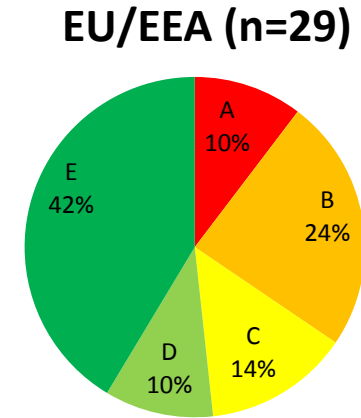
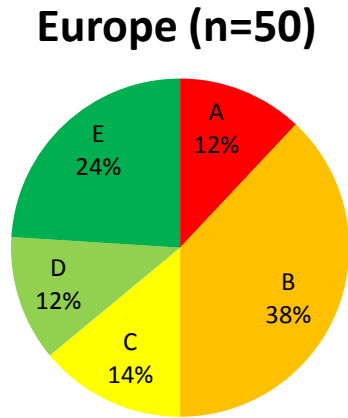
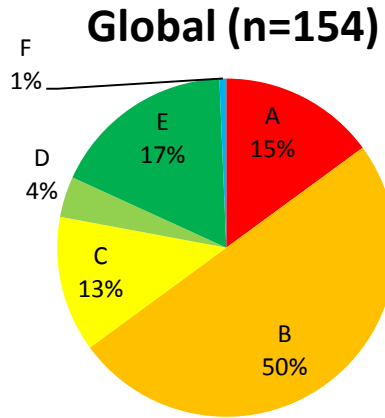
Country	Question 4.1	Question 4.2	Question 5.1	Question 5.2	Question 6.1	Question 6.2	Question 6.2.1	Question 6.2.2	Question 6.2.3	Question 6.2.4	Question 6.2.5
Afghanistan	B	N	D	Y	C	C	C				
Albania	B	N	C	Y	C	B	B	A	B	C	
Algeria	B	Y	B		D						
Andorra		N									
Angola	C	N	B	Y	B	B	A	B			
Antigua and Barbuda	B	Y	B	N	C	B	B	E	B	B	
Argentina	B	N	D	Y	B	C	C	A	C	C	
Armenia	B	N	D	N	D	B	B	A		A	
Australia	E	N	D	Y	D	D	D	A	D	D	
Austria	E	Y	D	N	D	E	E		E	E	
Azerbaijan	B	N	B	Y	C	C	C				
Bahamas (the)	B	Y	B	N	C	A	A	A	A	A	
Bahrain	A	N	B	N	C	C	A	A	A	A	
Bangladesh	B	N	C	Y	C	A					



Key results from the survey



One Health collaboration / coordination



A - No formal multi-sectoral governance or coordination mechanism exists.

B - Multi-sectoral working group(s) coordination committee on AMR established with Government leadership.

C - Multi-sectoral working group(s) is (are) functional, with clear terms of reference; regular meetings, and funding for working group(s). Activities and reporting/accountability.

D - Joint working on issues incl. agreement on common objectives, restriction of use of critically important antimicrobials.

E - Integrated approaches used to implement the national AMR action plan.

Global Database for Antimicrobial Resistance Country Self Assessment



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Survey year: 2017

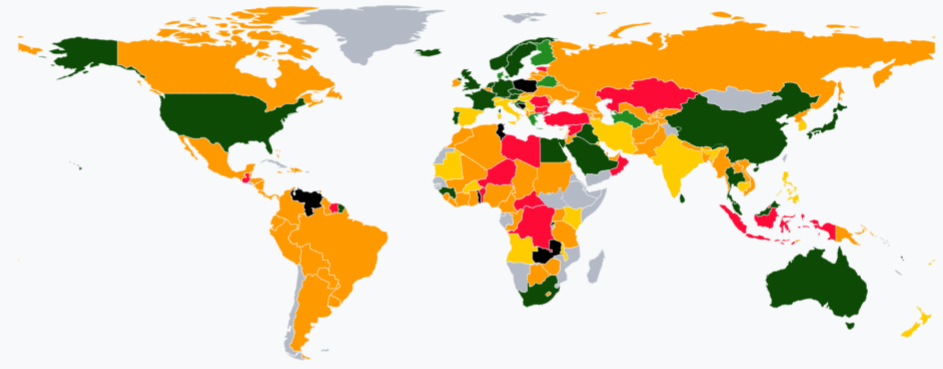
Question: 4.1 Multi-sector and One Health

WHO: WHO | FAO | OIE | Income

WHO Region: All

Country: All

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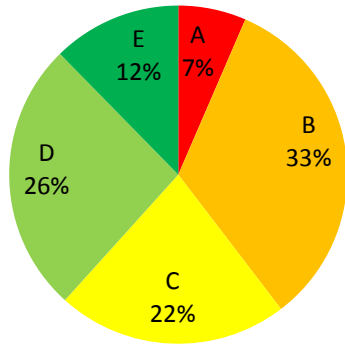


4.1 Multi-sector and One Health collaboration/coordination

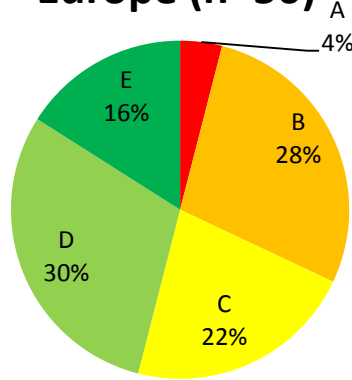
- A - No formal multi-sectoral governance or coordination mechanism exists.
- B - Multi-sectoral working group(s) or coordination committee on AMR established with Government leadership.
- C - Multi-sectoral working group(s) is (are) functional, with clear terms of reference; regular meetings, and funding for working group(s). Activities and reporting/accountability arrangements are defined.
- D - Joint working on issues including agreement on common objectives, including restriction of use of critically important antimicrobials.
- E - Integrated approaches used to implement the national AMR action plan.

Progress on national action plan development

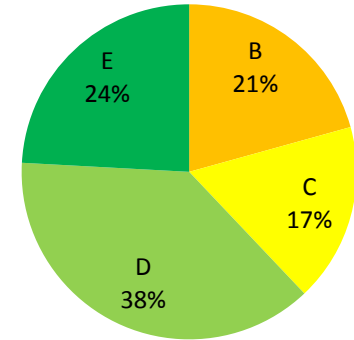
Global (n=154)



Europe (n=50)



EU/EEA (n=29)



A - No national AMR action plan.

B - National AMR action plan under development.

C - National AMR action plan developed.

D - National AMR action plan approved by government that reflects Global Action Plan objectives, with an operational plan and monitoring arrangements.

E - National AMR action plan has funding sources identified, is being implemented and has relevant sectors involved with a defined monitoring and evaluation process in place.

Global Database for Antimicrobial Resistance Country Self Assessment



Choose your question and filters:

Survey year
2017

Question
5.1 Country progress with devel

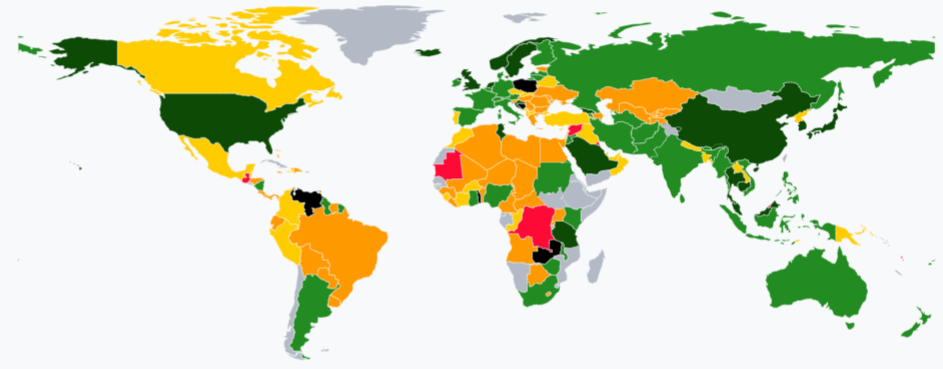
WHO FAO OIE Income

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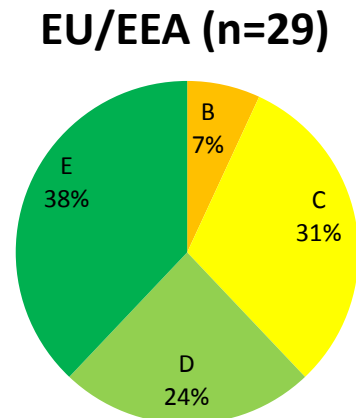
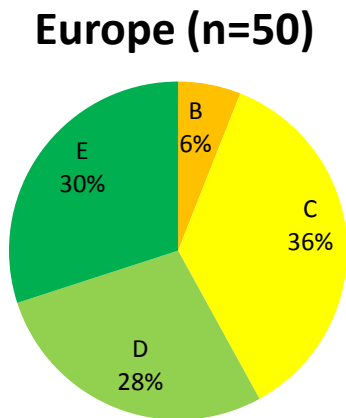
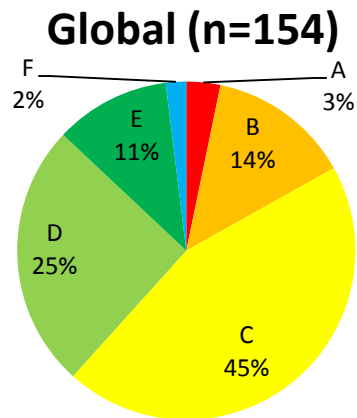


5.1 Country progress with development of a national action plan on AMR

- A - No national AMR action plan.
- B - National AMR action plan under development.
- C - National AMR action plan developed.
- D - National AMR action plan approved by government that reflects Global Action Plan objectives, with an operational plan and monitoring arrangements.
- E - National AMR action plan has funding sources identified, is being implemented and has relevant sectors involved with a defined monitoring and evaluation process in place.



Raising awareness in human health



A - No significant awareness-raising activities on ABR.

B - Some activities in parts of the country to raise awareness of ABR and actions that can be taken.

C - Limited or small-scale ABR awareness campaign targeting some, but not all, relevant stakeholders.

D - Nationwide, government-supported ABR campaign targeting all or the majority of stakeholders.

E - Focused, national scale government-supported activities implemented to change behaviour in target groups, both public and private

F - Missing answer

Choose your question and filters:

Survey year
2017

Question
6.1 Raising awareness and unde

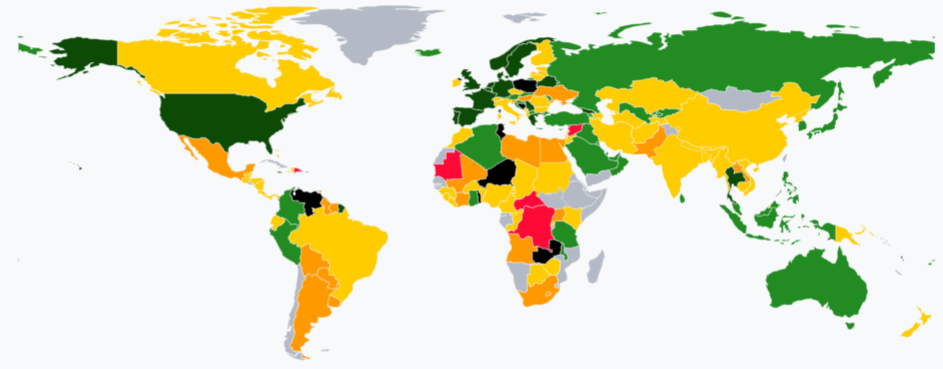
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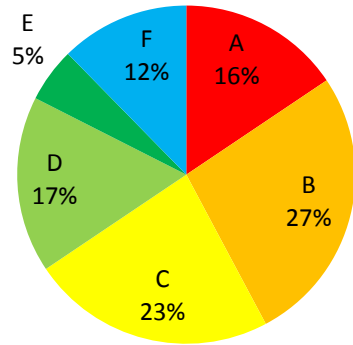
6.1 Raising awareness and understanding of antibiotic resistance risks and response in human health

- A - No significant awareness-raising activities on antibiotic resistance.
- B - Some activities in parts of the country to raise awareness about risks of antibiotic resistance and actions that can be taken to address it.
- C - Limited or small-scale antibiotic resistance awareness campaign targeting some, but not all, relevant stakeholders (e.g. general public, doctors, pharmacists, nurses, medicine sellers).
- D - Nationwide, government-supported antibiotic awareness campaign targeting all or the majority of stakeholders.
- E - Focused, national scale government-supported activities implemented to change behaviour regarding antibiotic resistance in target groups in human health, both public and private sectors, with monitoring undertaken of their awareness and behaviour change over last 5 years.

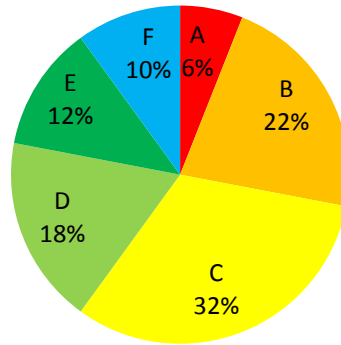


Raising awareness in non-human health sectors*

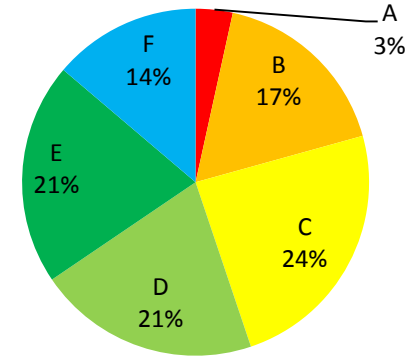
Global (n=154)



Europe (n=50)



EU/EEA (n=29)



A - No significant awareness-raising activities on ABR.

B - Some activities in parts of the country to raise awareness of ABR and actions that can be taken.

C - Limited or small-scale ABR awareness campaign targeting some, but not all, relevant stakeholders.

D - Nationwide, government-supported ABR campaign targeting all or the majority of stakeholders.

E - Focused, national scale government-supported activities implemented to change behaviour regarding ABR in target groups in human health, both public and private

F - Missing answer

Global Database for Antimicrobial Resistance Country Self Assessment



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Survey year
2017

Question
6.2 Raising awareness and unde

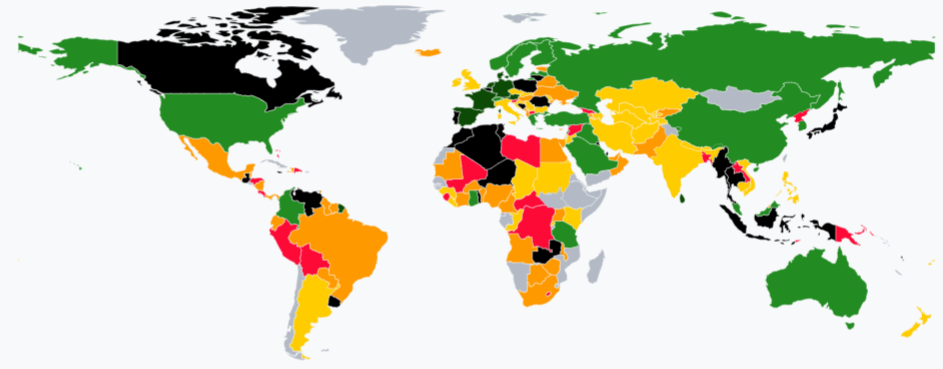
WHO | **FAO** | OIE | Income

WHO Region
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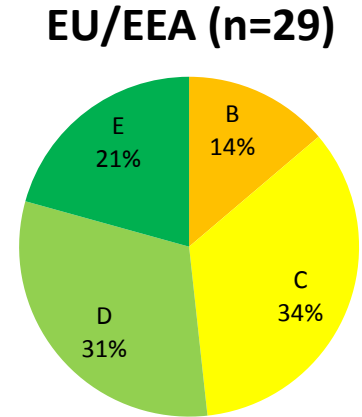
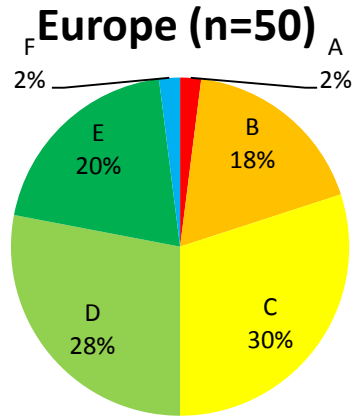
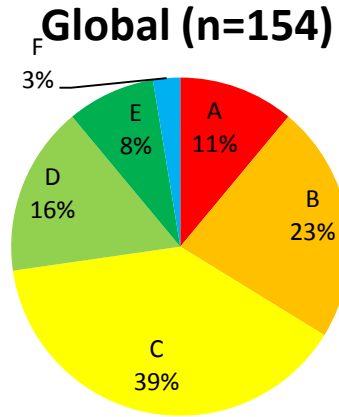


6.2 Raising awareness and understanding of AMR risks and response in animal health, plant health, food production, food safety, and environment sectors

- A - No significant awareness-raising activities on relevant aspects of risks of antimicrobial resistance.
- B - Some activities in parts of the country to raise awareness about risks of antimicrobial resistance and actions that can be taken to address it.
- C - Limited or small-scale antimicrobial resistance awareness campaign targeting some but not all relevant stakeholders within sector.
- D - Nationwide, government-supported antimicrobial resistance awareness campaign targeting all or the majority of relevant stakeholders within sector.
- E - Focused, national scale government supported activities implemented to change behavior of relevant stakeholders within sector, with monitoring undertaken of their awareness and behaviour change over last 2-5 years.



Training/professional education in human health



A - No training for human health workers on AMR.

B - Ad hoc AMR training courses in some health related disciplines.

C - AMR covered in some pre- and in-service training or other continuing professional development (CPD) for health workers.

D - AMR covered in pre-service training for all relevant cadres. In-service training/CPD for all types of health workers nationwide.

E - AMR systematically and formally incorporated in pre-service training for all relevant human health cadres. In-service training/CPD on AMR taken up nationwide, in public and private sectors.

F – missing the answer

Global Database for Antimicrobial Resistance Country Self Assessment



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Survey year

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Question

6.3 Training and professional ed

WHO FAO OIE Income

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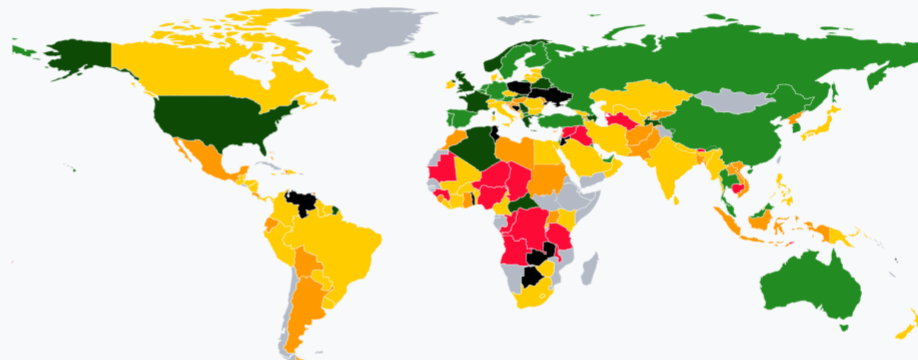
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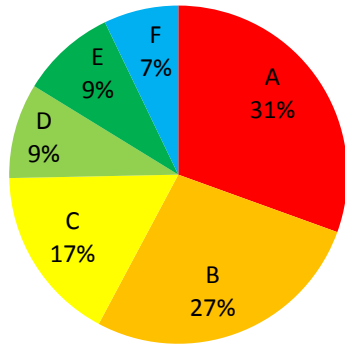
6.3 Training and professional education on AMR in the human health sector

- 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.

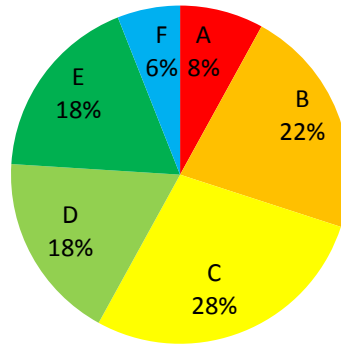


Training/professional education in veterinary sector

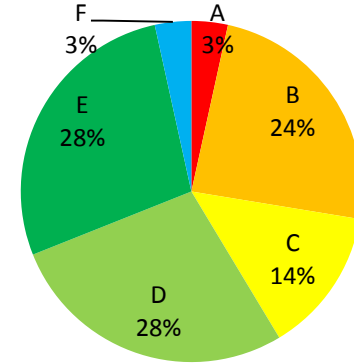
Global (n=154)



Europe (n=50)



EU/EEA (n=29)



- A** - No training of veterinary related professionals (veterinarians and veterinary paraprofessionals) related to AMR.
- B** - Ad hoc AMR training courses available for veterinary related professionals.
- C** - AMR and appropriate use covered in core curricula for graduating veterinarians / veterinary paraprofessionals when relevant.
- D** - Continuing professional training on antimicrobial resistance and use available nationwide for veterinary related professionals.
- E** - AMR is systematically and formally incorporated in curricula for graduating veterinarians and veterinary paraprofessionals when relevant and continuing professional training is a formal requirement.
- F** - Missing answer

Global Database for Antimicrobial Resistance Country Self Assessment



Choose your question and filters:

Survey year: 2017

Question: 6.4 Training and professional ec

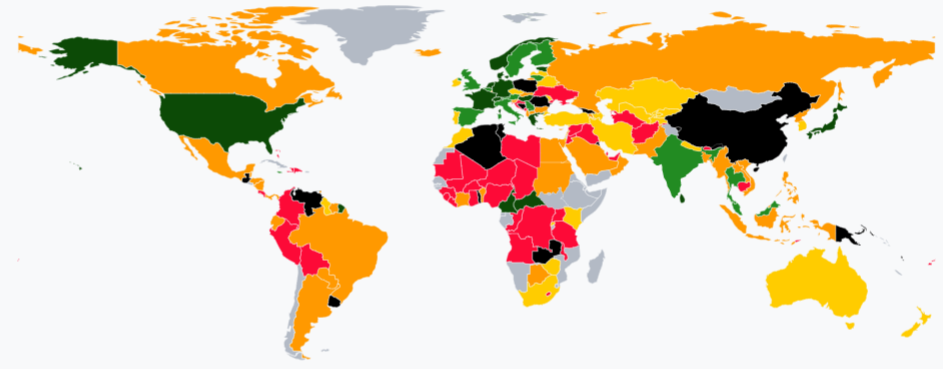
WHO | **FAO** | OIE | Income

WHO Region: All

Country: All

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6.4 Training and professional education on AMR in the veterinary sector

- A - No training of veterinary related professionals (veterinarians and veterinary paraprofessionals) related to AMR.
- B - Ad hoc AMR training courses available for veterinary related professionals.
- C - AMR and appropriate use is covered in core curricula for graduating veterinarians and for veterinary paraprofessionals when relevant.
- D - Continuing professional training on antimicrobial resistance and antimicrobial use is available nationwide for veterinary related professionals.
- E - AMR is systematically and formally incorporated in curricula for graduating veterinarians and veterinary paraprofessionals when relevant and continuing professional training is a formal requirement.



Global Database for Antimicrobial Resistance Country Self Assessment



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6.5 Training and professional ed

WHO FAO OIE Income

WHO Region

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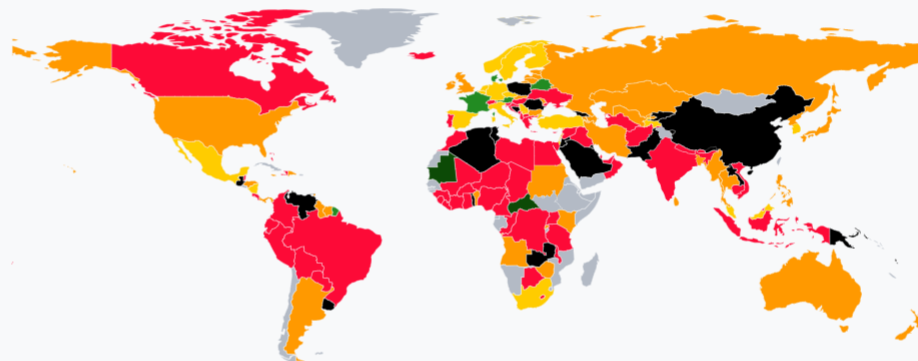
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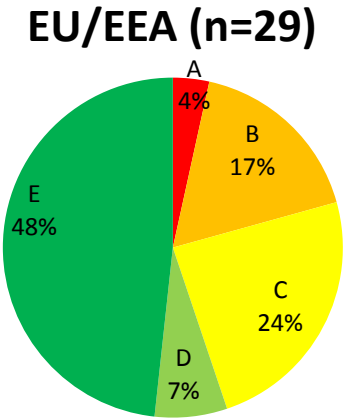
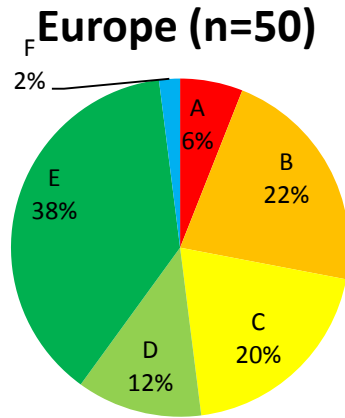
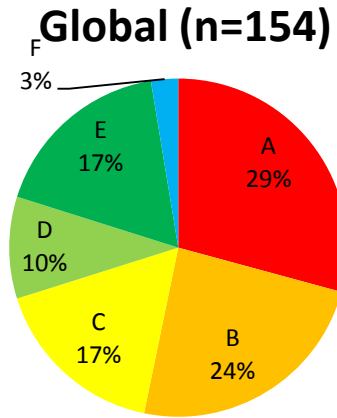


6.5 Training and professional education on AMR in farming sector (animal and plant), food production, food safety and the environment

- A - No training provision on AMR for key stakeholders, e.g. farmers and farm workers, extension workers, food and feed processors and retailers, environmental specialists.
- B - Tailored ad hoc AMR training courses available for at least two groups of key stakeholders.
- C - Tailored ad hoc AMR training courses are available for all or the majority of key stakeholders.
- D - Tailored AMR training courses are routinely available nationwide for all key stakeholders and completion of training is a formal requirement for at least two groups of key stakeholders.
- E - Tailored AMR training courses are routinely available nationwide and completion of training is a formal requirement for all key stakeholders.



National monitoring system for use in humans



- A** - No national plan or system for monitoring use of antimicrobials.
- B** - System for surveillance of antimicrobial use, incl monitoring national level sales /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 quality of antibiotic use are monitored in a national sample of healthcare settings.
- E** - Regular data collection and reporting (every year/two years) on: Antimicrobial sales or consumption at national level for human use; and Antibiotic prescribing and appropriate/rational use, in a representative sample of health facilities, public/private.

Global Database for Antimicrobial Resistance Country Self Assessment



Choose your question and filters:

Survey year
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Question
7.1 National monitoring system

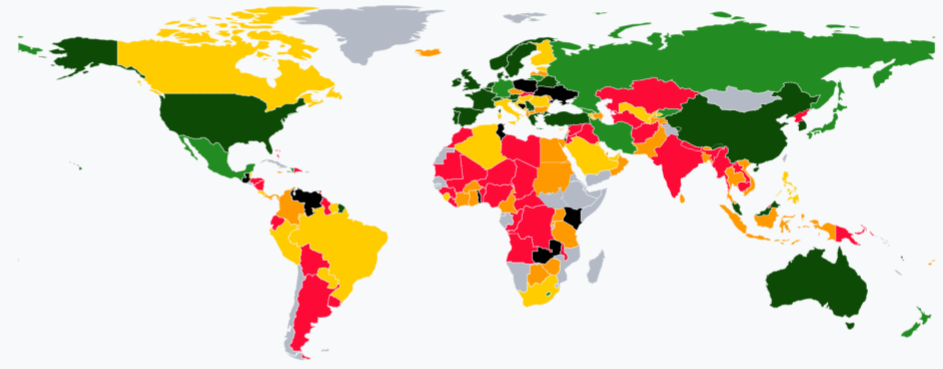
WHO FAO OIE Income

WHO Region
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7.1 National monitoring system for consumption and rational use of antimicrobials in human health

- 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 quality of 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.



Global Database for Antimicrobial Resistance Country Self Assessment



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Question
7.2 National monitoring system

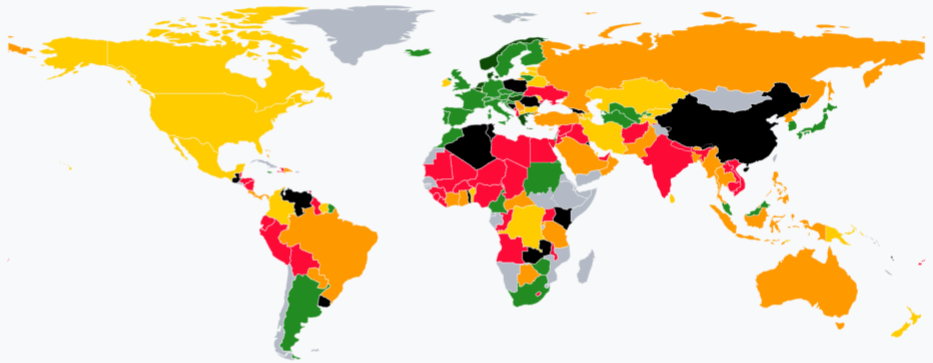
WHO FAO OIE Income

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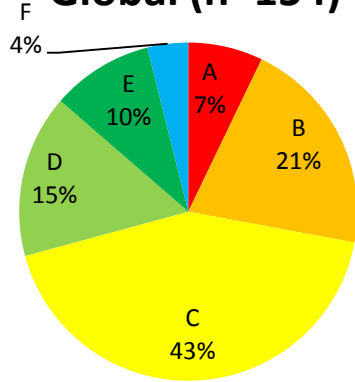
7.2 National monitoring system for antimicrobials intended to be used in animals (sales/use)

- A - No national plan or system for monitoring sales/use of antimicrobials in animals.
- B - Plan agreed for monitoring quantities of antimicrobials sold for/used in animals, based on OIE standards.
- C - Data collected and reported on total quantity of AMs sold for/used in animals and their intended type of use (therapeutic or growth promotion).
- D - On a regular basis, data is collected and reported to the OIE on the total quantity of antimicrobials sold for/used in animals nationally, by antimicrobial class, by species (aquatic or terrestrial), method of administration, and by type of use (therapeutic or growth promotion).
- E - Data on antimicrobials used under veterinary supervision in animals are available at farm level, for individual animal species.

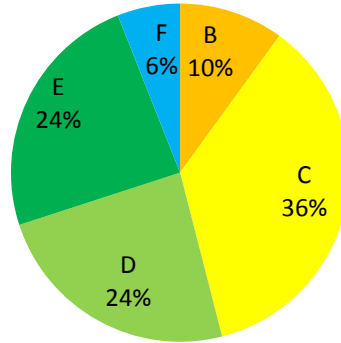


National surveillance system for AMR in humans

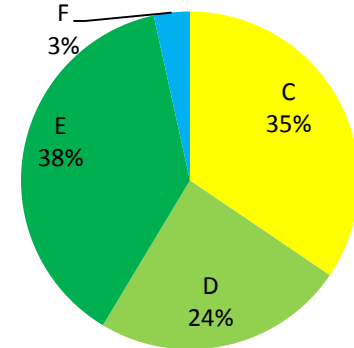
Global (n=154)



Europe (n=50)



EU/EEA (n=29)



A - No capacity for generating data and reporting on antibiotic resistance.

B - AMR data collated locally for common bacteria, not standardized, lacks national coordination/quality management.

C - National AMR surveillance in place for common bacterial pathogens linked to patient information, with a national reference laboratory that participates in external quality assurance.

D - Functioning national AMR surveillance system covering hospitals and outpatient clinics, external quality assurance, and a national coordinating centre producing reports.

E - National AMR surveillance system integrates surveillance of AMR across sectors, and generates regular reports.

Choose your question and filters:

Survey year
2017

Question
7.4 National surveillance system

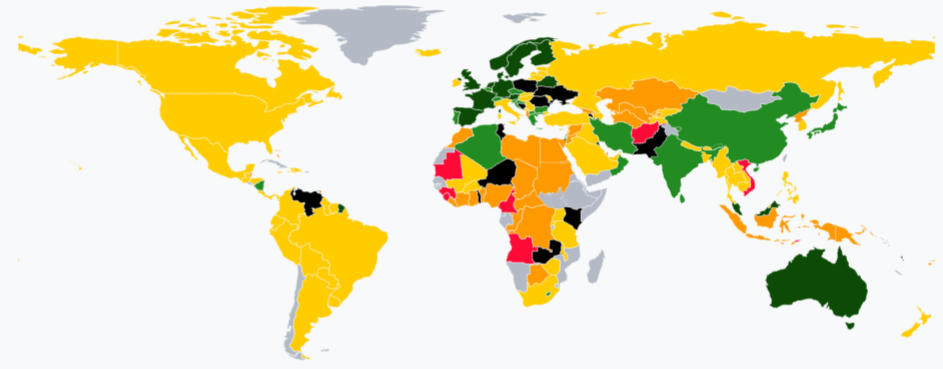
WHO | FAO | OIE | Income

WHO Region
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Country
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7.4 National surveillance system for antimicrobial resistance (AMR) in humans

- A - No capacity for generating data and reporting on antibiotic resistance (antibiotic susceptibility testing and accompanying clinical and epidemiological data collection).
- B - AMR data is collated locally for common bacteria, but may not use a standardized approach and lacks national coordination and/or quality management.
- C - National AMR surveillance activities are in place for common bacterial pathogens that link patient information with susceptibility testing, with a national reference laboratory that participates in external quality assurance.
- D - There is a functioning national AMR surveillance system covering antibiotics in hospitals and outpatient clinics, with external quality assurance, and a national coordinating centre producing reports on resistance levels.
- E - The national AMR surveillance system integrates surveillance of AMR across sectors, and generates regular reports.



Global Database for Antimicrobial Resistance Country Self Assessment



Choose your question and filters:

Survey year: 2017

Question: 7.5 National surveillance system

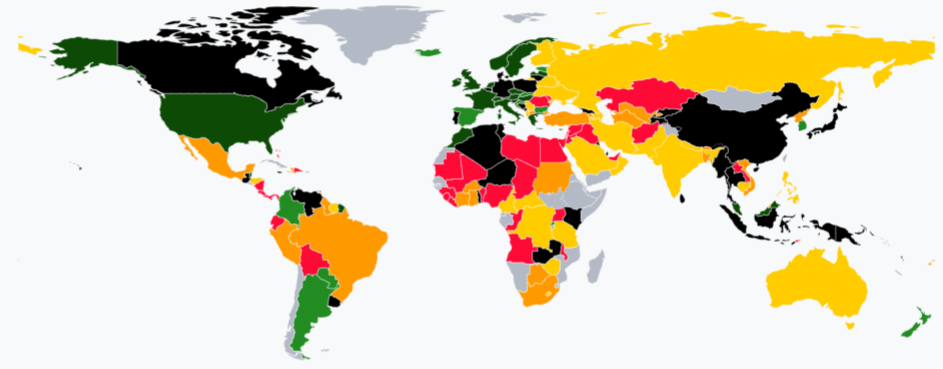
WHO | **FAO** | OIE | Income

WHO Region: All

Country: All

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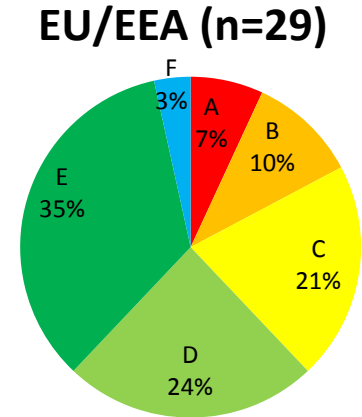
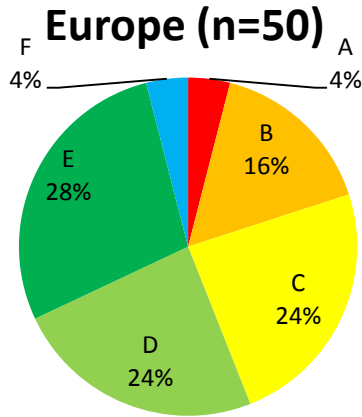
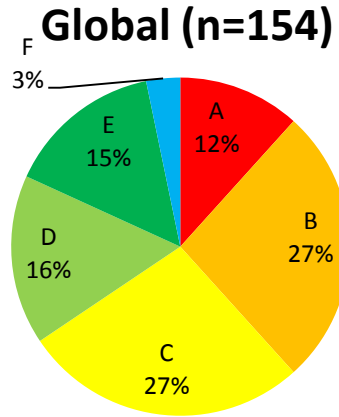


7.5 National surveillance system for antimicrobial resistance (AMR) in animals, plants, foods and environment

- A - No national plan for a system of monitoring of AMR is available.
- B - National plan for monitoring AMR but capacity (including laboratory) for surveillance and reporting data on AMR is lacking.
- C - Some AMR data is collected locally but may not use a standardised approach and lacks national coordination and/or quality management.
- D - Priority pathogenic/ commensal bacterial species have been identified for surveillance. Data systematically collected and reported on levels of resistance in at least 2 of those bacterial species, involving a laboratory that follows quality management processes, e.g. proficiency testing.
- E - National system of surveillance of AMR established for priority pathogens and for relevant commensal bacteria which follows quality assurance processes in line with



Infection Prevention and Control in human health care



A - No national IPC programme or operational plan available.

B - National IPC programme or operational plan available. IPC and water, sanitation and hygiene (WASH) and environmental health standards exist but not fully implemented.

C - National IPC programme and operational plan available and national guidelines available. Selected health facilities are implementing guidelines, monitoring and feedback in place.

D - National IPC programme available according to WHO IPC core components and IPC guidelines implemented nationwide.

E - IPC programmes in place and functioning at national and health facility levels according to WHO IPC core components guidelines.

Global Database for Antimicrobial Resistance Country Self Assessment



Choose your question and filters:

Survey year: 2017

Question: 8.1 Infection Prevention and Control

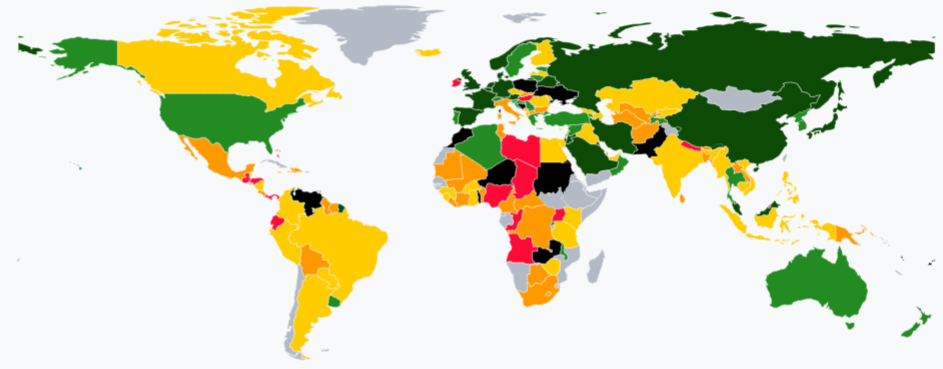
WHO | **FAO** | OIE | Income

WHO Region: All

Country: All

Map View | Visualization View | Table View | Response Overview | Documents

Print



8.1 Infection Prevention and Control (IPC) in human health care

- A - No national IPC programme or operational plan is available.
- B - A national IPC programme 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 programme 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 programme 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 programmes are in place and functioning at national and health facility levels according to the WHO IPC core components guidelines. Compliance and effectiveness are



Global Database for Antimicrobial Resistance Country Self Assessment



Choose your question and filters:

Survey year
2017

Question
8.2 Good health, management a

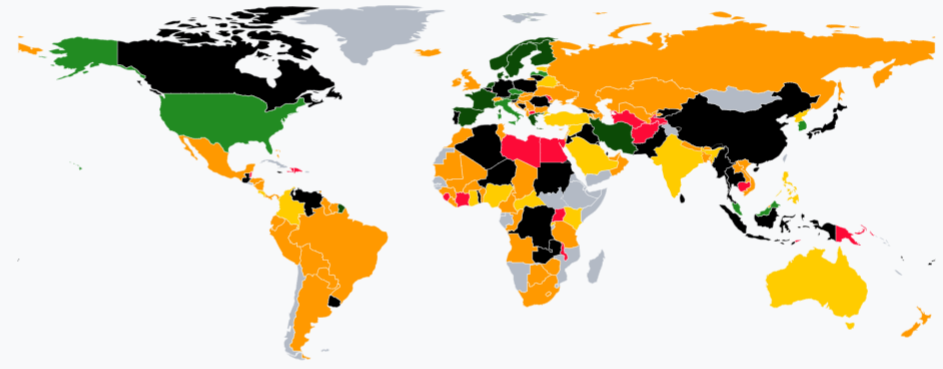
WHO | FAO | OIE | Income

WHO Region
All

Country
All

Map View Visualization View Table View Response Overview Documents

Print



8.2 Good health, management and hygiene practices to reduce the use of antimicrobials in animal and plant production and AMR transmission in food production

- A - No systematic efforts to improve good production practices to reduce the need to use antimicrobials.
- B - Some activities in place to develop and promote good production practices.
- C - National plan agreed to ensure good production practices in line with international standards (e.g. OIE Terrestrial and Aquatic Codes, Codex Alimentarius). Nationally agreed guidance for good production practices developed, adapted for implementation at local farm and food production level.
- D - Nationwide implementation of plan to ensure good production practices and national guidance published and disseminated.
- E - Nationwide implementation of plan to ensure good production practices and monitoring of impact on level of AM use, on animal health and welfare, and on production, with



Summary

In general:

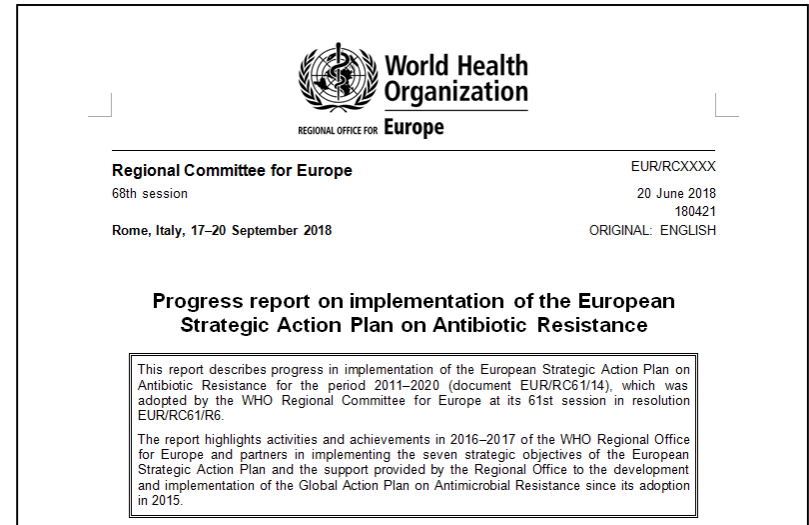
- European region more advanced compared to global picture
- EU/EEA sub-region more progress than region as a whole
- Human sector generally more advanced than non-human sectors
 - Awareness
 - Education of professionals
 - Monitoring and surveillance of use and resistance

Caution with interpretation of results

- A self-assessment survey
- Multisectoral and complex
 - responders not always fully informed
- Some questions complex or unclear
- Some responses aspirational
- Changes between 1st and 2nd survey

WHO/Europe implementation activities

- Implementation of European strategic action plan (2011-2020)
 - 7 Strategic Objectives
 - Aligned with Global action plan
- Mostly focused on non-EU MS
 - Governance and national action plans
 - AMR/AMC surveillance
 - Awareness raising



More interaction with EU MS

- 2017 EU Health Programme Work Plan – Direct Grant Agreement
 - 2.4.4.1 Support to implementation of national action plans on Antimicrobial Resistance (AMR) – World Health Organization*
 - Policy support, National Action Plan development, infection prevention and control, awareness and behaviour change, antimicrobial stewardship
- Joint Action on Antimicrobial Resistance & Healthcare-Associated Infections (EU-JAMRAI)
 - Advisory Committee and Stakeholder Forum



THE THIRD HEALTH PROGRAMME 2014-2020
FUNDING HEALTH INITIATIVES



Evidence-informed Policy Network (EVIPNet)

- Global WHO initiative promoting systematic use of health-research evidence in policy-making
- Workshops to build country capacity to develop policy briefs
 - training in acquiring, assessing, adapting and applying research evidence
- Policy dialogue meetings
- Policy briefs on AMR
 - Completed: Hungary (2017)
 - Ongoing: Bulgaria, Kazakhstan, Lithuania, Moldova, Montenegro, Romania, Serbia, Slovenia, Slovakia, the former Yugoslav Republic of Macedonia



Infection prevention and control

- SAVE LIVES: Clean Your Hands - WHO's global annual campaign
- 2017 WAAW campaign
- IPC Core components implementation



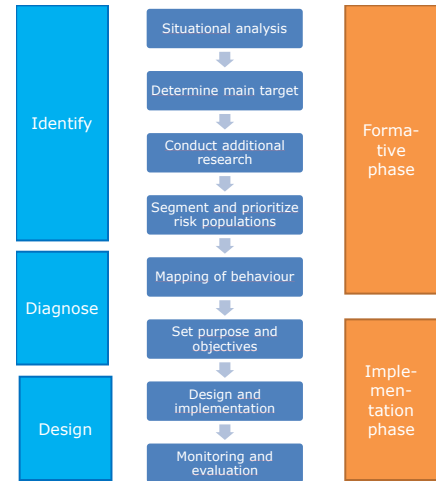
Antimicrobial stewardship

- Online course: “Antimicrobial Stewardship: A competency-based approach” (<https://www.openwho.org/>)
- Stewardship courses
- Pilot projects



Tailoring AMR Programmes (TAP)

- Knowledge alone not enough to change behaviour
- Methods/tools to design targeted behaviour change campaigns
- Based on behavioural science & social marketing
- Pilot projects
 - Ongoing: Sweden, England, Hungary, Kazakhstan, the former Yugoslav Republic of Macedonia
- Guidance document



Making progress

- Progressing on all strategic objectives
- Broad collaboration
 - Within WHO (Global – Regional – National)
 - With International Organizations (FAO, OIE)
 - With external partners (international, national)
 - With donors (countries, foundations)
- Supporting materials /tools developed and distributed
- Pool of experts/consultants
- Third global survey planned Q4 of 2018



Thank you for your attention

