



## Global Monitoring of Country Progress on Antimicrobial Resistance (AMR): Country self-assessment questionnaire (version two)

Version 2.0, 9 October 2017

### Introduction

The Global Action Plan on Antimicrobial Resistance (AMR)<sup>1</sup> was adopted in 2015 by all countries through decisions in the World Health Assembly, the FAO Governing Conference and the World Assembly of OIE Delegates. Countries agreed to have a national action plan on AMR that is consistent with the Global Action Plan, and to implement relevant policies and plans to prevent, control and monitor AMR.

A first round of monitoring on country progress with implementing the Global Action Plan took place in late 2016–early 2017. This progress was reported back to the World Health Assembly and the OIE World Assembly of Delegates in May 2017. Results are available at <http://www.who.int/antimicrobial-resistance/global-action-plan/database/en/>. Going forward regular annual reporting is planned, to show progress over time and to identify areas for action. Country responses will also be used to guide follow up actions and provision of assistance and support. The questionnaire below is slightly modified from the version used during the first round of monitoring, taking into account suggestions provided by countries.<sup>2</sup> The information from this questionnaire will be published in June 2018 and addressed to the governing bodies of WHO, FAO and OIE.

Guidance on the process for completing the questionnaire and other issues is available in the Guidance note (<http://www.who.int/antimicrobial-resistance/en/>). It is important that countries involve a multi-sectoral group in assessing national progress and provide consolidated responses agreed by all. Many countries have found that the process of completing the questionnaire is a useful review of progress for the National Action Plan (NAP) implementation team.

**Each country is asked to submit one official response, validated by all involved sectors, which summarises national progress.** The national response should be submitted using the online questionnaire. One access key will be sent through WHO to the Ministry of Health, to ensure only one version of the questionnaire per country. **For inclusion in global reporting, responses are requested by 1 March 2018.**

The questionnaire has 5 sections: section one asks for contact details and progress with multi-sectoral

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<sup>1</sup> WHO, 2015, <http://www.who.int/antimicrobial-resistance/publications/global-action-plan/en/>. The Global Action Plan was developed by WHO with the support of FAO and OIE.

<sup>2</sup> As the Tripartite Monitoring and Evaluation (M&E) approach to the global action plan on antimicrobial resistance is currently undergoing public consultation<sup>2</sup>, it is possible that feedback from the consultation may result in further slight changes to the annual progress monitoring questionnaire in the future.

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working on AMR and completing a multi-sectoral national action plan on AMR. The next four sections cover progress on the first four strategic objectives in the Global Action Plan on AMR. The questions include human health, animal production and health aspects of AMR and in specific cases also address AMR as food safety concerns, plant production, and the environment. Strategic objective 5 is equally important, but this data will be collected through other channels.

Countries that have recently started to develop their response to AMR may not be able to respond to all the questions; partial responses are completely acceptable. Please complete at least the first section of the questionnaire (questions 1 to 5.3), and any other questions that you can and then submit the response. If the response needs to be amended after submission, please contact [whoamrsecretariat@who.int](mailto:whoamrsecretariat@who.int).

The questionnaire was developed jointly between WHO, FAO and OIE. WHO is coordinating this annual global monitoring process. If there are questions on the process or the questionnaire, please contact Pravarsha Prakash in WHO at [whoamrsecretariat@who.int](mailto:whoamrsecretariat@who.int). WHO will act as liaison point with FAO and OIE.

Name of country ..... Date of completion .....

**1. Name and email of-existing AMR focal points for relevant sectors:**

- Human Health .....
- Animal Health (terrestrial and aquatic) .....
- Plant Health .....
- Food Production.....
- Food Safety .....
- Environment .....

**2. Name(s) and contact details of person(s) who coordinated the national response to this self-assessment**

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**3. Name and email of AMR Focal point in WHO country office .....**

Name and email of AMR Focal Point in FAO country or regional office .....

Name and email of OIE National Focal Point on veterinary products .....

**4. Multi-sectoral approach to addressing AMR**

*Please select one rating that most closely matches the country situation.*

4.1 Multi-sector and One Health collaboration/coordination		
<input type="radio"/>	<b>A</b>	No formal multi-sectoral governance or coordination mechanism exists.
<input type="radio"/>	<b>B</b>	Multi-sectoral working group(s) or coordination committee on AMR established with Government leadership.
<input type="radio"/>	<b>C</b>	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.
<input type="radio"/>	<b>D</b>	Joint working on issues including agreement on common objectives, including restriction of use of critically important antimicrobials.
<input type="radio"/>	<b>E</b>	Integrated approaches used to implement the national AMR action plan.

**4.2 Which sectors are actively involved in developing and implementing the AMR National Action Plan?**

- Human Health
- Animal Health (terrestrial and aquatic)
- Plant Health
- Food Production
- Food Safety
- Environment

**5. Country progress with development of a national action plan on antimicrobial resistance (AMR)**

*Please select one rating that most closely matches the country situation.*

5.1 Country progress with development of a national action plan on AMR		
<input type="radio"/>	<b>A</b>	No national AMR action plan.
<input type="radio"/>	<b>B</b>	National AMR action plan under development.
<input type="radio"/>	<b>C</b>	National AMR action plan developed.

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

**5.2 Is your country’s national action plan on AMR linked to any other existing action plans, strategies or targets related to HIV, tuberculosis, malaria or neglected tropical diseases?**

- Yes. If so, please select the relevant item from the drop-down menu (mark all diseases that are relevant):
  - HIV
  - Tuberculosis
  - Malaria
  - Neglected tropical diseases
- No

**5.3 If you have published your AMR national action plan, please insert a link here. ....**

**6. Country progress on strategic objective 1: Improve awareness and understanding of AMR through effective communication, education and training.**

Please select the rating (A-E) for each question that most closely matches the country situation. Please note that for each question, higher ratings are expected to have achieved the progress level covered in lower ratings (e.g. countries selecting “D” will have achieved progress listed in both “B” and “C” as well as “D”). For questions covering multiple sectors, please select the appropriate rating for each sector separately, as indicated.

6.1 Raising awareness and understanding of antibiotic resistance risks and response in human health		
<input type="radio"/>	<b>A</b>	No significant awareness-raising activities on antibiotic resistance.
<input type="radio"/>	<b>B</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.
<input type="radio"/>	<b>C</b>	Limited or small-scale antibiotic resistance awareness campaign targeting some, but not all, relevant stakeholders (e.g. general public, doctors, pharmacists, nurses, medicine sellers).
<input type="radio"/>	<b>D</b>	Nationwide, government-supported antibiotic awareness campaign targeting all or the majority of stakeholders.
<input type="radio"/>	<b>E</b>	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.

6.2 Raising awareness and understanding of AMR risks and response in animal health, plant health, food production, food safety, and environment sectors		
<input type="radio"/>	<b>A</b>	No significant awareness-raising activities on relevant aspects of risks of antimicrobial resistance.
<input type="radio"/>	<b>B</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.
<input type="radio"/>	<b>C</b>	Limited or small-scale antimicrobial resistance awareness campaign targeting some but not all relevant stakeholders within sector.
<input type="radio"/>	<b>D</b>	Nationwide, government-supported antimicrobial resistance awareness campaign targeting all or the majority of relevant stakeholders within sector.
<input type="radio"/>	<b>E</b>	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.

**For each of the following sectors, please indicate which statement in 6.2 above (A-E) is applicable:**

**Animal Health (terrestrial and aquatic).....**

**Plant Health.....**

**Food Production.....**

**Food Safety.....**

**Environment.....**

6.3 Training and professional education on AMR in the human health sector		
<input type="radio"/>	<b>A</b>	No training for human health workers on AMR.
<input type="radio"/>	<b>B</b>	Ad hoc AMR training courses in some human health related disciplines.
<input type="radio"/>	<b>C</b>	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.
<input type="radio"/>	<b>D</b>	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.
<input type="radio"/>	<b>E</b>	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.

6.4 Training and professional education on AMR in the veterinary sector		
<input type="radio"/>	<b>A</b>	No training of veterinary related professionals (veterinarians and veterinary paraprofessionals) related to AMR.
<input type="radio"/>	<b>B</b>	Ad hoc AMR training courses available for veterinary related professionals.

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O	C	AMR and appropriate use is covered in core curricula for graduating veterinarians and for veterinary paraprofessionals when relevant.
O	D	Continuing professional training on antimicrobial resistance and antimicrobial use is available nationwide for veterinary related professionals.
O	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.

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

O	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.
O	B	Tailored ad hoc AMR training courses available for at least two groups of key stakeholders.
O	C	Tailored ad hoc AMR training courses are available for all or the majority of key stakeholders.
O	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.
O	E	Tailored AMR training courses are routinely available nationwide and completion of training is a formal requirement for all key stakeholders.

**6.6 Progress with strengthening veterinary services**

O	A	No systematic approach at national level to strengthening Veterinary Services.
O	B	Veterinary services assessed and plans developed to improve capacity, through a structured approach such as OIE Performance of Veterinary Services (PVS) Evaluation and PVS Gap Analysis missions.
O	C	Implementation of plan to strengthen capacity gaps in Veterinary Services underway.
O	D	Monitoring of Veterinary Services performance carried out regularly, e.g. through PVS Evaluation Follow Up missions.
O	E	Documented evidence of strong capacity in compliance with OIE standards on the quality of Veterinary Services <sup>3</sup> .

<sup>3</sup> [http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre\\_vet\\_serv.htm](http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre_vet_serv.htm)

## 7. Country progress on strategic objective 2: Strengthen the knowledge and evidence base through surveillance and research.

Please select one rating for each question that most closely matches the country situation.

7.1 National monitoring system for consumption and rational use of antimicrobials in human health		
<input type="radio"/>	<b>A</b>	No national plan or system for monitoring use of antimicrobials.
<input type="radio"/>	<b>B</b>	System designed for surveillance of antimicrobial use, that includes monitoring national level sales or consumption of antibiotics in health services.
<input type="radio"/>	<b>C</b>	Total sales of antimicrobials are monitored at national level and/or some monitoring of antibiotic use at sub-national level.
<input type="radio"/>	<b>D</b>	Prescribing practices and quality of antibiotic use are monitored in a national sample of healthcare settings.
<input type="radio"/>	<b>E</b>	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.

7.2 National monitoring system for antimicrobials intended to be used in animals (sales/use)		
<input type="radio"/>	<b>A</b>	No national plan or system for monitoring sales/use of antimicrobials in animals.
<input type="radio"/>	<b>B</b>	Plan agreed for monitoring quantities of antimicrobials sold for/used in animals, based on OIE standards <sup>4</sup> .
<input type="radio"/>	<b>C</b>	Data collected and reported on total quantity of AMs sold for/used in animals and their intended type of use (therapeutic or growth promotion).
<input type="radio"/>	<b>D</b>	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).
<input type="radio"/>	<b>E</b>	Data on antimicrobials used under veterinary supervision in animals are available at farm level, for individual animal species.

7.3 National monitoring system for antimicrobial use <sup>5</sup> in plant production		
<input type="radio"/>	<b>A</b>	No national plan or system for monitoring use of antimicrobials in plants.
<input type="radio"/>	<b>B</b>	Plan agreed for monitoring quantities of antimicrobial sales or use in plant production.
<input type="radio"/>	<b>C</b>	Data collected and reported on quantity of AM used in some subsectors of plant production.
<input type="radio"/>	<b>D</b>	Data collected and reported on total quantity of AM used nationally in plant production.
<input type="radio"/>	<b>E</b>	On a regular basis, data is collected and reported on total quantity of AM use in crop production, by AM class.

7.4 National surveillance system for antimicrobial resistance (AMR) in humans		
<input type="radio"/>	<b>A</b>	No capacity for generating data and reporting on antibiotic resistance (antibiotic susceptibility testing and accompanying clinical and epidemiological data collection).
<input type="radio"/>	<b>B</b>	AMR data is collated locally for common bacteria, but may not use a standardized approach and lacks national coordination and/or quality management.
<input type="radio"/>	<b>C</b>	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.
<input type="radio"/>	<b>D</b>	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.
<input type="radio"/>	<b>E</b>	The national AMR surveillance system integrates surveillance of AMR across sectors, and generates regular reports.

<sup>4</sup> [http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre\\_antibio\\_monitoring.htm](http://www.oie.int/index.php?id=169&L=0&htmfile=chapitre_antibio_monitoring.htm) ;  
[http://www.oie.int/index.php?id=171&L=0&htmfile=chapitre\\_antibio\\_quantities\\_usage\\_patterns.htm](http://www.oie.int/index.php?id=171&L=0&htmfile=chapitre_antibio_quantities_usage_patterns.htm)

<sup>5</sup> antibiotic and antifungal agents

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<b>7.5 National surveillance system for antimicrobial resistance (AMR) in animals, plants, foods and environment</b>	
<b>A</b>	No national plan for a system of monitoring of AMR is available.
<b>B</b>	National plan for monitoring AMR but capacity (including laboratory) for surveillance and reporting data on AMR is lacking.
<b>C</b>	Some AMR data is collected locally but may not use a standardised approach and lacks national coordination and/or quality management.
<b>D</b>	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.
<b>E</b>	National system of surveillance of AMR established for priority pathogens and for relevant commensal bacteria which follows quality assurance processes in line with intergovernmental standards. Laboratories that report for AMR surveillance follow quality assurance processes.

**For each of the following sources of bacteria, please indicate which statement in 7.5 above (A-E) is applicable:**

**Animals (terrestrial and aquatic) .....**

**Plants .....**

**Food .....**

**Environment.....**



**8. Country progress on strategic objective 3: Reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures.**

Please select one rating for each question that most closely matches the country situation.

8.1 Infection Prevention and Control (IPC) in human health care		
O	A	No national IPC programme or operational plan is available.
O	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.
O	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.
O	D	National IPC programme available according to the WHO IPC core components guidelines <sup>6</sup> 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.
O	E	IPC programmes are in place and functioning at national and health facility levels according to the WHO IPC core components guidelines <sup>7</sup> . Compliance and effectiveness are regularly evaluated and published. Plans and guidance are updated in response to monitoring.

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 updating of plans and guidance in response to findings.

**For each of the following sectors, please indicate which statement in 8.2 above (A-E) is applicable:**

- Animal Health**.....
- Plant Health**.....
- Food Production**.....
- Food Safety**.....
- Environment**.....

**8.3 Coverage with critical measures (water supplies, sanitation, hygiene and immunization) to reduce spread of infections in communities and health care facilities<sup>8</sup>**

<sup>6</sup> WHO Guidelines on core components of IPC programmes at the national and acute health care facility level, <http://www.who.int/infection-prevention/publications/core-components/en/>

<sup>7</sup> As per footnote #5.

<sup>8</sup> These issues are critical to AMR containment, but the relevant data is already being submitted to WHO through other channels in most instances. If this questionnaire is being used to review country progress at national level, we recommend that at a minimum the data is downloaded and reviewed from the following websites. Ideally local data should be reviewed and discussed, and if appropriate included in the return. This data will not be displayed on the global returns to avoid confusion with other data submissions.

[http://www.who.int/immunization/monitoring\\_surveillance/routine/coverage/en/index4.html](http://www.who.int/immunization/monitoring_surveillance/routine/coverage/en/index4.html)

<https://www.washinhcf.org/home/>

Estimated national coverage with critical measures (water supplies, hygiene and immunization) to reduce spread of infections in communities and health care facilities.	Latest national coverage rate (in %)	Year
Immunisation coverage rate of pneumococcus vaccine.		
Immunisation coverage rate of Haemophilus influenzae type b (Hib) vaccine.		
Proportion of health care facilities with basic <sup>9</sup> water supplies.		
Proportion of health care facilities with basic <sup>10</sup> hand hygiene facilities.		
Proportion of health care facilities with functional sanitation facilities		

**9. Country progress on strategic objective 4: Optimize the use of antimicrobial medicines in human, animal and plant health.**

Please select one rating for each question that most closely matches the country situation.

9.1 Optimizing antimicrobial use in human health		
<input type="radio"/>	<b>A</b>	No/weak national policy & regulations for appropriate use.
<input type="radio"/>	<b>B</b>	National policy for antimicrobial governance and regulation developed for the community and health care settings.
<input type="radio"/>	<b>C</b>	Practices to assure appropriate antimicrobial use being implemented in some healthcare facilities and guidelines for appropriate use of antimicrobials available.
<input type="radio"/>	<b>D</b>	Guidelines and other practices to enable appropriate use are implemented in most health facilities nationwide. Monitoring and surveillance results are used to inform action and to update treatment guidelines and essential medicines lists.
<input type="radio"/>	<b>E</b>	Guidelines on optimizing antibiotic use are implemented for all major syndromes and data on use is systematically fed back to prescribers.

9.2 Optimizing antimicrobial use in animal and plant health	
<b>A</b>	No national policy or legislation regarding the quality, safety and efficacy of antimicrobial products, and their distribution, sale or use.
<b>B</b>	National legislation covers some aspects of national manufacture, import, marketing authorization, control of safety, quality and efficacy and distribution of antimicrobial products.
<b>C</b>	National legislation covers all aspects of national manufacture, import, marketing authorization, control of safety, quality and efficacy and distribution of antimicrobial products.
<b>D</b>	Effective enforcement processes and control are in place to ensure compliance with legislation.
<b>E</b>	Guidelines for responsible and prudent use of antimicrobials based on international standards (e.g. OIE Terrestrial and Aquatic Codes, Codex Alimentarius) are available according to animal species and/or production sector and include restriction of specific antimicrobial classes listed as Critically Important for humans and animals.

**For each of the following sectors, please indicate which statement in 9.2 above (A-E) is applicable:**

**Animal Health (terrestrial and aquatic).....**

**Plant Health.....**

9.3 Legislation and/or regulations to prevent contamination of the environment with antimicrobials*		
<input type="radio"/>	<b>A</b>	No legislation regarding control of waste discharge (sewage, health facilities, agriculture, manure and industrial effluent) into the environment.
<input type="radio"/>	<b>B</b>	Legislation and/or regulations are in place to control at least the release of human sewage into the environment.
<input type="radio"/>	<b>C</b>	Legislation and/or regulations encompass release of sewage, discharge of wastewater from health facilities, manure from intensive animal production, and industrial effluent to the environment.
<input type="radio"/>	<b>D</b>	There is a functioning system for monitoring regulatory compliance of discharge to the environment for some types of waste (sewage, health facilities, agriculture, manure and/or industrial effluent).

<sup>9</sup> "Basic" as defined in WASH in health care facilities standards or national standards. See <https://www.washinhcf.org/home/>

<sup>10</sup> As per footnote #7.

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O	E	There is a functioning system for monitoring regulatory compliance of all waste discharge to the environment (sewage, health facilities, agriculture, manure and industrial effluent). Regulations are in place that limit discharge of all antimicrobial residues into the environment, including in municipal and pharmaceutical industry waste and wastewater.
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\*Please note that domains A-D refer to regulatory control in general, while only E is AMR-specific

**Country use policies and regulation snapshot**

*Please tick boxes below that apply to your country.*

9.4 Country use policy and regulatory status	
<input type="checkbox"/>	Country has regulations on prescription and sale of antimicrobials, including requirements for prescriptions for human use.
<input type="checkbox"/>	Country does not authorize use of human and animal critically Important antimicrobials for growth promotion. <sup>11</sup>

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<sup>11</sup> If your country has no regulation or legislation relating to the use of antibiotics in growth promotion do not tick this box.