Global Antimicrobial Resistance Surveillance System (GLASS)

Guide to completing the GLASS implementation questionnaire
**Introduction**

This document has been developed for national GLASS focal points who have been nominated by their ministry of health, or a national agency officially designated by the ministry of health/national government, to represent the national antimicrobial resistance surveillance programme. It provides instructions and explanatory information on how to complete the *GLASS implementation questionnaire*. Detailed information on the GLASS methodology and implementation roadmap is available in the *GLASS Manual for early implementation* (1).

**GLASS enrolment steps**

<table>
<thead>
<tr>
<th>Expression of interest</th>
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<tbody>
<tr>
<td>Countries submit an expression of interest to participate in GLASS via <a href="mailto:glass@who.int">glass@who.int</a>, thereby confirming their commitment to build capacity to collect and share data, as outlined in the GLASS manual for early implementation</td>
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<table>
<thead>
<tr>
<th>Nomination of GLASS Focal Points</th>
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<tbody>
<tr>
<td>The Ministry of Health, or equivalent, submits an official nomination letter appointing one focal point and one alternate to represent the national antimicrobial resistance surveillance programme and be responsible for communication with GLASS</td>
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<tr>
<th>Accessing the IT platform</th>
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<tbody>
<tr>
<td>Once the official nomination letter is received, the GLASS secretariat provides the national focal point and the alternate with the credentials and instructions to access and use the GLASS IT platform</td>
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<tr>
<th>Country registration</th>
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<tbody>
<tr>
<td>The national focal point inputs initial country information data and contact details of participating national institutions and GLASS contact points</td>
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<tr>
<th>Submitting initial implementation data</th>
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<tr>
<td>The national focal point uploads data on the status of the national AMR surveillance programme in line with the GLASS core components as described in the GLASS manual</td>
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<tr>
<th>Reporting data on AMR and capacity building</th>
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<tbody>
<tr>
<td>Countries with the capacities to collect and share AMR data proceed with plans to generate and submit data to GLASS. Guidance on use of IT platform will be provided by WHO.</td>
</tr>
<tr>
<td>Countries without the capacities to collect and share AMR data according to the GLASS requirements plan and implement capacity building in collaboration with WHO and other partners.</td>
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</table>
GLASS implementation questionnaire

Once you have successfully logged in, the welcome page of the WHO GLASS portal page and home page “Surveillance of antibacterial resistance in humans” will be visible. (For login instructions and access to the home page “Surveillance of antibacterial resistance in humans” please refer to GLASS enrolment guide for national focal points). Please select the GLASS implementation questionnaire by clicking on the menu button and proceed with completing the online questionnaire.

Your country identification is generated automatically.

Please note that each time you upload AMR data you will be requested to update the information in the GLASS implementation questionnaire. Please pay particular attention to updating information on surveillance sites and laboratories.

You can also access the GLASS implementation questionnaire via the “MENU” button on the navigation bar and selecting GLASS implementation.
Select the name of your country via the drop down button “Country” and select the reporting year via the drop down button “Year” (please see example below for “France” and “2016” respectively). Then click on the “Search” button to display details as shown below.

Clicking on the button next to “Region”, will allow you to update and edit the data in the questionnaire. You can also delete all the information in the questionnaire.
Please note that questions 1-10 and question 13 of the GLASS implementation questionnaire are all mandatory (indicated by an asterisk *). The non-mandatory questions 11 and 12 will only be visible if you answer “yes” or “for some laboratories” to question 10.

The information you enter will not be saved automatically if you leave the page. To save the information you have entered, please click on the green “Save and Exit” button in the lower right hand corner, before accessing the next page or exiting the questionnaire.

You can exit the questionnaire at any time by clicking on the “Exit” button in the lower left hand corner, but remember that any information you have entered will not be saved automatically.

You will receive an error message if any of the questions are left unanswered. You must provide all requested information in one session. A pdf document of the GLASS implementation questionnaire can be downloaded from the homepage and it is advisable to gather all requested information using this document before accessing the online questionnaire to complete.

You can come back to the homepage by clicking on the “HOME” button on the navigation bar.

On the home page you can download the pdf version of the GLASS implementation questionnaire.

An electronic version of the GLASS implementation questionnaire will also have been sent to the nominated focal point via email immediately after enrolment in order to become familiar with the questions and to gather information before submitting responses through the web interface.

Once you are ready to complete the online GLASS implementation questionnaire, please proceed to Question 1.
Question 1 – National Coordinating Centre

The national coordinating centre (NCC) is one of the key core components of a national AMR surveillance system, as outlined in the GLASS Manual for Early Implementation (1), and is nominated by the government/ministry of health. The NCC is mandated to coordinate the national AMR surveillance system, including data collection and analysis, and to report data to GLASS. The NCC defines the objectives of the national surveillance system within the national AMR strategy and decides on the epidemiological and laboratory standards in consultation with partners. The NCC continuously monitors and evaluates the national surveillance. The function is usually undertaken by a public health institute, however depending on the country’s structure, other institutions may be considered more suitable.

More detailed information on the core function of the NCC and sample terms of reference are available in National antimicrobial resistance surveillance systems and participation in the Global Antimicrobial Surveillance System (GLASS): a guide for planning, implementation, and monitoring and evaluation (2).

If you answer “yes” to Question 1, you will be requested to provide the name and address of the designated institution.

Question 2 – National Focal Point

As part of the nomination process, the Ministry of Health will have submitted an official nomination letter to the GLASS secretariat appointing one focal point and one alternate to represent the national antimicrobial resistance surveillance programme and to be responsible for any communication with GLASS. The national focal point and the alternate have been provided with credentials to access the GLASS IT platform. The focal point is usually based in the national coordinating centre.

If you answer “yes”, you will be requested to provide the full name of the focal point.
There is no requirement to provide the contact details for the alternate at this point. These will be requested in the Country Information section (please refer to p.5 of the GLASS enrolment guide for national focal points).

**Question 3 – AMR surveillance plan**

The implementation and strengthening of national AMR surveillance may be anchored within a national AMR action plan or within an overall national strategy for AMR. If you answer “yes” to Question 3, please indicate whether a dedicated budget for AMR surveillance exists and provide a web link to any related documents or action plans.

**Question 4 and 5 – National Reference Laboratory**

A national reference laboratory for AMR serves as a resource and coordination point for laboratory expertise. It promotes good laboratory practices and supports laboratories within the national surveillance system. The government usually designates at least one national laboratory. Depending on the national organization/structure, the role of the NRL could include participation in the development of the annual plan for AMR surveillance, participation in defining priorities in national AMR surveillance (e.g. priority pathogen-antibiotic combinations of national priority) and participation in defining the microbiological methodology for AMR surveillance.

If you answer “yes”, you will be requested to provide the name and address of the laboratory.
External Quality Assessment (EQA) programmes are essential in establishing and supporting good laboratory practices. Please indicate if the national reference laboratory participates in an external quality assurance scheme.

**Question 6 – Antimicrobial susceptibility standards**

Please indicate which standards for antimicrobial susceptibility testing are applied by the laboratories serving the participating surveillance sites. Multiple answers are possible, e.g. some laboratories providing services to participating surveillance sites may apply EUCAST and others CLSI.

**Question 7 and 8 – Surveillance sites**

Please provide the number of hospitals and number of outpatient healthcare facilities that have been identified by the national coordinating centre as fulfilling the requirements to collect and report data and therefore can be considered potential surveillance sites. For details of the requirements (1) and additional sample tools (2), please refer to the *GLASS Manual for Early Implementation*. The numbers you provide here should indicate the potential scope of your national surveillance system rather than the actual number of surveillance sites that are participating in the current reporting period. It is feasible that for various reasons, some surveillance sites that are part of the national surveillance system, are not contributing data during the current reporting period.

Please provide the number of hospitals and number of outpatient healthcare facilities that have provided data for the current reporting period. The numbers may be equal or less than the numbers provided in question 7.
Question 9 to 12 – Laboratories and external quality assessment (question 11 and 12 optional)

Laboratories with the capacity to identify bacteria and to perform antimicrobial susceptibility testing (AST) may be located within participating surveillance sites or be providing this service externally. One laboratory may serve several surveillance sites. Please provide the number of laboratories with the capacity to perform antimicrobial susceptibility testing that are providing this service to the participating surveillance sites in this reporting period.

Please indicate if the national AMR surveillance system (or the national reference laboratory) provides an external quality assessment (EQA) scheme for all laboratories participating in GLASS.

If you answer “yes” or “for some laboratories”, you will be directed to Question 11 and 12. These questions are not mandatory.

For Question 11, please indicate if the external quality assessment (EQA) scheme covers bacterial identification and/or antimicrobial susceptibility testing.

For Question 12, please indicate whether the external quality assessment (EQA) scheme covers all or some of the priority pathogens listed in the GLASS Manual for Early Implementation (1). The priority list comprises *Escherichia coli*, *Klebsiella pneumoniae*, *Acinetobacter* spp., *Staphylococcus aureus*, *Streptococcus pneumoniae*, *Salmonella* spp., *Shigella* spp., and *Neisseria gonorrhoeae*.

Question 13 – National standards and guidelines

Question 13 refers to step 6 of the proposed 10 steps in setting up a national AMR surveillance system. Please indicate if national protocols have been developed or adapted for e.g. data collection,
laboratory procedures, diagnostic stewardship and data flow, that incorporate standards from the 
**GLASS Manual for early implementation** (1) and accompanying tools.

You have now completed the **GLASS implementation** questionnaire. Please click on the green 
“Save and Exit” button in the lower right corner.

Please note that this document does not cover procedures for submission of AMR data, analysis and 
reports.

**References:**

   [http://apps.who.int/iris/bitstream/10665/188783/1/9789241549400_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/188783/1/9789241549400_eng.pdf?ua=1)

2. National antimicrobial resistance surveillance systems and participation in the Global Antimicrobial 
   Surveillance System (GLASS): a guide for planning, implementation, and monitoring and evaluation. Will be 
   available soon from the GLASS Secretariat.