

Mapping and evaluation of national capacities in local and regional laboratories for the detection and characterization of *Salmonella* spp. and *Campylobacter* spp. in humans

Suggested outline for summary report in English from each NRL

As part of the FWD AMR-RefLabCap project, the NRL for *Salmonella* and/or *Campylobacter* in human infections in each country are invited to map and evaluate the regional/local laboratories' capacities for detection and characterization of *Salmonella* and/or *Campylobacter*.

The results of the mapping and evaluation should be written in national languages, and depending of the needs, may be disseminated to relevant stakeholders in own country e.g. for stakeholder engagement, to seek funding for local/regional laboratory support, etc.

In addition, a summary of the mapping results and evaluation should be made available in English for the FWD AMR-RefLabCap project team. The summary report will form a basis for planning training activities and other support activities, including individual support to each country participating in the mapping exercise depending on the needs. The deadline for the report submission is 21 March 2023.

Below is a suggested outline of the topics to be covered and included in the summary of the national mapping and evaluation exercise performed by each NRL. If your laboratory is the NRL for only *Salmonella* or *Campylobacter*, fill in the information for the relevant pathogen only.

The outline is divided in topics as specified below. Replace the text marked in yellow with your text for the topics that are relevant for your country (not all topics need to be filled in). Also, the level of details may vary depending on the topic, the results of your mapping and the availability of information. Add figures and tables when relevant.

Outline of the summary report:

1. Background
2. Diagnostics of *Salmonella* and *Campylobacter*
3. Laboratories performing diagnostics of *Salmonella* and *Campylobacter*
4. Human resources, laboratory equipment and funding at local/regional laboratories
5. *Salmonella* and *Campylobacter* detection methods used in diagnostic laboratories
6. *Salmonella* and *Campylobacter* characterisation methods used in local/regional laboratories
7. *Salmonella* and *Campylobacter* isolate referral and linking to cases
8. Other issues of relevance for your country
9. Evaluation and conclusions

Mapping and evaluation of national capacities in local and regional laboratories for the detection and characterization of *Salmonella* and *Campylobacter* in humans

Summary report for country

Name of laboratory (NRL)

Contact person(s)

Date

1. Background

Please, briefly describe the methodology used for the mapping.

For example, the sources of information, how many laboratories were you in contact with, etc.

Write text here (insert more lines as needed)

2. Diagnostics of *Salmonella* and *Campylobacter*

Please, describe how human diagnostics of *Salmonella* and/or *Campylobacter* is done in your country and include in overall terms the role of different laboratories in detection, culturing and characterisation (e.g., species identification, serotyping, other typing, AMR-testing, WGS).

Write text here (insert more lines as needed)

Please, include your evaluation of strengths/weaknesses and gaps/further needs for the human diagnostics of *Salmonella* and *Campylobacter* in your country.

Write text here (insert more lines as needed)

3. Laboratories performing diagnostics of *Salmonella* and *Campylobacter*

Please, indicate the number of local/regional laboratories that perform detection and/or characterisation of *Salmonella* and *Campylobacter* in your country.

Include information on the geographical coverage, private/government status and other information of relevance.

Include information on the laboratories' status regarding quality assurance, accreditation and participation in EQAs.

Write text here (insert more lines as needed)

Please, include your evaluation of strengths/weaknesses and gaps/further needs for the laboratories performing diagnostics of *Salmonella* and/or *Campylobacter* in your country.

If the laboratories require further assistance from the NRL, specify the needs

Write text here (insert more lines as needed)

4. Human resources, laboratory equipment and funding at local/regional laboratories

For example, describe the qualifications and skills of the personnel working on detection and characterisation of *Salmonella* and *Campylobacter* at local/regional laboratories (personnel in different roles: leaders, technical staff, etc). Likewise, describe the laboratory capacity (e.g. availability of the needed equipment, materials, etc.) and the funding situation in relation to the detection and characterisation of *Salmonella* and *Campylobacter*

Write text here (insert more lines as needed)

Please, include your evaluation on strengths/weaknesses and gaps/further needs in relation to qualifications of the staff, laboratory equipment, funding, etc. at the local/regional laboratories.

If the local/regional laboratories require further assistance from the NRL, specify the needs.

Write text here (insert more lines as needed)

5. *Salmonella* and *Campylobacter* detection methods used in diagnostic laboratories

Please, specify the methods used for detection of *Salmonella* and *Campylobacter* in human samples in the diagnostic laboratories (include differences between these, if relevant).

If culture-independent diagnostic tests are used, describe if/when isolation of the pathogen is carried out at the diagnostic laboratory or elsewhere.

Describe if/when isolates of *Salmonella* and *Campylobacter* are stored at the diagnostic laboratories.

Write text here (insert more lines as needed)

Please, include your evaluation on strengths/weaknesses and gaps/further needs for the detection of *Salmonella* and/or *Campylobacter* in the diagnostic laboratories in your country

If the laboratories require further assistance from the NRL, specify the needs

Write text here (insert more lines as needed)

6. *Salmonella* and *Campylobacter* characterisation methods used in local/regional laboratories

Please, specify the methods used for characterisation of *Salmonella* and *Campylobacter* for diagnostic and/or surveillance purposes. The characterisation could include species identification, serotyping, AMR-testing, and molecular typing methods (e.g., WGS, MLVA, PFGE).

If the laboratories provide results that are directly included in the national surveillance, describe how the communication of results is done.

Write text here (insert more lines as needed)

Please, include your evaluation on strengths/weaknesses and gaps/further needs for the characterisation of *Salmonella* and *Campylobacter* in the local/regional laboratories in your country.

If the laboratories require further assistance from the NRL, specify the needs.

Write text here (insert more lines as needed)

7. *Salmonella* and *Campylobacter* isolate referral and linking to cases

Please, describe the referral of isolates (or positive samples) from local/regional laboratories to the NRL or other laboratory for further characterization, including AMR-testing.

Specify if the referred isolates/samples are linked to case information, e.g. an identifier allowing for epidemiological investigations.

Specify the number and proportion of laboratories that refer samples/isolates to the NRL as well as the approximate number of samples/isolates referred to the NRL.

Write text here (insert more lines as needed)

Please, include your evaluation on strengths/weaknesses and gaps/further needs for the referral of *Salmonella* and *Campylobacter* isolates in your country.

If the local/regional laboratories require further assistance from the NRL, specify the needs.

Write text here (insert more lines as needed)

8. Other issues of relevance for your country

Please, describe any other issue that is relevant for the state of play in your country with regards to local/regional laboratories capacities for detection and characterisation of *Salmonella* and *Campylobacter*

Write text here (insert more lines as needed)

Please, include your evaluation on strengths/weaknesses and gaps/further needs in relation to these issues.

If the local/regional laboratories require further assistance from the NRL, specify the needs.

Write text here (insert more lines as needed)

9. Evaluation and conclusions

Please, provide your overall evaluation of strengths/weaknesses and gaps/further needs in relation to the regional/local laboratories' capacities in your country for detection and characterisation, including AMR determination, of *Salmonella* and *Campylobacter*.

Prioritise the needs for capacity building in the local/regional laboratories.

Overall conclusion.

Write text here (insert more lines as needed)