

## User feedback on NEOH tool applied to *AMR in Salmonella isolated from pigs – a part of the DANMAP system*

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### General information

**Name of evaluation tool:** Network for Evaluation of One Health (NEOH) One Health-ness Assessment Tool and Evaluation Framework

**Name of surveillance programme used in case:** AMR in Salmonella isolated from pigs – a part of DANMAP (DANMAP is an integrated approach for AMU/AMR in animals and humans in Denmark)

**Country of programme:** Denmark

**Surveillance component or programme covers (tick one):**

- AMU
- AMR
- Both
- Other, please describe:

**What is covered by (part of) component or programme evaluated (tick at least one):**

- Humans
- Livestock
- Aquaculture
- Bees
- Green environment
- Aquatic environment
- Food chain
- Companion animals
- Equidae
- Camelids and Deer
- Wildlife
- Other, please describe:

**Objective(s) of evaluation (tick at least one):**

- Performance
- Infrastructure
- Functionality
- Operations
- Collaboration
- One Health-ness / the strength of One Health
- Impact
- Other, please describe:

**Main result of evaluation:** Evaluation undertaken as an exercise with focus on assessment of the tool

**Time period for evaluation:** September - December 2019

**Name(s) of evaluator(s):** Liza Rosenbaum Nielsen

**Affiliation of evaluator(s):** SUND, University of Copenhagen

**Evaluator(s) relationship with tool (tick at least one):**

- Owner
- Developer

- User without involvement in development or ownership of tool
- Other, please describe:

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## Scoring of different aspects of the evaluation tool

*When answering, please describe in words and use a scale with four levels, where 1 = not satisfactory, 2 = major improvements needed, 3 = some improvements needed, 4 = satisfactory, and provide a short explanation for the score.*

- 1) User friendliness:** 2 - Hard to understand some of the questions in the tool (e.g. in 'the Thinking sheet' in the Excel tool), especially without prior training
- 2) Meets evaluation needs/requirements:** 4 & 2. For overall system features: meets the evaluation needs (4). For specific technical details (e.g. laboratory part of surveillance) it is less intuitive (2)
- 3) Efficiency:** 2 - It takes a long time to fill in the tool
- 4) Use of a step-wise approach to the evaluation:** 4 - A step-wise approach to the evaluation is followed (steps include context description, initiative-within-context description, One Health-ness evaluation (process evaluation) and theory of change with outcome and impact evaluation).
- 5) Overall appearance:** 2 - The Excel tool for the One Health-ness evaluation is too compressed in the layout. It is best to be an experienced Excel user and to have a large screen to work on.
- 6) Generation of actionable evaluation outputs:** 4 - The web-diagrams make it easy to identify where to put focus on gaps in the surveillance.
- 7) Allows evaluation of One Health aspects:** 4 - This is a major strength of the systems approach and the tool.
- 8) Workability in terms of required data (1: very complex, 4: simple):** 1 - Fairly complex tool to use, and it requires sufficient effort to gather the required information through interviews of essential actors and stakeholders and other/written information.
- 9) Workability in terms of required people to include (1: many, 4: few):** 1 - Need to interview all essential actors and stakeholders. One evaluator can perform the work over time.
- 10) Workability in terms of analysis to be done (1: difficult, 4: simple):** 4 - Once the tool is filled in it provides good support for the analysis
- 11) Time taken for application of tool (1: > 2 month, 2: 1-2 months, 3: 1 week - 1 month, 4: < 1 week):** 4 & 1. Filling in the tool can be done in < 1 month (4). But to interview and synthesise the information for the evaluation could take longer (1).

## Strengths, weaknesses, opportunities and threats

- 1) Things that I really liked about this tool/that this tool covered really well:** It really goes into depth with understanding the One Health context and evaluates the surveillance relative to that. It includes evaluation of aspects of sharing and learning internally and externally to the surveillance system. It provides web-diagrams highlighting gaps in One Health.
- 2) Things I struggled with:** The tool is not designed specifically for AMR/AMU, and the evaluator needs to populate the tool to fit that context (e.g. for description of the system dimensions which was difficult).
- 3) Things people should be aware of when using this tool:** The evaluator has to be trained to understand the theoretical background of the method and tool to be able to use it appropriately. It requires quite some time and human resources to perform interviews and other types of information collection to be able to do the qualitative and semi-quantitative scoring.

**4) Things that this tool is not covering or not good at covering:** Technical aspects such as sampling strategies, sensitivity of testing methods and ability to detect emerging AMR-issues are not explicitly addressed in the tool, so the evaluator would have to be aware to include that as part of the objectives and choose epidemiological approaches to evaluate those aspects, if needed.

## Scoring of themes

*Score the degree that the themes are covered by the evaluation tool.*

*Scoring scale: Well covered, More or less covered, Not well covered, Not covered at all.*

| Themes                        | Tool: NEOH           |   |
|-------------------------------|----------------------|---|
|                               | Score                | The reasoning for the score   |
| AMR/AMU                       | More or less covered | The tool is generic, so it does not have questions probing for occurrence, prevention, response to AMR or recording and management of AMU, but it can easily be fitted to contain such questions, for instance under 'objectives of the initiatives' which have to be filled in by the evaluator.   |
| Collaboration                 | Well covered         | The tool has a high degree of focus on exchange of data, information and knowledge, sharing capacities within and outside of the initiative, inclusive participation of stakeholders and actors also considering potential barriers to collaboration such as gender issues or other power imbalances as well as organisation of roles and responsibilities.   |
| Resources                     | Well covered         | The tool focuses on whether resources are allocated to achieve the objectives of the initiative, including human, physical and financial resources as well as training.   |
| Output and use of information | Well covered         | The output generated by the tool is useful for identification of areas where a One Health approach to the problem is not fully applied, and where a higher impact of the initiative being evaluated might be improved.  |
| Integration                   | Well covered         | The tool evaluates all of the following aspects: Data and knowledge integration within organizations and at national, regional, or international level, and systems interoperation between different sectors, contextualisation of the surveillance system, knowledge integration, shared decision making and planning across sectors, disciplines and countries, integration of the surveillance system in the decision-making process and formulation of common goals across sectors. It does not specifically address adherence to international testing and data standards, unless the evaluator specifies this as an objective of the initiative under evaluation. |
| Adaptivity                    | Well covered         | The tool assesses whether the plans for a One Health approach is followed when the initiative is implemented, including tools, plans and agreements to evolve and has questions assessing management and governance structures and evaluation. It specifically asks about flexibility and adaptability in planning, working and leadership approach.  |
| Technical operation           | Not well covered     | The tool contains only few questions probing for capacities and data handling. It does not allow for calculation of technical surveillance performance within the tools provided.   |



### Open comments

Regarding evaluation of governance, the tool includes consideration of legislation and National Action Plan if these dimensions are identified in the underlying system (the context) and/or as part of the initiative, early on in the evaluation process.



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- Yes
- No

*Name and date: Liza Rosenbaum Nielsen, 6<sup>th</sup> of May 2020*