

30. SPECIFIC TERMS OF REFERENCE FOR THE NRC FOR RICKETTSIA AND ANAPLASMA (EHRlichIA)

AIMS

- Each National Reference Centre (NRC) must meet both the general and the specific terms of reference.
- In the specific terms of reference, the NRC tasks dedicated to each selected pathogen or group of pathogens are described.
- These aim to guarantee the knowledge, the know-how and the epidemiological surveillance expertise of each NRC.
- The task list is not exhaustive and can be modified in function of the requirements and the evolution of knowledge and techniques.
- In the event a NRC is unable to perform a specific task, this can be subcontracted to preserve the knowledge in the NRC. If this is the case, quality of the subcontracted task has to be proven and assured.
- Each list of specific terms of reference is divided into three parts: 1) a reminder of the specific missions, 2) a description of the tasks that the NRC must be able to do including the competencies and 3) a list of the tasks that will be asked in a particular context.
- The type of analysis indicated for each specific pathogen in each particular situation (diagnosis or confirmation, typing, sensitivity to antimicrobial substances, virulence...) is defined.
- The collaboration with national and international surveillance systems (e.g. ECDC) and when relevant with other reference centres (European Medicines Agency, food safety reference centres, veterinary reference centres, ...) is also a priority.

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SPECIFIC MISSIONS

1. To perform or confirm the diagnosis.
2. To monitor the isolated strains by performing microbial typing.
3. To collaborate with existing national and international networks.
4. To participate in national surveillance, transfer microbiological data (through e-health reporting) and contribute to the presentation and interpretation of the results in a public health approach.
5. To interact with epidemiologists and other NRC's with the aim to sustain/adapt the use of the various outputs (with regards to quality of care, recommendations for control/prevention, ...).

RICKETTSIA

THE NRC MUST BE ABLE TO (LEVEL OF COMPETENCES)

1. Perform the serology (IgM, IgG) by IFAT on the different species.
2. Detect the presence of the pathogen by specific PCR.
3. Confirm the species by PCR and sequencing (16S, groEL,...).
4. Have access to whole genome sequencing and expertise in species specific bioinformatics analysis.

TASKS THAT WILL BE ASKED IN A PARTICULAR CONTEXT

1. To perform or to confirm diagnose when requested.
2. To collaborate with the reference lab of national animal agencies (one health perspective) and participate to a joint output, if relevant.
3. To collaborate with other reference labs including environmental and animal labs in order to request data on tick harboured strains.
4. To improve the surveillance representativeness by enlarging the action radius (geographical coverage and/or by collaborative work with food and veterinary networks).

ANAPLASMA PHAGOCYTOPHILUM

THE NRC MUST BE ABLE TO (LEVEL OF COMPETENCES)

1. Detect specific antibodies (IFAT, ELISA...).
2. Detect the pathogen by PCR.
3. Detect *Anaplasma* on stained blood smear.
4. Possess reference strains.
5. Perform the culture of *Anaplasma* on HL-60 cells.
6. Have access to whole genome sequencing and expertise in species specific bioinformatics analysis.

TASKS THAT WILL BE ASKED IN A PARTICULAR CONTEXT

1. To perform or to confirm the diagnosis when requested.
2. To collaborate with the reference lab of national animal agencies (one health perspective) and participate to a joint output, if relevant.



3. To participate in seroprevalence studies if requested.