

08. SPECIFIC TERMS OF REFERENCE FOR THE NRC FOR CLOSTRIDIUM BOTULINUM, C. PERFRINGENS AND C. TETANI

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 confirm the clinical diagnosis of botulism, tetanus and *C. perfringens* foodborne outbreaks.
2. To participate in the development of new diagnostic tools.
3. To collaborate to 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, ...).

THE NRC MUST BE ABLE TO (LEVEL OF COMPETENCES)

1. Perform the culture of *C. botulinum*, *C. perfringens* and *C. tetani*.
2. Confirm the clinical diagnosis or suspected cases by detection of the toxins.
3. Detect the toxins (neurotoxins for *C. botulinum* and *C. tetani* and enterotoxin for *C. perfringens*) from samples, preferentially by alternative methods to the mouse bioassay.
4. Perform the genotyping using an international recognized method.
5. Have access to whole genome sequencing and expertise in species specific bioinformatics analysis.
6. Manage a collection of representative strains.

TASKS THAT WILL BE ASKED IN A PARTICULAR CONTEXT

1. To detect the botulinic and tetanus toxin in clinical samples of clinically suspected cases.
2. To detect the *C. perfringens* enterotoxin.
3. To contribute to the investigation of foodborne outbreaks through active collaboration with National Reference Lab and Community Reference Lab of the National (FASFC) and European (EFSA) food safety agencies.
4. To collaborate with food microbiology labs and participate to joint output.
5. To participate to the validation of alternative methods for the mouse bioassay for botulinic toxin detection.