20. SPECIFIC TERMS OF REFERENCE FOR THE NRC FOR INFLUENZA VIRUS

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 carry out the virological aspect of the national influenza surveillance.
2. To type and subtype influenza viruses in human specimens.
3. To collaborate in the national pandemic influenza plan, when requested.
4. To collaborate with existing national and international networks: The WHO collaborating reference centres, the ECDC, the NRC on respiratory viruses.
5. 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.
6. 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 virus culture under appropriated biosafety conditions.
2. Detect specific antibodies (inhibition of hemagglutination and seroneutralisation).
3. Type virus (A or B) and subtype influenza A (H and N) by appropriate techniques.
4. Determine the lineage influenza B by appropriate techniques.
5. Perform the antigenic characterisation (inhibition of hemagglutination).
6. Perform the genetic characterisation (sequencing).
7. Be able to detect any new subtype.
8. Monitor the resistance to antivirals (neuraminidase inhibitors).
9. 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 the diagnosis and typing on these samples.
2. To contribute to the functioning of a network of sentinel physicians collecting clinical samples on Influenza Like Illness for testing.
3. To contribute to the functioning of a network of sentinel hospitals collecting clinical samples on severe acute respiratory infections.
4. To rapidly perform the diagnosis and communicate the results in case of confirmed new influenza in humans.
5. To participate to recommendations of vaccination policy.
6. To perform laboratory investigation on cases suspected of zoonotic influenza virus infection in collaboration with the veterinary influenza reference laboratory.
7. To ensure a good representativeness for surveillance purposes, including geographical coverage when relevant.
8. To perform the verification by laboratory testing, of the claimed performances and conformity of IVD devices, for Highly virulent pandemic influenza virus within the Belgian EURL (European Union Reference Laboratory Network) after its designation by the European commission under Regulation (EU) 2017/746. (http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2017:117:TOC)