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Work programme 2012 for the European Union Reference Laboratory

for Foot-and-Mouth Disease

1. Functions and duties

1.1. The laboratory must ensure liaison between the national laboratories of the Member States and provide optimal methods for the diagnosis of foot-and-mouth disease in livestock, and differential diagnosis of other vesicular viral diseases, where necessary, for each Member State specifically by:

1.1.1. regularly receiving field samples from Member States and countries geographically or commercially linked to the European Union in terms of trade in animals of susceptible species or products derived from such animals with a view to monitoring the disease situation globally and regionally, to estimating and where possible predicting the risk evolving from emerging virus strains and particular epidemiological situations and determining the identity of the virus, where necessary in close collaboration with the OIE designated regional reference laboratory and the WRL.

1.1.2. typing and full antigenic and genomic characterisation of vesicular viruses from the samples referred to in point 1.1.1.and communicating the results of such investigations without delay to the Commission, the Member State, and the National Laboratory concerned.

1.1.3. building up and maintaining an up-to-date collection of vesicular virus strains.

1.1.4. building up and maintaining an up-to-date collection of specific sera against vesicular virus strains.

1.1.5. advising the Commission on all aspects related to foot-and-mouth disease vaccine strain selection and use.

1.2. The laboratory shall support the functions of National/Central Laboratories, in particular by;

1.2.1. storing and supplying National/Central Laboratories with reagents and materials for use in diagnosis of foot-and-mouth disease such as virus and/or inactivated antigens, standardised sera, cell lines and other reference reagents.

1.2.2. retaining expertise on foot-and-mouth disease virus and other relevant viruses to enable rapid differential diagnosis;

1.2.3. promoting harmonisation of diagnosis and ensuring proficiency of testing within the Community by organising and operating periodic comparative trials and external quality assurance exercises on foot-and-mouth disease diagnosis at the Community level and the periodic transmission of the results of such trials to the Commission, the Member States, and National Laboratories.

1.2.4. carrying out research studies with the objective of developing improved methods of disease control in collaboration with National Laboratories and as agreed in the annual work plan of the Community Reference Laboratory.

1.3. The laboratory shall provide information and carry out further training, in particular by;

1.3.1. gathering data and information on the methods of diagnosis and differential diagnosis used in National Laboratories and the distribution of such information to the Commission and the Member States;

1.3.2. making and implementing the necessary arrangements for the further training of experts in laboratory diagnosis with a view to harmonising diagnostic techniques;

1.3.3. keeping a watching brief on developments in foot-and-mouth disease epidemiology;

1.3.4. organising an annual meeting where representatives of the National Laboratories may review diagnostic techniques and the progress of coordination.

1.4. The laboratory shall also perform experiments and field trials in consultation with the Commission directed towards an improved control of foot-and-mouth disease.

1.5. The laboratory shall furthermore review at the annual meeting of National/Central Reference Laboratories the contents of Annex XIII to Directive 2003/85/EC defining the tests and standards for foot-and-mouth disease diagnosis within the European Union.

2. Work plan and specific tasks for 2012

In addition to the above duties and functions, the following specific tasks should be carried out in 2012.

2.1 Prepare antisera as needed against FMDV vaccine strains to be used in vaccine matching tests. The specific strains of vaccines to be selected will be those that are held as vaccine antigens within the European Union Vaccine bank and/or those important for FMD vaccine matching studies.

2.2 Predict the ability of EU Vaccine Bank derived vaccines to provide protection against FMD viruses from representative topotypes that have been recently isolated by the WRL FMD.

2.3 Review requirements for potency testing of the vaccine antigens held in the European Union FMD vaccine bank and for preparation of reference materials.

2.4 Undertake one or two European Pharmacopeia potency tests on vaccine antigens held in the European Union FMD vaccine bank to evaluate efficacy against emerging field strains.

2.5 Continue work on collection and preparation of sera (for the detection of antibodies against both structural and non-structural proteins of the FMD virus) as needed for the FMD proficiency test schemes and reference sera.

2.6 Prepare and distribute virological and serological samples for a proficiency test study of EU NRLs for FMD so that their proficiency can be evaluated and documented.

2.7 Collate information on the diagnostic capability of EU NRLs for FMD for presentation at the 2011 Annual Meeting of the EU NRLs for FMD.

2.8 Organise a training course on FMD virological and serological diagnostic techniques to be held at IAH, Pirbright laboratory for EU member states and surrounding regions, with a proposed date of April/May 2012.

2.9. Prepare programme and organise the Annual Meeting of FMD National Reference Laboratories, 2012.

2.10 Contribute to the secretariat of the International FMD vaccine bank holders network

2.11 Maintain an FMD web-site to share information between the EURL and EU NRLs.

2.12 Develop software to efficiently and accurately decode and analyse the results from labs participating in the PTS.

European Union Reference laboratory for FMD