



Institute for Animal Health

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Work programme 2012 for the European Union Reference Laboratory for Swine Vesicular 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 Swine Vesicular Disease (SVD) in pigs, and differential diagnosis of other vesicular viral diseases, where necessary, for each Member State specifically by:
 - 1.1.1. receiving field samples from Member States and countries geographically or commercially linked to the European Union in terms of trade in pigs or pig products 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.
 - 1.1.2. typing and full antigenic and genomic characterisation of SVD 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 SVD virus strains.
 - 1.1.4. building up and maintaining an up-to-date collection of specific sera against SVDV.
 - 1.1.5. advice on epidemiological relationships with known isolates and possible origins of incursions into the EU..
- 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 SVD such as virus and/or inactivated antigens, standardised sera, cell lines and other reference reagents.
 - 1.2.2. retaining expertise on SVD 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 proficiency test schemes and external quality assurance exercises on SVD 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 European Union Reference Laboratory.
- 1.3. The laboratory shall provide information and carry out further training, in particular by;

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- 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 swine vesicular 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 SVD.

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 Receive new isolates from Member States as part of the diagnostic or confirmatory service of the EURL for SVD.
- 2.2 Determine the nucleotide sequence ("genetic fingerprint") of the VP1 gene of new isolates and compare with sequences in the IAH database to construct dendrograms ("family trees") indicating relationships with established strains.
- 2.3 Examination of new isolates for significant differences to current reference strains.
- 2.4 Provide sequence data and the information from 2.3 in the form of dendrograms to the EC and to EU National SVD Reference Laboratories.
- 2.5 Production, preparation and collection of antisera as necessary for the SVD diagnosis test and the SVD proficiency test schemes.
- 2.6 Production, preparation and supply of reagents for SVD virology and serology diagnosis to National Reference Laboratories of Member States.
- 2.7 Prepare and distribute virological and serological samples for a proficiency test study of EU NRLs for SVD so that their proficiency can be evaluated and documented.
- 2.8 Collate information on the diagnostic capability of EU NRLs for SVD for presentation at the 2012 Annual Meeting of the EU NRLs for SVD.
- 2.9 Prepare programme and organise the Annual Meeting of SVD National Reference Laboratories, 2012.
- 2.10 Maintain an SVD web-site to share information between the EURL and EU NRLs and development an programme for managing the annual proficiency test schemes.
- 2.11 Develop software to efficiently and accurately decode and analyse the results from labs participating in the PTS.

European Union Reference laboratory for SVD

19th August 2011