

Mission of the Community Veterinary Emergency Team to Serbia

SCOPE of the mission: Lumpy skin disease in cattle in Serbia

(6th of June 2016)



Terms of Reference

- The expert should provide assistance to the scientific, technical, managerial and practical on-the-spot aspects required for the development and refinement of the control strategy for lumpy skin disease (LSD) under local conditions taking into account sound scientific basis (including the recent EFSA report on LSD) and within the framework of Council Directive 92/119/EEC.
- The expert should report exclusively to the Commission services and the competent authorities of Serbia. A final report should include recommendations to the competent authorities.
- An expert of this team should report to the Commission and the Member States in the framework of the Standing Committee on Plants, Animals, Food and Feed.
- The expert shall operate under the provisions laid down in Commission Decision 2007/142/EC and in particular on the basis of the standard rules of procedure for groups of experts.



CVET experts and DG SANTE officials

- Dr Eeva Tuppurainen team leader, FI
- Dr Pip Beard- The Pirbright Institute, UK
- Commission Representative: Dr Dimitrios Dilaveris (DG SANTE)



Fact finding in Serbia

- On 6th of June meeting with the local veterinary authorities at the Ministry of Agriculture and Environmental Protection, Veterinary Directorate
- Total number of cattle in Serbia is 958.097
- General contingency plan is in place and applied to LSD
- Strategic level: the Ministry of Agriculture and Environmental Protection headed by the Chief Veterinary Officer
- Tactical level: the National Crisis Centre and the national reference laboratory
- Operational level: 12 regional centres
- The number of official veterinarians is 252
- Use of a live LSD vaccine must be authorized by the Agency of Medicine and Medical Devices, Serbia

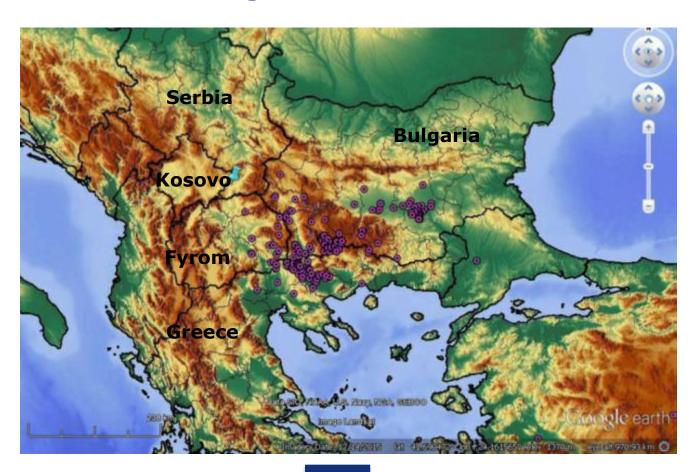


Transboundary cattle movements

- Control of these animal movements is challenging
- In the mountainous border regions with neighbouring countries, grazing cattle from both sides may sometimes cross the borders and mixing of herds occurs
- Transhumance farming is practised in the border regions
- Trade of cattle across the borders occurs although it is officially banned



On 6th of June the first LSD outbreak was reported in Bujanovac Serbia





Visit to the national reference laboratory for LSDV in Belgrade

- Three regional laboratories have capacity to carry out LSDV diagnostics
- Appointed reference laboratory in Belgrade, the other labs are in Novisad and Kradjevo
- Belgrade lab works at BSL 2
- Three veterinarians and three technicians are available and competent in molecular methods, if required staff from the other departments can assist
- One real-time PCR and three conventional PCR thermocyclers
- Gel-based PCR in place and setting up a real-time PCR method was in progress



Laboratory capacity in Belgrade

- Sample testing is available during evenings, weekends and holidays
- Samples arrive to the labs within the day of collection
- Test results available within the same or following day
- Tests are carried out according to good laboratory practice
- Manual DNA extraction is the bottleneck



Laboratory capacity in Belgrade

- No positive LSDV control was available for PCRs a safe alternative would be to extract DNA from the LSD vaccine
- Molecular DIVA assay is not yet in place -sequencing by commercial companies, recently published DIVA PCR method and a commercially available PCR kit (currently under validation by three laboratories)
- No virus isolation or serological assays for LSD available



Laboratory needs include

- Materials and reagents: DNA extraction and PCR mastermix kits
- A real-time PCR thermocycler and an automated DNA extraction robot
- Freezers (-20 and -80 °C) for sample storage
- Assistance in optimising and validating PCR-based diagnostic tests was offered by the Pirbright Institute



Recommendations (1/3)

- Regional rather than national approach is recommended, including exchange of information, coordination and harmonization of the control and eradication programs
- Swift mass vaccination in affected regions, aiming 100% vaccination coverage – if ring-vaccinations are used, no unvaccinated farms/animals should be left within the vaccinated regions
- Preventive vaccination campaigns should be carried out at the buffer zones between affected and disease-free countries
- Enforced awareness campaigns amongst field and abattoir veterinarians, farmers, animal care staff, cattle traders, slaughterhouse staff and drivers of cattle transport vehicles



Recommendations (2/3)

- Radius of protection and surveillance zones should be increased to 25 to 50 km
- Strict movement restrictions
- Movement of vaccinated cattle from infected regions to a slaughterhouse located in disease-free area is not recommended - the nearest slaughterhouse within the restricted region should always be preferred
- Only healthy vaccinated animals are safe to move after the immunity has been fully established (28 days post-vaccination)
- In case it is necessary to use an abattoir at the disease-free region, cattle should be certified by a veterinarian to be free of clinical signs of LSDV on the day of dispatch at the farm of origin



Recommendations (3/3)

- Animal traders, their animal facilities and cattle collection/resting stations should be registered
- Diagnostic capacity at the NRL need to be strengthened
- Enforced biosecurity measure at a farm level should be implemented throughout the country
- Detailed epidemiological surveys should be conducted
- Active and passive disease surveillance in the country should be enforced
- In order to detect unnoticed LSD outbreaks clinical and laboratory surveillance should be commenced at the border regions with the neighbouring disease-free countries



Thank you for your attention!

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Veterinary Expertise for Controlling Lumpy skin disease, Sheeppox

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