Standing Group of Experts on LSD in South-East Europe

under the GF-TADs umbrella

Eleventh meeting (SGE LSD7)
Ohrid, the former Yugoslav Republic of Macedonia, 18-19 October 2018

REPORT

Summary

The seventh meeting of the standing group of experts on lumpy skin disease (SGE LSD7) took place in Ohrid, the former Yugoslav Republic of Macedonia, on 18 and 19 October 2018. 14 countries attended the meeting. They presented their epidemiological situation, activities and plans in terms of vaccination. EFSA presented the report on LSD control and surveillance, just published, the EU reference laboratory for LSD its current activities, and the EuFMD the surveillance programme implemented in the Thrace region.

Following scientific advice from EFSA and EURL and based on the last epidemiological situation, the standing group of experts eventually recommended that vaccination be maintained in 2019 in Albania, Greece, Kosovo*, the former Yugoslav Republic of Macedonia, Montenegro and Turkey, and in part of Serbia and Bulgaria at least.

Next steps: an audioconference will be organised in the beginning of 2019 to check on vaccine availability and supply needs in the member countries; the SGE LSD8 will take place in the margins of the 87th OIE general session in May 2019, and the SGE LSD9 at a later stage in Serbia.

Minutes

Participants

See attached list of participants, representing 14 of the 21 members of the SGE LSD and representatives from the European Commission, EFSA, the EURL for LSD, the EuFMD, the FAO and the OIE.

Objectives of the meeting

The main objectives of the SGE LSD7 were to have an update on the epidemiological and vaccination situation in each country, and to agree on a coordinated vaccination exit strategy.

Updates from the member countries of the SGE LSD

Bulgaria

The situation is stable, no outbreak since 2016. The annual vaccination campaign took place from April to July, with a vaccination coverage of approximately 97%. Vaccination is now continuing in newborn animals and animals subject to trade. The vaccine used was kindly provided by Austria. The intention is to continue with vaccination of the entire bovine population in 2019. Investigations on adverse effects are still going on.

Croatia (PPT presentation)

No outbreak has been confirmed in Croatia. Vaccination campaigns were however deployed in 2016 and 2017, with over 90% vaccination coverage. Decision to cease vaccination after 2017 derived from consideration that a significant part of the population remained covered by previous vaccination campaigns, and also due to adverse effects in 4 to 5% of vaccinated cattle (death, abortion, reduced milk production, etc.) and restrictions to trade. Passive surveillance is ongoing throughout the country (3 suspicions only, all PCR negative), as well as an active surveillance programme since last June (clinical, PCR, ELISA). Regarding immunity testing, 50% of cattle vaccinated twice remain seropositive, as well as 20% of cattle vaccinated only once. These preliminary results show that Croatia is free of LSD.

Greece (PPT presentation)

The last outbreaks were recorded in Greece in March and August 2017, in regions which had not yet been vaccinated. Surveillance is ongoing. The vaccination coverage is estimated 64%, or even up to 70% if the calves protected by maternal antibodies are included. The 2018 vaccination campaign is still in progress. Vaccine was provided through a central procurement and the EU vaccine bank. Greece intends to continue with the vaccination in 2019.

Kosovo* (PPT presentation)

The first outbreaks were confirmed in 2016, and triggered 3 consecutive campaigns of vaccination. No outbreak was recorded in 2017 and 2018. Kosovo* is prepared to continue with the vaccination in 2019, depending on the strategy which will be decided.

Montenegro (PPT presentation)

The last outbreak registered in Montenegro was in October 2016. Vaccination campaigns took place in 2016, 2017 and 2018. The 2018 vaccination campaign started in May. Due to the reduced interest of the farmers, it achieved 'only' a 77% vaccination coverage, when it was close to 100% in 2016. Montenegro is waiting for the outcome of the discussion to decide on a possible future vaccination campaign.

Romania

Romania has never recorded any outbreak. Surveillance includes passive and active activities in case of epidemiological risk. Vaccination will be implemented in case of confirmation of the disease on the Romanian territory.

Russian Federation

The epidemic linked to the outbreaks of 2015 and 2016 has been eradicated through heterologous vaccination (sheep and goat pox), with a 95% coverage at a dose of x10 the usual dose used in small ruminants. However, approximately 40 outbreaks were confirmed in 2018 in another region, much farther to the East, very close to the border with Kazakhstan. They are linked to a vaccine-like strain, as reported to the OIE by the Russian Federation delegate last July. A vaccination campaign has been launched in the region with a heterologous vaccine only.

Following a relevant question from the delegates of Russia it was clarified that LYMPYVAX (spelled with Y), a live homologous vaccine against LSD, produced by MSD Animal Health (based in South Africa) is a different product from LUMPIVAX (spelled with I), a vaccine against LSD produced by the Kenya Veterinary Vaccines Production Institute (KEVEVAPI, based in Kenya). LYMP**Y**VAX (MSD Animal Health, South Africa) has been used in South East Europe during the recent vaccination campaigns. LUMP**I**VAX (KEVEVAPI, Kenya), on the other hand, has never been used in any country of South East Europe nor was it ever included in the EU LSD vaccine bank.

Serbia (PPT presentation)
The third annual vaccination campaign is still in progress, with a 77% coverage at this time, with the aim to reach 95% at the end of the campaign. Active and passive surveillance is ongoing. A procedure is in place since 2017 to monitor and compensate vaccination side effects (22 occurrences). For 2019, Serbia intends to continue vaccination, with different options in terms of targeted population, e.g. whole cattle population, or only in the Southern zone of the country, or only newborn calves after 6 months and imported cattle.

Slovenia
LSD was never detected in Slovenia. A vaccination strategy is ready, but has not been actually implemented so far. Surveillance in ongoing in a 20 km band along the southern border of the country.

The former Yugoslav Republic of Macedonia (PPT presentation)
The first outbreak occurred in April 2016. By the end of 2016 LSD had affected the largest part of the country. 3 outbreaks were confirmed in 2017 (the last one in May), none in 2018. National vaccination campaigns were implemented in 2016, 2017 and 2018.
A cohort study has been implemented before and after the 2018 campaign; it shows that 50% of animals were still seropositive prior to the campaign, the proportion being close to 80% after the campaign. The former Yugoslav Republic of Macedonia is planning to continue the vaccination in 2019, with a long term objective to exit the vaccination.
Also the former Yugoslav Republic of Macedonia reported the result of a study where Culicoides captured in a farm where the clinical disease was subsequently confirmed, and after vaccination was implemented, proved negative for the LSD virus. Interpretation of this interesting finding however appears to be challenging.

Turkey (PPT presentation)
The first LSD outbreaks were detected in August 2013. Following a steady decrease from 2014 to 2017, 44 outbreaks were detected so far in 2014 in the Eastern part of Turkey, including 2 outbreaks close to the border with Georgia.
The vaccine strain used in Turkey derives from a sheep and goat pox outbreak in Turkey in the 70s. The 2018 vaccination campaign took place during the first semester, with a coverage of 93% of the cattle population; it was left up to the regions to decide what vaccination dose should be used, from x3 to x5. To be noted that the vaccination dose applied in the province where the outbreaks occurred in 2018 was x3. Vector control is also applied in Turkey.
Vaccination is planned to continue in 2019 with a compulsory x5 dose across the country. Moreover, in Turkey, there are ongoing projects for the detection and early warning of vector-borne diseases.

Albania (PPT presentation)
7 suspicions were investigated since May 2018, none was confirmed. The national vaccination campaign started in July 2018 and is still ongoing, 25 to 30% of animals being vaccinated so far. Plans for 2019 are under consideration, including depending on vaccine availability.

To be noted that the outbreaks notified in Northern Albania in 2017 actually derived from samples taken in 2016 that were tested with some delay in 2017. The outbreaks confirmed in 2017 in the South were the consequence of a lack of sufficient vaccination coverage in that part of the country.

Austria

No LSD case has been detected in Austria. The vaccine emergency reserve was never used but eventually benefited Bulgaria (EU supported donation).

Bosnia Herzegovina

No LSD case has been confirmed. Vaccination was implemented in high risk areas of the country in 2017 and 2018. It is planned to stop vaccinating in 2019, while surveillance will of course continue.

Focus on surveillance and vaccination exit strategy

EFSA report "LSD: scientific and technical assistance on control and surveillance activities" (Alessandro Broglia, EFSA)

The presentation presented the report published a couple of days before the meeting, and available at https://www.efsa.europa.eu/en/efsajournal/pub/5452. The model shows that eradication can be achieved after 2 years of vaccination with a vaccination coverage of 90% while a longer vaccination period is necessary when the coverage is lower. Many factors need to be considered as regards the design of surveillance, including the size of the high risk area which should be 80 km from infected zones. It also depends on the objective – early detection or documentation of free status.

LSD EURL activities (Kris De Clercq, European Union reference laboratory)

The EURL has in particular provided assistance and advice to several countries; performed proficiency testing; conducted an experiment to identify the vector of LSD, which shows that stomoxys and tabanidae can transmit the disease, but not the ticks; etc.

LSD epidemiological situation in Europe and neighbouring areas – Occurrence and vaccination (evolution since GF TADs – SGE LSD5) (Dimitrios Dilaveris, European Commission)

The presentation summarises the epidemiological situation of LSD in South-East Europe, i.e. no outbreak in 2018, except for 1 outbreak in the European part of Turkey. It shows the vaccination status of the different countries of the region. It also covers the support provided so far by the European Commission, which is committed to continue providing the necessary assistance in the future.

EU support for LSD vaccination (Nicolas Krieger, European Commission)

The presentation describes the number of vaccine doses provided by the European Commission vaccine bank since 2016, or reimbursed to the members when they have bought the vaccine themselves. The Commission will continue supporting the countries regarding vaccine supplies.

LSD exit strategy in South East Europe, possibilities and challenges (Dimitrios Dilaveris, European Commission)

In the light of the current situation as described above, the presentation formulates practical questions and options in relation to a possible LSD exit strategy, bearing in mind the epidemiological situation in South East Europe, the vaccination campaigns of the previous years and the recommendations of the last EFSA report, in terms of vaccination and surveillance.

Discussion

The proposed option is to stop vaccination in countries or zones where:

- the whole population has been vaccinated for at least 2 consecutive years with a high vaccination coverage
- and that are more than 80 km away from countries or zones where outbreaks have been confirmed during the last 2 years.

This proposal would lead to maintain the vaccination in Albania, Greece, Kosovo*, the former Yugoslav Republic of Macedonia, Montenegro and Turkey, and in part of Serbia and Bulgaria at least.

Recommendations were drafted and thoroughly discussed, particularly points 2 and 6 to 8, taking into account the remarks and comments of the members and experts.

The THRACE surveillance programme (Kiril Krstevski, EUFMD)

The presentation describes the EuFMD project that aims at surveying the possible occurrence of exotic diseases in the Thrace region, involving Bulgaria, Greece and Turkey. The model used also enables to compute the level of confidence of absence of the diseases in the various countries of the region. Another component of the programme is a diagnostic bank which aims at helping plan the supply of appropriate reagents in case of an emergency situation.

CLOSING REMARKS – FUTURE STEPS

The SGE LSD7 endorsed the attached recommendations.
An audioconference will be organised in the beginning of 2019 to check on vaccine availability and supply needs in the member countries.
The next meetings of the SGE LSD will take place in the margins of the next general session in May 2019, and at a later stage in Serbia.

We would like to sincerely thank the European Commission and the Government of the former Yugoslav Republic of Macedonia for kindly supporting and hosting the SGE LSD7.

NB

- *All presentations of the SGE LSD7 are available on the webpage of the GF-TADs for Europe dedicated to LSD.*
- *An animation showing the progress of LSD vaccination in 2016 and 2017 and reported LSD outbreaks in South-East Europe, prepared by EFSA with the financial support of the European Commission, is referenced in the context of the SGE LSD5, and can be downloaded here.*