



Standing Group of Experts on LSD in Europe under the GF-TADs umbrella

Thirteenth meeting (SGE LSD11) 21st February 2024

Teleconference

REPORT

Summary

Based on previous recommendations and due to budgetary constraints on travel, the thirteenth meeting of the Standing Group of Experts on Lumpy Skin Disease (SGE LSD13) was conducted as a teleconference on February 21, 2024.

Chaired by the President of the regional GF TADs for Europe, the meeting commenced by updating participating countries on the LSD epidemiological status in Europe, Asia, and Africa (presentation by WOA, WAHIS reports). Detailed information on the LSD situation in Europe, including occurrence, vaccinations, active and passive surveillance was presented by DG SANTE. The WOA and EU Reference Laboratory for Capripox Viruses (Sciensano) presented an overview of LSD spread, including the latest news on diagnostics and the identification of potential recombinant strains.

Representatives from participating countries shared information on their national LSD epidemiological situations, providing updates on recent outbreak occurrences, vaccine types in use, post-vaccination surveillance, and disease preparedness. Additionally, countries outlined their plans for vaccination and surveillance in 2024. Members were presented with a set of recommendations and encouraged comments for further discussion.

Participants

| Countries | Name and surname of person attending |
|-----------------------------|--|
| SGE member countries | |
| Albania | <i>Ali Lilo</i> |
| Armenia | <i>Sona Tsarukyan Aramayis Khachatryan</i> |
| Azerbaijan | <i>Galib Abdulaliyev Natig Javadov</i> |

| | |
|--|--|
| | <i>Mirvugar Huseynov Tamilla Aliyeva</i> |
| Bosnia and Herzegovina | <i>Aleksandar Nemet</i> |
| Bulgaria | <i>Martin Hristov</i> |
| Croatia | <i>Lucija Stupar</i> |
| Georgia | <i>Natia Kartskhia</i> |
| Greece | <i>A. Mavridis, Mary Gianniou</i> |
| Israel | <i>Did not attend but sent PPT later</i> |
| Kosovo* | <i>Sadik Heta</i> |
| Montenegro | <i>Mevlida Hrapovic</i> |
| North Macedonia | <i>Nikolche Babovski</i> |
| Serbia | <i>Boban Djuric</i> |
| Turkey | <i>Visal Kayacik</i> |
| Hungary | <i>Zsuzsanna Irhazi</i> |
| Slovakia | <i>Barbora Pavlikova Vilem Kopriva</i> |
| Kazakhstan | <i>Azamat Umirkul</i> |
| Kyrgyzstan | <i>Adilet Sotovaldiev Kenzhe Orozobaeva</i> |
| Romania | <i>Florentina Dudu</i> |
| Slovenia | <i>Klavdija Štajner</i> |
| Tajikistan | <i>Shamurad Alibekovich</i> |
| Turkmenistan | <i>Erkayev Begmyrat</i> |
| Uzbekistan | <i>Observer did not indicate their name</i> |
| Ukraine | <i>Mikhailo Tuiakhov</i> |
| Other participants | |
| Presidency of the GF-TADs for Europe | <i>Bernard Van Goethem</i> |
| E.Commission /DG SANTE | <i>Moritz Klemm Dimitrios Dilaveris</i> |
| WOAH - Secretariat of the GF-TADs for Europe | <i>Mereke Taitubayev Aigerim Zhorgabayeva Dmitry Morozov Jean Perchet Denise Dubois Charmaine Chng Gregorie Hermann Bazimo</i> |
| FAO Europe | <i>Mark Hovari</i> |
| EURL | <i>Nick De Regge</i> |
| EFSA | <i>Alessandro Broglia – could not attend but provided input for recommendations</i> |
| WOAH – GF-TADs | <i>Alexandre Fediaevsky</i> |

23 member countries of the SGE LSD and Kosovo* as well as the representatives of WOA, FAO, European Commission (DG SANTE), and the WOA and EU Reference Laboratory for Capripox Viruses attended the meeting for a total of 47 participants.

* References to Kosovo shall be understood to be in the context of Security Council resolution 1244 (1999)

Opening, adoption of the agenda and presentation of the objectives of the meeting

Dr Taitubayev, Secretary of the GFTADs Europe SGE for LSD, welcomed the participants and opened the meeting, while giving the following strategic aspects.

The main objectives of the SGE LSD13 were to provide updates on the epidemiological situation in each member country, the LSD vaccination and surveillance strategies for 2024, as well as the LSD vaccination cessation strategy. These updates were then used as the basis for the adjustment of current recommendations.

Dr. Van Goethem expressed gratitude to the GF TADs Secretariat for organizing this important meeting, a pivotal moment to chart the path forward for LSD, with representation from numerous countries. Notably, he highlighted that since 2017, no LSD outbreaks have been reported in Southeast Europe, including Thrace. The most recent LSD outbreak in Anatolia occurred in 2021, and there have been no further outbreaks since. The effective containment of the disease in the region was attributed to mass vaccination efforts by participating countries, with the collaborative operations of this group playing a pivotal role in achieving success.

Dr. Van Goethem underscored that Bulgaria and Greece were the last countries in South East Europe to cease vaccination, and this year, no vaccination will occur in these regions. However, he pointed out that the disease is advancing in the Middle East, Russia, and possibly in Central Asia.

Dr Van Goethem presented the agenda, there were no comments. Dr Taitubayev confirmed the agenda and called for the first speaker.

Update on LSD situation (WOAH) , reporting requirements and WAHIS, Gregorie Bazimo

Dr Gregorie Bazimo provided an LSD situation update with a focus on the following points:

- LSD, historically reported as endemic in Africa, started to spread from 2012,
- Between 2019 and 2021, 21 Asian countries reported LSD for the very first time; and right now 47 ongoing outbreaks in 6 Asian countries,
- In Asia, the disease is present in several counties,
- There were some peaks in Europe in 2016 and in Asia in 2021. The disease is spreading at a lower level now,
- Many countries in Asia were affected over the last 5 years,
- WOAHS notification requirements,

A key role of WOAHS/WAHIS is to receive and disseminate information on the spread of the disease. WOAHS also collects, analyses, and disseminates the scientific information available to Members. A reminder was provided of the double declaration system, through emergency notification and six-monthly reports, based on the TAHC, including a reminder of the process. Reporting on the flow of information depends on the circumstances of the event detection.

Dr Gregorie Bazimo also presented the relevant analysis tools.

Dr Taitubayev thanked for the presentation, there were no questions.

FAO activities, Mark Hovari (FAO REU)

- Presentation of the multicounty program that ended in 2023 for Kyrgyzstan, Tajikistan, and Uzbekistan.
- Simulation exercises, laboratory training, provision of consumables for the detection of LSD, and consumables for vaccination campaigns.
- Virtual Learning centre for Europe and Central Asia. Lessons available online on LSD for Europe and Central Asia, including in Russian Language.
- Publications by FAO were also made available in several languages, such as the Field Manual and the Guidelines for the Vaccination Campaigns.

WOAH and EU reference laboratory for LSD, Nick de Regge

Dr Nick de Regge gave a presentation focusing on the following points:

- Recap of the current outbreaks,
- Phylogeny of LSD circulating strains is very important. 3 clusters have been identified so far, based on whole genome sequencing from the samples available:
 - Cluster 1.1: basic strains in South Africa, including Neethling-based vaccine strains
 - Cluster 2: from North Africa, and that has spread to Asia, Europe, Russia, and Middle east,
 - Cluster 1.2: recombinant strains, originating from poorly controlled vaccine strains. These were released in the field, initially in Kazakhstan, and have started spreading ever since,
- First occurrence in Pakistan and India – could be linked to the Kenyan sheep and goat pox vaccine strains, latest outbreaks linked to the recombinant strains first detected by Russia,
- Recombinant strains can have an impact on the diagnostic tests and it is important to have samples sequenced.

Diagnostic Tests:

- VNT IPMA tests – ID VET seem reliable,
- Other ELISA tests can be insufficiently sensitive and can be unreliable,
- New DIVA ELISA is being developed to differentiate recombinant and wild-type strains

LSDV diagnosis – serology – proficiency tests in 2023 were carried out and were promising, countries should have the capacity to detect the virus.

Some diagnostic problems remain with the detection of the recombinant strains and their differentiation from vaccine strains and work will continue on the development of appropriate DIVA tests.

Two different commercial homologous LSD vaccines that were used in southeast Europe and these, were tested in vivo and were found to confer effective protection against a recombinant field strain from South East Asia.

Additional work with recombinant field strains confirmed that they can transmit by direct contact (more efficiently than the “classic” field strains) as well as indirect contact. Epidemiological implications of this findings were discussed.

Questions and answers:

Dr Galib Abdulaliyev: several vaccines are available. How to choose vaccine strains for mass vaccination?

Nick de Regge: many studies on vaccinations were made with comparisons of different vaccines. From the results in the field and safety and efficacy studies, they would always recommend using the homologous vaccines. Vaccination based on Sheep pox virus seems to provide some protection, but it has not been fully assessed.

It is important to have appropriate diagnostic tests to distinguish between "classic" wild-type or recombinant strains. For vaccines, the classical homologous vaccines that were used to vaccinate in Europe were shown to be protective. Taking steps in advance can be good to ensure access to homologous vaccines. Heterologous vaccines were not studied.

Dimitrios Dilaveris: whatever vaccine is used, independent quality control should always be carried out, at least in relation to the titer, the identity of the strain, and the absence of other stains/pathogens. This should be common practice for all LSD vaccines used in the field.

Dr Van Goethem thanked again the four who made the presentations, and underlined that, as last year, the EURL presentation was very useful for all of the CVOs to better understand what is going on. He further highlighted that Members have to report outbreaks, as it is important to know what is going on in neighboring countries. This is absolutely key to successful LSD control, both transparency and quick reaction.

DG SANTE, Dimitrios DILAVERIS

No new outbreaks in Europe since 2016, the last outbreaks in Anatolia were in 2021.

The presentation focused on 2024 vaccination plans in Europe and the continuation of the exit strategy, along with the support offered by the European Union.

Country presentations:

Bulgaria, Martin Hristov

Demonstrated vaccination results for 2023. No vaccination is planned in 2024. Country has entered an 8-month recovery period, after the last vaccination, according to EU and WOAHP rules.

Greece, A. Mavridis

Presentation on LSD history with mass vaccination of cattle in Greece, surveillance, and occurrence since 2015 (last outbreak was in 2017). In 2024 no more vaccination. Country is entering an 8-month surveillance period, after the last vaccination, to show the absence of the virus, including tests, and maintaining high awareness.

Turkey, Visal KAYACIK

Vaccination with homologous vaccine in 2020-2022 in Turkish Thrace, followed by risk-based vaccination in 2023. In Anatolia similar activity but with heterologous vaccine. In 2023 -49 provinces were selected in the border provinces, neighboring provinces, and areas with high movement of animals. No outbreaks

detected in 2022 and 2023. In 2024, 15 border provinces will be vaccinated in Anatolia, with 5 doses of heterologous vaccine; this could perhaps go on in 2025.

Georgia, Natia Kartskhia

The first outbreak was in 2016, a ban of animal movement. Awareness campaigns, and vaccination with Neethling strain based on risk analysis.

Armenia, Sona Tsarukyan

LSD vaccination – preventive in buffer zones; vaccinated about 50% of the total amount of animals. LSD outbreaks were only detected in one region, in 2015, in the other part of the country. The vaccine used is heterologous. No virus was detected in vectors.

Azerbaijan, Natig Javadov

LSD occurrence in 2014, control measures were applied with movement restriction, quarantine, and vector control. Ongoing vaccination of 85% of cattle, passive and active surveillance ongoing.

Kazakhstan, Azamat Umirkul

In 2022-2023 no cases were registered. Vaccination in 2022-2023 of more than 85% of cattle in KZ using Neethling strain. Vaccination planned for 2024 too (5,1 million heads). Ongoing surveillance both passive and active.

Kyrgyzstan – Adilet Sotovaldiev

Historically free – they have passive and active surveillance. Vaccination of about 38% of cattle/ using heterologous vaccine.

Uzbekistan

No presentation sent or shared.

Tajikistan, Shamurad Alibekovich

In 2023 vaccinated cattle in 5 different areas close to Afghanistan , that were affected by LSD

Turkmenistan – Erkayev Begmyrat

No outbreaks officially registered. They have practiced preventive vaccination in all regions from 2018 to 2023 – using heterologous vaccine. Passive surveillance is practiced and clinical surveillance.

Mongolia – Bayartungalag

Routine vaccination since 2022 following the first occurrence in 2021 (59 outbreaks). 2024 plan to vaccinate only in the eastern part of Mongolia, in 7 provinces. No occurrence since June of 2022.

The President concluded that :

- The situation seems to be stable in Southeast Europe. Still vigilance is needed in view of the epidemiological situation in the surrounding regions (North Africa , Middle East) .
- Caucasus also seems stable, but we should be ready to react quickly if needed
- In Central Asia the situation seems to be evolving. More efforts are needed on :

- continuation of vaccination, in a coordinated way, especially in affected areas or areas under threat
- Identification /characterization of circulating strains
- systematic surveillance (active + passive) all-year-round

The situation in Central Asia may be further discussed in the margin of the Conference of the Regional Commission in September – October in Uzbekistan.

Recommendations:

The President presented the text of the draft recommendations, and the participants had the opportunity to make comments. Member countries were given one week (until March 1st COB) to further comment. If there are no additional comments, recommendations will be accepted and published.

Dr Van Goethem welcomed the organization of this meeting yearly unless events call for an intermediate meeting (e.g. due to epidemiological events). He called for the Central Asian countries to come back to SRR Astana to organize a meeting in the margins of the regional conference of WOAHA for Europe if they feel that coordination is needed against this disease.

All presentations are available on the GFTADs page of the WOAHA for Europe website, along with the recommendations.