WOAH Reference Laboratory Reports Activities 2023
Activities in 2023
This report has been submitted : 29 avril 2024 12:38

Laboratory Information

| Name of disease (or topic) for which you are a designated WOAH Reference Laboratory: | Lumpy skin disease virus |
| Address of laboratory: | Groeselenberg 99, 1180 Uccle |
| Tel: | +3223790627 |
| E-mail address: | nick.deregge@sciensano.be |
| Website: | https://www.sciensano.be/en |
| Name (including Title) of Head of Laboratory (Responsible Official): | Head of service Exotic and vector-borne diseases |
| Name (including Title and Position) of WOAH Reference Expert: | Head of service Exotic and vector-borne diseases |
| Which of the following defines your laboratory? Check all that apply: | Governmental Research agency |

TOR1: DIAGNOSTIC METHODS

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.? (Not for quality control, proficiency testing or staff training)
   Yes
<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Indicated in WOAH Manual (Yes/No)</th>
<th>Total number of test performed last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect diagnostic tests</td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>Direct diagnostic tests</td>
<td>Nationally</td>
<td>Internationally</td>
</tr>
<tr>
<td>real time pan-capripox PCR</td>
<td>0</td>
<td>50</td>
</tr>
</tbody>
</table>

TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOAH?
   No
3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOAH Members?
   Yes
<table>
<thead>
<tr>
<th>TYPE OF REAGENT AVAILABLE</th>
<th>RELATED DIAGNOSTIC TEST</th>
<th>PRODUCED/ PROVIDE</th>
<th>AMOUNT SUPPLIED NATIONALLY (ML, MG)</th>
<th>AMOUNT SUPPLIED INTERNATIONALLY (ML, MG)</th>
<th>NO OF RECIPIENT WOAH MEMBER COUNTRIES</th>
<th>COUNTRY OF RECIPIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>inactivated tissue homogenate containing clade 1.2 LSDV strain</td>
<td>real time PCR</td>
<td>in our BSL3 laboratory from samples from experimentally infected animals</td>
<td>0</td>
<td>2 ml</td>
<td>1</td>
<td>THAILAND,</td>
</tr>
</tbody>
</table>

4. Did your laboratory produce vaccines?
   No
5. Did your laboratory supply vaccines to WOAH Members?
   No
TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?
   Yes

<table>
<thead>
<tr>
<th>NAME OF THE NEW TEST OR DIAGNOSTIC METHOD DEVELOPED</th>
<th>DESCRIPTION AND REFERENCES (PUBLICATION, WEBSITE, ETC.)</th>
</tr>
</thead>
</table>

7. Did your laboratory validate diagnostic methods according to WOAH Standards for the designated pathogen or disease?
   No

8. Did your laboratory develop new vaccines for the designated pathogen or disease?
   No

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?
   No

TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAH Members?
    No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAH Member?
    Yes

<table>
<thead>
<tr>
<th>NAME OF THE WOAH MEMBER COUNTRY RECEIVING A TECHNICAL CONSULTANCY</th>
<th>PURPOSE</th>
<th>HOW THE ADVICE WAS PROVIDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITALY</td>
<td>discussion about the development and usefulness of LFDs for LSDV</td>
<td>online meeting</td>
</tr>
<tr>
<td>SPAIN</td>
<td>capripox virus isolation</td>
<td>online meeting</td>
</tr>
</tbody>
</table>

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAH Members other than the own?
    Yes

<table>
<thead>
<tr>
<th>Title of the study</th>
<th>Duration</th>
<th>PURPOSE OF THE STUDY</th>
<th>PARTNERS (INSTITUTIONS)</th>
<th>WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2020 - Defend project: tackle the emergence of African swine fever and lumpy skin disease in European livestock.</td>
<td>2018-2023</td>
<td>learn more about LSDV persistence and transmission, develop new diagnostic tools and vaccines</td>
<td>Pirbright, FLI, reference laboratories from Balkan countries</td>
<td>ALBANIA BOSNIA AND HERZEGOVINA BULGARIA ESTONIA GERMANY MONTENEGRO SLOVAKIA SOUTH AFRICA UNITED KINGDOM</td>
</tr>
</tbody>
</table>

13. In exercising your activities, have you identified any regulatory research needs* relevant for WOAH?
    Yes

Research need: 1

Please type the Research need: lack of DIVA vaccines

Relevance for WOAH Disease Control,
Relevance for the Codes or Manual Manual,
Field Vaccines,
Animal Category Terrestrial,
Disease: Lumpy skin disease
Kind of disease (Zoonosis, Transboundary diseases) Transboundary diseases,
If any, please specify relevance for Codes or Manual, chapter and title
(e.g. Terrestrial Manual Chapter 2.3.5 - Minimum requirements for aseptic production in vaccine manufacture)
Answer: chapter 3.4.12 Lumpy skin disease

Notes:
Answer:

TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?
Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:
detection and characterization of LSDV strains present in Nigeria

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?
No

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)

a) Articles published in peer-reviewed journals:

4


b) International conferences:

13
multiple international meeting in the context of GFTAD, WOAH central Asia, WOAH south Asia, WOAH south-east Asia, EuFMD, other scientific congresses

c) National conferences:

d) Other (Provide website address or link to appropriate information):
**TOR7: SCIENTIFIC AND TECHNICAL TRAINING**

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAH Members?
   Yes
   a) Technical visit: 0
   b) Seminars: 3
   c) Hands-on training courses: 2
   d) Internships (>1 month): 0

<table>
<thead>
<tr>
<th>Type of technical training provided (a, b, c or d)</th>
<th>Country of origin of the expert(s) provided with training</th>
<th>No. participants from the corresponding country</th>
</tr>
</thead>
<tbody>
<tr>
<td>C ALGERIA</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>B AFGHANISTAN</td>
<td></td>
<td>50</td>
</tr>
<tr>
<td>B BELGIUM</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>B AFGHANISTAN</td>
<td></td>
<td>150</td>
</tr>
</tbody>
</table>

**TOR8: QUALITY ASSURANCE**

18. Does your laboratory have a Quality Management System?
   Yes

<table>
<thead>
<tr>
<th>Quality management system adopted</th>
<th>Certificate scan (PDF, JPG, PNG format)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO17025</td>
<td>see document</td>
</tr>
<tr>
<td>ISO17043</td>
<td>see document</td>
</tr>
</tbody>
</table>

19. Is your quality management system accredited?
   Yes

<table>
<thead>
<tr>
<th>Test for which your laboratory is accredited</th>
<th>Accreditation body</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSDV capripox PCR; LSDV isolation; LSDV ELISA</td>
<td>BELAC, ISO17025, ISO17043</td>
</tr>
</tbody>
</table>

20. Does your laboratory maintain a “biorisk management system” for the pathogen and the disease concerned?
   Yes

   Contained use approval for work with capripox viruses under BSL3 conditions from the ‘Leefmilieu Brussel’

**TOR9: SCIENTIFIC MEETINGS**

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAH?
   No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAH?
   Yes

<table>
<thead>
<tr>
<th>Title of the event</th>
<th>Date (mm/yy)</th>
<th>Location</th>
<th>Role (speaker, presenting poster, short communications)</th>
<th>Title of the work presented</th>
</tr>
</thead>
<tbody>
<tr>
<td>GFTAD SGE LSDV Europe</td>
<td>2023-02-03</td>
<td>online</td>
<td>speaker</td>
<td>LSDV epidemiology in Asia and work of the EURL</td>
</tr>
<tr>
<td>GFTAD South-Asia, transboundary animal diseases</td>
<td>2023-09-05</td>
<td>Bhutan</td>
<td>speaker</td>
<td>Impact of LSDV recombinant strains; LSDV vaccine quality control and vaccinatio/challenger experiments at Sciensano; overview of LSDV diagnostic methods</td>
</tr>
<tr>
<td>workshop on transboundary animal diseases Greece</td>
<td>2023-02-10</td>
<td>online</td>
<td>speaker</td>
<td>Introduction to LSDV and SPPV</td>
</tr>
</tbody>
</table>
### TOR10: NETWORK WITH WOAH REFERENCE LABORATORIES

23. Did your laboratory exchange information with other WOAH Reference Laboratories designated for the same pathogen or disease?  
Yes  
24. Do you network (collaborate or share information) with other WOAH Reference Laboratories designated for the same pathogen?  
Yes  

<table>
<thead>
<tr>
<th>NETWORK/DISEASE</th>
<th>ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)</th>
<th>NO. PARTICIPANTS</th>
<th>PARTICIPATING WOAH REF. LABS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSDV</td>
<td>participant</td>
<td>4</td>
<td>Pirbright</td>
</tr>
</tbody>
</table>

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen?  
Yes  

<table>
<thead>
<tr>
<th>PURPOSE OF THE PROFICIENCY TESTS</th>
<th>ROLE OF YOUR REFERENCE LABORATORY (ORGANISER/PARTICIPANT)</th>
<th>NO. PARTICIPANTS</th>
<th>PARTICIPATING WOAH REF. LABS/ ORGANISING WOAH REF. LAB</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSDV serology and virology</td>
<td>organiser</td>
<td>45</td>
<td>WOAH RL LSDV Pirbright</td>
</tr>
</tbody>
</table>

26. Did your laboratory collaborate with other WOAH Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?  
Yes  

<table>
<thead>
<tr>
<th>TITLE OF THE PROJECT OR CONTRACT</th>
<th>SCOPE</th>
<th>NAME(S) OF RELEVANT WOAH REFERENCE LABORATORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>H2020-Defend</td>
<td>Increase knowledge on LSDV persistence and transmission; develop new tools for LSDV diagnosis and vaccination</td>
<td>WOAH RL Pirbright</td>
</tr>
</tbody>
</table>

### TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAH Reference Laboratories for the same pathogen?  
Yes  

<table>
<thead>
<tr>
<th>Purpose for inter-laboratory test comparisons</th>
<th>Role of your reference laboratory (organizer/participant)</th>
<th>No. participating laboratories</th>
<th>Name of the Test</th>
<th>WOAH Member Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSDV serology and virology</td>
<td>organiser</td>
<td>45</td>
<td>LSDV ELISA, LSDV IPMA; LSDV PCR</td>
<td>AUSTRALIA, AUSTRIA, BELGIUM, BOSNIA AND HERZEGOVINA, BULGARIA, CROATIA, CYPRUS, CZECH REPUBLIC, DENMARK, ESTONIA, FINLAND, FRANCE, GEORGIA, GERMANY, GREECE, HUNGARY, IRELAND, ITALY, KAZAKHSTAN, KOREA (DEM. PEOPLE’S REP. OF), KOSOVO, LITHUANIA, LUXEMBOURG, MOLDOVA, MONTENEGRO, NORTH MACEDONIA (REP. OF), NORWAY, POLAND, PORTUGAL, ROMANIA, SERBIA, SLOVAKIA, SLOVENIA, SPAIN, SWEDEN, SWITZERLAND, THE NETHERLANDS, TURKEY, UKRAINE, UNITED KINGDOM,</td>
</tr>
</tbody>
</table>

### TOR12: EXPERT CONSULTANTS

28. Did your laboratory place expert consultants at the disposal of WOAH?  
Yes  

<table>
<thead>
<tr>
<th>KIND OF CONSULTANCY</th>
<th>Location</th>
<th>SUBJECT (FACULTATIVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>revision of LSDV chapter in the manual - paragraph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wildlife and part vaccines</td>
<td>Online</td>
<td>LSDV</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>Specific technical question related to LSDV and zoonosis</td>
<td>Online</td>
<td>LSDV</td>
</tr>
<tr>
<td>Advisory committee on ASEAN LSDV control strategy</td>
<td>Bangkok</td>
<td>LSDV</td>
</tr>
<tr>
<td>Specific question to review script for LSDV videos on vaccination and diagnostics</td>
<td>Online</td>
<td>LSDV</td>
</tr>
</tbody>
</table>

29. Additional comments regarding your report:
   No