# OIE Reference Laboratory Reports Activities

## *Activities in 2020*

### This report has been submitted : 2021-01-19 23:06:06

| | |
|---|---|
| **Name of disease (or topic) for which you are a designated OIE Reference Laboratory:** | Classical swine fever |
| **Address of laboratory:** | CSIRO Australian Centre for Disease Preparedness<br>5 Portarlington Road East Geelong Victoria 3220<br>AUSTRALIA |
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| **Name (including Title) of Head of Laboratory (Responsible Official):** | Prof Trevor Drew Director |
| **Name (including Title and Position) of OIE Reference Expert:** | Prof Trevor Drew Director |
| **Which of the following defines your laboratory? Check all that apply:** | Governmental |

### *ToR 1: To use, promote and disseminate diagnostic methods validated according to OIE Standards*

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

| Diagnostic Test | Indicated in OIE Manual (Yes/No) | Total number of test performed last year | |
|---|---|---|---|
| Indirect diagnostic tests | | Nationally | Internationally |
| cELISA | Yes | 607 | 299 |
| NPLA | Yes | 2 | 3 |
| Direct diagnostic tests | | Nationally | Internationally |
| Real-time PCR | Yes | 439 | 452 |

### *ToR 2: To develop reference material in accordance with OIE requirements, and implement and promote the application of OIE Standards.*
### *To store and distribute to national laboratories biological reference products and any other reagents used in the diagnosis and control of the designated pathogens or disease.*

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by the OIE?

No

3. Did your laboratory supply standard reference reagents (non OIE-approved) and/or other diagnostic reagents to OIE Member Countries?

Yes

| Type of reagent available | Related diagnostic test | Produced/ provide | Amount supplied nationally (ml, mg) | Amount supplied internationally (ml, mg) | No. of recipient OIE Member Countries | Region of recipients |
|---|---|---|---|---|---|---|
| CSF positive controls | CSF real-time PCR | Produced in-house | 0 | 16ml | 20 - Australia, Cambodia, Indonesia, Lao PDR, Myanmar, Malaysia, Philippines, Thailand, Viet Nam, Singapore, Bhutan, Nepal, Bangladesh, Pakistan, India, Sri Lanka, china, Chinese Taipei, Mongolia, New Caledonia | ☐Africa ☐Americas ☒Asia and Pacific ☐Europe ☐Middle East |

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to OIE Member Countries?

No

## *ToR 3: To develop, standardise and validate, according to OIE Standards, new procedures for diagnosis and control of the designated pathogens or diseases*

6. Did your laboratory develop new diagnostic methods validated according to OIE Standards for the designated pathogen or disease?

No

7. Did your laboratory develop new vaccines according to OIE Standards for the designated pathogen or disease?

No

## *ToR 4: To provide diagnostic testing facilities, and, where appropriate, scientific and technical advice on disease control measures to OIE Member Countries*

8. Did your laboratory carry out diagnostic testing for other OIE Member Countries?

Yes

| Name of OIE Member Country seeking assistance | Date (month) | No. samples received for provision of diagnostic support | No. samples received for provision of confirmatory diagnoses |
|---|---|---|---|
| PAPUA NEW GUINEA | March | 14 | 0 |
| PAPUA NEW GUINEA | May | 97 | 0 |
| PAPUA NEW GUINEA | June | 393 | 0 |
| PAPUA NEW GUINEA | September | 137 | 0 |
| PAPUA NEW GUINEA | December | 49 | 0 |

9. Did your laboratory provide expert advice in technical consultancies on the request of an OIE Member Country?

Yes

| Name of the OIE Member Country receiving a technical consultancy | Purpose | How the advice was provided |
|---|---|---|
| PAPUA NEW GUINEA | Diagnostic testing, advice on sampling, laboratory and field diagnostics and establishing PCR capability | In loco and remote assistance (web/phone, email) |
| INDONESIA | Laboratory diagnostics – virus isolation | Remote assistance (email) |

### *ToR 5: To carry out and/or coordinate scientific and technical studies in collaboration with other laboratories, centres or organisations*

10. Did your laboratory participate in international scientific studies in collaboration with OIE Member Countries other than the own?

No

### *ToR 6: To collect, process, analyse, publish and disseminate epizootiological data relevant to the designated pathogens or diseases*

11. Did your Laboratory collect epizootiological data relevant to international disease control?

Yes

| If the answer is yes, please provide details of the data collected: |
| --- |
| Epizootiological data was collected as part of an investigation on the ASFV outbreak in Papua New Guinea from March 2020, including diagnostic testing for delimiting surveillance and molecular characterization of viruses detected. Classical swine fever was NOT detected as part of this exercise. |

12. Did your laboratory disseminate epizootiological data that had been processed and analysed?

No

| If the answer is no, please provide a brief explanation of the situation: |
| --- |
| The epizootiological data was passed to the competent authority of Papua New Guinea and more widely disseminated in the context of African swine fever – CSF was not detected. See ASF report from ACDP. |

**13. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category)**

a) Articles published in peer-reviewed journals: 0

b) International conferences: 1
Williams DT. 'Quality control, biosafety and biosecurity in the veterinary diagnostic laboratory.' OIE Regional virtual training on swine disease laboratory diagnosis, 4/11/2020. Webinar. https://rr-asia.oie.int/en/events/oie-regional-virtual-training-on-swine-disease-laboratory-diagnosis/

c) National conferences: 0

d) Other:
(Provide website address or link to appropriate information) 0

## *ToR 7: To provide scientific and technical training for personnel from OIE Member Countries*
## *To recommend the prescribed and alternative tests or vaccines as OIE Standards*

14. Did your laboratory provide scientific and technical training to laboratory personnel from other OIE Member Countries?

No

## *ToR 8: To maintain a system of quality assurance, biosafety and biosecurity*

***relevant for the pathogen and the disease concerned***

15. Does your laboratory have a Quality Management System?

Yes

| Quality management system adopted | Certificate scan (PDF, JPG, PNG format) |
|---|---|
| ISO 17025 & ISO 17043 | ISO 17043 and 17025 Certificates.pdf |
| ISO 9001 | ISO9001 Certification Expiry 30-11-2022.pdf |
| ISO 14001 | ISO14001 Certification Expiry 30-11-2022.pdf |

16. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|---|---|
| Testing for sterility and freedom from contamination of biological materials intended for veterinary use – Innocuity (Bacterial culture - Biphasic medium, mycoplasma broth; Dark field microscopy; Embryonated egg culture; Enzyme linked immunosorbent assay (ELISA); Fluorescent antibody test; Haemagglutination; PCR - Quantitative (qPCR); Polymerase chain reaction (PCR); Virus isolation) | NATA (ILAC affiliated) |
| Detection and identification of viruses (Transmission electron microscopy (TEM); Scanning electron microscopy (SEM)) | NATA (ILAC affiliated) |
| Testing for sterility and freedom from contamination of biological materials intended for veterinary use – Innocuity (Embryonated egg culture; Enzyme linked immunosorbent assay (ELISA); Fluorescent antibody test; Bacterial culture - Biphasic medium, mycoplasma broth; Dark field microscopy; PCR - 16S Universal; Virus isolation; Haemagglutination; Indirect fluorescent antibody; Polymerase chain reaction (PCR); PCR – Quantitative (qPCR)) | NATA (ILAC affiliated) |
| Microbiology - Serology of infection – Microbial antibody and/or antigen detection and/or quantitation (Enzyme linked immunosorbent assay (ELISA)) | NATA (ILAC affiliated) |
| Microbiology - Serology of infection - Microbial antibody and/or antigen detection and/or quantitation (Neutralising peroxidase linked assay; Fluorescent antibody virus neutralisation test) | NATA (ILAC affiliated) |
| Detection and identification of viruses (Cell culture; Cultural) | NATA (ILAC affiliated) |
| Accreditation No: 13546 (scope last change 2020 | |

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

Yes

*(See Manual of Diagnostic Tests and Vaccines for Terrestrial Animals, Chapter 1.1.4)*

### *ToR 9: To organise and participate in scientific meetings on behalf of the OIE*

18. Did your laboratory organise scientific meetings on behalf of the OIE?

No

19. Did your laboratory participate in scientific meetings on behalf of the OIE?

Yes

| Title of event | Date (mm/yy) | Location | Role (speaker, presenting poster, short communications) | Title of the work presented |
|---|---|---|---|---|
| OIE Regional virtual training on swine disease laboratory diagnosis | 11/20 | Online | Speaker | Quality control, biosafety and biosecurity in the veterinary diagnostic laboratory.' |

### *ToR 10: To establish and maintain a network with other OIE Reference Laboratories designated for the same pathogen or disease and organise regular inter-laboratory proficiency testing to ensure comparability of results*

20. Did your laboratory exchange information with other OIE Reference Laboratories designated for the same pathogen or disease?

Yes

21. Was your laboratory involved in maintaining a network with OIE Reference Laboratories designated for the same pathogen or disease by organising or participating in proficiency tests?

No

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

No

### *ToR 11: To organise inter-laboratory proficiency testing with laboratories other than OIE Reference Laboratories for the same pathogens and diseases to ensure equivalence of results*

23. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than OIE Reference Laboratories for the same disease?

Yes

*Note: See Interlaboratory test comparisons in: Laboratory Proficiency Testing at: http://www.oie.int/en/our-scientific-expertise/reference-laboratories/proficiency-testing see point 1.3*

| Purpose for inter-laboratory test comparisons[1] | No. participating laboratories | Region(s) of participating OIE Member Countries |
|---|---|---|
| Swine Disease - Harmonising existing test methods (specify: PCR for CSF/ASF/PRRS/SIV detection) | 30 | ☐Africa<br>☐Americas<br>☒Asia and Pacific<br>☐Europe<br>☐Middle East |
| Detection of Terrestrial and Avian diseases by Australian & New Zealand laboratories: Classical Swine Fever Virus | 13 | ☐Africa<br>☐Americas<br>☒Asia and Pacific<br>☐Europe<br>☐Middle East |

## *ToR 12: To place expert consultants at the disposal of the OIE*

24. Did your laboratory place expert consultants at the disposal of the OIE?

Yes

| Kind of consultancy | Location | Subject (facultative) |
|---|---|---|
| Mission lead – visit to country applying for Official Freedom | EU country Jan 2020 | Visits to farms, abattoirs, laboratories, hunting grounds, veterinary offices |
| Review of OIE Terrestrial Manual Management of Veterinary Laboratories | Online Oct 2020 | Review and additions to Chapter |
| Member, OIE Ad Hoc Group for CSF | Virtual meeting Dec 2020 | Review of dossiers from countries applying for official freedom |
| Technical advice to National Authority | online | Review of Code Commission chapters (via OIE Australia) |

25. Additional comments regarding your report:

ACDP was only awarded status as an OIE Reference Laboratory for CSF in mid-2020. Due to COVID-19, ACDP has worked on limited operational capacity since March 2020 (for example, adopting roster arrangements for staff site access, reduced site access to ensure physical distancing, no domestic or international travel and visitors unable to attend site for most of the year). This has significantly limited ACDP's capacity to carry out planned research and conduct training and has limited some types of diagnostic submissions to the laboratory.