Richard Paley - - UNITED_KINGDOM

# WOAH Reference Laboratory Reports Activities 2025

**This report has been submitted: 30 janvier 2026 15:32**

## LABORATORY INFORMATION

| | |
|---|---|
| ***Name of disease (or topic) for which you are a designated WOAH Reference Laboratory:** | Spring viraemia of carp |
| ***Address of laboratory:** | Cefas Weymouth Laboratory, Barack Road, The Nothe, Weymouth, Dorset, DT4 8UB |
| ***Tel:** | +441305206642 |
| ***E-mail address:** | richard.paley@cefas.gov.uk |
| **Website:** | https://www.cefas.co.uk/icoe/aquatic-animal-health/designations/woah-reference-laboratories |
| ***Name (including Title) of Head of Laboratory (Responsible Official):** | Dr Rachel Hartnell |
| ***Name (including Title and Position) of WOAH Reference Expert:** | Dr Richard Paley, Principal Virologist |
| ***Which of the following defines your laboratory? Check all that apply:** | Governmental |

## 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

| Diagnostic Test | Indicated in WOAH Manual (Yes/No) | Total number of test performed last year | |
|---|---|---|---|
| Indirect diagnostic tests | | Nationally | Internationally |
| Ag-ELISA | Yes | 0 | 0 |
| Direct diagnostic tests | | Nationally | Internationally |
| Culture (EPC cells) | Yes | 413 | 0 |
| Conventional PCR (RT-PCR) | Yes | 6 | 0 |
| IFAT | Yes | 0 | 0 |
| real time RT-PCR | No | 10 | |

## 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?

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOAH Members?

## TOR3: NEW PROCEDURES

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

Yes

7. Did your laboratory validate diagnostic methods according to WOAH Standards for the designated pathogen or disease?

Yes

| Name of the new test or diagnostic method developed | Description and References (Publication, website, etc.) |
|---|---|
| A modified pan SVCV RT-qPCR assay | Publication of work developing and validating an improved RT-qPCR assay: Zhu P, Sun J, Liao L, Zuo Z, Rice A, Gui S, Wu J, Zhu Y, Zhang L, Liu H, Stone D and Liu H (2026) Development and partial validation of an RT-qPCR assay for the rapid detection of spring viremia of carp virus (SVCV). Front. Microbiol. 16:1726705. doi: 10.3389/fmicb.2025.1726705 |
| A recombinase polymerase (RPA) assay for rapid and potential in field detection of SVCV | In development |

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

9. Did your laboratory validate vaccines according to WOAH Standards for the designated pathogen or disease?

# 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?

No

# 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

| Title of the study | Duration | Purpose of the study | Partners (Institutions) | WOAH Member Countries involved other than your country |
|---|---|---|---|---|
| Development of improved real time PCR methods | 24months | Method development, validation and publication | WOAH SVC reference laboratory, State Key laboratory of aquatic animal health, Shenzhen, P.R. China | CHINA (PEOPLE'S REP. OF) |
| Development of global SVCV sequence database | 4 yrs | Sharing and backup of important historical reference isolates and epidemiological analysis and analysis of virulence | >20 | |

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

Yes

Research need : 1

**Please type the Research need:** Recent publications on susceptibility of amphibia warrant further research into the range of amphibia susceptible, tissue tropisms, potential for non-lethal testing

**Relevance for WOAH** Disease Control, Standard Setting,

**Relevance for the Code or Manual** Code, Manual,

**Field** Epidemiology and Surveillance, Diagnostics,

**Animal Category** Terrestrial, Aquatic,

**Disease:**

Infection with spring viraemia of carp virus

**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:*

**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: |
|---|
| The routine national surveillance program includes testing to retain freedom in approved compartments, ad hoc testing programme of susceptible ornamental imports and course fish testing on suspicion. There were no SVCV positive identifications in 2025.<br><br>A publication on experimental infection studies on the susceptibility of barbel, chub, orfe, rudd, and tench to SVCV is undergoing review. |

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:

b) International conferences:

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?

No

# TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

| Quality management system adopted | Certificate scan (PDF, JPG, PNG format) | |
|---|---|---|
| ISO 17025 | certificate scan scan | ISO17025 certificate.pdf |

| | | |
|---|---|---|
| ISO 9001 | certificate scan scan | ISO 9001 certificate.pdf |

19. Is your quality management system accredited?

Yes

| Test for which your laboratory is accredited | Accreditation body |
|---|---|
| Isolation and identification of SVCV | UKAS |
| Detection and confirmation of SVCV by RT-PCR | UKAS |

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

Yes

Cefas Biorisk management system includes a range of practices and procedures to ensure biosecurity, biosafety, and biocontainment of infectious agents including security measures for laboratories, from standard operating procedures to physical measures to individual practices in the laboratory. This includes a dedicated Biosafety and Biosecurity Committee with lead and deputy officers and a internally published laboratory Biosecurity Handbook.

# 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?

No

# 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. Are you a member of a network of WOAH Reference Laboratories designated for the same pathogen?

Yes

| NETWORK/DISEASE | ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC) | NO. PARTICIPANTS | PARTICIPATING WOAH REF. LABS |
|---|---|---|---|
| SVCV collaboration | participant | 2 | Dr Hong Liu WOAH SVC reference laboratory, State Key laboratory of aquatic animal health, Shenzhen, P.R. China |

25. Did you organise or participate in inter-laboratory proficiency tests with WOAH Reference Laboratories designated for the same pathogen during the past 2 years?

Yes

| Purpose of the proficiency test: | Role of your Reference Laboratory (organiser/ participant) | No. participating Laboratories | Participating WOAH Ref. Labs/ organising WOAH Ref Lab |
|---|---|---|---|
| EURL annual Comparative test of diagnostic procedures for EU listed fish diseases | participant | Includes approximately 10 WOAH ref labs including the other SVCV ref lab | Americas, Asia and Pacific, Europe |

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

| Title of the project or contract | Scope | Name(s) of relevant WOAH Reference Laboratories |
|---|---|---|
| Evaluation of SVCV RT-qPCR assays | Towards recommendation for a pan SVCV assay suitable for surveillance – published | Dr Hong Liu WOAH SVC reference laboratory, State Key laboratory of aquatic animal health, Shenzhen, P.R. China |

# 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 during the past 2 years?

Richard Paley - - UNITED_KINGDOM

Yes

| Purpose for inter-laboratory test comparisons1 | Role of your reference laboratory (organizer/participant) | No. participating laboratories | Name of the test | WOAH Member Countries |
|---|---|---|---|---|
| EURL annual Comparative test of diagnostic procedures for EU listed fish, mollusc and crustacean diseases | participant | 40 | diagnostic procedures for various EU listed fish, mollusc and crustacean diseases | |

# TOR12: EXPERT CONSULTANTS

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

Yes

| Kind of consultancy | Location | Subject (facultative) |
|---|---|---|
| Provision of advice | online meetings | WOAH network for wildlife |
| Technical advice | national laboratory | Drafting new diagnostic chapter for TiLV |
| Provision of advice | by email correspondence, Uganda | Recommended action for dealing with large scale mortality multi species mortality event |

29. Additional comments regarding your report: