

# WOAH Reference Laboratory Reports Activities 2024

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## LABORATORY INFORMATION

<b>*Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory:</b>	Spring viraemia of carp
<b>*Address of laboratory:</b>	Cefas Weymouth Laboratory, Barack Road, The Nothe, Weymouth, Dorset, DT4 8UB
<b>*Tel:</b>	+441305206642
<b>*E-mail address:</b>	richard.paley@cefas.gov.uk
<b>Website:</b>	<a href="https://www.cefas.co.uk/icoe/aquatic-animal-health/designations/woah-reference-laboratories">https://www.cefas.co.uk/icoe/aquatic-animal-health/designations/woah-reference-laboratories</a>
<b>*Name (including Title) of Head of Laboratory (Responsible Official):</b>	Dr Rachel Hartnell
<b>*Name (including Title and Position) of WOAHO Reference Expert:</b>	Dr Richard Paley, Principal Virologist
<b>*Which of the following defines your laboratory? Check all that apply:</b>	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 WOAHO Manual (Yes/No)	Total number of test performed last year	
Indirect diagnostic tests		Nationally	Internationally
Ag-ELISA	Yes	0	0

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Direct diagnostic tests		Nationally	Internationally
Culture (EPC cells)	Yes	141	0
Conventional PCR (RT-PCR)	Yes	0	0
IFAT	Yes	0	0

## TOR2: REFERENCE MATERIAL

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

No

3. Did your laboratory supply standard reference reagents (nonWOAH-approved) and/or other diagnostic reagents to WOA Members?

No

4. Did your laboratory produce vaccines?

No

5. Did your laboratory supply vaccines to WOA Members?

No

## TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods 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	Initial partial validation is described in PhD thesis: Rice, A. (2021). Investigating pathogenicity of spring viraemia of carp virus (SVCV) and the development of diagnostic tools (Order No. 29349078). Available from <a href="https://www.proquest.com/dissertations-theses/investigating-pathogenicity-spring-viraemia-carp/docview/2685080145/se-2">https://www.proquest.com/dissertations-theses/investigating-pathogenicity-spring-viraemia-carp/docview/2685080145/se-2</a> Full validation is ongoing with Dr Hong Liu, SVCV designated reference laboratory.

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

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

No

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

No

## TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOA Members?

No

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

No

## TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOA 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	24 months	Method development	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	Epidemiological analysis and analysis of virulence	>20	

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

Yes

### Research need : 1

**Please type the Research need:** Finalising improved realtime PCR methods for surveillance

**Relevance for WOA** Standard Setting,

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

**Field** Diagnostics,

**Animal Category** Aquatic,

**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:** Aquatic manual chapter 4.4.1 (Real-time PCR) and chapter 5 (tests for surveillance)

**Notes:**

**Answer:**

### Research need : 2

**Please type the Research need:** Exploring recent research indicating susceptibility of amphibia to SVCV

**Relevance for WOA** Disease Control,

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

**Field** Epidemiology and Surveillance, Diagnostics,

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**Animal Category** Aquatic,

**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:* Aquatic Manual chapters 2.2.1 (susceptible host species); 2.2.5 (reservoirs) and 2.2.6 (vectors) and Code article 10.9.2 (susceptible species)

**Notes:**

*Answer:* Recent publication - Emmenegger, E. J., et al. (2024). "Host Jump of an Exotic Fish Rhabdovirus into a New Class of Animals Poses a Disease Threat to Amphibians." *Viruses* 16(8): 1193.

## 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 2024.

A publication on experimental infection studies on the susceptibility of barbel, chub, orfe, rudd, and tench to SVCV was finalised and is ready for submission (pending internal approval process).

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 WOA 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)	
ISO17025	ISO17025 certificate	ISO17025 certificate.pdf
ISO9001	ISO9001 certificate	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 WOA?

No

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

Yes

Title of event	Date	location	Role (speaker, presenting poster, short communications)	Title of the work presented
WOAH Training of				National Regulatory

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National Focal Points for Aquatic Animal Health (Cycle IV), invited expert, facilitator	2024-09-07	Tunis, Tunisia	Invited expert facilitator, speaker	information systems, UK: Challenges to obtain data and feed the system in a timely manner.
WOAH Training of National Focal Points for Aquatic Animal Health (Cycle IV), invited expert, facilitator	2024-09-07	Tunis, Tunisia	Invited expert facilitator, speaker	Certification and commercial trade facilitation

## TOR10: NETWORK WITH WOAHP REFERENCE LABORATORIES

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

Yes

24. Do you network (collaborate or share information) with other WOAHP Reference Laboratories designated for the same pathogen?

Yes

NETWORK/DISEASE	ROLE OF YOUR LABORATORY (PARTICIPANT, ORGANISER, ETC)	NO. PARTICIPANTS	PARTICIPATING WOAHP REF. LABS
SVCV research collaboration	Participant	2	Dr Hong Liu WOAHP 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 WOAHP 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 WOAHP Ref. Labs/ organising WOAHP Ref Lab
EURL annual Comparative test of diagnostic procedures for EU listed fish diseases	participant	>40	Americas Asia and Pacific Europe

26. Did your laboratory collaborate with other WOAHP 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 WOAHP Reference Laboratories
Evaluation of SVCV RT-qPCR assays	Towards recommendation for a pan SVCV assay suitable for surveillance – publication in prep.	Dr Hong Liu WOAHP 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 WOAHP Reference

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Laboratories for the same pathogen during the past 2 years?

Yes

Purpose for inter-laboratory test comparisons <sup>1</sup>	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 crustacean diseases	Participant	40	diagnostic procedures for EU listed crustacean diseases	
EURL annual Comparative test of diagnostic procedures for EU listed mollusc diseases	Participant	40	diagnostic procedures for EU listed mollusc diseases	
KHV PCR proficiency Test, run by VetQas of UK Animal and Plant Health Agency (APHA)	Material provider and test commentator and participant (separate staff)	40	Koi herpesvirus	

## TOR12: EXPERT CONSULTANTS

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

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 - ongoing
Invited expert, facilitator	Tunis, Tunisia	WOAH Training of National Focal Points for Aquatic Animal Health (Cycle IV), French speaking African countries

29. Additional comments regarding your report: