

*bulletin*

# THE OFFICIAL

Official acts and recommendations



# OFFICIAL ACTS

# EXPERT REPORTS

# ANIMAL HEALTH

## ACTIVITIES & PROGRAMMES



Recognition of official disease status of non-contiguous territories, which are part of a country that already has an official OIE disease status



At a meeting held from 12 to 16 February 2018, the OIE Scientific Commission for Animal Diseases (Scientific Commission) discussed the situation of non-contiguous territories of Member Countries which already had an officially recognised disease status. Since some Members wished to include non-contiguous territories that were not specified in the initial application for disease-status recognition, the Scientific Commission endorsed a transparent procedure which would enable these non-contiguous territories to be included within the officially recognised status.

This procedure is annexed to the [report of the February 2018 Scientific Commission meeting](#).

## ACTIVITIES & PROGRAMMES



### Procedure for the publication of self-declarations of disease freedom



The OIE is pleased to report that the new Standard Operating Procedure (SOP) for the publication of self-declarations of disease freedom is available on the OIE website.

[Download the Standard Operating Procedure...](#)

Should an OIE Member wish to communicate and publicly state that its country, or a zone or compartment of its country, is free from a specific disease, the OIE offers visibility by publishing this self-declaration.

The information contained in the self-declaration remains the responsibility of the Delegate of the Member Country concerned.

[View the list of self-declarations...](#)

Please note that all self-declarations formerly published in the OIE *Bulletin* are now available [here](#).



## ACTIVITIES & PROGRAMMES

### ► PARTNERS

### Entering a new phase of cooperation between the OIE and the Eurasian Economic Union



On 24 January 2018, the OIE Regional Representation in Moscow organised a first meeting in its new premises. In attendance were representatives from the Veterinary Services of Armenia, Belarus, Kazakhstan, Kyrgyzstan and Russia, comprising the Member States of the Eurasian Economic Union (EAEU). They were joined by Eurasian Economic Commission (EEC) leaders, and representatives of the OIE (both from OIE Headquarters in Paris and the Regional and Sub-Regional Representations), including Dr Jean-Philippe Dop, OIE Deputy Director General, and Dr Romano Marabelli, Special Advisor to the Director General of the OIE.

A **'Tentative Programme of activities to implement the Memorandum of Understanding between the OIE and the Eurasian Economic Commission (EEC) for the triennial period of 2018 to 2021'** was signed in December 2017 by Dr Monique Éloit, Director General of the OIE, and Mr Valery Koreshkov, Member of the Board (Minister) for Technical Regulation of the Eurasian Economic Commission. Mr Koreshkov, as well as Dr Evgeny Nepoklonov, Vice-Minister for Agriculture and Delegate of the Russian Federation to the OIE, have honoured the meeting of 24 January with their presence.

Participants discussed the inauguration of this Programme, which centres around activities designed to implement OIE standards in the EAEU. The primary aim is to eliminate foci of particularly dangerous animal diseases and, with this in mind, participants discussed issues related to integrating international standards and OIE recommendations into the legislation of the EAEU.

The meeting also provided an opportunity for participants to learn how to become more involved in the OIE's standard-setting process at the regional level, thus making a significant contribution to animal health in this part of the world.

## ACTIVITIES & PROGRAMMES

### ▶ REFERENCE CENTRES

#### News from the OIE/FAO FMD Reference Laboratories Network



*The annual meeting of the OIE/FAO FMD Reference Laboratories Network was hosted by the Agricultural Research Council–Onderstepoort Veterinary Institute (ARC-OVI) in Pretoria, South Africa, during November 2017.*

The purpose of the three-day meeting was to collate recent global FMD surveillance data, to review and update regional risk maps for FMD virus lineages and to identify priorities for vaccine quality control.



[Meeting minutes](#)

## ACTIVITIES & PROGRAMMES

### ▶ REFERENCE CENTRES

#### News from the East African Regional Laboratory Network for FMD



*A meeting of foot and mouth disease (FMD) experts took place in Addis Ababa, Ethiopia, from 12 to 14 December 2017.*

The participants reviewed the FMD situation and FMD laboratory diagnostic capacity in East Africa. Training priorities for laboratory diagnostics and approaches to sustain the network were agreed.

The meeting was supported by the OIE Laboratory Twinning Project on FMD between the World Reference Laboratory for FMD (WRLFMD), the Pirbright Institute (United Kingdom), and the National Animal Health Diagnostic and Investigation Center (NAHDIC), Ethiopia.

Representatives were present from the FMD laboratories of seven East African countries, as well as from WRLFMD, the Ethiopian Ministry of Livestock and Fishery, the European Commission for the Control of FMD (EuFMD), the Ethiopian National Veterinary Institute (NVI), the Ethiopian Agricultural Transformation Agency (ATA) and the Pan-African Veterinary Vaccine Centre (PANVAC).

### **Information about the OIE Laboratory Twinning Programme**

#### **Meeting report**

## EXPERT REPORTS

### ► SPECIALIST COMMISSIONS

#### Activities of Specialist Commissions



[Report of the meeting of the Aquatic Animal Health Standards Commission](#) held from 14 to 21 February 2018.

[Report of the meeting of the Terrestrial Animal Health Standards Commission \(Code Commission\)](#) held from 12 to 23 February 2018.

[Report of the meeting of the Scientific Commission for Animal Diseases \(SCAD\)](#) held from 12 to 16 February 2018.

[Report of the meeting of the Biological Standards Commission \(BSC\)](#) held from 6 to 9 February 2018.

**[More information about OIE Specialist Commissions...](#)**



## EXPERT REPORTS

### ▶ WORKING GROUP

### Highlights from the Working Group on Wildlife



© Torsten Mörner

## Wildlife diseases around the world

Each year, the [OIE Working Group on Wildlife](#) (WGW) reviews some of the important wildlife disease events that have come to the attention of its members and their networks. There was much to review in 2017.

In Mongolia, as many as 55% of the total population of Saiga antelope (*Saiga tatarica mongolica*) died of peste des petits ruminants (PPR), together with ibex (*Capra siberica hagenbecki*), goitered gazelle (*Gazella subgutturosa*), bharal (*Pseudois nayaur*), and domestic small ruminants. Avian influenza viruses of the H5N6 and H5N8 groups caused mortality in wild and domestic birds in the Asia-Pacific rim, including the People's Republic of China, Chinese Taipei, Hong Kong, India, Japan, the Republic of Korea, Nepal, the Philippines and Vietnam, and H5N8 viruses caused many mortality events in Western Europe during the winter of 2016–2017. The spread of African swine fever from Eastern to Western Europe continued, and large-scale efforts were implemented to control chronic wasting disease (CWD) in Norway.

Major outbreaks of anthrax occurred in Tanzania, Namibia, Mozambique and Zimbabwe, particularly in hippopotami (*Hippopotamus amphibius*), but also in elephants (*Loxodonta africana*), zebra (*Equus burchelli*), wildebeest (*Connochaetes taurinus*), and various gazelle species. In Tanzania, Zambia and Zimbabwe, numerous human cases were reported in people who had handled or eaten meat from infected animals. The disease occurrences of note in Africa and the Middle East included plague in Madagascar, monkeypox in the Congo Basin, Marburg haemorrhagic fever in Uganda, Lassa fever in Nigeria, and Middle East respiratory syndrome coronavirus (MERS-CoV) in Saudi Arabia.

In North America, an outbreak of New World screwworm (*Cochliomyia hominivorax*) in white-tailed deer (*Odocoileus*



*virginianus*) was successfully eradicated by a massive release of sterilised male flies. CWD continued to spread by natural means and human agency. Preliminary results from infection trials in macaque monkeys indicated that clinical CWD could be acquired by these old-world primates by consuming meat from affected animals.

This short summary of major disease events demonstrates the tight connections among diseases of wildlife, people and livestock. Understanding these connections is essential if the risks posed by these diseases are to be managed and reduced. **Surveillance and reporting of diseases in wildlife is the foundation for such understanding.**

Knowledge of the occurrence of pathogens and diseases in wildlife is very important to both animal and human health

## Reporting wildlife diseases to the OIE

Because knowledge of the occurrence of pathogens and diseases in wildlife is so important to both animal and human health, **the OIE asks all Members to report the occurrence of specific pathogens and diseases in wildlife that are not on the official OIE List of diseases**. Such reporting is voluntary but highly encouraged, and is a major objective of the appointment and training of the OIE National Focal Points for Wildlife. Currently, participation in this reporting is low. In the coming months, the OIE will take steps to simplify and encourage reporting of these diseases in wildlife by providing better guidance on reporting requirements for non OIE-listed diseases and enhancing communication with the OIE National Focal Points for Wildlife. The WGW urges all OIE Members to take part in this voluntary but important wildlife disease reporting.

## Diagnostic test methods in wildlife

Many OIE National Focal Points for Wildlife and others seek information on the most appropriate methods to use to identify pathogens and diseases that are not on the official OIE List and thus not covered by the OIE *Codes* and *Manuals*. The WGW noted that useful guidance in such diagnostic techniques is available on line, including:

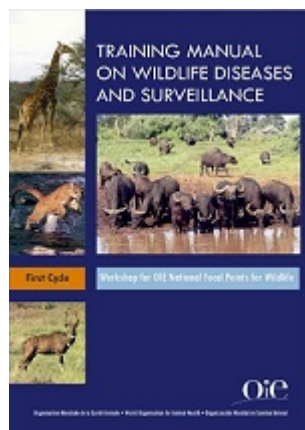
- [diagnosis cards](#) from the European Wildlife Disease Association (EWDA)
- [wildlife health fact sheets](#) from Wildlife Health Australia
- fact sheets in the [Transmissible Diseases Handbook](#) of the European Association for Zoo and Wildlife Veterinarians (EAZWV).

The Working Group undertook to search for reliable on-line sources of information on diagnostic methods that can be applied to specimens from wild animals for each of the non-listed pathogens for which annual voluntary reporting is requested from Member Countries by the OIE. This information will be provided to the OIE to assist Member Countries with wildlife disease surveillance and diagnosis. It should be complete by the next meeting of the Working Group in December 2018.

## Wildlife health training manuals and workshops

The Working Group on Wildlife is an enthusiastic supporter of the training workshops offered by the OIE to its

National Focal Points for Wildlife. Four cycles of these training workshops have now been completed and a fifth is under development. Each cycle consisted of five regional workshops on the same topics presented at a suitable venue for Asia, the Americas, Europe, Francophone Africa, and Anglophone Africa and the Middle East. A training manual was created for each cycle and these can be used for self-training or in classrooms.

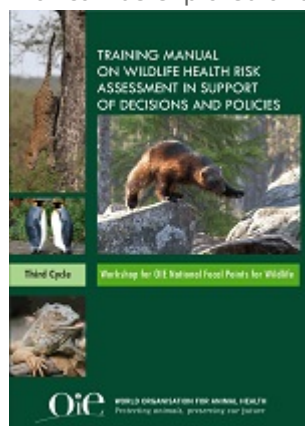


The manual for the first cycle provides a broad introduction to wildlife health and its



relevance to the health of people and domestic animals.

The manual for the second cycle provides a detailed overview of wildlife disease surveillance and includes data files that can be explored and analysed as learning exercises.



The manual for the third cycle provides a 'how-to' course in wildlife health risk assessment in the context of international movement of wild animals, and then carry this risk assessment into actual decision-making, with an exercise in multi-criteria decision analysis.

The manual for the fourth cycle is in preparation and will provide practical information on wildlife disease surveillance with an emphasis on disease diagnosis. The WGW congratulates the OIE on the quality of these training workshops for OIE National Focal Points for Wildlife and urges all who are interested to make full use of these excellent teaching manuals which the OIE has made available to the world, free of charge.

The OIE asks all Members to report the occurrence of specific pathogens and diseases in wildlife that are not on the official OIE List of diseases

## New Terms of Reference for the Working Group on Wildlife

The updated Terms of Reference for the Working Group on Wildlife were adopted by the World Assembly of Delegates in May 2018. The WGW's former Terms of Reference comprised advising the Scientific Commission on Animal Diseases (SCAD) on wildlife health issues. This important relationship with SCAD will continue but, in addition, the WGW will help the OIE as a whole with issues related to wildlife, and will support the Organisation and its Members to engage with climate change and biodiversity conservation imperatives. In December 2018, during its meeting at the OIE Headquarters, the WGW will plan and begin to implement activities around these new responsibilities.

[Report of the Working Group meeting held from 12 to 15 December 2017](#)

Contact: [OIE Scientific and Technical Department](#)



## EXPERT REPORTS

### ► AD HOC GROUPS

#### Activities of *Ad hoc* Groups



*Ad hoc* groups are convened to support [the work of OIE Specialist Commissions](#).

The following are the most recent *Ad hoc* group meeting reports:

- *Ad hoc* Group on Veterinary Paraprofessionals, 12–14 February 2018
- *Ad hoc* Group on Killing Methods for Farmed Reptiles for their Skins and Meat, 25 January 2018
- *Ad hoc* Group on Antimicrobial Resistance, 22–24 January 2018
- *Ad hoc* Group on Animal Welfare and Pig Production Systems, 16–18 January 2018
- *Ad hoc* Group on Tilapia lake virus (TiLV), November 2017 – January 2018

All of these reports are available [here](#).

## ANIMAL HEALTH

### ► OFFICIAL DISEASE STATUS

#### Colombia – Establishment of an FMD containment zone



© OIE/María Julia Anguita

Since outbreaks of foot and mouth disease (FMD) were reported from Colombia on 24 June 2017, the officially recognised status of the ‘FMD-free zone where vaccination is practised’ [\[1\]](#) was suspended.

On 21 November 2017, Colombia submitted documentation to the OIE requesting an evaluation for the establishment of a containment zone. This was approved by the Scientific Commission for Animal Diseases.

The ‘FMD free zone where vaccination is practised’ status for the zone was therefore re-instated, taking effect from 11 December 2017, with the exception of the territory within the containment zone, composed of the Department of Arauca and parts of the Departments of Boyacá, Casanare and Cundinamarca Departments, as shown [here](#).

Contact: [OIE Status Department](#)

## ANIMAL HEALTH

### ► OFFICIAL DISEASE STATUS

#### Myanmar – Suspension of PPR-free status



© OIE/Laura Wolf

Myanmar was officially recognised as a peste des petits ruminants (PPR)-free country by the OIE in 2014.

In 2017, a mission was conducted in Myanmar to monitor its compliance with the *Terrestrial Animal Health Code* provisions for the maintenance of its PPR-free status. As a consequence, Myanmar's PPR-free country status was suspended, with effect from 18 December 2017.

According to the Standard Operating Procedure (SOP) for the suspension of an officially recognised disease status, the country has two years to recover its previously recognised status by complying with the relevant requirements of the *Terrestrial Animal Health Code*.

Contact: [OIE Status Department](#)



## ANIMAL HEALTH

### ► OFFICIAL DISEASE STATUS

#### Kyrgyzstan – Suspension of AHS-free status



© Vladimir Riabinin - Unsplash

Kyrgyzstan was officially recognised as an African horse sickness (AHS)-free country by the OIE in 2017.

Following a mission conducted in Kyrgyzstan in April 2018 to monitor compliance with the *Terrestrial Animal Health Code* provisions for the maintenance of its AHS-free country status, [this status is suspended with effect from 22 May 2018](#).

According to the [Standard Operating Procedure \(SOP\) for the suspension of an officially recognised disease status](#), the country has two years to recover its previously recognised status by complying with the relevant requirements of the *Terrestrial Animal Health Code*.

Contact: [OIE Status Department](#)

## OFFICIAL ACTS

### ► NEW DELEGATES

**23 May 2018**

#### **ECUADOR**

***Dr Patricio Ramiro García Villamarín***

Director Ejecutivo, Agencia de Regulación y Control Fito y Zoonosanitario – AGROCALIDAD, Ministerio de Agricultura y Ganadería



**21 May 2018**

#### **LESOTHO**

***Dr Gerard Relebohile Mahloane***

Director General of Veterinary Services, Livestock Services, Ministry of Agriculture and Food Security

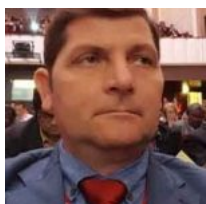


**18 May 2018**

#### **JAPAN**

***Dr Norio Kumagai***

Chief Veterinary Officer, Director, Animal Health Division, Food Safety and Consumer Affairs Bureau, Ministry of Agriculture, Forestry and Fisheries



**3 May 2018**

#### **ALBANIA**

***Dr Pëllumb Aleksi***

Director, Food Safety and Veterinary Institute, Ministry of Agriculture and Rural Development



**3 May 2018**

#### **ROMANIA**

***Dr Geronimo Răducu Brănescu***

President Secretary of State Chief Veterinary Officer, National Sanitary Veterinary and Food Safety Authority



**23 April 2018**

**GHANA**

***Dr Kingsley Mickey Aryee***

Ag. Chief Veterinary Officer, Veterinary Services Directorate, Ministry of Food and Agriculture



**18 April 2018**

**CANADA**

***Dr Jaspinder Komal***

Chief Veterinary Officer, Canadian Food Inspection Agency



**18 April 2018**

**GAMBIA**

***Dr Abdou Ceesay***

Director General (CVO), Gambia Veterinary Services, Department of Livestock Services, Ministry of Agriculture

**12 April 2018**

**CROATIA**

***Dr Damir Tudan***

Assistant Minister, Chief Veterinary Officer, Ministry of Agriculture



**22 March 2018**

**TANZANIA**

***Dr Martin Ruheta***

Acting Director of Veterinary Services, Ministry of Livestock and Fisheries



**20 March 2018**

**LIBERIA**

***Dr Joseph R. N. Anderson***

Director of Livestock/Veterinary Services, Animal Health Services, Ministry of Agriculture

**20 March 2018**

**MOLDOVA**

***Dr Vitalie Caraus***



Head, Sanitary and Veterinary Surveillance Division, National Food Safety Agency, Ministry of Agriculture, Regional Development and Environment



**5 March 2018**

**INDIA**

***Mr Tarun Shridhar***

Secretary, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture and Farmers Welfare



**1 March 2018**

**UNITED KINGDOM**

***Dr Christine Middlemiss***

Chief Veterinary Officer, Department for Environment, Food and Rural Affairs



**20 February 2018**

**ALGERIA**

***Dr Hachimi Karim Kaddour***

Directeur des Services vétérinaires, Ministère de l'agriculture, du développement rural et de la pêche

**16 February 2018**

**SAN MARINO**

***Dr Antonio Putti***

Responsable de la santé vétérinaire et de l'hygiène alimentaire, Département de la prévention de la République de Saint-Marin, Secrétariat d'État pour la Santé et la Sécurité sociale, la famille et les affaires sociales



**15 February 2018**

**GUATEMALA**

***Dr David René Orellana Salguero***

Director, Dirección de Sanidad Animal del Viceministerio de Sanidad Agropecuaria y Regulaciones, Ministerio de Agricultura, Ganadería y Alimentación



**3 February 2018**

**UZBEKISTAN**

***Dr Abrar Akbarov***

Deputy Chairman, State Veterinary Committee of the Republic of Uzbekistan



**31 January 2018**

**KAZAKHSTAN**

***Dr Samat Tyulegenov***

Director General, RSE National Reference Center for Veterinary, Committee of Veterinary Control and Supervision, Ministry of Agriculture

**16 January 2018**

**PANAMA**

***Dr Rolando Arturo Tello Jaramillo***

Director, Dirección Nacional de Salud Animal, Ministerio de Desarrollo Agropecuario



**13 January 2018**

**TAJIKISTAN**

***Dr Farhod Kamolzoda***

Chairman, Committee for Food Security under the Government of the Republic of Tajikistan

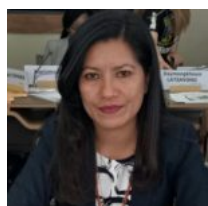


**8 January 2018**

**JORDAN**

***Dr Mahmoud Alhanatleh***

CVO, Director of Veterinary Directorate, Ministry of Agriculture

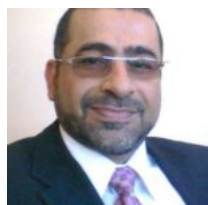


**4 January 2018**

**TIMOR-LESTE**

***Dr Joanita Bendita Da Costa Jong***

National Director of Veterinary Directorate, Ministry of Agriculture and Fisheries



**1 January 2018**

**OMAN**

***Dr Julanda Almawly***

Director of Central Laboratory of Animal Health



**29 December 2017**

**SRI LANKA**

***Dr Wedasingha Arachchige Nihal***

Director General, Department of Animal Production and Health, Ministry of Rural Economy



## OFFICIAL ACTS

### ► NEW REFERENCE CENTRES

#### ACUTE HEPATOPANCREATIC NECROSIS DISEASE



Designated reference expert: **Dr Grace Chu-Fang Lo**

International Center for the Scientific Development of Shrimp Aquaculture (CDSA), National Cheng Kung University (NCKU)

No. 500, Sec. 3 Anming Road, Annan District, Tainan City 709  
Chinese Taipei

Tel. +886-6-3842448

E-mail: [gracelow@mail.ncku.edu.tw](mailto:gracelow@mail.ncku.edu.tw)

This new OIE Reference Laboratory has a long-standing programme of work on shrimp diseases. Currently, CDSA's research includes the new, rapidly spreading shrimp disease acute hepatopancreatic necrosis disease (AHPND), which is caused by a pathogenic strain of the opportunistic marine bacterium *Vibrio parahaemolyticus*. This pathogenic strain acquires a plasmid that expresses a deadly toxin. To develop potentially useful measures to control AHPND, the laboratory often partners with public institutions and the private sector of OIE Member Countries to collaborate on the pathogenesis of AHPND in shrimp, and for studies on microbiome dynamics during possible outbreaks of AHPND in shrimp grow-out ponds.

#### CHRONIC WASTING DISEASE (CWD)



Designated reference expert: **Dr Sylvie L. Benestad**

Norwegian Veterinary Institute, National Reference Laboratory for TSE in animals

P.O. Box 750 Sentrum, 0454 Oslo  
Norway

Tel. +47 97 53 68 30

E-mail: [sylvie.benestad@vetinst.no](mailto:sylvie.benestad@vetinst.no)

This new OIE Reference Laboratory has extensive experience in diagnosis of the transmissible spongiform encephalopathies (TSE) in small ruminants, cattle and cervids, and is the only Norwegian laboratory testing for TSE. The laboratory has a large collaborative network in Europe and North America and is particularly active in research, working on epidemiological studies and the characterisation of TSE strains. The TSE laboratory's activities are subjected to quality assurance and are accredited under [ISO/IEC 17025](#) by the Norwegian Accreditation Agency (NA).

## HIGHLY PATHOGENIC AVIAN INFLUENZA AND LOW PATHOGENIC AVIAN INFLUENZA (POULTRY) AND NEWCASTLE DISEASE



Designated reference expert: **Dr Viktor N. Irza**

Federal State-Financed Institution 'Federal Centre for Animal Health' (FGBI 'ARRIAH')  
Yur'evets, Vladimir, 600901  
Russia

Tel. +7 4922 26 18 67; +7 4922 26 06 14; mobile +7 910 774 01 99

E-mail: [mail@arriah.ru](mailto:mail@arriah.ru); [irza@arriah.ru](mailto:irza@arriah.ru)

Website: [www.arriah.ru](http://www.arriah.ru)

This new OIE Reference Laboratory is located in the Federal Centre for Animal Health (FGBI 'ARRIAH'), which operates under the auspices of the Federal Service for Veterinary and Phytosanitary Surveillance (Rosselkhoznadzor). The laboratories are also National Rosselkhoznadzor Reference Laboratories for avian influenza and Newcastle disease. They provide diagnostic services, undertake epidemiological studies and research projects, and conduct national proficiency tests (ring trials). The laboratories are accredited under [ISO/IEC 17025](#) by the Russian Federal Service for Accreditation. The scope of activities includes OIE compliant molecular, genetic, virological and serological methods. The laboratories are prepared to offer assistance in diagnostics and epidemiological studies to neighbouring countries.

## INFECTIOUS BURSAL DISEASE



Designated reference expert: **Dr Xiaomei Wang**

Division of Avian Immunosuppressive Disease  
Harbin Veterinary Research Institute (HVRI)  
Chinese Academy of Agricultural Sciences (CAAS)  
678 Haping Road  
Xiangfang District  
Harbin, 150069  
People's Republic of China

Tel. +86-451-51 05 16 90; +86-451-51 05 16 94

E-mail: [wangxiaomei@caas.cn](mailto:wangxiaomei@caas.cn)

Website: [www.hvri.ac.cn](http://www.hvri.ac.cn)

This new OIE Reference Laboratory focuses on diagnosis, epidemiology, research into prevention and control, and other services relating to infectious bursal disease (IBD). Two vaccines and two IBD diagnosis kits have been developed. The laboratory also undertakes national and international research projects focused on the pathogenicity and immunological mechanisms of IBD. The laboratory has been accredited to [ISO 17025](#) by the China National Accreditation Service for Conformity Assessment (CNAS).

## INFECTIOUS HAEMATOPOIETIC NECROSIS



Designated reference expert: **Prof. Hong Liu**

Animal and Plant Inspection and Quarantine Technical Centre  
Shenzhen Exit & Entry Inspection and Quarantine Bureau  
General Administration of Quality Supervision  
Inspection and Quarantine (AQSIQ) of P.R. China  
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Guangdong Province, 518045

People's Republic of China

Tel. +86-755 25 58 84 10

E-mail: [liuhong@szciq.gov.cn](mailto:liuhong@szciq.gov.cn); [szciqlh@sina.com](mailto:szciqlh@sina.com)

This new OIE Reference Laboratory undertakes research on emerging and exotic aquatic animal diseases in China, especially viral diseases, focusing mainly on pathogenicity, genomics, epidemiology and rapid detection methods. The Laboratory provides technical support for the national entry-exit quarantine competent authority and domestic fishery agencies in disease surveillance, investigation and analysis of exotic and emerging diseases, epidemiological analysis, import risk assessment of aquatic animals and their products, and in drawing up aquatic animal quarantine trade protocols and contract terms.

Prof. Hong Liu has worked in aquaculture for over 20 years.

## INFECTIOUS HAEMATOPOIETIC NECROSIS AND VIRAL HAEMORRHAGIC SEPTICAEMIA



Designated reference expert: **Dr Kyle Garver**

Pacific Biological Station – Aquatic Animal Health Laboratory (PBS-AAHL)  
Fisheries & Oceans Canada  
3190 Hammond Bay Road  
Nanaimo V9T 6N7  
British Columbia  
Canada

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E-mail: [Kyle.Garver@dfo-mpo.gc.ca](mailto:Kyle.Garver@dfo-mpo.gc.ca)

The Pacific Biological Station is a government facility operating under the Department of Fisheries and Oceans, Canada. It houses the national reference laboratories for infectious haematopoietic necrosis virus (IHNV) and viral haemorrhagic septicaemia virus (VHSV), which conduct regulatory diagnostics under the National Aquatic Animal Health Programme to prevent aquatic animal diseases from being introduced to or spread in Canada. In this role, the laboratories administer proficiency panels and control samples for IHNV and VHSV real-time reverse transcriptase polymerase chain reaction (RT-qPCR) testing, work towards the standardisation of diagnostic methods, and perform confirmatory testing. In addition, through maintenance of a biosafety level 2 aquarium facility, the laboratories conduct research on endemic aquatic viral diseases, with investigations focused on evaluating strain virulence, host response, development of diagnostic tools and vaccine efficacy studies. The laboratories' activities are subjected to quality assurance and are accredited under [ISO/IEC 17025](#) by the Standards Council of Canada.

## KOI HERPESVIRUS DISEASE





Designated reference expert: **Dr Sven M. Bergmann**

German Reference Laboratory for KHVD, Friedrich-Loeffler-Institut (FLI), Federal Research Institute for Animal Health, Institute of Infectology  
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This new OIE Reference Laboratory is located at the Friedrich-Loeffler-Institut (FLI), the Federal Research Institute for Animal Health in Germany, which is an independent higher federal authority operating under the auspices of the Federal Ministry for Food and Agriculture. The laboratory, which is the German reference laboratory for koi herpesvirus disease (KHVD), is in direct contact with government and federal state authorities regarding the classical, serological and molecular diagnosis of KHVD (including high throughput sequencing). It designs plans for KHVD eradication, and is involved in the development of vaccines against the disease.

The Reference Laboratory also develops new test methods for the molecular, histological and serological detection of KHV, and conducts national proficiency tests (ring trials) for quality assurance procedures for animal disease diagnosis. The laboratory has extensive experience in diagnosing diseases of fish, molluscs and crustaceans. It is accredited for diagnostic techniques for notifiable diseases of fish, covering a wide range of diagnostic methods.

## **SALMONELLOSIS**



Designated reference expert: **Dr Min-Su Kang**

Avian Bacteriology Laboratory, Avian Disease Research Division, Animal and Plant Quarantine Agency (APQA), Ministry of Agriculture, Food and Rural Affairs (MAFRA)  
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The Animal and Plant Quarantine Agency (APQA) is a government institute that is responsible for protecting animal

health, animal welfare and plant health, and for undertaking animal and plant quarantine inspections in the Republic of Korea. This new OIE Reference Laboratory for salmonellosis is also the national reference laboratory for *Salmonella* in poultry. The laboratory develops new diagnostic methods and vaccines and conducts molecular epidemiological studies. The laboratory also performs confirmatory tests for the diagnosis of *Salmonella* infections in animals, and provides scientific and technical assistance and training to personnel from diagnostic laboratories in the Republic of Korea and other OIE Members of the Asia-Pacific region.

## VIRAL HAEMORRHAGIC SEPTICAEMIA



Designated reference expert: **Dr Hyoung Jun Kim**

Aquatic Animal Quarantine (AAQ) Laboratory, National Fishery Products Quality Management Service (NFQS),  
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The National Fishery Products Quality Management Service (NFQS) is the competent authority for quarantine of aquatic animals imported into and exported from the Republic of Korea. The new OIE Reference Laboratory for viral haemorrhagic septicaemia (VHS), hosted by the NFQS, provides expertise on validation of molecular methods for VHS diagnosis. In addition, it provides scientific and technical support as well as training in diagnosis for VHS and fish rhabdoviral diseases. The laboratory also offers, at the international level, high quality diagnostic services using molecular and virological tools. The laboratory undertook a research project jointly with the OIE Reference Laboratory for VHS in Denmark that led to the development of a novel reverse-transcriptase polymerase chain reaction, which had the same sensitivity of detection as the cell culture method. The test has been submitted for consideration by the OIE Aquatic Animal Health Standards Commission for inclusion in the [chapter on VHS in the OIE Manual of Diagnostic Tests for Aquatic Animals](#).

**The OIE** is an international organisation created in 1924 with a mandate from its 182 Member Countries to improve animal health and welfare. Its activities are permanently supported by 301 centres of scientific expertise and 12 regional offices with a presence on every continent.



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