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OIE and International Biosecurity Standards

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Introduction



Disease outbreaks due to international trade

Although 'local' pathogens combined with other factors such as poor husbandry and inadequate water quality are the most common causes of disease outbreaks in aquaculture, the introduction of 'exotic' pathogens through international trade in live aquatic animals and their products continues to be a major cause of new epizootics.



Some examples of international spread of aquatic animal diseases

- White spot disease in shrimp has spread to 22 countries via international trade in post-larvae (and products?)
- Taura syndrome to Asia from Americas via live shrimp transfers (species more resistant to white spot disease)
- *Gyrodactylus salaris* to Norway from Sweden via live juvenile salmon for stock enhancement (!)



Some examples of international spread of aquatic animal diseases

- First cases of Sleeping Disease of trout in UK linked with imported trout fillets
- EHN virus to Finland from Germany via live farmed sheatfish imports
- First cases of SVC in Switzerland, USA, Denmark linked with koi carp imports
- Koi herpes virus disease spread to several countries via international koi carp trade.
- Infectious salmon anaemia to Chile from Norway (via eggs?)???



- Without effective implementation of biosecurity measures, the occurrence, trans-boundary spread and serious economic impact of diseases in aquatic animals will continue.



Import safeguards



Quarantine and Health Certification

Quarantine and health certification requirements form a justifiable part of national biosecurity measures to prevent the introduction or transfer of exotic diseases of aquatic animals

but

they must be developed within the context of larger international standards addressing this issue.



World Trade Organisation (WTO)

“Agreement on the Application of Sanitary
and Phytosanitary Measures”

(SPS Agreement)

1995



SPS AGREEMENT

The Sanitary and Phytosanitary (SPS) Agreement states that animal health requirements established by importing countries should be based on international standards, guidelines and recommendations, primarily those developed by the **Office International des Epizooties (OIE)**.



Office International des Epizooties (OIE)

- An intergovernmental veterinary organisation established in 1924 in order to promote world animal health.
- One of its main activities is to provide uniform guidelines and standards for disease reporting and biosecurity measures applicable to international trade in live animals and their products.
- There are currently 174 OIE Member Countries and Territories worldwide (as of April 2009)
- Now known as the **World Organisation for Animal Health (OIE)**



- The main aim of OIE is to ensure the sanitary safety of international trade in live animals and their products.
- This is achieved by providing guidelines on the health measures to be used by the competent authorities of importing and exporting countries to prevent the transfer of agents pathogenic for aquatic animals, while avoiding unjustified trade barriers.



Developing the OIE standards for aquatic animals
is the role of the
Aquatic Animal Health Standards Commission



The **OIE standards** applicable to disease reporting and biosecurity measures for international trade in aquatic animals and their products are laid out in the **OIE Aquatic Animal Health Code** and in the **OIE Manual of Diagnostic Tests for Aquatic Animals**.





2009 edition of the Aquatic Animal Health Code
is now available to read on line at:

http://www.oie.int/eng/normes/fcode/en_sommaire.htm

2009 edition of the Diagnostic Manual for Aquatic Animals
will follow soon



Guidelines in the Aquatic Code



- With advances in scientific knowledge, the Aquatic Animal Health Standards Commission prepares draft texts for new chapters, or revises existing chapters of the Aquatic Code and the Aquatic Manual with the input of internationally renowned independent experts, OIE ad hoc groups, and the expertise at the many OIE Reference Laboratories for aquatic animal diseases.
- These drafts are further refined after comments from OIE Member Countries and Territories before being finalised and presented to, and adopted or rejected by, the 174 national delegates at the OIE General Session in May each year.



- The Aquatic Code and Aquatic Manual therefore provide globally accepted international standards and guidelines, and a uniform approach to the diagnosis of, and surveillance for, the diseases listed in the Aquatic Code, so that disease reporting obligations and the requirements for health certification in connection with international trade in aquatic animals and aquatic animal products can be met.

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VETERINARY PUBLIC HEALTH

(Under preparation)

WELFARE OF FARMED FISH

Introduction to recommendations for the welfare of farmed fish

Welfare of farmed fish during transport

DISEASES OF AMPHIBIANS

Infection with *Batrachochytrium dendrobatidis*

Infection with ranavirus

DISEASES OF CRUSTACEANS

Crayfish plague (*Aphanomyces astaci*)

Infectious hypodermal and haematopoietic necrosis

Infectious myonecrosis

Taura syndrome

White spot disease

White tail disease

Yellow head disease

DISEASES OF FISH

Epizootic haematopoietic necrosis

Epizootic ulcerative syndrome

Gyrodactylosis (*Gyrodactylus salaris*)

Infectious haematopoietic necrosis

Infectious salmon anaemia

Koi herpesvirus disease

Red sea bream iridoviral disease

Spring viraemia of carp

Viral haemorrhagic septicaemia

DISEASES OF MOLLUSCS

Infection with *Bonamia exitiosa*

Infection with *Bonamia ostreae*

Infection with *Marteilia refringens*

Infection with *Perkinsus marinus*

Infection with *Perkinsus olseni*

Infection with *Xenohaliotis californiensis*



OIE list of aquatic animal diseases (2009)

- 9 fish diseases
- 7 mollusc diseases
- 9 crustacean diseases
- 2 amphibian diseases



OIE list of aquatic animal diseases

- The list is reviewed annually by the AAHSC and recommendations for deletions and additions are proposed to OIE Member Countries and Territories
- Notification and reporting requirements apply to all listed diseases and any new emerging diseases.



Obligation to notify and report disease detection



- A key purpose of listing a disease in the Aquatic Code is to ensure transparency of the aquatic animal health status world-wide, by obliging Member Countries and Territories to report its occurrence to OIE.
- The OIE collates and disseminates the information received in reports on the status of those listed diseases in Member Countries and Territories.



Disease reporting obligations for Member Countries

- **Immediate (within 24 hours) notification**, must be provided to the OIE under specific epidemiological circumstances; this applies to all listed diseases.
- **Weekly reports** by fax or electronically subsequent to a notification; in each case, a final report on the incident should include information on the evolution of an incident that justified immediate notification. These reports should continue until the disease has been eradicated or the situation has become sufficiently stable that six-monthly reports be submitted.
- **Six-monthly reports** on the absence or presence and evolution of all listed diseases, and findings of epidemiological importance to other countries with respect to **diseases not listed by OIE**
- **Annual questionnaire** on any other information of significance to other countries



Immediate notification

- For all listed diseases in the following situations:
 - the first occurrence or re-occurrence of a disease in a country or zone or compartment of the country previously considered to be free of that particular disease; or
 - if the disease has occurred in a new host species; or
 - if the disease has occurred with a new pathogen strain or in a new disease manifestation; or
 - if there is potential for international spread of the disease; or
 - if the disease has newly recognised zoonotic potential.



Immediate notification

- For non-listed diseases:

- if there is a case of an **emerging disease** or pathogenic agent should there be findings that are of epidemiological significance to other countries.

‘Emerging disease’ :

- means a newly recognised serious disease, the cause of which may or may not yet be established, that has the potential to be spread within and between populations, for example by way of trade in aquatic animals and/or aquatic animal products.



“Disease” notification

In this context, it is important to understand that the circumstances for **regular** as well as **immediate notification** of aquatic animal diseases **do not require the presence of clinical disease or mortality.**

The *Aquatic Code* clarifies in Article 1.2.1.2.4:

“The presence of an infectious agent, even in the absence of clinical disease, should be reported.”



Aquatic Animals Commission

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http://www.oie.int/tidc/eng/en_fdc.htm

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Latest disease reports: [oi herpesvirus disease, Belgium \(Follow-up report No. 1\)](#) [Koi herpesvirus disease, Belgium](#)

Other disease reports :

- | | |
|----------------------------|---|
| 20/05/2009 | Viral haemorrhagic septicaemia, Slovakia (Follow-up report No. 1. Final report) |
| 24/04/2009 | Spring viraemia of carp, United Kingdom (Immediate notification) |
| 31/03/2009 | Viral haemorrhagic septicaemia, Bulgaria (Follow-up report No. 1. Final report) |
| 27/03/2009 | Infectious salmon anaemia, United Kingdom (Follow-up report No.1) |
| 25/03/2009 | Infectious myonecrosis, Brazil (Follow-up report No.1. Final report) |
| 20/03/2009 | Viral haemorrhagic septicaemia, Belgium (Immediate notification) |
| 20/02/2009 | Infectious salmon anaemia, United Kingdom (Immediate report) |

Focus on : [Aquatic Animal Health Code 2009](#)

[Report of 77th OIE General Session, May 2009 \(see pages 84, 117 and 129 for AAC items\)](#)

[Report of the Aquatic Animals Commission meeting, March 2009](#)

[Databases of aquatic animal disease occurrence](#)

[Import risk analysis](#)



OIE guidance on import requirements

PDF

CHAPTER 10.5.

INFECTIOUS SALMON ANAEMIA

Article 10.5.1.

For the purposes of the *Aquatic Code*, infectious salmon anaemia (ISA) means *infection* with ISA virus (ISAV) of the genus *Isavirus* of the family Orthomyxoviridae.

Information on methods for *diagnosis* are provided in the *Aquatic Manual*.

Article 10.5.2.

Scope

The recommendations in this Chapter apply to: Atlantic salmon (*Salmo salar*), brown and sea trout (*S. trutta*) and rainbow trout (*Onchorynchus mykiss*). These recommendations also apply to any other *susceptible species* referred to in the *Aquatic Manual* when traded internationally.

Article 10.5.3.

Commodities

1. When authorising the importation or transit of the following *commodities*, the *Competent Authorities* should not require any ISA related conditions, regardless of the ISA status of the *exporting country, zone or compartment*.
 - a. From the species referred to in Article [10.5.2](#), intended for any purpose:
 - i. *commodities* treated in a manner that inactivates the *disease agent* e.g. leather made from fish skin, pasteurised products and some ready-to-eat meals; and fish oil and fish *meal* intended for use in *feed*;
 - ii. biological samples preserved for diagnostic applications in such a manner as to inactivate the *disease agent*.
 - b. The following *commodities* destined for human consumption from the species referred to in Article [10.5.2](#), which have been prepared and packaged for direct



- Country, zone or compartment declared free of a disease
- Country, zone or compartment infected or not declared free of a disease

Article 10.5.4.

Infectious salmon anaemia free country

A country may make a self-declaration of freedom from ISA if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from ISA if all the areas covered by the shared water are declared ISA free countries or zones (see Article 10.5.5).

1. A country where none of the susceptible species is present may make a self-declaration of freedom from ISA when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where the species referred to in Article 10.5.2, are present but there has been no observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in the corresponding chapter of the Aquatic Manual, may make a self-declaration of freedom from ISA when basic biosecurity conditions have been continuously met in the country for at least the past 10 years.

OR

3. A country where the last observed occurrence of the disease was within the past 10 years or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in the corresponding chapter of the Aquatic Manual) may make a self-declaration of freedom from ISA when:
 - a. basic biosecurity conditions have been continuously met for at least the past 2 years; and
 - b. targeted surveillance, as described in Chapter 1.4, of the Aquatic Code, has been in place for at least the last 2 years without detection of ISAV.

OR

4. A country that has made a self-declaration of freedom from ISA but in which the disease is subsequently detected may make a self-declaration of freedom from ISA again when the following conditions have been met:
 - a. on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
 - b. infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
 - c. targeted surveillance, as described in Chapter 1.4, of the Aquatic Code, has been in place for at least the last 2 years without detection of ISAV; and
 - d. previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

Article 10.5.5.

Infectious salmon anaemia free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from ISA may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared an ISA free zone or compartment if all the Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species is present may be declared free from ISA when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the species referred to in Article 10.5.2. are present but there has been no observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in the corresponding chapter of the Aquatic Manual, may be declared free from ISA when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 10 years.

OR

3. A zone or compartment where the last observed occurrence of the disease was within the past 10 years or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in the corresponding chapter of the Aquatic Manual) may be declared free from ISA when:

- a. basic biosecurity conditions have been continuously met for at least the past 2 years; and
- b. targeted surveillance, as described in Chapter 1.4. of the Aquatic Code, has been in place for at least the last 2 years without detection of ISAV.

OR

4. A zone previously declared free from ISA but in which the disease is detected may be declared free from ISA again when the following conditions have been met:
 - a. on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
 - b. infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
 - c. targeted surveillance, as described in Chapter 1.4. of the Aquatic Code, has been in place for at least the last 2 years without detection of ISAV; and
 - d. previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

Article 10.5.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from infectious salmon anaemia

1. When importing, for aquaculture, live aquatic animals of the species referred to in Article 10.5.2 from a country, zone or compartment not declared free from ISA, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
 - a. the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
 - b. the treatment of all effluent and waste material in a manner that ensures inactivation of ISAV.
2. If the intention of the introduction is the establishment of a new stock, the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES) should be followed.
3. For the purposes of the Aquatic Code, the ICES Code (full version see: <http://www.ices.dk/indexfla.asp>) may be summarised to the following main points:
 - a. identify stock of interest (cultured or wild) in its current location;
 - b. evaluate stock health/disease history;
 - c. take and test samples for ISAV, pests and general health/disease status;
 - d. import and quarantine in a secure facility a founder (F-0) population;
 - e. produce F-1 generation from the F-0 stock in quarantine;
 - f. culture F-1 stock and at critical times in its development (life cycle) sample and test for ISAV and perform general examinations for pests and general health/disease status;
 - g. if ISAV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as ISA free or specific pathogen free (SPF) for ISAV;
 - h. release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities referred to in point 1 of Article 10.5.3.

Article 10.5.9.

Article 10.5.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from infectious salmon anaemia

1. When importing, for aquaculture, live aquatic animals of the species referred to in Article 10.5.2 from a country, zone or compartment not declared free from ISA, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
 - a. the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment; and
 - b. the treatment of all effluent and waste material in a manner that ensures inactivation of ISAV.
2. If the intention of the introduction is the establishment of a new stock, the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES) should be followed.
3. For the purposes of the Aquatic Code, the ICES Code (full version see: <http://www.ices.dk/indexfla.asp>) may be summarised to the following main points:
 - a. identify stock of interest (cultured or wild) in its current location;
 - b. evaluate stock health/disease history;
 - c. take and test samples for ISAV, pests and general health/disease status;
 - d. import and quarantine in a secure facility a founder (F-0) population;
 - e. produce F-1 generation from the F-0 stock in quarantine;
 - f. culture F-1 stock and at critical times in its development (life cycle) sample and test for ISAV and perform general examinations for pests and general health/disease status;
 - g. if ISAV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the basic biosecurity conditions of the importing country, zone or compartment, the F-1 stock may be defined as ISA free or specific pathogen free (SPF) for ISAV;
 - h. release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to commodities referred to in point 1 of Article 10.5.3.

Article 10.5.9.

Article 10.5.9.

Importation of live aquatic animals for processing for human consumption from a country, zone or compartment not declared free from infectious salmon anaemia

When importing, for processing for human consumption, live *aquatic animals* of the species referred to in Article 10.5.2, from a country, *zone* or *compartment* not declared free from ISA, the *Competent Authority* of the *importing country* should assess the *risk* and, if justified, require that:

1. the consignment is delivered directly to and held in *quarantine* facilities for slaughter and processing to one of the products referred to in point 1 of Article 10.5.3, or other products authorised by the *Competent Authority*; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of ISAV.

OIE Members may wish to consider introducing internal measures to prevent such *commodities* being used for any purpose other than for human consumption.

This Article does not apply to *commodities* referred to in point 1 of Article 10.5.3.

Article 10.5.10.

Importation of live aquatic animals intended for use in animal feed, or for agricultural, industrial or pharmaceutical use from a country, zone or compartment not declared free from infectious salmon anaemia

When importing, for use in animal *feed*, or for agricultural, industrial or pharmaceutical use, live *aquatic animals* of the species referred to in Article 10.5.2, from a country, *zone* or *compartment* not declared free from ISA, the *Competent Authority* of the *importing country* should require that:

1. the consignment is delivered directly to and held in *quarantine* facilities for slaughter and processing to products authorised by the *Competent Authority*; and
2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of ISAV.

This Article does not apply to *commodities* referred to in point 1 of Article 10.5.3.

Article 10.5.11.

Importation of aquatic animal products from a country, zone or compartment declared free from infectious salmon anaemia

When importing *aquatic animal products* of the species referred to in Article 10.5.2, from a country, *zone* or *compartment* declared free from ISA, the *Competent Authority* of the *importing country* should require an *international aquatic animal health certificate* issued by the *Competent Authority* of the *exporting country* or a *certifying official* approved by the *importing country* certifying that, on the basis of the procedures described in Articles 10.5.4, or 10.5.5, (as applicable), the place of production of the *commodity* is a country, *zone* or *compartment* declared free from ISA.

The *certificate* should be in accordance with the Model Certificate in Chapter 5.10.

This Article does not apply to *commodities* referred to in point 1 of Article 10.5.3.

2. all effluent and waste material from the processing are treated in a manner that ensures inactivation of ISAV.

This Article does not apply to commodities referred to in point 1 of Article 10.5.3.

Article 10.5.11.

Importation of aquatic animal products from a country, zone or compartment declared free from infectious salmon anaemia

When importing aquatic animal products of the species referred to in Article 10.5.2, from a country, zone or compartment declared free from ISA, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country certifying that, on the basis of the procedures described in Articles 10.5.4, or 10.5.5, (as applicable), the place of production of the commodity is a country, zone or compartment declared free from ISA.

The certificate should be in accordance with the Model Certificate in Chapter 5.10.

This Article does not apply to commodities referred to in point 1 of Article 10.5.3.

Article 10.5.12.

Importation of aquatic animal products from a country, zone or compartment not declared free from infectious salmon anaemia

When importing aquatic animal products of the species referred to in Article 10.5.2, from a country, zone or compartment not declared free from ISA, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

In the case of dead fish, whether eviscerated or uneviscerated, such risk mitigation measures may include:

1. the direct delivery into and holding of the consignment in biosecure/quarantine facilities for processing to one of the products referred to in point 1 of Article 10.5.3, or other products authorised by the Competent Authority;
2. the treatment of all effluent and waste material in a manner that ensures inactivation of ISAV.

This Article does not apply to commodities referred to in point 1 of Article 10.5.3.

Article 10.5.4.

Infectious salmon anaemia free country

A country may make a self-declaration of freedom from ISA if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from ISA if all the areas covered by the shared water are declared ISA free countries or zones (see Article 10.5.5).

1. A country where none of the susceptible species is present may make a self-declaration of freedom from ISA when basic biosecurity conditions have been continuously met in the country for at least the past 2 years.

OR

2. A country where the species referred to in Article 10.5.2, are present but there has been no observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in the corresponding chapter of the Aquatic Manual, may make a self-declaration of freedom from ISA when basic biosecurity conditions have been continuously met in the country for at least the past 10 years.

OR

3. A country where the last observed occurrence of the disease was within the past 10 years or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to clinical expression as described in the corresponding chapter of the Aquatic Manual) may make a self-declaration of freedom from ISA when:
 - a. basic biosecurity conditions have been continuously met for at least the past 2 years; and
 - b. targeted surveillance, as described in Chapter 1.4, of the Aquatic Code, has been in place for at least the last 2 years without detection of ISAV.

OR

4. A country that has made a self-declaration of freedom from ISA but in which the disease is subsequently detected may make a self-declaration of freedom from ISA again when the following conditions have been met:
 - a. on detection of the disease, the affected area was declared an infected zone and a buffer zone was established; and
 - b. infected populations have been destroyed or removed from the infected zone by means that minimise the risk of further spread of the disease, and the appropriate disinfection procedures (see Aquatic Manual) have been completed; and
 - c. targeted surveillance, as described in Chapter 1.4, of the Aquatic Code, has been in place for at least the last 2 years without detection of ISAV; and
 - d. previously existing basic biosecurity conditions have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.



‘Basic biosecurity conditions’ means:

a set of conditions applying to a particular disease, and a particular zone or country, required to ensure adequate disease security, such as:

- the disease, including suspicion of the disease, is compulsorily notifiable to the Competent Authority;

and

- an early detection system is in place within the zone or country;

and

- import requirements to prevent the introduction of disease into the country or zone, as outlined in the Aquatic Code, are in place.



Safe commodities

Article 10.5.3.

Commodities

1. When authorising the importation or transit of the following commodities, the Competent Authorities should not require any ISA related conditions, regardless of the ISA status of the exporting country, zone or compartment.
 - a. From the species referred to in Article 10.5.2, intended for any purpose:
 - i. commodities treated in a manner that inactivates the disease agent e.g. leather made from fish skin, pasteurised products and some ready-to-eat meals; and fish oil and fish meal intended for use in feed;
 - ii. biological samples preserved for diagnostic applications in such a manner as to inactivate the disease agent.
 - b. The following commodities destined for human consumption from the species referred to in Article 10.5.2, which have been prepared and packaged for direct retail trade:
 - i. eviscerated fish (chilled or frozen);
 - ii. fillets or cutlets (chilled or frozen);
 - iii. dried eviscerated fish (including air dried, flame dried and sun dried).

For the commodities referred to in point 1b), OIE Members may wish to consider introducing internal measures to address the risks associated with the commodity being used for any purpose other than for human consumption.

2. When authorising the importation or transit of commodities of a species referred to in Article 10.5.2, other than those referred to in point 1 of Article 10.5.3, the Competent Authorities should require the conditions prescribed in Articles 10.5.7, 10.5.12, relevant to the ISA status of the exporting country, zone or compartment.
3. When considering the importation/transit from an exporting country, zone or compartment not declared free of ISA of a live commodity from a species not covered in Article 10.5.2, but which could reasonably be expected to be a potential mechanical vector for ISA, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 10.5.4.

Infectious salmon anaemia free country

A country may make a self-declaration of freedom from ISA if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from ISA if all the areas covered by the shared water are declared ISA free countries or zones (see Article 10.5.5.).



Criteria to assess the safety of aquatic animal commodities and products

- 2 sets of criteria:
 - Criteria to assess the safety of aquatic animal commodities irrespective of country disease status
 - Criteria to assess the safety of aquatic animal products destined for human consumption irrespective of country disease status



Criteria to assess the safety of aquatic animal commodities irrespective of country disease status

For an aquatic animal commodity to be considered safe for international trade, it should comply with the following criteria:

absence of the disease agent in the traded commodity:

- there is strong evidence that the disease agent is not present in the tissues from which the commodity is derived, and
- the water (including ice) used to process or transport the commodity is not contaminated with the disease agent and the processing prevents cross contamination of the commodity to be traded.

OR

even if the disease agent is present in, or contaminates the tissues from which the commodity is derived, the treatment or processing to produce the commodity to be traded inactivates the disease agent:

- physical (e.g. temperature, drying, smoking);
and/or
- chemical (e.g. iodine, pH, salt, smoke);
and/or
- biological (e.g. fermentation).



Criteria to assess the safety of aquatic animal products destined for human consumption irrespective of the country disease status

For an aquatic animal product to be considered safe for international trade, it should comply with the following criteria:

the aquatic animal product is prepared and packaged for retail trade for human consumption;
and

EITHER

it includes only a small amount of waste tissues;

OR

viable disease agent is unlikely to be present in the waste tissues, because:

the disease agent is not normally found in the waste tissues;

OR

the disease agent may be present in the waste tissues but the processing prior to importation involves processes known to inactivate and/or reduce the load of the disease agent:

- physical (e.g. temperature, drying, smoking);

or

- chemical (e.g. pH, salt, smoke);

or

- biological (e.g. fermentation).



OIE guidelines on disease surveillance

PDF

CHAPTER 1.4.

AQUATIC ANIMAL HEALTH SURVEILLANCE

Article 1.4.1.

Introduction and objectives

1. Surveillance activities may be performed to achieve any of the following objectives:
 - a. demonstrating the absence of disease;
 - b. identifying events requiring notification as listed in Article 1.1.3. of the Aquatic Code;
 - c. determining the occurrence or distribution of endemic disease, including changes to their incidence or prevalence (or its contributing factors), in order to:
 - i. provide information for domestic disease control programmes,
 - ii. provide relevant disease occurrence information to be used by trading partners for qualitative and quantitative risk assessment.

The type of surveillance applied depends on the desired outputs needed to support decision-making. Surveillance data determine the quality of disease status reports and should satisfy information requirements for accurate risk analysis both for international trade as well as for national decision-making. Surveillance of endemic diseases provides valuable information for day-to-day health management and can act as the foundation for detecting outbreaks of exotic disease and demonstrating specific disease freedom.

Surveillance systems described in this chapter should also be used to generate information for decisions on prescribed disease prevention and control programmes. However, the actual strategies for prevention and control are beyond the scope of this chapter on surveillance recommendations.

Having a suitable management strategy to respond to surveillance data is of utmost importance for the successful implementation of surveillance systems.

2. Essential prerequisites to enable a Member to provide information for the evaluation of its animal health status are:
 - a. that the particular Member complies with the provisions of Chapter 3.1. of the Aquatic Code on the quality and evaluation of the Competent Authorities;



Surveillance activities can be performed to achieve any of the following objectives:

- a) demonstrating the absence of disease;
- b) identifying events requiring notification to OIE as listed in Article 1.1.3. of the Aquatic Code;
- c) determining the occurrence or distribution of endemic diseases, including changes to their incidence or prevalence (or its contributing factors) in order to:
 - i) provide information for domestic disease control programmes,
 - ii) provide relevant disease occurrence information to be used by trading partners for qualitative and quantitative risk assessment.



New detailed guidance on surveillance



*Guide for Aquatic
Animal Health
Surveillance*



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Organisation Mondiale de la Santé Animale • World Organisation for Animal Health • Organización Mundial de Sanidad Animal

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Possible causes for a disease 'incursion' into a country

- Import health requirements inadequate or non-existent
- Import requirements good but ineffectively enforced by the authorities (or ignored by importers e.g. smuggling)
- Unreliable disease surveillance/diagnostics in exporting country



Possible causes for a disease ‘incursion’ into a country

- Slow awareness of a new or emerging disease in exporting country.
- Aetiological agent previously unknown or not known to be virulent so not included in official surveillance in either importing or exporting country.
- Intensification of surveillance in importing country.



Other possible causes for a disease 'incursion' into a country

- Dead wild fish as fresh feed for farmed fish or as fishing bait.
- Live fish transport vehicles that have been used in other countries and not disinfected sufficiently.
- Discharge of ships' ballast water ?
- Accidental release of imported pathogens and pathological materials intended for laboratory use.

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CHAPTER 5.9.

MEASURES CONCERNING INTERNATIONAL TRANSPORT OF AQUATIC ANIMAL DISEASE AGENTS AND PATHOLOGICAL MATERIAL

Article 5.9.1.

Introduction

There is the *risk* that *disease* may occur as a result of the accidental release of *aquatic animal* pathogens during international transport of packaged materials. Such pathogens may already occur in the country or they may have been imported deliberately or inadvertently. It is therefore necessary to have in place measures to prevent their accidental release. These measures may be applied at national borders by prohibiting or controlling the importation of specified *aquatic animal* pathogens or *pathological material*, which may contain them.

Competent Authorities should not require *sanitary measures* for biological samples preserved for diagnostic applications that are treated in such a manner as to inactivate the *disease agent* and will not cause *aquatic animal disease*.

Article 5.9.2.

Importation of aquatic animal pathogens

The importation of a *disease agent* pathogen referred to in the *Aquatic Code*, whether in culture, in *pathological material* or in any other form, should be officially controlled by the *Competent Authority* to ensure appropriate safeguards are in place to manage the *risk* posed by the *disease agent* pathogen. The conditions should be appropriate to the *risk* posed by the *disease agent* pathogen and, in relation to air transport, the appropriate standards of the International Air Transport Association or other relevant transport associations concerning the packaging and transport of dangerous goods as outlined in Article 5.9.3, should apply.

When considering applications to import a *disease agent* pathogen referred to in the *Aquatic Code*, whether in culture, in *pathological material* or in any other form, from other countries, the *Competent Authorities* should have regard to the nature of the material, the animal from which it is derived, the susceptibility of that animal to various *diseases* and the animal health situation of the country of origin. It may be advisable to require that material be pretreated before import to minimise the *risk* of inadvertent introduction of a *disease agent* pathogen referred to in the *Aquatic Code*.

Any material that does not satisfy the applied conditions should be rendered safe by the *Competent Authority* of the receiving country.

Article 5.9.3.

Packaging and documentation for transport

The safe transport of a *disease agent*/pathogen referred to in the *Aquatic Code*, with respect to the pathogen, the handlers and the environment, is primarily dependent on proper packaging and it is the responsibility of the sender that this is done in accordance with current regulations.

1. Basic triple packaging system

The system consists of three layers as follows:

- a. Primary receptacle: a labelled primary watertight, leak-proof receptacle containing the specimen. The receptacle is wrapped in enough absorbent material to absorb all fluid in case of breakage.
- b. Secondary receptacle: a second durable, watertight, leak-proof receptacle to enclose and protect the primary receptacle(s). Several wrapped primary receptacles may be placed in one secondary receptacle. Sufficient additional absorbent material must be used to cushion multiple primary receptacles.
- c. Outer shipping package: the secondary receptacle is placed in an outer shipping package, which protects it and its contents from outside influences such as physical damage, temperature fluctuations and water while in transit.

Ice or dry ice when used in a shipment must be placed outside the secondary receptacle. If wet ice is used, it should be in a leak-proof *container* and the outer package must also be leak-proof. The secondary receptacle must be secured within the outer package to prevent damage after the refrigerant has melted or dissipated.

Dry ice must NOT be placed inside the primary or secondary receptacle because of the risk of explosions. The outer package must permit the release of carbon dioxide gas if dry ice is used. IATA Packing Instruction 904 must be observed for packages containing dry ice.

2. Documentation

Specimen data forms, letters and other types of information that identify or describe the specimen and also identify the shipper and receiver should be taped to the outside of the secondary receptacle, together with a copy of the recipient's import permit.

Article 5.9.4.

Any sender of a *disease agent*/pathogen referred to in the *Aquatic Code* or *pathological material* must ensure that the proposed receiver has obtained the necessary import licence referred to in Article [5.9.2](#).

Article 5.9.5.

1. Every consignment of a *disease agent*/pathogen referred to in the *Aquatic Code* or *pathological material* should be notified in advance by the sender to the intended recipient, giving the following information:
 - a. exact nature of the sample and its packaging;

dioxide gas if dry ice is used. IATA Packing Instruction 904 must be observed for packages containing dry ice.

2. Documentation

Specimen data forms, letters and other types of information that identify or describe the specimen and also identify the shipper and receiver should be taped to the outside of the secondary receptacle, together with a copy of the recipient's import permit.

Article 5.9.4.

Any sender of a disease agent/pathogen referred to in the Aquatic Code or pathological material must ensure that the proposed receiver has obtained the necessary import licence referred to in Article 5.9.2.

Article 5.9.5.

1. Every consignment of a disease agent/pathogen referred to in the Aquatic Code or pathological material should be notified in advance by the sender to the intended recipient, giving the following information:
 - a. exact nature of the sample and its packaging;
 - b. the number of packages sent and the marks and numbers enabling their identification;
 - c. date of despatch;
 - d. method of transport used for consignment of products (ship, aircraft, railway wagon or road vehicle).
2. The recipient should notify the sender of the receipt of each consignment of a disease agent/pathogen referred to in the Aquatic Code or pathological material on its arrival.
3. When a consignment that has been notified by the sender fails to arrive by the anticipated date, the intended recipient should notify the Competent Authority of the receiving country and, at the same time, the sender in the country of origin, so that any necessary action can be taken for investigation to be made without delay.



Conclusions

- Through the Aquatic Code and Aquatic Manual, OIE publishes globally accepted international biosecurity standards and guidelines, with respect to the listed diseases, for international trade in aquatic animals and their products.
- The standards and guidelines provide a uniform approach to diagnosis and surveillance so that the need for transparency in the diseases situation in trading countries, and the requirements for health certification for international trade, can be met.
- However, these guidelines in themselves cannot provide full protection against disease incursion and/or spread in a country – there are several ways they can be rendered ineffective.
- National and farm-level biosecurity precautions are essential adjuncts to the OIE standards
- All stakeholders must play their part to the full to ensure that biosecurity measures are effective in preventing disease occurrence and spread.



Thank you for your attention