

OIE

OIE Sub-Regional Training Course on Diseases of Fish  
DIFS, Rhodes University, Grahamstown, South Africa  
September 19, 2011  
Presented by Dr. Patrick Bastiaensen

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**OIE Aquatic Animal Health Standards**

Barry Hill  
President  
OIE Aquatic Animal Health Standards Commission



OIE

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



**Aquatic animals**

OIE



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The OIE standards applicable to 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**.



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The OIE standards and guidance in the *Aquatic Code* and *Aquatic Manual* aim to reduce disease risks



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





### Aquatic Animal Health Standards Commission (elected May 2009 for 3 years)

**President:**

- Dr Barry Hill (UK)

**Vice-President:**

- Dr Ricardo Enriquez Sais (Chile)

**General Secretary:**

- Dr Franck Berthe (EFSA)

**Members:**

- Dr Olga Haenen (Netherlands)
- Dr Huang Jie (China)
- Dr Victor Manuel Vidal (Mexico)










### The Commission is regularly assisted by:





**Don Lightner**  
USA

**Eli Katunguka-Rwakishaya**  
Uganda

**Rohana Subasinghe**  
FAO, Rome

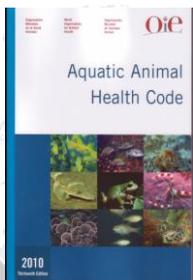


- With advances in scientific knowledge, the Aquatic Health Standards Commission prepares draft texts for new chapters, or revises existing chapters of the Aquatic Code and the Aquatic Manual with the input of internationally renowned independent experts, OIE *ad hoc* groups, and expertise at the many OIE Reference Laboratories for aquatic animal diseases.
- These drafts are further refined with input from national experts of OIE Members before being finalised and presented to the National Delegates at the OIE General Session in May each year for adoption.



## OIE Aquatic Animal Health Code (‘Aquatic Code’)

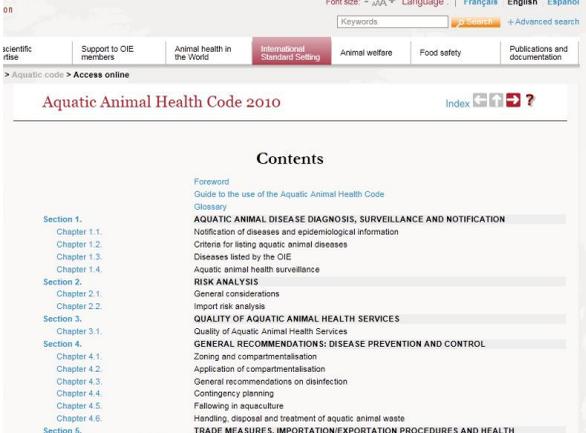




**Aquatic Animal Health Code**

2010

**Also available on-line at the OIE website**



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### Aquatic Animal Health Code 2010

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**Section 2. RISK ANALYSIS**

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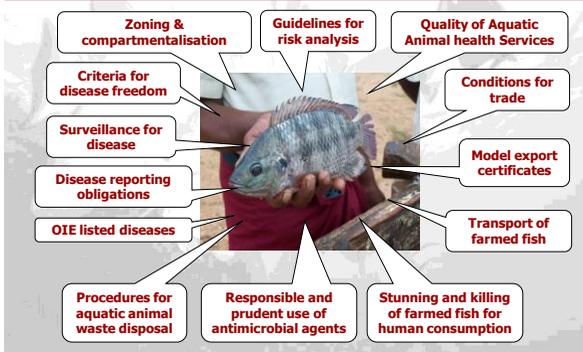
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Chapter 4.6. Handling, disposal and treatment of aquatic animal waste

**Section 5. TRADE MEASURES, IMPORTATION/EXPORTATION PROCEDURES AND HEALTH**

## Some of the information available in the *Aquatic Code*



## Contents of the *Aquatic Code*



### General Provisions (Horizontal issues)

- User's guide
- Glossary
- Section 1 : Animal disease diagnosis, surveillance and notification
- Section 2 : Risk analysis
- Section 3 : Quality of Aquatic Animal Health Services
- Section 4 : General recommendations : disease prevention and control
  - Zoning/compartmentalisation
  - Recommendations on disinfection
  - Contingency planning
  - Fallowing in aquaculture
  - Handling, disposal and treatment of aquatic animal waste

## Contents of the *Aquatic Code*



### General Provisions (contd)

- Section 5 : Trade measures, import/export procedures and health certification
  - General obligations
  - Certification procedures
  - Criteria to assess safety of aquatic animal commodities
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  - Model veterinary certificates...
- Section 6 : Veterinary Public Health
  - Control of aquatic animal health hazards in aquatic animal feed
  - Antimicrobials: prudent use/monitoring/ controlling resistance (under development)
- Section 7 : Welfare of Farmed Fish
  - Transport
  - Stunning and killing for human consumption
  - Killing for disease control purposes (under development)

## Contents of the *Aquatic Code*



### Disease specific chapters

(OIE listed diseases - of importance to international trade)

- Section 8 : Diseases of Amphibians
- Section 9 : Diseases of Crustaceans
- Section 10 : Diseases of Fish
- Section 11 : Diseases of Molluscs

## Critically important



- OIE Delegates should realise and accept their **responsibility to participate actively** in the debate and setting of international standards
- Once a standard is adopted the Delegate is **obligated to support** the adopted standard
- Focal points have an important role in the standard setting procedure, through the **preparation of comments for the Delegate** for new or revised OIE standards

## Aquatic Code

### Glossary



- ◆ **Aquaculture** means the farming of aquatic animals with some sort of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc.
- ◆ **Aquaculture establishment** means an establishment in which fish, molluscs or crustaceans for breeding, stocking or marketing are raised or kept.



- ◆ **Aquatic Animal Health Services** means the governmental and non-governmental organisations that implement animal health and welfare measures and other standards and recommendations in the Aquatic Code in the territory. The *Aquatic Animal Health Services* are under the overall control and direction of the *Competent Authority*. Private sector organisations, veterinarians, aquatic animal health professionals or veterinary paraprofessionals are normally accredited or approved by the *Competent Authority* to deliver the delegated functions.



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- ◆ **Competent Authority** means the *Veterinary Authority* or other *Governmental Authority* of a Member having the responsibility and competence for ensuring or supervising the implementation of aquatic animal health and welfare measures, international health certification and other standards and recommendations in the Aquatic Code in the whole territory.



- ◆ **Veterinary Authority** means the *Governmental Authority* of an OIE Member, comprising veterinarians, other professionals and paraprofessionals, having the responsibility and competence for ensuring or supervising the implementation of aquatic animal health and welfare measures, international aquatic animal health certification and other standards and recommendations in the Aquatic Code in the whole territory.



- ◆ **Aquatic animal health status** means the status of a country, zone or compartment with respect to an aquatic animal disease, according to the criteria listed in the relevant chapter of the Aquatic Code dealing with the disease.
- ◆ **Aquatic animal products** means non-viable aquatic animals and products from aquatic animals.



- ◆ **Aquatic animals** means all life stages (including eggs and gametes) of fish, molluscs, crustaceans and amphibians originating from aquaculture establishments or removed from the wild, for farming purposes, for release into the environment, for human consumption or for ornamental purposes.



- ◆ **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:
  - a. the disease, including suspicion of the disease, is compulsorily notifiable to the *Competent Authority*; and
  - b. an early detection system is in place within the zone or country; and
  - c. import requirements to prevent the introduction of disease into the country or zone, as outlined in the Aquatic Code, are in place.



- ◆ **Biosecurity plan** means a plan that identifies significant potential pathways for the introduction and spread of disease in a zone or compartment, and describes the measures which are being, or will be, applied to mitigate the risks to introduce and spread disease, taking into consideration the recommendations in the Aquatic Code. The plan should also describe how these measures are audited, with respect to both their implementation and their targeting, to ensure that the risks are regularly re-assessed and the measures adjusted accordingly.



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- ◆ **Certifying official** means a person authorised by the Competent Authority to sign health certificates for aquatic animals.
- ◆ **Commodity** means aquatic animals, aquatic animal products, biological products and pathological material.



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- ◆ **Commodity** means aquatic animals, aquatic animal products, biological products and pathological material.
  - a. biological reagents for use in the diagnosis of certain diseases;
  - b. sera for use in the prevention and treatment of certain diseases;
  - c. inactivated or modified vaccines for use in preventive vaccination against certain diseases;
  - d. genetic material of infectious agents;
  - e. endocrine tissues from fish or used in fish.



- ◆ **Certifying official** means a person authorised by the Competent Authority to sign health certificates for aquatic animals.
- ◆ **Commodity** means aquatic animals, aquatic animal products, biological products and pathological material.  
means samples obtained from live or dead aquatic animals, containing or suspected of containing pathogenic agents, to be sent to a laboratory.



- ◆ **Compartment** means one or more aquaculture establishments under a common biosecurity management system containing an aquatic animal population with a distinct health status with respect to a specific disease or diseases for which required surveillance and control measures are applied and basic biosecurity conditions are met for the purpose of international trade. Such compartments must be clearly documented by the *Competent Authority(ies)*.



- ◆ **Zone** means a portion of one or more countries comprising:
  - a. an entire water catchment from the source of a waterway to the estuary or lake, or
  - b. more than one water catchment, or
  - c. part of a water catchment from the source of a waterway to a barrier that prevents the introduction of a specific disease or diseases, or
  - d. part of a coastal area with a precise geographical delimitation, or
  - e. an estuary with a precise geographical delimitation,that consists of a contiguous hydrological system with a distinct health status with respect to a specific disease or diseases. The zones must be clearly documented (e.g. by a map or other precise locators such as GPS co-ordinates) by the *Competent Authority(ies)*.



- ◆ **Zone** means a portion of one or more countries comprising:
  - a. an entire water catchment .....  
means an area or basin of land bounded by natural features such as hills or mountains, into which all run-off water flows.



- ◆ **Egg** means a viable fertilised ovum of an aquatic animal. 'Green eggs' means newly fertilised ova of fish. 'Eyed eggs' means eggs of fish where the eyes of the embryo are visible and that the eggs may be transported.
- ◆ **Gametes** means the sperm or unfertilised eggs of aquatic animals that are held or transported separately prior to fertilisation.



- ◆ **Feed** means any material (single or multiple), whether processed, semi-processed or raw that is intended to be fed directly to aquatic animals.
- ◆ **Feed ingredient** means a component, part or constituent of any combination or mixture making up a feed, including feed additives, whether or not it has a nutritional value in the animal's diet. Ingredients may be of terrestrial or aquatic, plant or animal origin and may be organic or inorganic substances.



- **Live feed** means live farmed or wild caught animals and algae used as feed for aquatic animals. Live feed is often fed to aquatic animal species at an early life-stage and to aquatic animal species that have been cultured for a relatively short time.
- **Meal** means a product derived from an aquatic animal that has been ground and heat processed to reduce the moisture content to less than 10%.



- **Fallowing** means, for disease management purposes, an operation where an aquaculture establishment is emptied of aquatic animals susceptible to a disease of concern or known to be capable of transferring the pathogenic agent, and, where feasible, of the carrying water. For aquatic animals of unknown susceptibility and those agreed not to be capable of acting as carriers of a disease of concern, decisions on fallowing should be based on a risk assessment.



- **Incidence** means the number of new outbreaks of disease within a specified period of time in a defined aquatic animal population.
- **Prevalence** means the total number of infected aquatic animals expressed as a percentage of the total number of aquatic animals in a given aquatic animal population at one specific time.



- **Sensitivity** means the proportion of true positive tests given in a diagnostic test, i.e. the number of true positive results divided by the number of true positive and false negative results.
- **Specificity** means the probability that absence of infection will be correctly identified by a diagnostic test, i.e. the number of true negative results divided by the number of true negative and false positive results.



- **Outbreak** means an occurrence of one or more cases in an epidemiological unit.



- **Outbreak** means an occurrence of one or more cases in an epidemiological unit.

Case means an individual aquatic animal infected by a pathogenic agent, with or without clinical signs.

A case definition is a set of criteria used to distinguish a case animal or an epidemiological unit from a non-case.



- **Outbreak** means an occurrence of one or more cases in an epidemiological unit.

means a group of animals that share approximately the same risk of exposure to a pathogenic agent within a defined location. This may be because they share a common aquatic environment (e.g. fish in a pond, caged fish in a lake), or because management practices make it likely that a pathogenic agent in one group of animals would quickly spread to other animals (e.g. all the ponds on a farm, all the ponds in a village system).



- **Infection** means the presence of a multiplying or otherwise developing or latent pathogenic agent in a host. This term is understood to include infestation where the pathogenic agent is a parasite in or on a host.
- **Infective period** means the longest period during which an affected aquatic animal can be a source of infection.



- **Protection zone** means a zone established to protect the health status of aquatic animals in a free country or free zone, from those in a country or zone of a different aquatic animal health status, using measures based on the epidemiology of the disease under consideration to prevent spread of the pathogenic agent into a free country or free zone. These measures may include, but are not limited to, vaccination, movement control and an intensified degree of surveillance.

- **Quarantine**



- **Protection zone** means a zone established to protect the health status of aquatic animals in a free country or free zone...
- **Quarantine** means maintaining a group of aquatic animals in isolation with no direct or indirect contact with other aquatic animals, in order to undergo observation for a specified length of time and, if appropriate, testing and treatment, including proper treatment of the effluent waters.



- **Surveillance** means a systematic series of investigations of a given population of aquatic animals to detect the occurrence of disease for control purposes, and which may involve testing samples of a population.
- **Target population** means, for the purposes of demonstrating freedom from infection, the population of interest, usually made up of all aquatic animals of species susceptible to a specified pathogenic agent in a defined country, zone or aquaculture establishment.



- **Surveillance**
- **Target population**
- **Targeted surveillance** means surveillance targeted at a specific disease or infection.

