



Biosecurity and the importance of early detection and reporting/notification

Regional Workshop for National Focal Point for Aquatic Animals in Europe

December 2021

Why biosecurity?

- Build resilient and responsive systems
- We know we will be challenged by new and emerging diseases
- Aquatic animal health services need to be able to meet these challenges
 - Prevention
 - Detection
 - Response





Prevention is always better than cure!

What is biosecurity?



A set of management and physical measures which, when used together, cumulatively reduce the risk of infection in aquatic animal populations within an aquaculture establishment.

Planning and implementation requires identification of <u>risks</u> and cost-effective measures to achieve the identified <u>biosecurity</u> objectives of the plan.

The measures required will <u>vary among aquaculture establishments</u>, depending on factors such as likelihood of exposure to pathogenic agents, the species of farmed aquatic animal, the category of aquaculture production system, husbandry practices, environmental conditions and geographical location.

Chapter 4.1.

Your first line defense system!!

This chapter:

- describes recommendations on biosecurity to be applied to aquaculture establishments, including semi-open, semi-closed and closed systems;
- describes general principles of biosecurity planning, categories of aquaculture production systems, area management, mitigation measures for transmission pathways, the application of risk analysis and approaches for biosecurity plan development.
- The principles designed to mitigate the <u>risks</u> associated with the introduction of <u>pathogenic</u> <u>agents</u> into, the spread within, or the release from <u>aquaculture establishments</u>



Chapter 1.4. – What will you find in the chapter?





Article 4.1.5.

Categories of aquaculture production systems

Article 4.1.6.

Area management

Article 4.1.7.

Transmission pathways and mitigation measures

Article 4.1.8.

Risk analysis

Article 4.1.9.

Biosecurity plan development







Reporting and notification of diseases

Why is it important?

To reduce the spread:

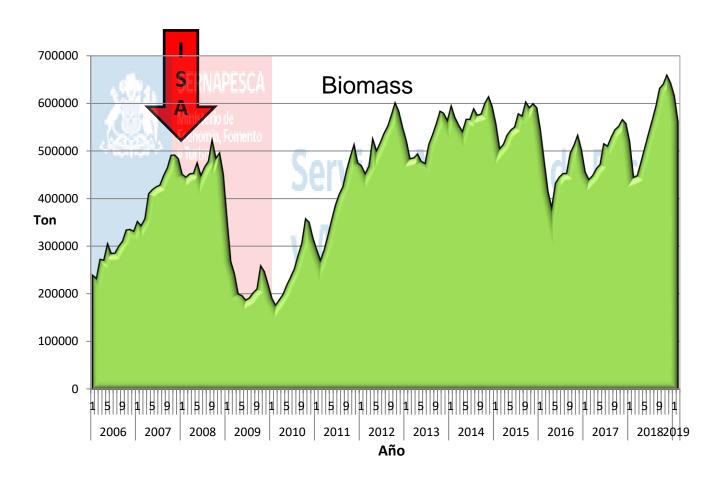
- In your country
- In the region
- Globally

To reduce the economic and social impact CC UK + GBADs



Infection with infectious salmon anaemia (ISAV) in Chile

"The appearance of an exotic disease or even its mere suspicion can potentially be disastrous in a country or region. The appearance of the ISA Virus cost Chile 3,500 million dollars, 15,000 jobs and 25 points reduction in GDP of the Los Lagos region".



<u>Term of Reference</u> for Focal Points for Aquatic Animals



OIE-WAHIS

Analytics

World Animal Health Information System

OIE-WAHIS (OIE World Animal Health Information System) is a unique comprehensive database through which information on the animal health situation worldwide is reported and disseminated throughout the world. OIE-WAHIS data reflects the information gathered by the Veterinary Services from OIE Members and non-Members Countries and Territories on OIE-listed diseases in domestic animals and wildlife, as well as on emerging diseases and zoonoses.

All this information can be publicly accessed and visualized on this interface. OIE-WAHIS replaces and significantly extends the former web interface named WAHIS providing access to all reported data since 2005. This new public interface includes data extraction tools, interactive mapping tools and dashboards to support data consultation, visualization and extraction of officially validated animal health data.



Support the optimal collection and submission of aquatic animal disease information to the OIE thorough the OIE-WAHIS



Performance of notifying listed and emerging aquatic animal diseases to the OIE

In general poor compared to terrestrial animal diseases

- OIE-WAHIS is only as good as the data coming in Result:
 - Unnecessary spread of pathogenic agents
 - Increased economic and social impact
 - Reduced productivity

Infection with tilapia lake virus

Trade in Tilapia

- Global production of tilapia, predominantly *Oreochromis niloticus*, is estimated at 4.5 million metric tonnes (FAO data).
- Tilapines, comprising more than 100 species, are the second most important group of farmed fish worldwide after carp.
 - Huge potential for spreading the virus if measures to ensure safe trade are not implemented.
 - Has already spread to three continents (Asia, South America, North America and Africa).
- Despite geographic separation; strains were highly homologous, suggesting an epidemiological link and international spread.
- It is more than likely that more diseases will emerge and cause problems for tilapines population and measures to prevent, detect and control must be implemented by all countries with tilapia production to reduce the consequences.
 - Trade, increased production and climatic changes are some of the drivers.
- Please remember the lessons learned from the spread of infection with TiLV!! Take measures to prevent, detect and control diseases in tilapia!!!!!!
- Sharing information, collaboration and coordination and is key



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Why is difficult?

- Diagnostic capacity, regulations or lack of trained personnel
- Diseases are not notifiable in countries
 - If not reported within the country, they cannot be notified to the OIE
 - Poor knowledge of the responsibility to notify the OIE (emerging diseases)
- Trade implications
- Different interpretation or approaches in the *Terrestrial* and *Aquatic Code*

2021-2025







Guardians of aquatic animal health and welfare