Introduction

Aquatic animal health and welfare are of great importance to the World Organisation for Animal Health (WOAH), particularly in the context of our Aquatic Animal Health Strategy launched in May 2021. Therefore, WOAH publishes regularly an aquatic animal health situation report highlighting information on 1) disease events reported by countries and territories through the World Animal Health Information System (WAHIS) and 2) antimicrobial agents intended for use in aquatic animals reported by countries and territories through the Global database for ANImal antiMicrobial USE (ANIMUSE). This report is intended to be used as scientific communication material published on our website. It is produced quarterly, and each edition covers one of the four species categories of aquatic animals within the scope of WOAH’s work: amphibians, crustaceans, fish and molluscs. This report provides information on WOAH-listed diseases of molluscs as well as data on antimicrobial use.

Contextual data

By becoming a Member of WOAH, countries accept the legal obligation to share animal health data on listed and emerging diseases in accordance with our standards. Diseases included in this list meet the following criteria: 1) freedom at the level of country or zone by at least one country, and potential for international spread, 2) significant morbidity or mortality in animals (farmed or wild) or humans (for zoonotic diseases), and 3) reliable means for diagnosis and case definition is available. The list is revised annually and in 2023 comprises 31 aquatic animal diseases, and 3 emerging diseases.

The implementation of surveillance is essential for the detection of animal disease events, allowing for information sharing. However, not all countries and territories have the capacity to implement surveillance systems for all diseases listed by WOAH and therefore resources are prioritised. Figure 1 provides an overview of the number of listed diseases of molluscs for which surveillance activities have been reported by countries and territories via WAHIS in 2019 (the most recent year with over 100 countries and territories submitting information). In 2019, the list comprised 7 diseases of molluscs.

This figure shows that of the 138 countries and territories that shared information via WAHIS, 43% reported no surveillance completed for the 7 diseases of molluscs, 25% reported surveillance for some of the listed diseases of molluscs, and 32% reported surveillance for all listed diseases of molluscs. In some regions of the world, such as western Africa, middle Africa, eastern Africa, southern Asia, and central Asia, many reports were missing. This context, which highlights important gaps in surveillance, must be considered when interpreting animal disease events reported to WOAH.

Figure 1. Number of listed diseases of molluscs for which surveillance activities have been reported by countries and territories via WAHIS in 2019
Disease situation in the past 5 years (2019-2023)

This section presents disease situations in molluscs that have been reported by countries and territories through WAHIS. This reporting is a requirement for our Members and covers listed diseases, for which information on presence/absence must be reported through six-monthly reports. Members are also requested to inform WOAH if the situation is unknown.

Although these data may have some bias, either because they are incomplete or because their granularity varies (depending on the reporting country/territory), they represent the official reference information on animal health reported by the official services, using a standard template and a standard data format.

These maps show the situation reported for the seven listed diseases of molluscs in the past five years. Presence is shown in red. Suspicion is shown in orange. Absence is shown in green. No information is shown in white or grey. Please note that not all the countries and territories reporting the disease present have declared a disease surveillance program in place.

**Infection with abalone herpesvirus** has been reported present (see area in red) in one country (Australia).

**Infection with Bonamia exitiosa** has been reported present (see areas in red) in five countries (Australia, Croatia, New Zealand, Spain and United States of America).
Infection with *Bonamia ostreae* has been reported present or suspected (see areas in red or light orange) in nine countries (Canada, Denmark, France, Ireland, Netherlands, New Zealand, Spain, United Kingdom, United States of America).

Infection with *Marteilia refringens* has been reported present (see areas in red) in eight countries (France, Greece, Morocco, Norway, Portugal, Spain, Sweden and United Kingdom).
Infection with *Perkinsus marinus* has been reported present or suspected (see areas in red or light orange) in three countries (Brazil, Morocco, United States of America).

Infection with *Perkinsus olseni* has been reported present or suspected (see areas in red or light orange) in nine countries/territories (Australia, Brazil, French Polynesia, Morocco, New Zealand, Portugal, Spain, Tunisia, Uruguay).
Infection with *Xenohaliotis californiensis* has been reported present (see areas in red) in three countries/territories (Chile, Ireland, United States of America).

**Exceptional events reported during the period of interest (13/07/2022 – 13/07/2023)**

This section highlights exceptional disease events in molluscs that have been reported by countries and territories through WAHIS. However, no such events were reported to WOAH through WAHIS during the period covered by this report. As noted above, this reporting is a requirement for our Members and covers listed diseases as well as emerging diseases, for which exceptional events must be reported through immediate notification, followed by weekly follow-up reports until the situation has stabilised. Exceptional events include first occurrence, recurrences, detection of new strains, occurrence of the disease in new hosts, and unexpected changes in disease dynamics in the country. Stable situations are not covered in this section and are reported to WOAH through another channel of WAHIS.

**Africa, Americas, Asia, Europe, Oceania**

No report for exceptional event in molluscs has been submitted to WOAH since November 2020.

**Self-declared Disease Status during the period of interest (13/07/2022 – 13/07/2023)**

In accordance with the provisions of the *Aquatic Animal Health Code (Aquatic Code)*, Members may wish to self-declare the freedom of their country, zone or compartment from a disease. A Member wishing to publish a self-declaration for disease-freedom, should provide the relevant documented evidence of compliance with the provisions of the relevant chapters of the *Aquatic Code*.

**No self-declaration was published for diseases of molluscs during the period of interest.**

**Antimicrobial use in molluscs**

In the past decades, a range of pathogens have been reported to develop resistance to antimicrobials. To make sure these key medicines remain efficient, WOAH is gathering data on the amounts of antimicrobial use in animals worldwide. This information is an essential asset to reduce overuse and misuse of antimicrobials and to curb the spread of antimicrobial resistance (AMR).

Since 2015, WOAH has taken the lead to build a global database on antimicrobial agents intended for use in animals collecting data from its Members. In 2022, the way antimicrobial use data is reported has been transformed with an online customised database system: [ANIMUSE Global Database](https://www.anisuregistry.org) (ANimal antiMicrobial USE).

Based on the data reported, we produce annual reports on antimicrobial agents intended for use in animals. According to the 7th report, 69 countries reported quantities of antimicrobial agents intended for use in aquaculture, and 28 countries covered molluscs in their total antimicrobial reported quantities. WOAH is working to raise awareness among its Members of the importance of collecting and sharing antimicrobial use data, and to understand the barriers to collecting
and reporting this information. This topic is of critical importance to animal health, including mollusc health. This will help WOAH to further support its Members in building capacity and increasing reporting for better management of antimicrobials globally. Although antimicrobial use is limited to mollusc spat production it could still have influence on AMR emergence, therefore the need to monitor it.

Visit our website for more information. For any press inquiry on the disease, you can email us at media@woah.org