

Editorial
Perspectives
Dossier
Around the World
Resources



Improving aquatic animal health and welfare worldwide





Emerging infectious diseases (EIDs) are a significant animal and public health threat [1,2]. Several authors have described an increasing occurrence of EIDs, most of them with zoonotic origins (60.3%), and the majority of those (71.8%) originating in wildlife [2,3]. This article describes key elements in the reporting of emerging diseases to the World Organisation for Animal Health (WOAH), explaining the criteria by which a disease is considered emerging and presenting some statistics on reporting from WOAH Members.

In addition to the 117 terrestrial and aquatic listed diseases, WOAH Members have an obligation to report information on diseases of particular epidemiological relevance, even if they do not fit the criteria listed in Chapter 1.2 of the *Terrestrial Animal Health Code* and the *Aquatic Animal Health Code*.

An emerging disease is defined in the Codes as 'a new occurrence in an animal of a disease, infection or infestation, causing a significant impact on animal or public health resulting from: i) a change of a known pathogenic agent or its spread to a new geographic area or species; or ii) a previously unrecognised pathogenic agent or disease diagnosed for the first time'.

The process to evaluate and assess whether a disease should be considered as emerging is described here.

According to Article 1.1.4 of the <u>Terrestrial Animal Health Code</u> and the <u>Aquatic Animal Health Code</u>, if an emerging disease occurs, the Veterinary Authorities in that country shall send to WOAH, through the <u>World Animal Health Information System (WAHIS)</u>, an immediate notification and periodic follow-up reports. The submission of these reports is critical to enabling a better understanding of the epidemiology of the disease and its importance for animal and public health.

In contrast to the report for listed diseases, Members do not have the obligation to submit an alert report 24 hours after disease confirmation.

Since 2005, WOAH has recognised 29 emerging diseases (13 **B**aquatic diseases and 16 terrestrial diseases). Some emerging diseases were later included in the list of reportable diseases (e.g. infection with decapod iridescent virus 1). In 2022, WOAH recognised four emerging diseases: three aquatic diseases (carp edema virus, *Enterocytozoon hepatopenaei* infection and Tilapia lake virus disease) and one terrestrial disease (SARS-CoV-2 in animals).

The occurrence of emerging diseases is reported through WAHIS. Between 2005 and September 2022, there were 178 immediate notification reports (144 for terrestrial diseases and 34 for aquatic diseases). The trend of report submission is presented in Figure 1. The peak of reports in 2021 was due to SARS-CoV-2 in animals and the peak in 2009 to swine influenza H1N1.

These two examples highlight the fact that EIDs are a major animal and public health concern, and emphasise the importance of reporting to WAHIS and the significance of a One Health approach that includes human, animal and environmental health monitoring.





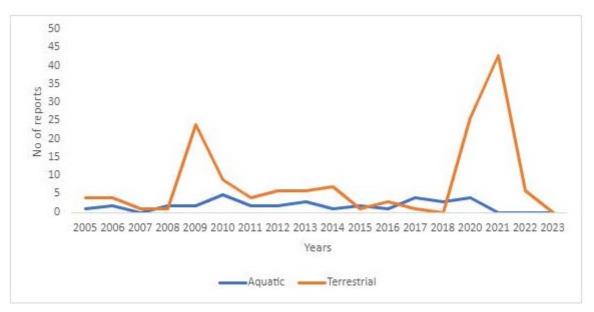


Figure 1. Trend in the number of reports submitted to WAHIS on emerging diseases during the period 2005–2022 (as of September 2022)

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PERSPECTIVES

WOAH ACTIONS

The importance of notification of emerging diseases

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WOAH (founded as OIE) is a global organisation, working to ensure the health of animals across the world. Since 1924, we have focused on the complexities of animal health. We disseminate information on animal diseases and use science-based strategies to limit their potentially negative impact on society.

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