

Periodic global update on recent exceptional disease events of terrestrial wildlife reported to WOA

Situation report period covered – November 2023

A general introduction of the scope and objective of this report as well as global level of wildlife disease surveillance activities can be found on [Wildlife Health - WOA - World Organisation for Animal Health](#).

In total **548 new outbreaks** with **8,030 cases** of [exceptional disease events](#)¹ (Figure 2) were reported in terrestrial wildlife during the period, through WOA's early warning system. Other cases may have been reported during the period through email using the provision of [article 1.1.5](#)² of the Terrestrial Animal Health Code. Other cases in wildlife species can be reported as affected in areas where diseases are stable, and they are not covered by this report.

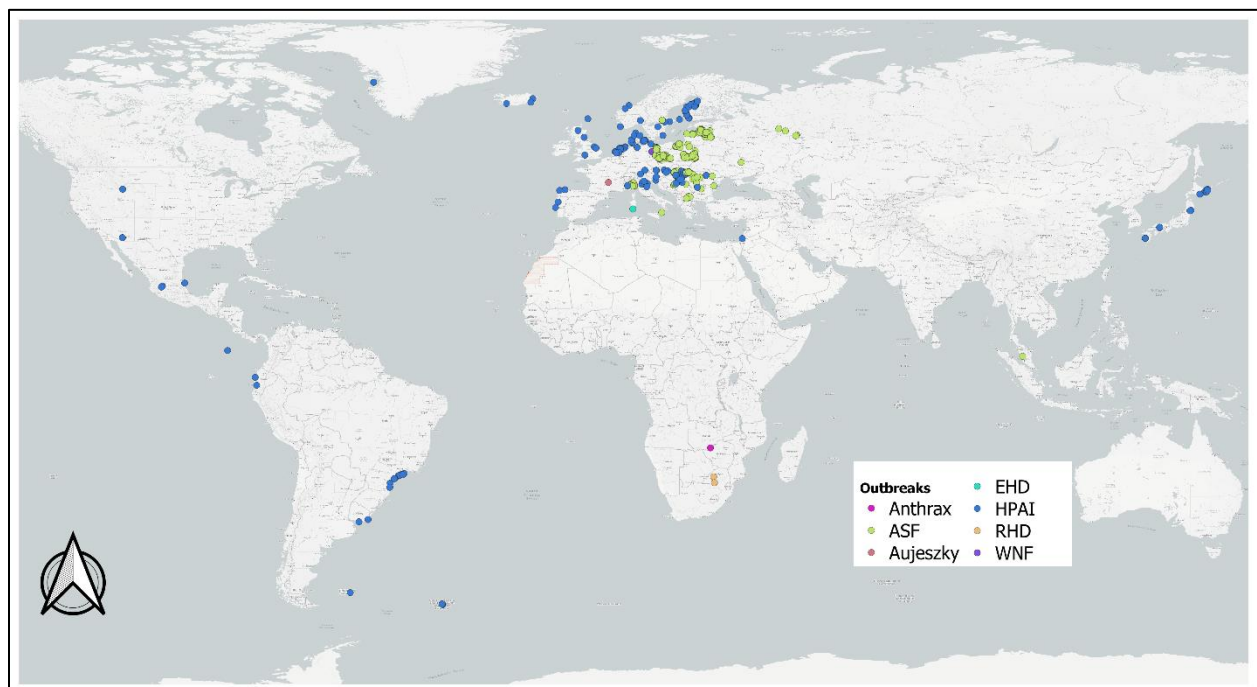


Figure 1. New outbreaks of exceptional disease events reported during the period in terrestrial wildlife. ASF= infection with African swine fever, EHD = Infection with Epizootic hemorrhagic disease, HPAI = Infection of birds other than poultry, including wild birds, with influenza A viruses of high pathogenicity, RHD= Rabbit haemorrhagic disease , WNF = West Nile Fever.

¹ Based on the criteria listed in Article 1.1.3.1 of the WOA Terrestrial Animal Health Code

² Although Member Countries are only required to notify listed diseases and emerging diseases, they are encouraged to provide WOA with other important animal health information.

Outbreaks were reported in countries in Africa, the Americas, Asia, and Europe (Figure 3), specifically, infection with African swine fever (ASF), anthrax, Infection with Aujeszky's disease, Infection of birds other than poultry, including wild birds, with influenza A viruses of high pathogenicity (HPAI), Infection with Epizootic hemorrhagic disease (EHD), Rabbit haemorrhagic disease (RHD), and West Nile Fever (WNF). The large majority of outbreaks (91%) were reported in the Europe Region, possibly related to more extensive wildlife surveillance and/or reporting in the Region. Some outbreaks were also reported in South America, linked to the spread of HPAI in the Region, and in Asia, mainly related to HPAI outbreaks reported in Japan. The diseases with the highest number of outbreaks reported were, as in previous reports, ASF and HPAI, followed by RHD (2 outbreaks reported in South Africa), and all the other diseases (Aujeszky, EHD, WNF) with one outbreak reported for each. Cases were reported in 61 different wild species belonging to 15 orders (Table 1, Table 2, and Annex 1).

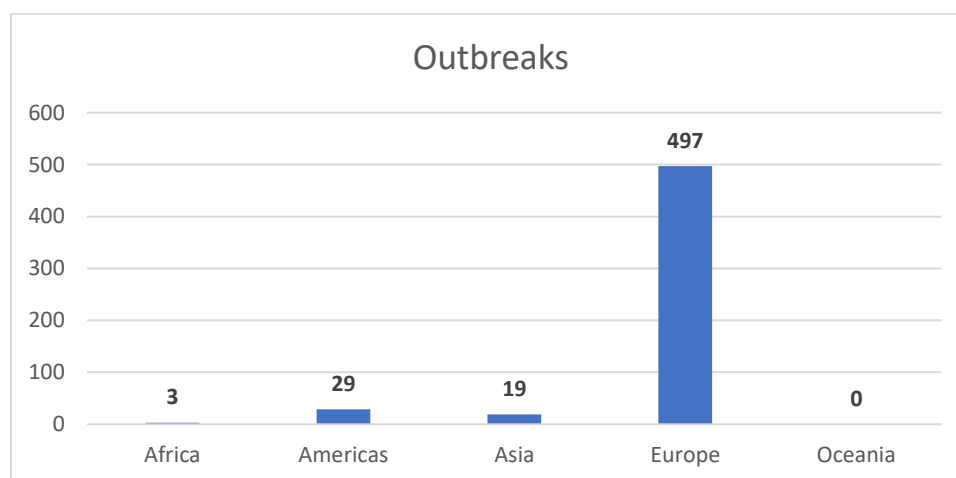


Figure 2: Number of outbreaks reported during the period and split by world region

Table 1 – Number of outbreaks reported by disease and information on zoonotic character of the disease³.

Disease	Outbreaks reported	Zoonotic disease
Anthrax	1	Common
ASF	341	No
Aujeszky	1	No
EHD	1	No
HPAI	201	Occasional
RHD	2	No
WNF	1	Common

³ This assessment is based on the definition of zoonosis documented in the Tripartite Guide to Addressing Zoonotic Diseases in Countries: “infectious diseases that can be spread between animals and humans; can be spread by food, water, fomites, or vectors.”

Table 2 - Number of cases reported by order, and animal species; conservation status of each species, based on IUCN red list of threatened species (database accessed on 06 July 2023) This table provides the list of species with threatened status. The full list of species reported is provided in annex 1.

Disease	Cases	Order	Species (scientific name)	Species (common name)	Endangered status*
HPAI	4	Gruiformes	<i>Grus japonensis</i>	Red-crowned Crane	VU
Anthrax	3	Artiodactyla	<i>Hippopotamus amphibius</i>	Hippopotamus	VU
HPAI	1	Carnivora	<i>Lutra lutra</i>	Otter	NT
HPAI	1	Anseriformes	<i>Marmaronetta angustirostris</i>	Marbled teal	NT
HPAI	2	Procellariiformes	<i>Procellaria aequinoctialis</i>	White-chinned petrel	VU
HPAI	2	Charadriiformes	<i>Rissa tridactyla</i>	Black-legged Kittiwake	VU

*NT=Near threatened; VU=vulnerable; EN= endangered; CE= critically endangered

Global and regional impact

Reporting and impact on biodiversity

Out of the 61 species for which cases were reported, six of them (9.8%) have a threatened status according to the IUCN classification. In particular, two are classified as “Near threatened” (NT), and four as “Vulnerable” (VU), (figure 3, table 2). Out of the seven reported diseases, HPAI is impacting the large majority of the species (5/6), while anthrax is impacted one of them. The severe impact of HPAI on species with vulnerable conservation status is a common finding in our analysis, highlighting the significant impact of this disease on biodiversity conservation. The recently published WOAHA guidelines “[Considerations for emergency vaccination of wild birds against high pathogenicity avian influenza in specific situations](#)” addresses this risk by providing guidance on considerations for emergency vaccination of wild birds against high pathogenicity avian influenza (HPAI) in immediate response to an outbreak or increased risk of introduction of HPAI

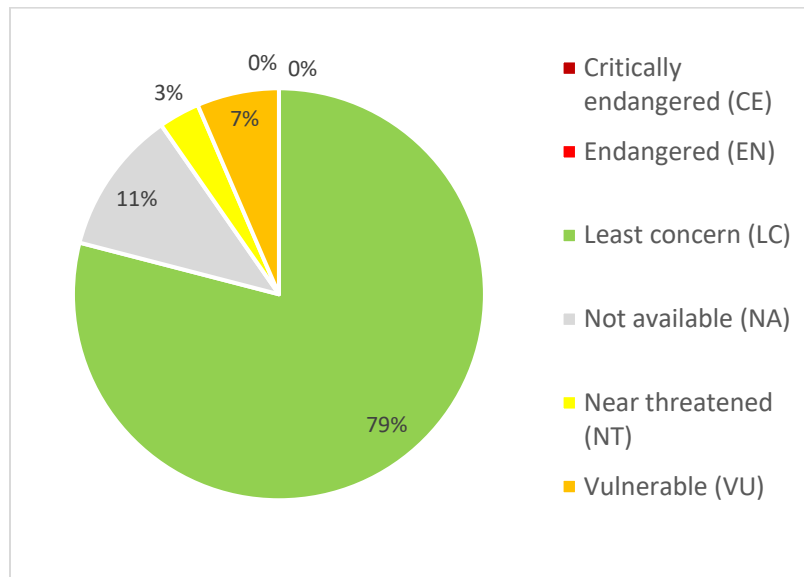


Figure 3: percentage of reported species falling under the different IUCN categories

In particular, four species with “Vulnerable” status were reported during the period. regarding the species with endangered status, HPAI was detected in two **wild** Black-legged Kittiwake in Iceland (one animal died from the disease), four **wild** Red-crowned Crane in Japan (all cases died from the disease), and two **wild** White-chinned petrel in Brazil. To provide an idea of the potential impact of HPAI occurrence in this species it is relevant to highlight that:

- Black-legged Kittiwake⁴ has a decreasing population trend, with continuing decline of mature individuals. European population has declined markedly since the 1980s, and is currently estimated and projected to be declining overall at a rate of >40% over three generations. Impact of HPAI on European population could be quite important as, based on the latest population estimates, Europe (including Greenland) is considered to hold >50% of the global population.
- Red-crowned Crane⁵ has a decreasing population (estimated continuing decline rate over three generations of 30.6%) with number of mature individuals estimated at around 2300, with Japan hosting the largest part of the population (the rest of the population is located in Korea peninsula, and China [PRC])

⁴ <https://www.iucnredlist.org/species/22694497/155617539>

⁵ <https://www.iucnredlist.org/species/22692167/213488064>

- White-chinned petrels⁶ are also in decline, with an estimated 3,000,000 adult individuals (based on 1985-2011 figures). Global long-term data are lacking for most of the colonies, but a decline can be inferred from a 28% decline in nest occupancy over 20 years on Bird Island, South Georgia, and an 86% decline over 1981-1993 at sea in Prydz Bay, Antarctica. The spread of HPAI in the Antarctic region could potentially contribute to this decline.

HPAI keeps also being reported in wild mammals, and the [WOAH statement on HPAI in wild mammals](#) highlighted the need for better surveillance, reporting, control and genetic sequence sharing to better anticipate the consequences of the ongoing outbreaks.

Another "vulnerable" species reported in November and affected by anthrax outbreaks is represented by three cases reported in hippopotamus in Zambia. The Red List describes the Hippopotamus populations as Vulnerable, as the global population experienced considerable declines in the mid 1990s and early 2000s. The most recent population estimates suggest that recently (over the 8 years since the last assessment), populations have largely remained stable.

Finally, ASF has not been reported in any endangered wildlife species, but it could potentially threaten endemic wild pig species, leading to the extinction of local populations^{7,8} and creating tensions for top predators that rely on wild pigs as a major food source.

Reporting and impact on Public health

HPAI has a recognised zoonotic potential. In the current situation, it is worrying to observe that the number of cases in mammals has increased and that the virus has adapted to infect mammals more efficiently (in this report HPAI was reported in eight mammal species, belonging to Carnivora orders [American Mink, Arctic Fox, Eurasian Lynx, Otter, Raccoon dog, Red Fox, South American fur seal, South-American sea lion]). This situation represents a risk for increased human infections, although currently, the infections are still sporadic. The increased number of HPAI cases reported in mammals is a trend observed since 2021 (for additional information, see the [HPAI situation reports](#)). This trend has led to a [statement of WOA](#)H on avian influenza in mammals to increase awareness, monitoring and analysis of wild mammals, acknowledging the risk that H5N1 avian influenza may become better and better adapted to mammals.

⁶ <https://www.iucnredlist.org/species/22698140/132628887>

⁷ <https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/cont.12784>

⁸ <https://www.iucn.org/fr/node/18504>

Of public health of major concern, considering the significant impact and mortality is also the reporting of anthrax in three Hippopotamus in Zambia. Finally, West Nile Fever (WNF) was reported in Germany in a bird belonging to Accipitridae family (species not specified). During 2023, Germany reported 24 cases of WNF in wild birds.

Reporting and impact on domestic animal's health and welfare

During the reporting period, most of the reported outbreaks of non-zoonotic diseases were related to the occurrence of African swine fever in wild boar in Europe. African swine fever is one of the major animal diseases currently threatening global livestock and food security (for more information see the [African swine fever situation reports](#)). The major impact of African swine fever is linked to the establishment of a wildlife cycle that makes disease eradication challenging. Reduction of wild boar density may have indirect effects also on increased predation of livestock⁹. It is interesting to note that EHD has been reported in a fallow deer in Italy. This vector-borne disease has historically been isolated from wild and domestic ruminants and arthropods in North America, Ecuador, the Caribbean, French Guiana, Asia, Africa and Australia. EHD was considered an emerging disease in cattle and was added to the WOAHA list of notifiable diseases in May 2008 following outbreaks in Mediterranean basin countries, including Algeria, Israel, Jordan, Morocco, Tunisia and Türkiye. The disease has recently been reported in some European countries (Italy, France, Portugal, Spain) and the outbreak reported in fallow deer is one of the few reported cases of the disease in wildlife through WAHIS.

Regarding the occurrence of HPAI, it is relevant to highlight that the dynamics of the disease at the poultry/wildlife interface can also impact food security (for additional information please see also the [HPAI situation reports](#)).

Key messages

For a century, WOAHA has managed repositories for animal health disease monitoring data from its Members. By providing a common tool through the World Animal Health Information System (WAHIS), that is homogenous across countries, and based on shared definitions and standards, we ensure that reporting is standardised and centralised. The data collected through WAHIS provides an overview of diseases in wildlife around the world to better anticipate, prevent, monitor and control outbreaks. The information provided in this report on surveillance implementation in terrestrial wildlife shows major gaps in several

⁹ <https://www.sciencedirect.com/science/article/pii/S1470160X21010840>

parts of the world, which suggests that the number of cases reported to WOAAH is significantly under-detected and underestimated. This summary however provides a picture of what has been detected and is useful to the international community.

The information provided in this monthly situation report highlights that:

- Surveillance activities reported in wildlife are largely variable among countries and regions (refer to the general introduction [Wildlife Health - WOAAH - World Organisation for Animal Health](#)).
- The reporting of exceptional events affecting wildlife in November mainly concerned ASF and HPAI in several regions. This is a common situation also observed in previous situation reports.
- Several countries reported outbreaks of ASF and HPAI, which shows the widespread existence of surveillance activities for these two diseases.
- Deaths and cases in several species with critical conservation status have been reported by countries, highlighting the importance of diseases for the conservation of biodiversity.
- The widespread detection of ASF and HPAI in wildlife represents a threat to biodiversity conservation (especially HPAI in fragmented bird and mammal populations), livestock, food security, and potentially human health at the global level.

More information and resources

- [Statement on avian influenza and mammals](#)
- [Avian Influenza and Wildlife: Risk Management for People Working with Wild Birds](#)
- [Continued expansion of HPAI H5 in wildlife in South America and incursion into the Antarctic region \(OFFLU statement\)](#)
- [Considerations for emergency vaccination of wild birds against high pathogenicity avian influenza in specific situations](#)
- [African swine fever in wild boar ecology and biosecurity](#)
- [African swine fever awareness and technical resources](#)
- [In-country wildlife disease surveillance report 2021](#)
- [In-country wildlife data management survey dashboard 2023](#)

For any press inquiry on diseases in wildlife, you can email us at media@woah.org

Complete list of species for which cases were reported in October 2023 is available on demand at epi@woah.org.