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

Situation report period covered – October 2023

Recent exceptional disease events in terrestrial wildlife (which were reported for the month covered by this report: October 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 - WOAH - World Organisation for Animal Health.

In total **564 new outbreaks** with **2,565 cases** of exceptional disease events[1] (Figure 2) were reported in terrestrial wildlife during the period, through WOAH'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.

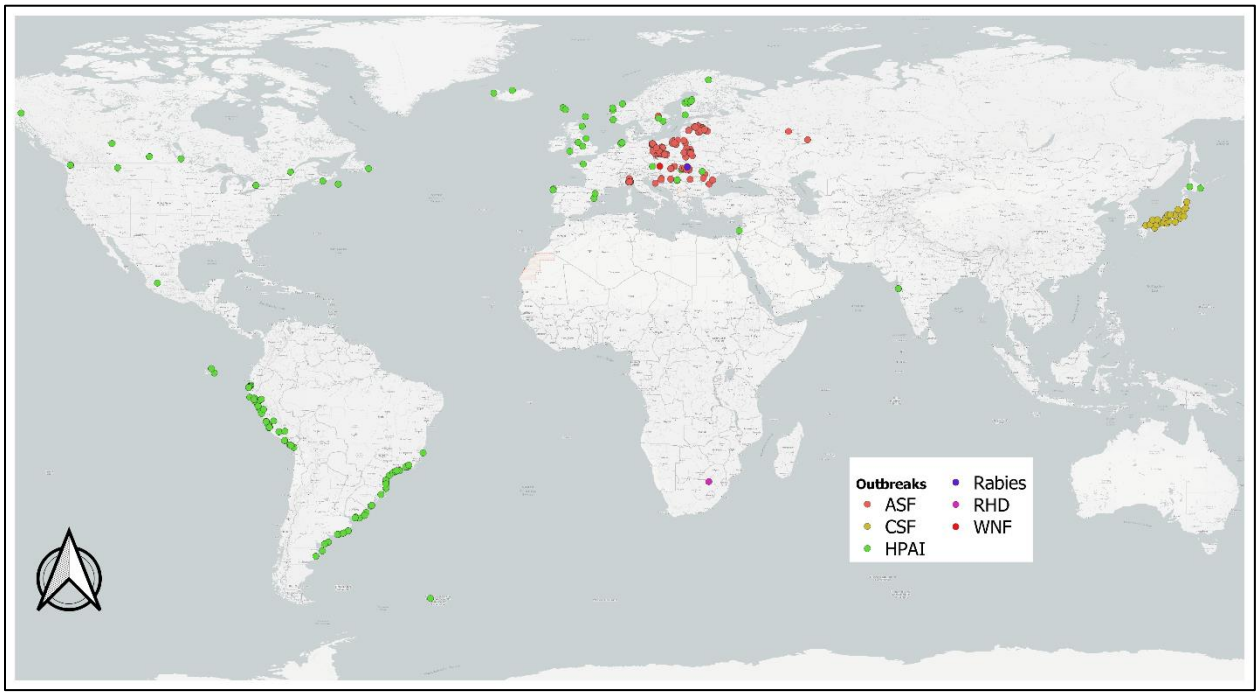

Figure 1. New outbreaks of exceptional disease events reported during the period in terrestrial wildlife. ASF= infection with African swine fever, CSF = infection with Classical swine fever, HPAI = Infection of birds other than poultry, including wild birds, with influenza A viruses of high pathogenicity,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

[1] Based on the criteria listed in Article 1.1.3.1 of the WOAH Terrestrial Animal Health Code

[2] Although Member Countries are only required to notify listed diseases and emerging diseases, they are encouraged to provide WOAH 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), infection with Classical swine fever (CSF), Infection of birds other than poultry, including wild birds, with influenza A viruses of high pathogenicity (HPAI), Infection with rabies virus, Rabbit haemorrhagic disease (RHD), and West Nile Fever (WNF).** A higher density of outbreaks was reported in the Europe Region, possibly related to more extensive wildlife surveillance and/or reporting in the Region. Several outbreaks were also reported in South America, linked to the spread of HPAI in the Region, and in Asia, linked to the ongoing CSF event in Japan. The diseases with the highest number of outbreaks reported were ASF and HPAI, followed by CSF, rabies, RHD, and WNF with few outbreaks reported for each of the last three diseases. Cases were reported in 69 different wild species belonging to 16 orders (Table 1, Table 2, and Annex 1).

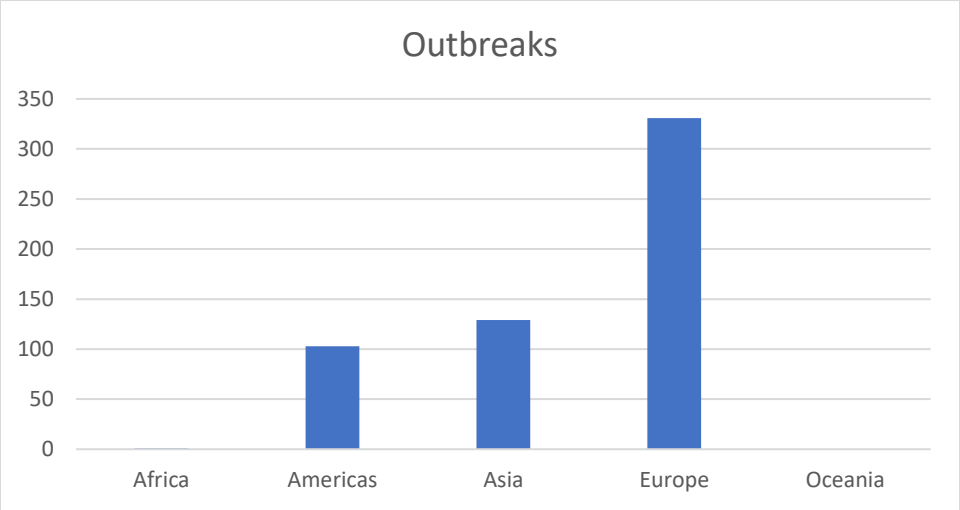

Figure 2: Number of outbreaks reported during the period and split by world region

Table 1 – Number of outbreaks reported by disease and information on zoonotic character of the disease[3].

Disease	Outbreaks reported	Zoonotic disease
ASF	288	No
CSF	125	No
HPAI	147	Occasional
RHD	1	No
Rabies	2	Common
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	3	Accipitriformes	*Aquila rapax*	Tawny Eagle	VU
HPAI	6	Psittaciformes	*Ardenna grisea*	Sooty Shearwater	NT
HPAI	3	Phaethontiformes	*Pelecanus thagus*	Peruvian pelican	NT
HPAI	113	Trogoniformes	*Phalacrocorax bougainvillii*	Guanay Cormorant	NT
HPAI	21	Trogoniformes	*Phalacrocorax gaimardi*	Red-legged Cormorant	NT
HPAI	3	Procellariiformes	*Phoebastria irrorata*	Waved albatross	CE
HPAI	2	Charadriiformes	*Rissa tridactyla*	Black-legged Kittiwake	VU
HPAI	1	Anseriformes	*Somateria mollissima*	Common Eider	NT

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

Global and regional impact

Reporting and impact on biodiversity

Out of the 69 species for which cases were reported, eight of them (11.6%) have a threatened status according to the IUCN classification. In particular, five are classified as “Near threatened” (NT), two as “Vulnerable” (VU), and one as “Critically endangered” (CE) (figure 4, table 2). Out of the five reported diseases, HPAI is the only one with an impact on the eight species with threatened status, highlighting the relevant impact of this disease on biodiversity conservation.

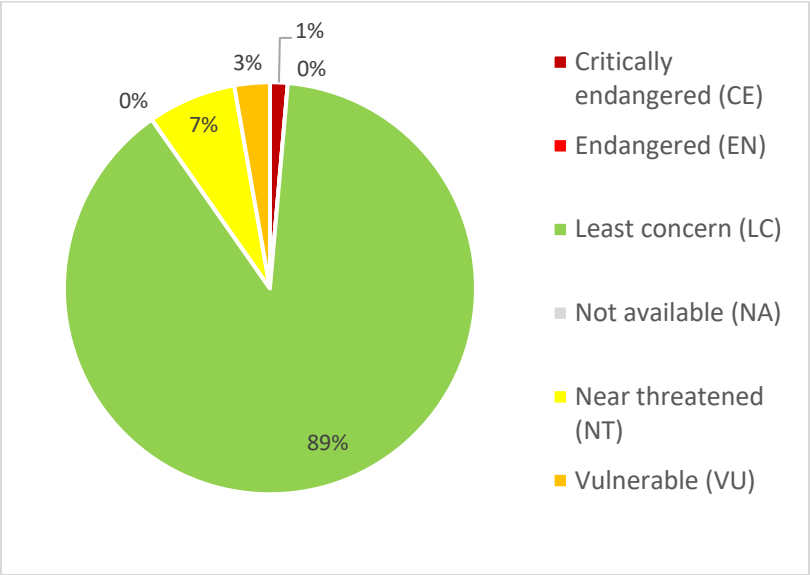

Figure 3: percentage of reported species falling under the different IUCN categories

In particular, regarding the species with endangered status, HPAI was detected in three **captive** Accipitriformes (Tawny eagle – *Aquila rapax*) in Peru and one of these died from the infection. The Tawny eagle is a species occurring over large areas of Sub-Saharan Africa, with isolated populations in North Africa, the Middle East and South Asia, and its population, showing a rapid decreasing trend, is estimated at 100,000 – 499,999 mature individuals[4]. HPAI was also detected in two **wild** Charadriiformes (Black-legged Kittiwake - *Rissa tridactyla*), in Canada and Finland and both of them died from the disease. The Black-legged Kittiwake breeds in the North Atlantic, and on to the Taymyr Peninsula and Severnaya Zemlya (Russia), and wintering south to the Sargasso Sea and West Africa; and in the North Pacific, south to the East China Sea and northwestern Mexico, and the population is declining (no estimation of number of mature individuals available)[5]. Finally, HPAI was reported three times in wild population of the Critically endangered Waved albatross (*Phoebastria irrorate*) in Peru. All three cases died from the disease. Estimation of the number of mature individuals is not available but evidence has shown a 2-3% reduction in annual adult survival compared with that in the 1960s, which is thought to have driven recent dramatic declines in the breeding population. 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.

[4] https://www.iucnredlist.org/species/22696033/203852137
[5] https://www.iucnredlist.org/species/22694497/155617539

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[6,7] 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 particular, the occurrence of HPAI cases in five "unusual hosts", belonging to Carnivora orders (American Mink, Arctic Fox, Red Fox, South American fur seal, South-American sea lion) reported this month, highlights again the increased risk of transmission to mammals (including humans). It is interesting to notice that the carnivores affected could be scavengers or predators of infected birds. This confirms a trend (increased number of HPAI cases reported in unusual hosts) observed since 2021 (for additional information, see the HPAI situation reports). This trend has led to a statement of WOAH 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.

Of public health concern is also the reporting of rabies in wild fox in Hungary where the disease recurred since the second half of 2022, after a period of absence of five years (vaccination in response to the outbreaks has been applied in both domestic animals and wildlife) and of West Nile Fever (WNF) in Austria in an Eurasian Eagle-owl.

Reporting and impact on domestic animal's health and welfare

During the period most of the outbreaks of non-zoonotic diseases reported were related to the occurrence of African swine fever in wild boar in Europe. African swine fever represents one of the main animal diseases that currently threaten livestock and food security at the global level (for additional information please see also 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 livestock[8]. Several outbreaks of Classical Swine Fever (CSF) were also reported in Japan, where the CSF events started in 2018 and reported so far around 4,000 outbreaks in wild boar.

[6] https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/conl.12784
[7] https://www.iucn.org/fr/node/18504
[8] https://www.sciencedirect.com/science/article/pii/S1470160X21010840

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, WOAH 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 parts of the world, which suggests that the number of cases reported to WOAH 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 - WOAH - World Organisation for Animal Health).
- The reporting of exceptional events affecting wildlife in October concerned mainly ASF and HPAI in several regions.
- 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)
- 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

Annex 1

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