

# WILDLIFE DISEASES

## Situation Report 02/24

Period covered: Jul – Sep 2024

This report provides an update of wildlife disease situation, according to the information submitted through the World Animal Health Information System of the World Organisation for Animal Health (WAHIS).

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](#).

## Key messages and Recommendations

- During the reporting period, **35 countries and territories** reported **1,249 outbreaks** and **3,808 cases** in wildlife. Cases of **eight diseases** were reported in **123 different wildlife species**, **8%** of which are classified as being at risk of extinction by the International Union for Conservation of Nature (IUCN) red list.
- The reporting of exceptional events affecting wildlife during the period mainly concerned **African Swine Fever (ASF)** and **Highly Pathogenic Avian Influenza (HPAI)** in several regions. This is a common situation also observed in previous situation reports that shows the widespread existence of surveillance activities in WOA Member countries and the extensive distribution of these two diseases worldwide. In this report also **West Nile fever (WNF)** recorded a significant number of outbreaks
- Few deaths and cases in **11 threatened species**, representing **8% of the total number of cases** notified during the period have been reported, highlighting the impact of diseases on the **biodiversity conservation**. The spread and persistence of ASF and HPAI in wildlife poses a threat not only to biodiversity (especially when the diseases are reported in fragmented avian and mammal populations), but also to livestock, food security, and human health at a global level. During this period, two other diseases played an unexpectedly significant role in terms of impact on biodiversity: Anthrax, which affected the highest number of threatened species (5/11) in a unique event in Zimbabwe, and WNF, which alone affected 2 out of 3 IUCN "vulnerable" species.
- From a public health perspective, it is important to highlight the WNF event in Israel, which infected 916 people, 71 of whom died.



## Recent updates (January – June 2024)

In total 1,249 new outbreaks with 3,808 cases of [exceptional disease events](#) (based on the criteria listed in Article 1.1.3. of the WOA *Terrestrial Animal Health Code* - Figure 1) were notified in terrestrial wildlife during the reporting period, through the WAHIS system. Other cases in wildlife have been reported during the period through email using the provision of [article 1.1.5](#) of the *Terrestrial Animal Health Code* (although Members are only required to notify listed diseases and emerging diseases, they are encouraged to provide WOA with other important animal health information), specifically in relation to Infection of birds other than poultry, including wild birds (HPAI) (see [dedicated dashboard](#)). Other cases in wildlife species reported in areas where disease occurrences are stable are not covered by this report.

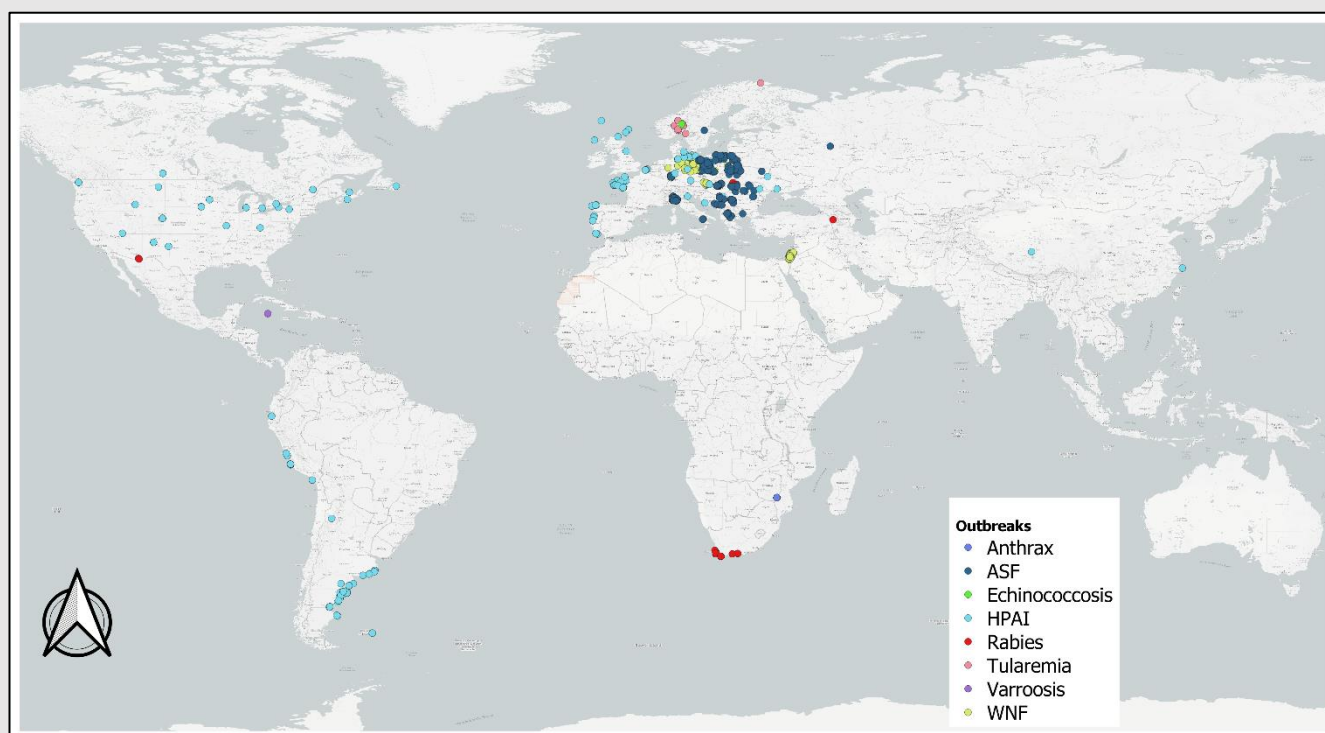


Figure 1. New outbreaks of exceptional disease events reported during the period in terrestrial wildlife. ASF = infection with African swine fever virus; HPAI = Infection of birds other than poultry, including wild birds, with influenza A viruses of high pathogenicity; WNF = West Nile fever.

Outbreaks were reported in Africa, in the Americas, in Asia, and in Europe (Figure 2). Specifically, infection with African swine fever virus (ASF), Anthrax, Infection with *Echinococcus granulosus*, infection of birds other than poultry, including wild birds, with influenza A viruses of high pathogenicity (HPAI), infection with rabies virus (rabies), Infestation of honey bees with *Varroa* spp. (Varroosis), Tularemia, and West Nile Fever (WNF). Most outbreaks (76%) were reported in Europe, possibly related to more extensive wildlife surveillance and/or reporting. Most of the outbreaks reported in the Americas were associated with the spread of HPAI in the region, while in Asia the reported outbreaks were mainly associated with WNF. Finally, the majority of outbreaks reported in Africa were associated with rabies (Figure 2). The diseases with the highest global number of outbreaks reported were, as in previous reports, ASF (775 outbreaks) and HPAI (341 outbreaks). Cases were reported in 123 different wild species belonging to 26 orders (Table 1, Table 2).

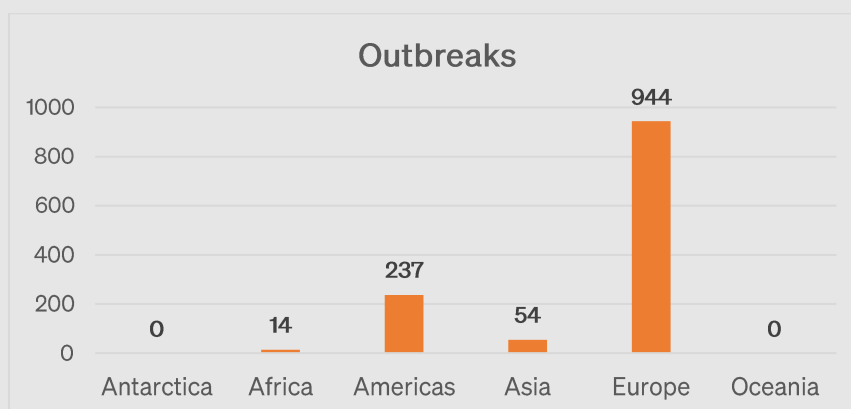


Figure 2: Number of outbreaks reported during the period and split by world region.

Table 1. Number of outbreaks reported by disease and information on zoonotic character of the disease<sup>1</sup>.

Disease	Outbreaks reported	Zoonotic disease
ASF	775	No
Anthrax	1	Common
Echinococcosis	1	Common
HPAI	341	Occasional
Rabies	18	Common
Tularemia	10	Common
Varroosis	1	No
WNF	102	Common

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 diseases that affected species with threatened status. The full list of species reported is available on demand.

Disease	Cases	Order	Species (common name)	Reporting countries/territories	Conservation Status *
Anthrax	2	<i>Perissodactyla</i>	Plains Zebra	Zimbabwe	NT
Anthrax	3	<i>Artiodactyla</i>	Giraffe	Zimbabwe	VU
Anthrax	4	<i>Proboscidea</i>	African Savanna Elephant	Zimbabwe	EN
Anthrax	1	<i>Carnivora</i>	Lion	Zimbabwe	VU
Anthrax	137	<i>Artiodactyla</i>	African buffalo (Cape buffalo)	Zimbabwe	NT
HPAI	2	<i>Charadriiformes</i>	Audouin's Gull	Portugal	VU
HPAI	175	<i>Phaethontiformes</i>	Peruvian pelican	Peru	NT
HPAI	10	<i>Piciformes</i>	Chilean Flamingo	Argentina	NT
WNF	1	<i>Anseriformes</i>	Ferruginous Pochard	Israel	NT
WNF	1	<i>Falconiformes</i>	Saker Falcon	Austria	EN
WNF	1	<i>Strigiformes</i>	Jackass Penguin	Israel	EN

\*NT=Near threatened; VU=vulnerable; EN=endangered; CR= critically endangered

<sup>1</sup> 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."

# Global and regional impact

## Reporting and impact on biodiversity

Out of the 123 species for which cases were reported, 11 of them (8%) have a threatened status according to the IUCN classification. They constitute 8% of cases reported in wildlife over the period, which represents quite an important impact given that species threatened with extinction are less numerous and with limited geographic distribution. Three species are classified as “Endangered” (EN), three as “Vulnerable” (VU), and five as “Near threatened” (NT) (figure 3, table 2).

Of the eight diseases reported, anthrax is the one that affected the highest number of reported threatened species (5/11), while HPAI and WNF each affected three. The anthrax event, localised in Gonarezhou National Park (Masvingo Province), was quite significant as it affected 14 different species in the same country (Zimbabwe).

The detection of HPAI in species with a vulnerable conservation status is a common and consistent finding in our analysis, highlighting the potentially detrimental impact of this disease on biodiversity conservation. Further scientific studies such as a wildlife population assessment would be needed to measure the impact of the disease.

Finally, WNF affected most of the threatened species during this period (2 out of the 3 species mentioned above).

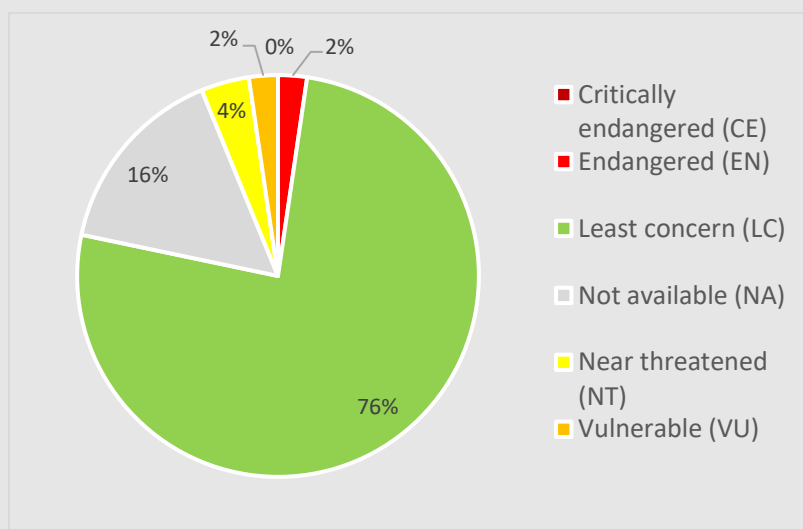


Figure 3: Percentage of reported species falling under the different IUCN categories

Just considering only species with “Endangered” (EN) IUCN status, WNF was detected in **one captive Saker Falcon** in Austria, and **one captive Jackass Penguin** in Israel. To provide an idea of the potential impact of WNF occurrence in these species it is relevant to highlight that:

- **Saker Falcon** has an estimated population of 12,200-29,800 mature individuals, with a decreasing population. This species occurs in a wide range across the Palearctic region from eastern Europe to western China.

- [Jackass Penguin](#) has a decreasing population with an estimated population of 41,700 mature individuals. It is endemic to southern Africa, where it breeds at 28 localities in Namibia and South Africa. Just seven colonies now support 97% of the South African population.

Anthrax was reported in another species with “Endangered” status, the African Savanna Elephant (4 cases reported) in Zimbabwe. The [African Savanna elephant](#) has a decreasing population, and over the past century, its subpopulations have declined across most of their range. The [African Elephant Status Report 2016](#) estimated a continental population of 415,428 for both African Savanna and African Forest Elephants combined and [reported](#) a continental decline of approximately 111,000 elephants since 2006. Over the same period, a decline of 30% of African Savanna Elephants was [reported](#).

Finally, important mortality events were reported in the “Near Threatened” African buffalo (137 cases) due to Anthrax, and in the “Near Threatened” Peruvian pelican (175 cases) due to HPAI:

- [African buffalo](#) has an estimated population of 398,000-401,000 mature individuals. The population was already declining in the 1990s. Buffalo numbers are predicted to continue to decline because of ongoing poaching for meat, habitat conversion, and expansion of human and domestic livestock populations.
- [Peruvian pelican](#) has an estimated population of 100,000-1,000,000 individuals. The species is likely to have been badly affected by the El Niño event of 1998, and population declines over 36 years (three generations) are thought to have been in the region of 10-19%.

## 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. Just in this situation report HPAI was reported in 11 mammal species, belonging to Carnivora, Lagomorpha, and Rodentia orders: Desert Cottontail, Domestic cat, House mouse, Northern raccoon, Prairie Vole, Puma, Red Fox, South-American sea lion, Southern elephant seal, Striped Skunk, Western deer mouse. This might indicate ongoing adaptation to new mammalian host and potential future risks for human health, although currently, the human 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](#) on avian influenza in mammals to increase awareness, monitoring and analysis of wild mammals, acknowledging the risk that H5N1 avian influenza may increasingly adapt to mammals.

Several outbreaks of five common zoonoses: anthrax, echinococcosis, rabies, tularemia, and WNF were reported in 10 countries (Armenia, Austria, Germany, Hungary, Israel, Norway, Poland, South Africa, United States of America, and Zimbabwe).

From a public health perspective some events are relevant to be mentioned. Anthrax showed an unexpected change in disease epidemiology in Zimbabwe, affecting several wildlife species.

In the United States of America, a new strain of rabies was reported. It is the case of rabies related to the variant associated with skunks in northern Mexico (W1), which was confirmed in two wild

skunks *Mephitis mephitis* from Cochise County, Arizona; while in South Africa rabies outbreaks in an unusual aquatic host (Cape fur seal) are still reported as of today. Investigations are ongoing, but the source of rabies is likely terrestrial. Rabies in seals is rare; for example, cases were reported in Svalbard in the 1980s. While the risk to humans can be managed through effective risk communication, the potential for spread within the seal colonies (two million seals across 30 colonies in Angola, Namibia, and South Africa, where close proximity and territorial fights are common) still needs assessment.

Finally, it is important to highlight the first occurrence of WNF in Poland, and the first occurrence in a zone in Germany, while in Israel from mid-June 2024 a high incidence of West Nile virus was observed in birds, mosquitoes and humans. By 26 September 2024, 916 people had tested positive for the disease, of whom 71 had died.

## 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 ASF in wild boar in Europe. ASF 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 ASF is linked to the establishment of a sylvatic epidemiological cycle that makes disease eradication challenging. Reduction of wild boar density may have indirect effects also on increased predation of [livestock](#).

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

Considering the impact that the disease can have on bees, it is also relevant to mention the recurrence of varroosis in Cayman Island after a period of absence of around 20 years.

# 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](mailto:media@woah.org)

Complete list of species for which cases were reported in December 2023 is available on demand at [epi@woah.org](mailto:epi@woah.org).

To contact the wildlife team at WOAHP use [wildlife@woah.org](mailto:wildlife@woah.org).