



Sentinel Surveillance Program

Annual Report 2024

Wildlife Disease Surveillance in Australia

Australia has a **national system for wildlife disease surveillance** that is coordinated by Wildlife Health Australia (WHA).

This integrated system for reporting and data capture relies on **coordinated programs, focus groups and the central collation of data** into the eWHIS national database.

The **Sentinel Surveillance Program** is a WHA partnership with zoos, universities and veterinary clinics that connects wildlife professionals and captures wildlife disease information.

In 2024, the Sentinel Surveillance Program participants saw more than **75,000 wildlife cases** at their clinics.

General Surveillance Programs

- WHA State and Territory Coordinators & Environment Representatives
- Zoo Based Wildlife Disease Surveillance
- Sentinel Clinic Wildlife Disease Surveillance
- University Based Wildlife Disease Surveillance

Sentinel
Surveillance
Program

Targeted surveillance & monitoring

- Avian influenza in wild birds
- Australian bat lyssavirus (ABLV) monitoring

Focus Groups

- Universities Focus Group
- Bat Health Focus Group

Electronic wildlife health information system (eWHIS)

- WHA administers the national database capturing information relating to wildlife health surveillance and disease investigations in Australia.
- More than 20,000 wildlife health events have been reported since the database was established.



Photo: Shana Ahmed

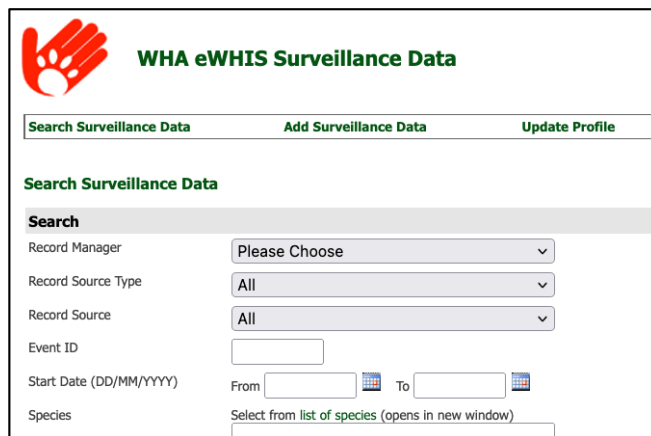


Contributing to the national database - eWHIS

What is eWHIS?

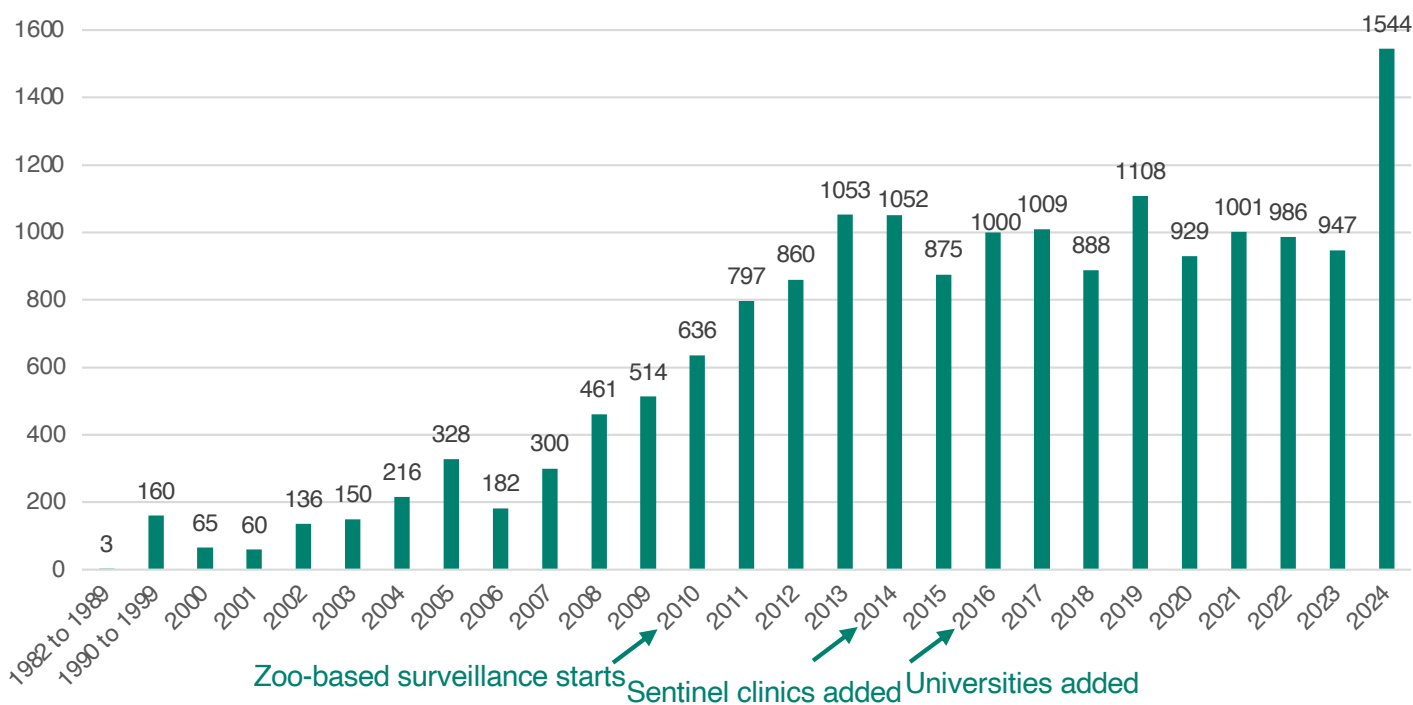
- The electronic Wildlife Health Information System ([eWHIS](#)) is the national database capturing information relating to wildlife health surveillance and disease investigations in Australia.
- Data is collected in eWHIS from the [WHA Coordinators and Environment Representatives](#), Sentinel Surveillance partners, and targeted projects such as the [National Avian Influenza in Wild Birds Program](#) and Australian bat lyssavirus monitoring.
- Program participants enter cases directly into the eWHIS database.
- These entries make a valuable contribution to Australia's wildlife health system and help us build an understanding of current wildlife disease trends and emerging issues.

Since the Sentinel Surveillance Program began, more than **5000 events** have been reported to eWHIS from program participants.



The screenshot shows the 'WHA eWHIS Surveillance Data' interface. It includes a search bar with filters for Record Manager, Record Source Type, Record Source, Event ID, Start Date, and Species. There are also buttons for 'Search Surveillance Data', 'Add Surveillance Data', and 'Update Profile'.

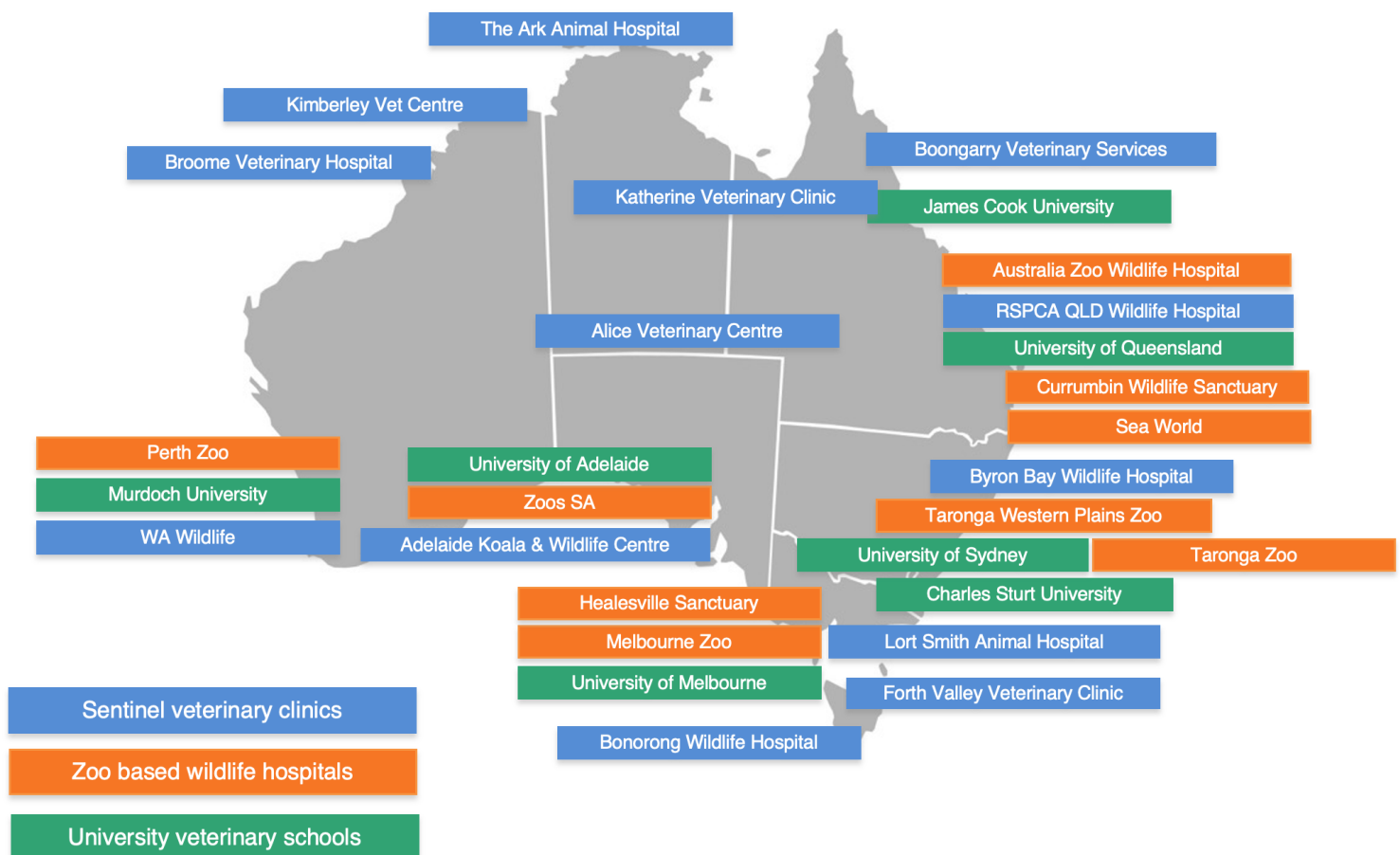
Total number of eWHIS records per calendar year



See pages 8 and 9 for further explanation of 2024 data.

Sentinel Surveillance Program: An Overview

- The wildlife disease Sentinel Surveillance Program grew from the successful **zoo-based** program established in 2010 ([Cox-Witton et al. 2014](#)) to include **veterinary clinics** from 2014 and **universities** from 2016.
- The program expanded to 9 zoos, 13 sentinel clinics and 7 universities by the end of 2024.
- WHA provides **funding** to each clinic or organisation for their participation.
- Sentinel veterinary clinics, zoos & universities enter data and participate in program activities including **quarterly teleconferences** chaired by WHA that provide opportunity for networking, connection and support across Australia.
- The program **improves linkages** between veterinary clinics, zoos, universities and **government agencies**.



2024 - Key achievements and developments

519 events reported to eWHIS through the program, contributing **34%** of the total eWHIS submissions for the year.

Participants saw more than **75,000** wildlife cases at their clinics, the highest caseload ever recorded for the program.

Alice Veterinary Centre and **Katherine Veterinary Clinic** (NT), and the **Forth Valley Veterinary Clinic** (Tas) were added as new sentinel clinics expanding the program caseload and geographic reach.

6 disease investigations from the Sentinel Surveillance Program were funded through the [NSDI program](#).

WHA team members visited **9** program partners around the country establishing relationships and building networks.

Program partners contributed to **enhanced bird flu surveillance** in wild birds.

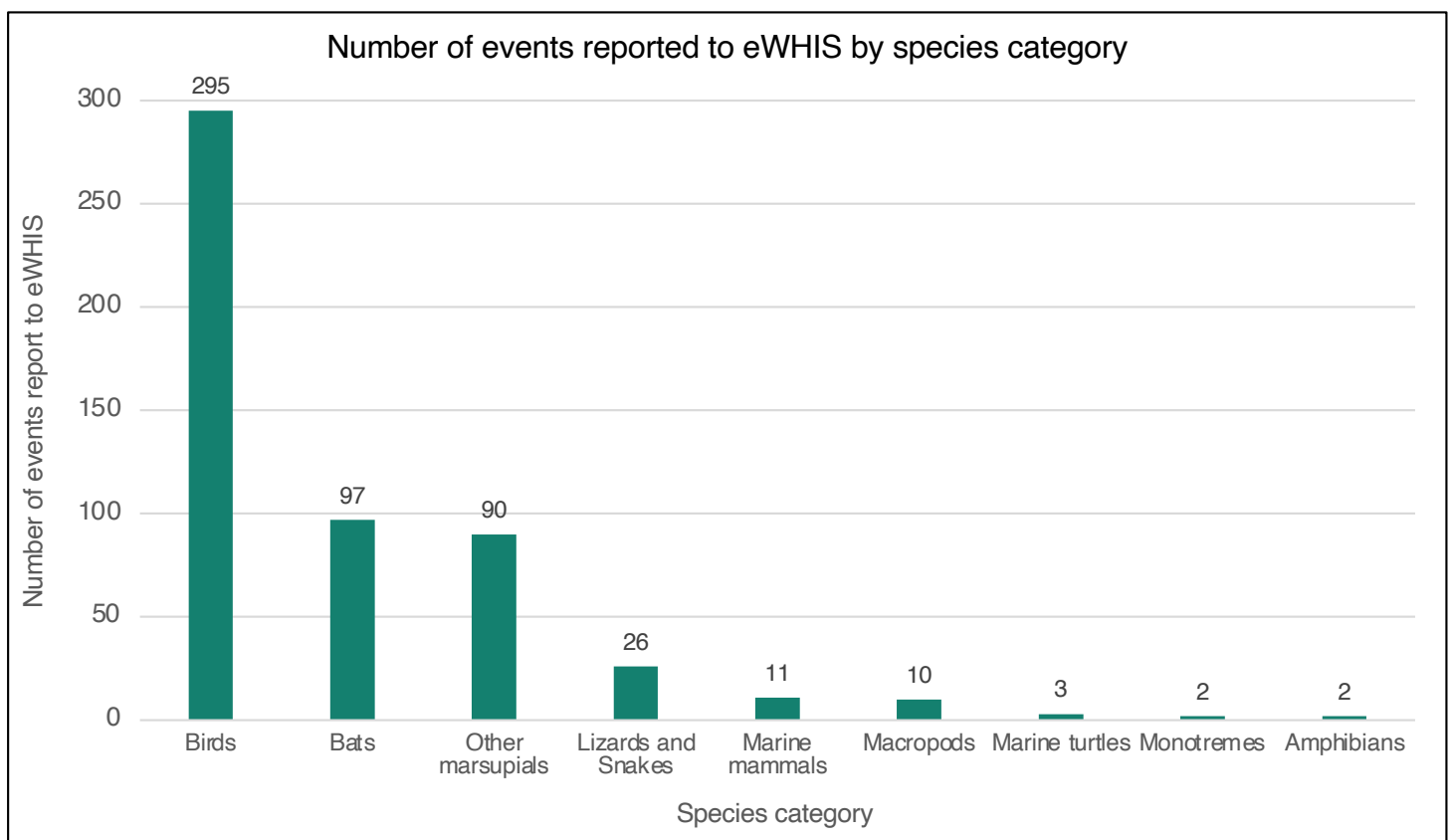


eWHIS Reporting - 2024 Summary:

- In 2024 we saw the **highest yearly total of eWHIS entries ever reported through the sentinel surveillance program** (519 events).
- Entries have ranged annually from 87 to 486 since the program began in 2010.
- Most of the events involved free-ranging wildlife (96%).
- 83% of the eWHIS records reported by the Sentinel Surveillance Program involved a single animal. There was 1 event that reported more than 3000 animals affected in a single event. This was a lorikeet paralysis syndrome event, see page 9 for further information.

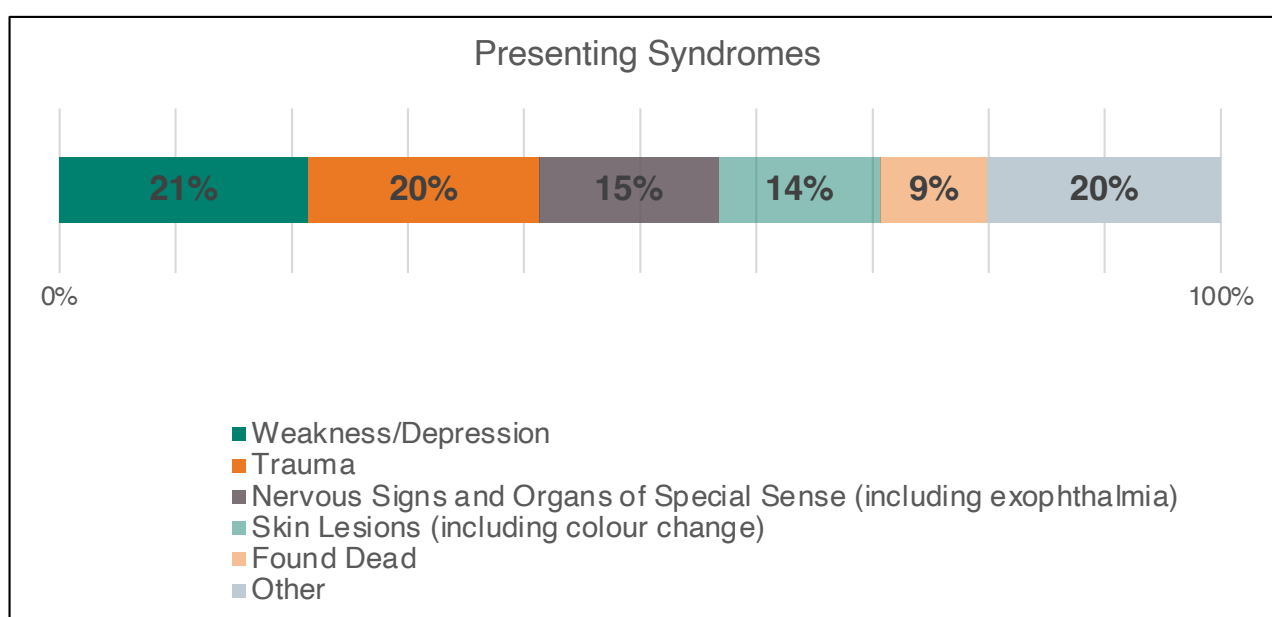
Species:

- Events involving more than **150 different species** were reported to eWHIS.
- Birds were the most frequently reported (see chart below). This is different to previous years where bats were typically most frequently reported to eWHIS (the majority for ABLV testing). This is likely a reflection of **increased bird flu surveillance**.



eWHIS Reporting: Disease investigations

- Sentinel surveillance program participants undertake disease investigations in-house or through university, private or government laboratories.
- Participants can utilise the **National Significant Disease Investigation Fund**, which supported 6 disease investigations through the program in 2024.
- Program participants select cases for eWHIS entry based on **national priority areas** that include notifiable diseases, mass mortalities, public health and zoonotic diseases, poisoning events, or new and emerging diseases.
- The most common presentation for reported disease events were weakness/ depression or trauma.



- Testing was undertaken to exclude significant diseases including avian paramyxovirus, lyssavirus, Japanese encephalitis, Hendra virus, *Brucella* and influenza A.
- In 2024 Australia remained the only continent that had not detected [high pathogenicity H5 bird flu](#), and the Sentinel Surveillance Program contributed to enhanced surveillance for this disease.
- Compared to 2021, the number of events with avian influenza exclusions increased by 38% in the Sentinel Surveillance Program.

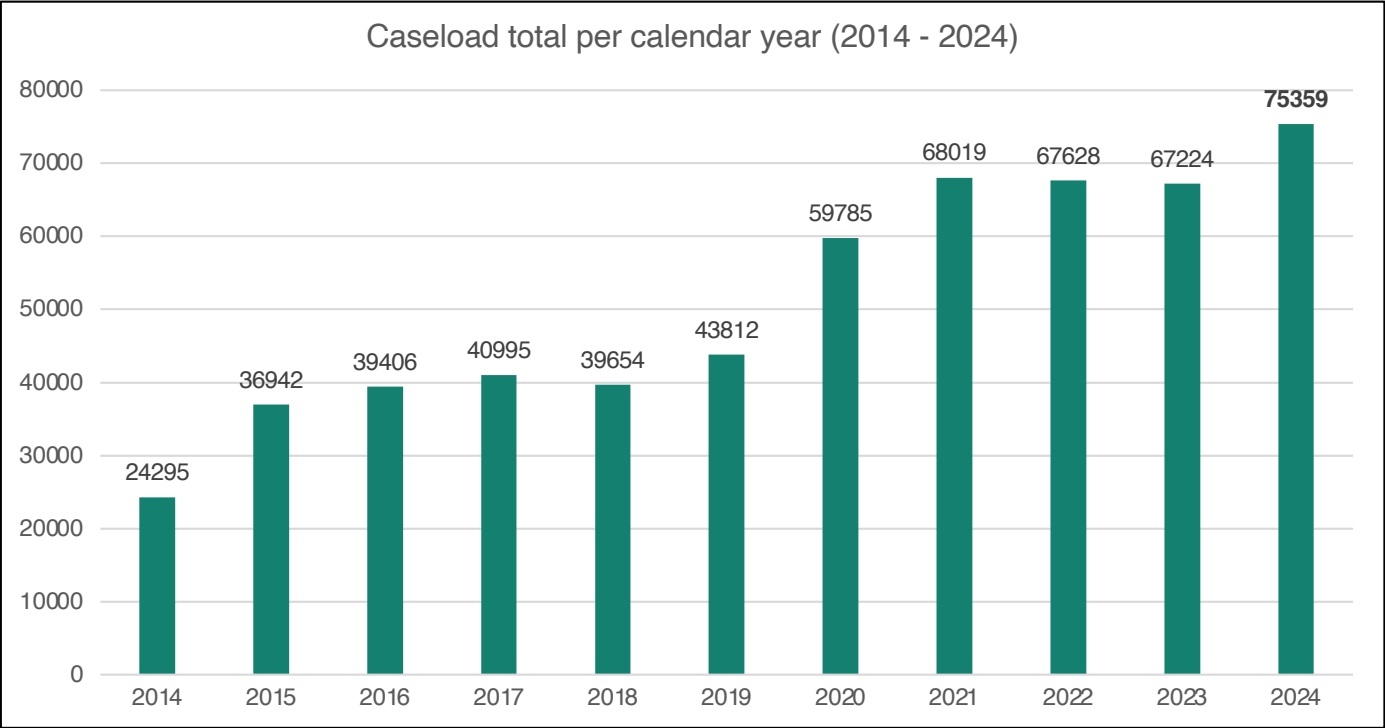
Common diagnoses
Botulism (confirmed or suspected)
Dermatitis
Sarcoptic mange
Ecological cause
Toxoplasmosis
Mycobacteriosis – <i>M. ulcerans</i>
Mycosis
Emaciation



For more information on diseases that can affect Australian wildlife see WHA's [Fact Sheets](#).

Caseload data 2024:

- In addition to submitting wildlife health event information into eWHIS, Sentinel Surveillance Program participants also submit **monthly wildlife caseloads** totaling how many wildlife cases are seen per month by their organisation.
- In 2024 **75,359 wildlife cases** were seen by Sentinel Surveillance Program organisations. This is the highest caseload total ever recorded for the program, showcasing a significant surveillance effort.



- Of the wildlife cases seen, a majority were bird species, making up 64.4% of all cases. This is consistent with previous years.
- In 2024 there was an outbreak of [lorikeet paralysis syndrome](#) (LPS) in northern NSW and southeastern Qld. Several program clinics were in the outbreak zone and saw increased presentations of lorikeets during this time. This has likely contributed to the the high number of bird presentations and the high overall caseload total for 2024.

Species group	Total caseload	Percentage of total caseload
Avian	38011	64.4%
Mammal	16037	27.2%
Reptile	4732	8.0%
Amphibian	272	0.5%
Fish	14	0.0%




Utilisation of information from the Program

Information is used for:

- **Publications** including [Animal Health Surveillance Quarterly](#), [ABLV Bat Stats](#), [Wild Bird News](#) and WHA [Fact sheets](#).
- International **World Organisation for Animal Health (WOAH)** reporting.
- **Annual report** on poisoning events to the APVMA.
- Data to inform EAD **outbreak** responses.
- Keeping **government** informed e.g. new disease findings.
- **Data access requests** for disease risk assessments, research projects, and publications.

Data ownership:

- Ownership of data in eWHIS remains with the data submitter and WHA [Confidentiality Principles](#) & the [Data Management Policy](#) apply.
- Data submitters can select the level of confidentiality and access for each individual record.
- WHA seeks approval before release or publication of specific information.




Resource Centre


[Home](#) > [Resource Centre](#) > [Fact Sheets](#)

Fact Sheets

Wildlife Health Australia's Fact Sheets contain brief, factual information on a wide range of diseases, both infectious and non-infectious, that impact Australian wildlife and feral animals. Information focuses on implications of disease for free-ranging native wildlife, although impacts on humans, domestic and feral animals are included to provide a One Health perspective. Diseases of relevance to Australian wildlife that are exotic to Australia, or zoonotic (transmitted from an animal to a human) are also included. There are also several Fact Sheets on topics of general interest to wildlife health.

Wildlife Health Australia welcomes your feedback on Fact Sheets. Please email admin@wildlifehealthaustralia.com.au. We would also like to hear from you if you have a particular area of expertise and are interested in creating or updating a WHA Fact Sheet. A small amount of funding is available to facilitate this.





ABLV BAT STATS

Australian Bat Lyssavirus Report - December 2024

Cases of ABLV infection - January to December 2024

There were 8 cases of Australian bat lyssavirus (ABLV) infection reported in bats in Australia between January and December 2024. This includes 3 from Queensland, 3 from South Australia and 2 from New South Wales (Table 1).

Queensland

Two little red flying-foxes (*Pteropus scapulatus*) tested positive for ABLV in the first half of 2024 as reported in [June Bat Stats](#). One spectacled flying-fox pup (*P. conspicillatus*) tested positive in December. The pup was in care with a rehabilitator for approximately 2.5 weeks and was growing normally before developing weakness in both legs and one wing. The pup was euthanased after the signs progressed to twitching and staring behaviour. This serves as a good reminder to take the same precautions with pups as with adults, as pups can be infected with ABLV even if they appear healthy.

New South Wales

Two grey-headed flying-foxes (*P. poliocephalus*) tested positive for ABLV in 2024, the first of which was reported in [June Bat Stats](#). The second bat displayed unusually aggressive behaviour and excessive salivation. It was euthanased, and found to be ABLV positive.

YEAR	NSW	NT	QLD	VIC	WA	SA	Total
1995 - 2000	10	1	83 ^a	0	0	0	94
2001	0	0	9	1	4	0	14
2002	4	0	10	2	1	0	17
2003	5	0	3	2	0	0	10
2004	5	0	6	1	0	0	12
2005	6	0	5	0	0	0	11
2006	2	0	4	0	0	0	6
2007	6	0	2	0	0	0	8
2008	0	0	0	0	0	0	0
2009	2	0	8	0	0	0	10
2010	0	0	8	0	1	0	9
2011	0	0	4	2	0	0	6
2012	1	0	3	0	0	1	5
2013	3	0	11	0	0	0	14
2014	5	1	14	1	11	0	32
2015	10	1	11	0	0	0	22
2016	5	1	8	1	0	0	15
2017	4	0	19	3	2	0	28
2018	5	0	5	1	0	0	11
2019	6	0	1	0	0	0	7
2020	5	0	9	4	0	0	18
2021	10	1	17	5	0	2	35
2022	1	1	8	1	0	1	12
2023	1	1	11	1	0	5	19
2024	2	0	3	0	0	3	8
Total	88	3	363	36	19	12	423

ACT and TAS have not been included in this report. *ABLV was first recognised in 1995, the first peak years of testing in

Publications

PUBLICATIONS USING EWHIS DATA

WHA TEAM PUBLICATIONS

WILD BIRD REFERENCES

The following publications have used data recorded in the national electronic wildlife health information system (eWHIS):

- **Wildlife Health Australia reports** in *Animal Health Surveillance Quarterly*
- Knox et al (2025). **Making the most of mortalities: Novel host-parasite records in a sandy inland mouse (*Pseudomys hermannsburgensis*)**. *International Journal for Parasitology: Parasites and Wildlife*. doi: 101037
- Rowley et al (2024). **Broad-scale pesticide screening finds anticoagulant rodenticide and legacy pesticides in Australian frogs**. *Science of the Total Environment*. 930, 172526
- Phillip Island Nature Parks (2024). **Phillip Island (Mallard) Little Penguin (*Eudyptula minor*) Disease Risk Analysis**. University of Melbourne
- Cooke R et al (2022). **Widespread exposure of powerful owls to second-generation anticoagulant rodenticides in Australia spans an urban to agricultural and forest landscape**. *Science of The Total Environment*, 819, 153024



Further information and links

Reference:

- Cox-Witton K, Reiss A, Woods R, Grillo V, Baker RT, Blyde DJ, et al. (2014) Emerging Infectious Diseases in Free-Ranging Wildlife—Australian Zoo Based Wildlife Hospitals Contribute to National Surveillance. *PLoS ONE* 9(5): e95127. <https://doi.org/10.1371/journal.pone.0095127>

Other Resources:

- National Significant Disease Investigation Fund:
www.wildlifehealthaustralia.com.au/Incidents/Disease-Investigation-Funding
- Sentinel Surveillance Program webpage:
<https://wildlifehealthaustralia.com.au/Our-Work/Surveillance/Sentinel-Surveillance>
- WHA Coordinator contacts:
<https://wildlifehealthaustralia.com.au/Incidents/WHA-Coordinator-Contacts>

WHA thanks all the veterinary clinics, zoos and universities in this program for their tireless work caring for and treating our native wildlife, and their valuable contributions to wildlife health surveillance.

We also thank **Animal Health Australia** for their management of the NSDI funding program and the **Zoo and Aquarium Association** for co-administering the zoo program.

Scan here to visit our website!

