

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.

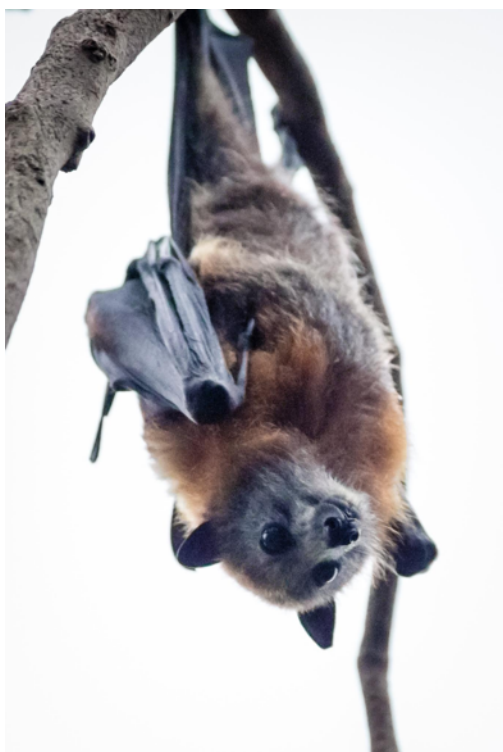


Table 1: ABLV infection in Australian bats[^]

YEAR	NSW	NT	QLD	VIC	WA	SA	Total
1995 - 2000	10	1	83 [#]	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	98	7	262	25	19	12	423

[^] Infection confirmed by FAT, PCR, IHC and/or virus isolation. ACT and TAS have not recorded any cases of ABLV infection that satisfy this case definition.

[#] A BFF from QLD was diagnosed retrospectively in 1996, when ABLV was first recognised.

⁺ Higher numbers of ABLV infected bats were associated with peak years of testing in 1997-1998.

South Australia

Three grey-headed flying-foxes tested positive for ABLV in 2024, two of which were reported in [June Bat Stats](#). The third flying-fox displayed aggression and polydipsia (excessive thirst). It was euthanased and found to be ABLV positive.

Human contact

Potentially infectious contact with humans was reported for two of the ABLV infected flying-foxes. Clinical advice was provided by an experienced public health official for both cases.



Little red flying-foxes

Photo: Paislie Hadley via Flickr (CC)

Why are bats submitted for ABLV testing?

Bats are submitted for ABLV testing for a variety of reasons. A common reason is contact between the bat and a person with the potential for ABLV transmission (e.g. a bite or scratch). Bats are also regularly submitted following contact with a pet dog or cat (Figure 1). Bats displaying unusual or aggressive behaviour or other neurological signs may be tested; these signs can occur with ABLV infection but can also be due to a number of other diseases. Bats that show other clinical signs e.g. respiratory signs, bats that die or are euthanased due to trauma, and bats that are found dead may also be submitted for testing.

Figure 1: ABLV tested bats – Contact with people and pets

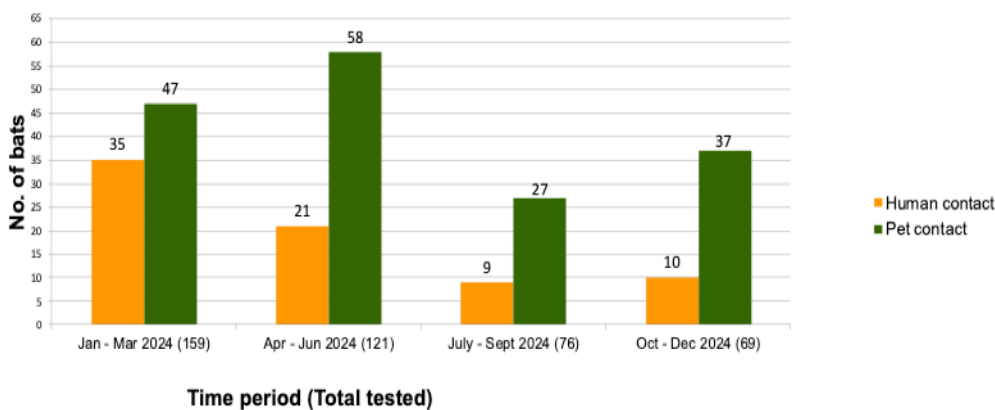


Figure 1 presents reported human-bat contacts which, based on Young & McCall 2010,¹ is an underestimate of the true contact frequency. Not all bat contact is reported, and for the majority of reports the bat is not available for testing.

If bats had both human and pet contact, they are only reported as human contact in the figure.

ABLV prevalence in bats and public health significance

There are no recent surveys on the prevalence of ABLV infection in wild bats. Surveys of wild-caught bats in the early 2000s indicated an ABLV prevalence in the wild bat population of less than 1%.² ABLV infection is more common in sick, injured and orphaned bats, especially those with neurological signs.³ People are more likely to have contact with bats that are unwell or debilitated, as these bats may be found on or near the ground.⁴



Little forest bat

Photo: © Lindy Lumsden

ABLV infection causes a range of clinical signs in bats, which can include abnormal behaviour such as uncharacteristic aggression, paralysis or paresis, and seizures. The behavioural changes may increase the likelihood of a person or pet being bitten or scratched when coming in contact with the bat. The likelihood of a person developing ABLV disease from contact with a bat is influenced by a number of factors including whether the bat was ABLV-infected, the type of contact e.g. bite or scratch, the vaccination status of the person, and whether the person sought medical attention.

ABLV prevalence in bats submitted for testing

Some of the bats that come into contact with people or pets are tested for ABLV. The percentage of ABLV infection in bats submitted for testing is of interest as an indicator of public exposure, however it is also heavily influenced by factors affecting which bats are submitted for testing.

A total of 425 bats were tested for ABLV in Australia between January and December 2024 (Table 2). This is an increase in the number of bats tested compared to 2023 (375 bats) and is the greatest number of bats submitted for ABLV testing since 2020. This may in part be due to increased presentations of sick flying-foxes due to Flying-fox Paralysis Syndrome outbreaks in SE Qld and northern NSW at the end of the year (see [WHA Incident Information](#)). There were 8 cases of ABLV infection reported in bats (1.9% of the bats submitted for testing) (Table 3). All 8 detections were in flying-foxes (2.5% of flying-foxes tested), and there were zero detections in microbats. As described above, testing of unwell bats is not representative of the whole bat population; consequently these results over-estimate the level of ABLV infection in the wider bat population.

Table 2: ABLV testing by bat species (Jan - Dec 2024)

Species	No. tested	No. ABLV infected
Flying-foxes, blossom & tube-nosed bats		
<i>Pteropus poliocephalus</i> /Grey-headed Flying-fox	176	5
<i>Pteropus alecto</i> /Black Flying-fox	108	0
<i>Pteropus scapulatus</i> /Little Red Flying-fox	24	2
<i>Pteropus</i> spp.	15	0
<i>Pteropus conspicillatus</i> /Spectacled Flying-fox	2	1
Insectivorous bats (microbats)		
<i>Vespertilionidae</i> spp.	13	0
<i>Nyctophilus geoffroyi</i> /Lesser Long-eared Bat	9	0
<i>Chalinolobus gouldii</i> /Gould's Wattled Bat	9	0
<i>Austronomus australis</i> /White-striped Freetail Bat	7	0
<i>Vespadelus darlingtoni</i> /Large Forest Bat	3	0
<i>Vespadelus vulturnus</i> /Little Forest Bat	3	0
<i>Nyctophilus</i> spp.	2	0
<i>Nyctophilus arnhemensis</i> /Arnhem Long-eared Bat	1	0
<i>Nyctophilus bifax</i> /Eastern Long-eared Bat	1	0
<i>Nyctophilus gouldii</i> /Gould's Long-Eared Bat	1	0
<i>Nyctophilus walkeri</i> /Pygmy Long-eared Bat	1	0
<i>Miniopterus australis</i> /Little Bent-wing Bat	1	0
<i>Miniopterus orianae bassani</i> /Southern Bent-wing Bat	1	0
<i>Emballonuridae</i> /Sheath-tail Bats	1	0
<i>Macroderma gigas</i> /Ghost Bat	1	0
<i>Chalinolobus morio</i> /Chocolate Wattled Bat	1	0
Mircobat; species not identified	45	0
TOTAL	425	8

*ABLV Bat Stats is published twice a year. The June issue presents data from the 6 month period of January to June. The December issue presents 12 months of data for the calendar year.



Lesser long-eared bat
Photo: D Whitford © Australian Museum



Pygmy long-eared bat
Photo: © Lindy Lumsden

Table 3: ABLV infection (%) in bats submitted for testing (Jan - Dec 2024)

	No. tested	No. infected	% infected ⁺
Flying-foxes	325	8	2.5%
Microbats	100	0	0%
TOTAL	425	8	1.9%

⁺ This figure represents the percentage of ABLV infection in the bats tested. The level of ABLV infection in the wider bat population is estimated to be significantly lower.

Bat facts

- ✿ **ABLV is a virus** that infects Australian flying-foxes and insectivorous bats.
- ✿ **ABLV is closely related to**, but distinct from rabies virus.
- ✿ **ABLV can infect people and other mammals with a fatal outcome.** ABLV infection has led to the deaths of three people, two horses and many bats in Australia.
- ✿ **Community members should not handle bats.** If you find an injured or sick bat, contact a wildlife rehabilitation organisation or your local veterinarian.
- ✿ People trained in the care of bats **should be vaccinated and always use appropriate protection** when interacting with bats.
- ✿ **ABLV is transmitted** by the saliva of an infected animal introduced via a bite or scratch, or by contamination of mucous membranes or broken skin. In the event of a bat bite, scratch or other significant contact, **seek medical attention URGENTLY.** **Bite or scratch wounds** should immediately be washed thoroughly with soap and copious water for approximately 15 minutes and a virucidal antiseptic such as an iodine based antiseptic applied.* Bat saliva in the eyes or mouth should be rinsed out immediately and thoroughly with water.
- ✿ **For more information** contact your local Public Health agency for advice.
- ✿ **ABLV can also be transmitted to other mammals.** Prevent pets and other animals from coming into contact with bats. If an animal might have been bitten or scratched by a bat, **seek urgent veterinary advice.**
- ✿ ABLV is a nationally notifiable disease in Australia. **If you suspect a bat is infected with ABLV** contact your department of agriculture or primary industries, or call the Emergency Animal Disease Hotline on 1800 675 888.
- ✿ **Where to find more information:** See page 5 & 6.

* Department of Health. Rabies Virus and Other Lyssavirus (including Australian Bat Lyssavirus) Exposures and Infections. CDNA National Guidelines for Public Health Units. Canberra. 2022. Available from <https://www.health.gov.au/resources/publications/rabies-and-other-lyssavirus-cdna-national-guidelines-for-public-health-units>

Clinical signs of ABLV

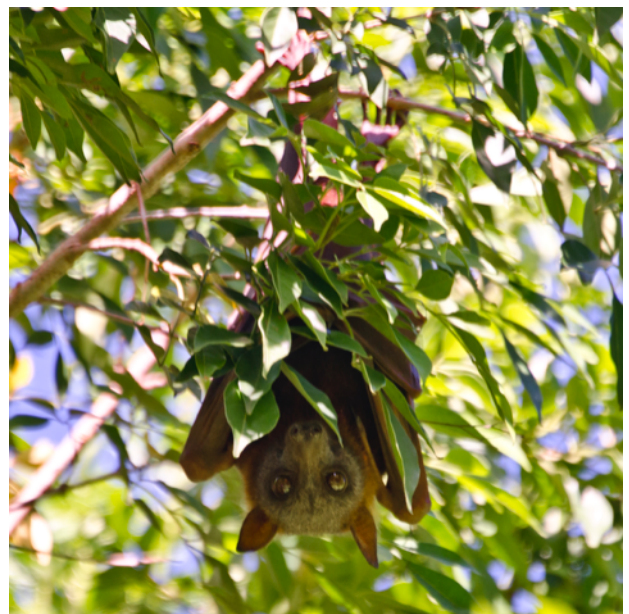
An ABLV infected bat may display any of these clinical signs:

- Abnormal behaviour such as excitation / agitation / aggression
- Paralysis or paresis
- Unprovoked attacks
- Unusual vocalisation
- Inability to fly
- Convulsions / seizures / tremors

Apparently healthy bats with normal behaviours may still be infected with ABLV

DO NOT ATTEMPT TO HANDLE an injured, unwell or aggressive bat

REPORT it to your local wildlife service, vet or bat rehabilitation group



Little red flying-fox
Photo: Paislie Hadley via Flickr (CC)

Recent news and publications

ACT Government releases new plan to protect the Grey-headed Flying-Fox

September 2024: “The ACT Government has today released the Native Species Conservation Plan for the Grey-headed Flying-Fox, which outline strategic actions to help protect the species in the Territory...”. Download the plan from the [ACT Environment website](#)

New flying-fox webpage and interactive map

October 2024: “The Victorian Department of Energy, Environment and Climate Action has updated its online information about flying-foxes. Scroll down on the first page for an interactive map of flying-foxes in Victoria, and you can add your own sightings. www.wildlife.vic.gov.au/flying-foxes

Updated biosecurity guidelines for bat research in Australian caves

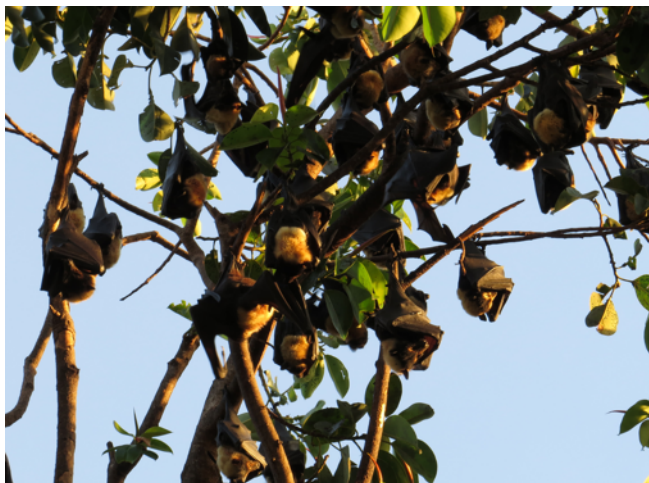
November 2024: the WHA Biosecurity Guidelines for Bat Research in Caves in Australia have been updated. The main changes are to make the recommendations consistent with the recent revision to the US decontamination protocol. The guidelines can be accessed on the [WHA website](#).

Mass mortalities of grey-headed flying-foxes (*Pteropus poliocephalus*) from tree collapses

November 2024: “...The grey-headed flying-fox (*Pteropus poliocephalus*) is a vulnerable species endemic to eastern and south-eastern Australia that is known to be susceptible to a spectrum of compounding threats including factors producing simultaneous deaths. We describe two incidents of trees within a flying-fox roost collapsing and causing mass mortalities in individuals roosting in those trees.” Mo et al (2024). Mass mortalities of grey-headed flying-foxes (*Pteropus poliocephalus*) from tree collapses. *Pacific Conservation Biology* <https://www.publish.csiro.au/PC/justaccepted/PC24027>

Don't touch sick bats

December 2024: [South Burnett News](#) “Queensland Health has warned residents not to touch bats that may have fallen from trees – even if they are injured – to avoid becoming infected with Australian bat lyssavirus. Flying Fox Paralysis Syndrome is occurring across south-east Queensland which, along with the extreme heat, is leading to unwell bats being found on the ground and in people's yards...”



Spectacled flying-foxes
Photo: Donald Hobern via Flickr (CC)

Are you interested in bat health?



Gould's long-eared bat
Photo: Victorian DSE via Flickr

Wildlife Health Australia collates recent media articles and publications relating to bat health into a monthly ‘Bat News’ email. If you would like to receive the monthly email, please contact WHA: admin@wildlifehealthaustralia.com.au

Where to find information

Wildlife Health Australia (WHA)

www.wildlifehealthaustralia.com.au

- Wildlife disease fact sheets, including [Australian Bat Lyssavirus](#) and [Zoonoses in Australian Bats](#)
- Links: WHA Bat Health Page - <https://wildlifehealthaustralia.com.au/Resource-Centre/Bat-Health>

State/Territory departments of agriculture, health and environment

For links to agency websites see:

[State/ Territory Australian Bat Lyssavirus Resources](#)

Commonwealth Department of Health and Aged Care

- Healthdirect ABLV information and resources: <https://www.healthdirect.gov.au/australian-bat-lyssavirus-infection>
- For current information for medical professionals, see the Series of National Guidelines on Rabies & ABLV: <https://www.health.gov.au/resources/publications/rabies-and-other-lyssavirus-cdna-national-guidelines-for-public-health-units>
- For vaccination information contact your local or regional Public Health Unit, or see the immunisation handbook: <https://immunisationhandbook.health.gov.au/contents/vaccine-preventable-diseases/rabies-and-other-lyssaviruse>

AUSVETPLAN

For current policy on surveillance and management see AUSVETPLAN - Lyssaviruses: <https://animalhealthaustralia.com.au/wp-content/uploads/>

ABLV BAT STATS



WHA Bat Health Focus Group

This document has been approved by the Wildlife Health Australia (WHA) Bat Health Focus Group. Using a collaborative One Health approach, the Bat Health Focus Group considers bat health issues in relation to the broader context of biosecurity, public health, livestock health and environmental impacts in Australia. Members come from organisations including Australian and State Government departments of agriculture, public health and environment; CSIRO Australian Centre for Disease Preparedness, universities, the Australasian Bat Society and the Australian Speleological Federation. Members include veterinarians, biologists, ecologists, virologists, epidemiologists and wildlife/bat carers.

Information sources

This report presents the latest information on ABLV testing across Australia. Information has been made available by CSIRO Australian Centre for Disease Preparedness, Janine Barrett PhD thesis 2004 (with permission), QLD Health, zoo & wildlife veterinarians, universities, Wildlife Health Australia members, and State/Territory WHA Coordinators (representatives of Chief Veterinary Officers), and is collated by Wildlife Health Australia. More detailed information is available in the electronic Wildlife Health Information System (eWHIS).

References

- ¹ Young MK & McCall BJ (2010). Potential exposure to Australian bat lyssavirus in South East Queensland: What has changed in 12 years? *Comm Dis Intell*, 34(3), 334-8 www1.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi3403l.htm
- ² Field HE (2005). The Ecology of Hendra virus and Australian bat lyssavirus, PhD thesis, The University of Queensland <https://espace.library.uq.edu.au/view/UQ:13859>
- ³ Barrett J (2004). Australian Bat Lyssavirus, PhD thesis, The University of Queensland <https://espace.library.uq.edu.au/view/UQ:9486>
- ⁴ McCall B, Field HE, Smith GA, Storie GJ, Harrower BJ (2005). Defining the risk of human exposure to Australian bat lyssavirus through potential non-bat animal infection. *Comm Dis Intell*, 29(2), 200-203 www1.health.gov.au/internet/main/publishing.nsf/Content/cda-cdi2902k.htm

State/Territory WHA Coordinators

Contact your state/territory department of primary industries/agriculture or WHA Coordinator for more information on ABLV testing, or to report a suspected ABLV infected bat.

STATE	CONTACT	PHONE	EMAIL
ACT	Kyeelee Driver	(02) 6207 2357	kyeelee.driver@act.gov.au
NSW	Louise Livingston	0448 699 710	louise.livingston@dpi.nsw.gov.au
NT	Cathy Shilton	(08) 8999 2122	cathy.shilton@nt.gov.au
QLD	Stephanie Grimmett Anita Gordon	(07) 3708 8762	bslwildlife@daf.gov.au
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