

Guidelines

ABLV Post-exposure vaccination guidelines with Nobivac inactivated rabies vaccine

Australian bat lyssavirus post-exposure vaccination

ABLV is an invariably fatal zoonosis that can be transmitted by a bite or scratch from an infected bat to humans and other mammals (including pets). Fatal disease has occurred in 3 human cases in Australia. ABLV has also infected horses in Australia. There have been no reported cases of ABLV in other animals in Australia yet, but the potential is there for an exposed animal to become infected and transmit ABLV to a person or another animal.

Post-ABLV exposure vaccination may be undertaken in animals exposed to an ABLV-infected bat. Where a bat has interacted with a pet, the bat tests positive or the bat is not available for testing (including cases of repeat exposure to bats), the owner should be offered the option of vaccinating the animal/s with rabies vaccine. **If the owner is considering the vaccination program which requires two vaccines 7 days apart, it should be commenced as soon as possible after the bat/animal interaction.** This process is recommended to commence prior to results of testing the bat which can take several days, as testing is performed interstate, in Geelong, Victoria.

The ABLV post-exposure vaccination and monitoring protocol must be completed as described below or as otherwise advised by the South Australian Chief Veterinary Officer (CVO).

Who can use the rabies vaccine?

Supply and use of the Nobivac inactivated rabies vaccine is only permitted in Australia under Australian Pesticides and Veterinary Medicines Authority (APVMA) permit number PER14236. This means the vaccine can only be used in the preparation of animals for export or with CVO permission post exposure to ABLV.

Veterinarians should contact the **Emergency Animal Disease Hotline** on **1800 675 888** to report a suspect ABLV exposure incident in an animal, assess the potential risk and if necessary, arrange for a permit to access the vaccine.

A registered veterinarian with case-specific authorization from the South Australian Chief Veterinary Officer (CVO), can use the vaccine in South Australia to manage Australian bat lyssavirus (ABLV) risk following potential exposure to ABLV.

An [Application to use Nobivac inactivated rabies vaccine](#) must be completed and approved by the SA CVO before ordering and using the vaccine for this purpose.

To prepare cats and dogs for export from Australia, all veterinarians who are fully registered by a state or territory veterinary board, may also order and use the rabies vaccine, however they **do not** need to submit the above application for export purposes.

Assessment of likely exposure risk

The appropriate management for each case is determined by the history of the exposure, clinical signs observed in the bat, and any ABLV test results from the bat if available. Assessment of likely exposure risk should be discussed in collaboration with PIRSA Biosecurity SA veterinarians.

Options for managing animals potentially exposed to ABLV through bat contact include:

1. When the bat tests negative for ABLV

When the bat tests negative for ABLV, there is no risk to the in-contact animal and no further action is required (unless additional exposures may have occurred).

2. When the bat tests positive for ABLV, OR is not available for testing

If a pet is exposed to ABLV by an ABLV positive bat, there is a risk that ABLV could be passed from the pet to humans. To date, transmission from an affected pet to a human has never been reported. Public health guidance is that the risk of transmission of ABLV from a dog or a cat to a person is very low but the risk exists. If such transmission was to occur, the potential outcomes are obviously extremely serious as reported cases of ABLV infection in humans have been fatal. Advice to the owner should include the following options:

a. **Vaccination:** Vaccinate the affected pet with inactivated rabies vaccine as soon as possible after the contact with the bat to reduce the risks of clinical ABLV infection. The rabies vaccine is used on the basis of the limited available animal data and clinical experience supporting its use. Vaccinated pets that are known to have had interaction with a positive or an untested bat should be monitored for neurological signs; if these signs develop, the affected animal should be seen by a veterinarian ASAP and communicated to the vet clinic prior to arrival at the vet clinic.

b. **Monitor the animal for at least two years:** This option is not recommended if clinical signs of ABLV or a positive ABLV detection has occurred in the bat involved. The pet owner can keep the animal at home but should be advised to observe their pet closely for **at least two years** for any changes in behaviour or signs of ill-health (due to the possible long incubation period). Seek private veterinary assistance ASAP and provide history of bat exposure prior to arrival at the clinic. Any changes should be immediately reported to the Emergency Animal Disease Hotline 1800 675 888 (24hrs). The owner needs to also understand that taking no action does nothing to lower the potential risk of ABLV infection. If clinical signs suggesting ABLV disease are reported, it is likely to be recommended that the animal be euthanased and samples taken for examination.

c. **Euthanasia;** To avoid any potential risk of humans contracting ABLV infection from the pet some owner may consider euthanasia of the pet the most appropriate course of action for their individual situation.



Private Veterinarian Responsibilities

- provide the owner with advice to make an informed decision about what the most appropriate option would be
- document the basis on which the owner makes an informed decision in the patient's clinical record, given the likelihood of infection, the potential consequences, and the pros and cons specific to the circumstances. In particular, document that the owner's decision to vaccinate post-exposure, or to monitor and report, is made knowing that neither option reduces the risk to zero.

Vaccination Protocol

The vaccine is more likely to be effective if given as soon as possible, and two vaccinations are required 7 days apart.

Minimise the interval between potential exposure and the first vaccine (Day 0_{PV}) as far as reasonable. If the owner's private veterinarian does not have the vaccine in stock, options for reducing the delay include seeking veterinary services from a veterinarian that has the vaccine in stock or the owner's veterinarian sourcing the vaccine from another veterinarian pending supply by a veterinary wholesaler.

Day 0_{PV}

Administer the first vaccination with Nobivac rabies vaccine

If the animal is not microchipped, microchip and register it to comply with the APVMA permit.

Day 7_{PV}

Administer the second vaccination with Nobivac® rabies vaccine

Day 35_{PV}

If the animal is clinically well and isn't showing signs suggestive of ABLV you can consider the protocol complete.

The animal can return to normal management.

Exposed animal management until day 35_{PV} residual risk period ends

There is a residual risk period of 35 days between when the first vaccine is given and when immunity can be assumed to have taken effect. During the residual risk period, the animal may still develop ABLV disease and could transmit infection to others.

Contact with the pet should be minimised until the program has been successfully completed. The vaccine program does not end until the 35-day residual risk period has passed with the vaccinated animal remaining well.



Isolate the potentially exposed animal and minimise contact between it and people and other animals until the post-exposure protocol has been completed. Ideally, only people with a history of rabies vaccination, and a recently demonstrated titre of >2 IU, should have contact with the animal; however, this may not be reasonable.

To isolate and minimise contact:

- confine the animal to the house or yard, preferably in a section of the property not used by people or other animals (for example, the garage, laundry or fenced section of yard)
- prevent contact with children. If contact with children cannot consistently be prevented at a specific place, consider sending either the animal or children to another location for the residual risk period
- confine the animal at night – don't allow it to roam the house or sleep with people
- don't take the animal to off-leash areas, parties, or other situations where the animal may have contact with people or other animals
- take all reasonable steps to prevent unauthorised access and contact (for example, consider putting up warning signs and locking doors and gates).

Take all reasonable steps to avoid being bitten or scratched during the residual risk period. Everyone should wear appropriate personal protective equipment (PPE) whenever contact with the animal is possible. PPE may include:

- long-sleeved shirt, long pants, closed shoes, puncture-resistant gloves, a hat, glasses (preferably safety glasses)

If the animal shows signs suggestive of ABLV

If, at any point, an animal shows behavioural or [clinical signs suggesting ABLV](#), isolate it (if safe to do so) and contact your private veterinarian and report to PIRSA Biosecurity on the Emergency Animal Disease Hotline on **1800 675 888**.

Responsibility for costs

The owner will be responsible for costs associated with: • All veterinary consultations • the rabies vaccine • microchipping of the animal • vet and lab charges for collection of serum to measure response to vaccination (not required by PIRSA Biosecurity) • euthanasia of the animal if the owner elects that course of action.

PIRSA Biosecurity will cover the following costs: • initial testing of the bat/s for ABLV • courier charges to submit the bat to Gribbles VETLAB • ABLV testing of animals suspected of being infected with ABLV.

Applying to use the rabies vaccine

To use the vaccine for ABLV risk management, complete the [Application to use Nobivac inactivated rabies vaccine](#) and submit it to the South Australian CVO by emailing it to **PIRSA.BiosecuritySA@sa.gov.au**



We'll make all reasonable efforts to respond on the same working day. We'll respond on the next working day to applications received on weekends and public holidays.

If you submit an application in the afternoon or have not received a response to your emailed permit call (08) 8207 7900 to alert the Office of the CVO to help ensure a same day response.

Veterinarians in other jurisdictions should apply to the relevant state or territory CVO.

Further Information

- [SA Health website](#) for information on ABLV symptoms, treatment and prevention.
- Queensland Government's [Australian Bat Lyssavirus overview](#).
- Queensland Government's [ABLV information for veterinarians](#).
- Queensland Government's [ABLV checklist for owners](#).

