Guideline for staff and students exposed to Australian Bat Lyssavirus

Background

Lyssavirus is closely related to the rabies virus. Testing of bats in Australia has shown that the virus is widely distributed in Australia. It should be assumed that all Australian bats have the potential to carry Australian Bat Lyssavirus (ABL). The usual means of transmission of lyssavirus to humans is through bites or scratches from infected animals.

Recommendations:

Pre-exposure vaccinations

Pre-exposure vaccination should be recommended to those who are occupationally exposed to bats where there is a risk of being bitten or scratched or those who work with Australian Bat Lyssavirus in a laboratory. For example:

- Bat carers, bat handlers, researchers and students;
- Veterinarians and veterinary assistants;
- Veterinary laboratory staff;
- Wildlife officers;
- Managers of display or research colonies of bats.
- Laboratory staff as above

Pre-exposure vaccination consists of three doses of rabies vaccine given on days 0, 7 and 28. Booster doses are recommended every 2 years. The incidence of side effects (not life threatening) does increase with booster doses. Laboratory staff who work with live ABL should have 6 monthly blood testing and boosters if necessary.

Post-exposure treatments

The wound should be washed thoroughly as soon as possible with soap and water. Proper cleansing of the wound is the single most effective measure for reducing the transmission of classic rabies virus. Where possible, without placing other persons at risk of exposure, the bat should be kept for investigation by the State veterinary laboratory.

The person sustaining the bite or scratch should contact either the University Health Service who will make a decision on the appropriate treatment.

Pre-exposure vaccination will be needed if the person has on-going contact with bats or works with ABL. Post-exposure vaccination consists of 4-5 doses of rabies vaccine (depending on the circumstances). Rabies immunoglobulin should be given as a single dose at the same time as the first dose of the post-exposure vaccination course. It should not be given at the same site as the vaccine. Immunoglobulin administration is not
necessary if rabies vaccinations commenced after the injury and more than 7 days has elapsed since rabies vaccination commenced.
If the bat has been kept, arrangements should be made immediately with the State veterinary laboratory to have it tested where post exposure vaccination is indicated.

**Implications for the University of Queensland**

Reasonable precautions including the use of personal protective equipment to avoid bites or scratches from bats are vital. Handling bats should be avoided where possible. Funding for pre-exposure vaccination. Initial post-exposure vaccination may be made available through arrangement with public health authorities. Further treatment will be dependent on the results of the injured worker’s blood tests and the results of serological testing of the bat.


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**Further information**


**Contact for Additional Information**

Fiona Coulthard  
Occupation Health Nurse Advisor  
Email: f.coulthard@uq.edu.au  
Phone: 07 33654883 (ext 54883)