RABIES GUIDANCE

General

This guidance is for use by those whose work in the University may place them at risk of contracting rabies. It is not a substitute for a properly undertaken risk assessment of the work activities. Identified risk is the determinant of the need for pre and post exposure prophylaxis. In the case of any doubt advice from the Occupational Health Service (0113 343 2997) should be sought.

In general the risk of infection is small. However, managers have a responsibility to ensure that the process of surveillance, when indicated, is undertaken and advice from the Occupational Health Service [OHS] complied with.

Disease

Rabies is an acute viral encephalomyelitis caused by some lyssavirus. The illnesses resulting from that caused by rabies virus genotype 1 [classical rabies] or that by the less commonly implicated rabies related lyssavirus [European bat (EBLV) & Australian bat lyssavirus (ABLV) for example] are clinically indistinguishable. Infection is usually from a bite or scratch by a rabid animal. Worldwide the commonest cause is dogs. The EBLV-1 and EBLV-2 found in insectivorous bats have rarely caused disease. Exposure via mucous membrane has a low probability of infection, but all contamination should be treated as a significant event.

The range of incubation is 4 days to 19 years but 3-12 weeks is the most likely. Once manifested, death from respiratory paralysis is the normal outcome and emphasises the need for appropriate prophylaxis.

Rabies is prevalent in Eastern Europe and Turkey. Please check the current risk level of rabies on the A to Z list of countries and their category of risk for rabies by visiting this website https://www.gov.uk/government/publications/rabies-risks-by-country/rabies-risks-in-terrestrial-animals-by-country
Pre-Exposure Immunisation

Primary immunisation consists of three doses of 1.0 ml rabies vaccine on days 0, 7 and 28. The third dose can be given after 21 days if time constraints justify it. There are no absolute contraindications to rabies vaccine. Hypersensitivity reaction during a pre-exposure course should result in it being discontinued.

In the University environment those who should seek pre-exposure immunisation are:

- Those who regularly handle imported animals
- Those regularly handling bats
- Those working abroad whom by the nature of the work may have contact with rabid animals
- Healthcare workers who may care for people with rabies
- Those travelling in rabies enzootic areas with uncertain access to rapid and safe medical care

Reinforcing dose should be given at one year after completion of the primary course for those at continued risk. Subsequent immunisation depends on the workers circumstance and advice from occupational health should be sought. There is an attached protocol to this guidance for Bat-handlers.

Post-Exposure Management

Wounds should be cleaned with flushing for 15 minutes under a running tap as soon as possible, washing with a detergent. A disinfectant should then be applied with wound coverage using a simple dressing. Suitable disinfectants are aqueous solutions of iodine, 40-70% alcohol or those containing quaternary ammonium compounds.

If indicated, post exposure immunisation should occur in those with a history of hypersensitivity due to the greater risks of rabies, but done under medical supervision after the first dose.

<table>
<thead>
<tr>
<th>Rabies risk</th>
<th>Un-immunised or incompletely immunised</th>
<th>Fully immunised</th>
</tr>
</thead>
<tbody>
<tr>
<td>No risk</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Low risk</td>
<td>5 doses of 1.0ml IM of rabies vaccine on day’s 0, 3, 7, 14 and 30</td>
<td>2 doses of 1.0ml IM of rabies vaccine on days 0 and 3.</td>
</tr>
<tr>
<td>High risk</td>
<td>5 doses of 1.0ml IM of rabies vaccine on day’s 0, 3, 7, 14 and 30 plus HRIG on day 0 only.</td>
<td>2 doses of 1.0ml IM of rabies vaccine on days 0 and 3.</td>
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Sources of information

Advice can be obtained from the Occupational Health Service.
Further advice on risk assessment following an incident can be obtained from: Public Health England; infectious diseases 020 8200 4400
Information on rabies for terrestrial animals by country in Europe is available via WHO at:

www.who-rabies-bulletin.org

Protocol for Bat Handlers

Healthy bats may have rabies but extra vigilance is needed if a bat is sick, grounded without apparent injury or behaving in an unusual manner. In the UK, only Myotis daubentonii is known to carry rabies (EBL-2).

Those working with bats and their managers are recommended to observe the following guidance:

1. Those with potential exposure have a primary course of rabies vaccine.
2. A booster given of rabies vaccine at one year.
3. Titre done at 3 months after the primary immunisation but, if needed earlier, leave as long as possible but at least 2 weeks. Subsequent titres carried out as indicated by risk assessment.
4. Booster given when titre <0.5IU/ml
5. Tetanus titre done on commencement of health surveillance if none already available. No further action is needed if a positive obtained. If negative, immunisation is to be considered.
6. Managers implement the University health surveillance system:
   a. Refer to Occupational Health Service
   b. Obtain letter of clearance annually, as long as the individual is potentially at risk.
   c. Keep an appropriate health record.
   d. Notify Occupational Health Service when surveillance is no longer required.

If an employee of the University does or suspects that they may have received a bite or a scratch from an animal that may have rabies, it is essential that you complete the online form on the Sentinel accident reporting system. In order to complete this information we suggest you ascertain the following information where possible.

As Rabies is on the list for ‘Notification of infectious diseases’ (NOIDs) which is the term used to refer to the statutory duties for reporting notifiable diseases in the UK, you will also need to collect the relevant information in order to be able to report this occurrence. For more information on NOIDs please visit

For an assessment of risk after an incident the following should be ascertained:

1. Contact nature – bite, scratch, and handling.
2. Condition of the bat and its origin – behaviour, species, size and location is helpful in determining most likely species if this is unknown.
3. Site and severity of the wound.
4. Availability of the bat for testing.

Advice should be sought as soon as possible from local medical staff whenever possible. In addition, advice can be obtained from the contacts given in the guidance including the Occupational Health Service.