Guidelines on requesting rabies pre-exposure prophylaxis
April 2019
PHE guidelines on managing rabies pre-exposure (April 2019)

Document information

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PHE guidelines on requesting rabies pre-exposure prophylaxis
(April 2019)

Authors
Kevin Brown

Reviewed by
Katherine Russell

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Document review plan

Responsibility for review
(disease group lead)
Kevin Brown

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-

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Contact information

<table>
<thead>
<tr>
<th>Name</th>
<th>Kevin Brown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit/Team Details</td>
<td>Rabies and Immunoglobulin Service, Immunisation and Countermeasures, PHE Colindale,</td>
</tr>
<tr>
<td>Telephone No</td>
<td>020 8327 6204</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:RIgS@phe.gov.uk">RIgS@phe.gov.uk</a></td>
</tr>
</tbody>
</table>
About Public Health England

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Public Health England
Wellington House
133-155 Waterloo Road
London SE1 8UG
Tel: 020 7654 8000
www.gov.uk/phe
Twitter: @PHE_uk
Facebook: www.facebook.com/PublicHealthEngland

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A. Introduction

Rabies is an acute viral encephalomyelitis caused by several members of the Rhabdoviridae family. It transmits through infected saliva via bites or scratches from rabid animals (in particular dogs). It is almost invariably fatal once symptoms develop.

Rabies still poses a significant public health problem in many countries in Asia and Africa where 95% of human deaths occur. Post-exposure treatment (PET) using rabies vaccine with or without rabies immunoglobulin (HRIG) is highly effective in preventing disease if given correctly and promptly after exposure.

The UK has been free of rabies in terrestrial animals since 1922. However, European Bat Lyssavirus type 2 (EBLV2), a rabies-like virus, has been found in Daubenton’s bats (Myotis daubentonii) across the UK. In 2018, European Bat Lyssavirus type 1 (EBLV1) was identified for the first time in two serotine bats in southern England.

In those with increased risk of exposure to rabies, rabies pre-exposure prophylaxis can be very effective and reduce the need for rabies immunoglobulin in the case of an exposure. However it does not negate the need for prompt post exposure treatment if an exposure/incident occurs. The groups of individuals where rabies pre-exposure prophylaxis is recommended is given in the Green book https://www.gov.uk/government/publications/rabies-the-green-book-chapter-27.

Pre-exposure prophylaxis is also recommended for some travellers, but this vaccination is not provided as part of the NHS service and is not covered in this guidance.


Purpose and scope

This guidance provides a practical guide to completing the risk assessment for individuals who are eligible for vaccine provided through PHE (individuals who regularly handle/rehabilitate bats, in a voluntary capacity) and therefore have an increased risk of rabies exposure, but no identifiable employer. The Department of Health and Social Care (DHSC), through PHE, does not supply vaccine for travellers or for those with an increased occupational risk of rabies exposure, including an increased occupational risk though the handling of bats (ie ecologists, wildlife workers).
Requests for pre-exposure vaccine related to travel should be referred to local health professionals providing travel health services or private travel clinics. Guidance on travel health, including pre-exposure rabies vaccine, is available to support health professionals through the National Travel Health Network and Centre (NaTHNaC) website: https://www.travelhealthpro.org.uk/ or for complex queries, to the advice line on 0845 602 6712.

Provision of vaccine for occupational risk is the responsibility of the employer (Health and Safety at Work Act, 1974 and Control of Substances Hazardous to Health, COSSH, 2002). This includes self-employed individuals. Vaccine can be obtained by employers through occupational health providers or local pharmacies by private prescription.

Separate documents deal with the risk assessment for rabies post-exposure treatment, and or clinical advice about a possible case of rabies.

Rlgs

The PHE Rabies and Immunoglobulin Service (Rlgs) operates between 9am-5pm Monday to Friday. All risk assessments/requests should be completed using the rabies pre-exposure risk assessment form (IMW248) and emailed to Rlgs (lg.clerks@nhs.net) by secure email which can be achieved by sending from a nhs.net mailbox. Any requests for advice should also be directed to this service (tel 020 8327 6204).

Devolved administrations

PHE/DHSC does not supply rabies vaccines for Scotland or Northern Ireland (or the Channel Islands), and these countries have alternative arrangement for providing rabies pre-exposure prophylaxis.

Requests for pre-exposure prophylaxis for individuals in Wales should use the same procedure as individuals in England. Alternative advice can sought from the duty virologist, University Hospital of Wales, Cardiff telephone 029 20 747 747.
B. Pre-exposure prophylaxis risk assessment: does the person need PrEP?

The following information is required to complete the risk assessment:

- patient name, date of birth, age and address
- relevant medical history, including whether the patient is severely immunosuppressed
- organisation, role and frequency of handling bats
- any previous rabies vaccinations

This should be recorded in the rabies pre-exposure prophylaxis form which can be found on the PHE website (IMW248 v2 or https://www.gov.uk/government/publications/rabies-pre-exposure-request-form).
All boxes in pale yellow should be completed by the requesting physician. Please leave the grey boxes blank to be completed by the RlgS team at Colindale.

**B1. Patient details**

Complete the patient details as indicated. The form also acts as the prescription if vaccine is issued. It is a legal requirement for these cases to record the date of birth (4 digits for the year) and the patient’s address.

**B2. Significant medical history**

Information is required about any immunosuppressive conditions or therapy and if the individual has known allergies.

If the person is severely immunosuppressed (as defined in Green Book, chapter 6; https://www.gov.uk/government/publications/contraindications-and-special-considerations-the-green-book-chapter-6), seriously consider whether it is appropriate that the patient should be handling bats at all. These individuals should be advised that...
bat lyssavirus infections are fatal in humans, and if they are exposed to bat lyssavirus, it is possible that they may not respond to post-exposure vaccine, and that it may not be possible to treat them. The individual requires careful counselling and should be made aware of the potential risks. If vaccination is still required and the individual is aware of the potential risks if they are exposed, then antibody levels may be required two weeks after the last dose of vaccine to ensure an adequate immune response.

B3. Eligibility for free vaccine

PHE only provides vaccine for individuals where there is no identified employer and the individual is regularly handling bats. All other individuals at occupational risk of rabies, including self-employed workers, should obtain rabies vaccination through their employer following a risk assessment based on their specific roles and responsibilities.

Please provide information on the organisation that the individual is volunteering for, their role and bat handling activities within the organisation, their training status and how often they have handled bats in the last 6 months and/or plan to in the next 6 months. This information will be used to determine if the correct groups of individuals are being targeted for free vaccination.

B4. Previous rabies vaccination

Please include the dates of any previous rabies vaccination received. Please also include any results of rabies antibody tests and the dates of testing.

B5. Vaccination status

Immune status for rabies will be based on history of vaccination and whether the person is immunocompetent. This information will determine the PrEP required. Immunity should be assessed as follows:

**Fully immunised:** At least three documented doses of rabies vaccine (either a complete primary pre-exposure course or as part of a four or five dose post-exposure course) or documented rabies antibody (VNA) titres of at least 0.5 IU/ml.

**Partially immune:** Person who has had incomplete / inadequate primary vaccination course, or VNA never >0.5IU/ml.

**Non immune:** Person who has never received pre- or post-exposure immunisation with rabies vaccine.
B6. Number of doses requested

A primary course of rabies PrEP is three doses of vaccine given on day 0, 7 and 28. This should be followed by a single booster at one year if the individual is still at risk. For individuals with frequent exposures, boosters are then recommended at 3-5 year intervals.

Regular rabies antibody testing is not offered in England. If the individual would prefer to have antibody levels taken rather than a booster, this will need to be paid for by the patient, and should be organised through the Animal and Plant Health Agency (APHA), Weybridge. (Antibody levels should be taken at least one year after the last dose of vaccine to be predictive of future antibody levels.

Individuals who are partially immune and have received only one or two doses of vaccine more than a year previously should complete the three dose primary schedule, with a booster dose one year later if they are still at risk.

B7. Doctor performing risk assessment

This should be the doctor who is taking responsibility for the accuracy of the information provided, and full responsibility that the medicine is appropriate for the patient. Please also provide this individual’s GMC number for the record. The vaccine will be issued to this named individual.

B8. Delivery information

Please provide full information, including the name of the surgery or department the vaccine should be delivered to.

All vaccines will be delivered by Movianto, so the Movianto/ ImmForm number for the site of delivery must be provided.
C. Logistics

C1. Submission to the Rabies and Immunoglobulin Service (RlgS)

The completed form should be returned to the PHE Rabies and Immunoglobulin Service (RlgS) by secure e-mail. The e-mail address is provided on the form, and in order to be secure MUST be sent from an ‘nhs.net’ e-mail address. Please return as an Excel document.

All requests for vaccine will be reviewed by the RlgS team for eligibility, and if confirmed vaccine will be issued through Movianto. Requests for pre-exposure prophylaxis will only be dealt with in working hours, and when time permits. Please allow at least two weeks for the request to be approved and for the vaccine to be delivered to the surgery.

Please note that PHE usually only holds one of the following vaccines (depending on availability), either human diploid cell (HDCV), chick embryo (PCECV), or Vero (PVRV)-derived vaccine, and this will be the only vaccine that can be issued. All the vaccines provided through PHE are interchangeable.

C2. Administering vaccine

Vaccine is given in the deltoid muscle by intramuscular injection. Each sequential dose should be given in alternate deltoids; suggest starting in the nondominant arm.

D. Source documents and useful references

Immunisation against infectious disease – ‘The Green Book’

British National Formulary
http://www.bnf.org


Rabies e-Health learning module
eHealth can be accessed by registering at https://lms.kallidus.com/PublicHealthEngland
To find the rabies module, enter the HPA Emergency Response Portal.
