



Public Health
England

Protecting and improving the nation's health

PHE guidelines on requesting rabies pre-exposure prophylaxis

June 2018



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Document information

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Reviewed by	Katherine Russell.
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Document history

Date	Reason for change	Issue number
June 2017	First version of this guidance	1.0
June 2018	Update guidance to reflect changes to the Green Book, and reminding employers of their responsibility to provide vaccine for employees with a risk of rabies exposure due to their employment.	2.0

Document review plan

Responsibility for review (disease group lead)	Kevin Brown
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About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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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 2 (EBLV2), a rabies-like virus, has been found in Daubenton's bats (*Myotis daubentonii*) across the UK.

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.

Information, guidance and the risk assessment form for post-exposure treatment are available on the rabies pages of the PHE website <https://www.gov.uk/government/collections/rabies-risk-assessment-post-exposure-treatment-management>

Purpose and scope

This guidance provides a practical guide to completing the risk assessment for individuals who regularly handle bats and therefore have an increased risk of rabies exposure. The Department of Health and Social Care (DHSC), through PHE, provides vaccine for those who regularly handle bats in the UK on a voluntary basis (i.e. not part of their paid employment). DHSC/PHE does not supply vaccine for travellers or for those with an increased occupational risk of rabies exposure.

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 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, COSHH, 2002) 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.

RIgS

The PHE Rabies and Immunoglobulin Service 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 RIgS (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 v1 or

<https://www.gov.uk/government/publications/rabies-pre-exposure-request-form>).

 PHE Rabies and Immunoglobulin Service Public Health England			
RigS No		Please leave blank for RigS staff to complete	
Date (DD/MM/YYYY):			
Requester details			
Source of request:		Fax number:	Fax number:
Requester name: Dr		Phone number:	Phone number:
Patient details			
Patient name:		First name	Surname
DOB:		dob	Phone number: Phone number
Patient address		NHS no: NHS number	
Address Use Alt-Return for new line			
Postcode: Post code		Country:	
Significant medical history			
Is the patient severely immunosuppressed? (see chapter 6 in Green Book)		Full details including doses	
Other relevant Hx (allergies, coagulopathies)			
Rabies risk group information			
Which organisation	Choose from list	Role	Choose from list
Training status	Choose from list	Details :	
How often have you handled a bat in the last 6 months	Choose from list	How often do plan to handle a bat in the next 6 months	Choose from list
Additional information Any relevant additional information			
Previous rabies vaccination history:			
Details of previous courses		Vaccination status :	Choose from list
No of doses requested		Primary vaccine course should be given into alternate arms by intramuscular inoculation on days 0, 7, and 28	
If not d0 start UK schedule at:			
Doctor performing risk assessment and confirming eligibility		GMC No:	
Delivery information			
Department/Surgery	Name		
Delivery address:	Address		
	Postcode:	Movianto number	Required field
PHE Consultant approving issue			
Vaccine Required?			
No of doses			
If not d0 start UK schedule at:			
VRD Consultant name	#N/A	Signature	Date:
Additional advice given: Click here to enter text			
The Rabies and IgG Clerk National Infection Service PHE Colindale 61 Colindale Avenue London NW9 5HT Tel: 020 8327 6204 Fax: 020 8200 1509 Please return by secure e-mail to: lg.clerks@nhs.net			
Please note the advice given is based on the available information. It remains the responsibility of registered healthcare professionals prescribing, supplying or administering medicines to check the medicine is appropriate for the patient. This includes checking doses, contraindications and drug interactions. The clinician should also be aware of potential side effects and communicate these to the patient.			
IMW248-Pre Exposure Rabies Request Form for Bat Handlers Authorised by Kevin Brown		Issue: 1.0	
Page 1/3		Effective Date: 12/6/2018	

All boxes in pale yellow should be completed by the requesting physician. Please leave the grey boxes blank to be completed by the RIgS team at Colindale

B1	Patient details			
	Patient name:	First name	Surname	Phone number: Phone number
	DOB:	dob		NHS no: NHS number
	Patient address	Address Use Alt-Return for new line		
		Postcode: Post code	Country:	
B2	Significant medical history			
	Is the patient severely immunosuppressed? (see chapter 6 in Green Book)			Full details including doses
	Other relevant Hx (allergies, coagulopathies)			
B3	Rabies risk group information			
	Which organisation	Choose from list	Role	Choose from list
	Training status	Choose from list	Details :	
	How often have you handled a bat in the last 6 months	Choose from list	How often do plan to handle a bat in the next 6 months	Choose from list
	Additional information	Any relevant additional information		
B4	Previous rabies vaccination history:			
	Details of previous courses		Vaccination status :	Choose from list
	No of doses requested		<i>Primary vaccine course should be given into alternate arms by intramuscular inoculation on days 0, 7, and 28</i>	
B5	If not d0 start UK schedule at:			
	Doctor performing risk assessment and confirming eligibility		GMC No:	
B6	Delivery information			
	Department/Surgery	Name		
	Delivery address:	Address		
		Postcode:	Moviato number	Required field

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 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>), 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 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 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.

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 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 individual taking responsibility for the accuracy of the information provided. Please also provide this individual's GMC number for the record.

B8. Delivery information

Please provide full information, including the name of where the vaccine should be delivered.

The vaccine 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 (RIgS)

The completed form should be returned to the PHE Rabies and Immunoglobulin Service (RIgS) 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 RIgS 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.

Adverse reactions to rabies vaccine are briefly discussed in the Green Book (<https://www.gov.uk/government/publications/rabies-the-green-book-chapter-27>).

D. Source documents and useful references

Immunisation against infectious disease – ‘The Green Book’

<https://www.gov.uk/government/publications/rabies-the-green-book-chapter-27>

British National Formulary

<http://www.bnf.org>

Rabies vaccines: WHO Position Paper :Weekly Epidemiological Record (WER) April 2018. Vol 93 pp 201-220. http://www.who.int/rabies/resources/who_wer9316/en/

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.

Mansfield et al (2016) Rabies pre-exposure prophylaxis elicits long-lasting immunity in humans. *Vaccine* 34:5959-5967

Further documents relating to rabies, rabies pre-exposure prophylaxis and rabies postexposure prophylaxis are also available on the rabies page of the PHE website:

<https://www.gov.uk/government/collections/rabies-risk-assessment-post-exposure-treatment-management>