



UK Health
Security
Agency

Guidelines on requesting rabies pre-exposure prophylaxis for regular bat handlers

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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
April 2019	Guidance updated to reflect new version of the form and further clarification on which groups of individuals are eligible for provision of vaccine through Public Health England (PHE).	3.0
October 2019	Updated RIgS phone number.	3.1
July 2020	Updated rabies pre-exposure form.	4.0
March 2022	Clarification that UK Health Security Agency (UKHSA) only provides pre-exposure vaccine for trained bat handlers that are regularly handling bats and for which there is no formal employer. Reformatted along UKHSA guidelines.	5.0

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 1 (EBLV1) was found for the first time in serotine bats (*Eptesicus serotinus*) in southern England in 2018, and European Bat Lyssavirus 2 (EBLV2), a rabies-like virus, has been found in Daubenton's bats (*Myotis daubentonii*) across the UK. A soprano pipistrelle (*Pipistrellus pygmaeus*) tested positive for lyssavirus antigen in 2020, but there was insufficient RNA to type the virus.

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 or incident occurs. The groups of individuals where rabies pre-exposure prophylaxis is recommended is given in the [Green Book](#).

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 UKHSA website.

Purpose and scope

This guidance provides a practical guide to completing the risk assessment on behalf of individuals who are eligible for vaccine provided through UKHSA (trained individuals who regularly handle or 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 UKHSA, does not supply vaccine for travellers or for those with an increased occupational risk of rabies exposure, including an increased occupational risk through the handling of bats (for example, ecologists or 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 or, for complex queries, via 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). 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 UKHSA Rabies and Immunoglobulin Service (RlgS) operates from 9am to 5pm Monday to Friday. All risk assessments or requests should be completed using the rabies pre-exposure risk assessment form (IMW248) and emailed to RlgS (lg.clerks@nhs.net) by secure email. This can be achieved by sending from a nhs.net mailbox. Any requests for advice should also be directed to this service (telephone 0330 128 1020).

All the 'pink' boxes in the form need to be completed and the request approved by a GP for the request to be processed.

Devolved administrations

UKHSA/DHSC do not supply rabies vaccines for Scotland or Northern Ireland (or the Crown Dependencies of the Channel Islands and Isle of Man) and these countries have alternative arrangements for providing rabies pre-exposure prophylaxis.

Requests for pre-exposure prophylaxis for individuals in Wales should use the same procedure as individuals in England. Alternatively, advice can sought from the duty virologist at the 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 needed 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 UKHSA website (IMW248 v4). This is a screenshot of the form.

UKHSA Rabies and Immunoglobulin Service			
Request for Rabies Pre Exposure Prophylaxis for Regular Bat Handle			
RlgS No	Please leave blank for RlgS staff to complete		
Date (DD/MM/YYYY):	dd/mm/yyyy		
Requester details			
Source of request:		Phone	Phone number
Requester name: Dr		Alt number:	Phone number
Patient details			
Patient name:	First name	Surname	Phone Phone number
DOB:	dd/mm/yyyy	NHS no:	NHS number
Patient address	Address Use Alt-Return for newline		
	Postcode: Post code	Country:	
Significant medical history			
Is the patient severely immunosuppressed? [see chapter 6 in		<input type="checkbox"/> Y/N	Full details including doses
Other relevant Hx (allergies, ophthalmology)			
Rabies risk group information			
Which organisation	Choose from list	Role	Choose from list
Training status	Choose from list	Details:	
How often has this person handled a bat in the last 6 months?	Choose from list	How often does this person plan to handle bats in the next 6 months?	Choose from list
Does the patient handle bats as part of their paid employment?			
Additional information Any relevant additional information			
Previous rabies vaccination history:			
Details of previous courses		Vaccination status: Choose from list	
Results of rabies antibody testing requested	Result in IU/ml	Date: dd/mm/yyyy	
<i>Primary vaccine course should be given into alternate arms by intramuscular inoculation on days 0, 7 and 28.</i>			
If not d0 start UK schedule at:		GMC No:	
Doctor performing risk assessment and confirming eligibility			
Delivery information			
Department/Surgery Name			
Delivery address: Address			
	Postcode:	Movianto number	Required field
UKHSA approval			
Vaccine Required?			
No of doses			
If not d0 start UK schedule at:			
UKHSA staff Choose from list		GMC/NMC no	Signature
Additional advice given <small>Click here to enter text</small>		Date:	
Please return by secure e-mail to: iq.clerks@nhs.net			
Any queries, please contact the Rabies and Immunoglobulin Service, UKHSA Colindale			
The Rabies and IqG Clerk Immunization Division UKHSA 61 Colindale Avenue London NW9 5HT		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. Tel: 0330 128 1020 Fax: 020 8200 1563	

All boxes in pink must be completed by the requesting doctor. Please leave the grey boxes blank to be completed by the RIgS team at Colindale.

This is another screenshot of the form with the numbers B1 to B8 placed next to each important section. The text that follows explains the purpose and requirements of each section.

B1	Patient details			
	Patient name:	First name	Surname	Phone number: Phone number
	DOB:	dd/mm/yyyy		NHS no: NHS number
B2	Patient address			
	Address Use Alt-Return for new line			
B3	Postcode:	Post code	Country:	
	Significant medical history			
	Is the patient severely immunosuppressed? (see chapter 6 in Green Book)	Y/N		Full details including doses
B3	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 has this person handled a bat in the last 6 months	Choose from list	How often does this person plan to handle bats in the next 6 months	Choose from list
	Does the patient handle bats as part of their paid employment?	Y/N		
B4	Additional information			
	Any relevant additional information			
B6	Previous rabies vaccination history:			
	Details of previous courses		Vaccination status :	Choose from list
B6	Results of rabies antibody testing:	Result in IU/ml	Date: dd/mm/yyyy	
	No of doses requested		<i>Primary vaccine course should be given into alternate arms by intramuscular inoculation on days 0, 7, and 28</i>	
B7	If not d0 start UK schedule at:			
	Doctor performing risk assessment and confirming eligibility		GMC No:	
B8	Delivery information			
	Department/Surgery	Name		
	Delivery address:	Address		
	Postcode:		Movianto number	Required field

UKHSA approval

B1. Patient details

Complete the patient details as indicated, including the NHS number. The form also acts as the written order if vaccine is issued. It is a legal requirement for these cases to record the date of birth (4 digits for the year), age if under 18 years old (the form should calculate this for you), 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](#)), 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 and they could die from rabies.

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 2 weeks after the last dose of vaccine to ensure an adequate immune response.

B3. Eligibility for free vaccine

UKHSA only provides vaccine for individuals where there is no identified employer and the individual is **regularly** handling bats. This means that where someone is about to start being trained in bat handling as a volunteer (for example, as a trainee bat carer or in another capacity, for example, bat box checking or trapping) then vaccinations should not be required, provided people are wearing appropriate gloves, are closely supervised and, should someone be bitten (the risk of which should be minimised by the gloves and close supervision), they seek post exposure treatment promptly.

The same applies to individuals who start training to be a bat handler but do not complete their training or do not handle bats on a regular basis after their training. Rabies vaccine provided by UKHSA on behalf of the DHSC is prioritised to protect those at greatest risk on an ongoing basis.

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 3 documented doses of rabies vaccine (either a complete primary pre-exposure course or as part of a 4 or 5 dose post-exposure course) or documented rabies antibody (VNA) titres of at least 0.5 IU/ml.

Partially immune

Person who has had incomplete or inadequate primary vaccination course, or VNA never greater than 0.5 IU/ml.

Non immune

Person who has never received pre- or post-exposure immunisation with rabies vaccine.

B6. Number of doses of vaccine requested

A primary course of rabies PrEP is 3 doses of vaccine given on days 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 to 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. Further information on the [timing of booster rabies vaccines based on antibody levels](#) is available.

Individuals who are partially immune and have received only one or 2 doses of vaccine more than a year previously should complete the 3 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 only.

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 (RIgS)

The completed form should be returned to the UKHSA Rabies and Immunoglobulin Service (RIgS) by secure email. The email address is provided on the form, and in order to be secure **must** be sent from an 'nhs.net' email 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 2 weeks for the request to be approved and for the vaccine to be delivered to the surgery.

Please note that UKHSA 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 UKHSA 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](#).

D. Source documents and useful references

1. Immunisation against infectious disease – [‘The Green Book’](#)
2. [British National Formulary](#)
3. Mansfield K and others. [‘Rabies pre-exposure prophylaxis elicits long-lasting immunity in humans’](#) Vaccine 2016: volume 34 issue 48
4. Rabies vaccines: [‘WHO Position Paper: Weekly Epidemiological Record \(WER\) April 2018’](#) Water Environment Research 2018: number 16, 93, pages 201 to 220
5. Further documents relating to rabies, rabies pre-exposure prophylaxis and rabies post-exposure prophylaxis are also available on the rabies page of the duty doctor pack on the Intranet and on the [UKHSA website](#)

About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation health secure.

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