



UK Health  
Security  
Agency

# Introduction to the Rabies and Immunoglobulins Service (RIgS)

Exeter Travel Health Masterclass,  
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# Overview

- What is rabies? How do you get it? Why is it important?
- Rabies post exposure treatment
  - Information needed for risk assessment
- The role of the Rabies & Immunoglobulins Service (RIgS)
- How to contact us & resources
- Acknowledgements

# What is rabies? And how do you get it?

- An acute viral encephalomyelitis caused by infection with classic rabies virus or number of related Lyssaviruses
- Zoonotic disease. Endemic in terrestrial mammals in some countries, Lyssaviruses present in bat populations in all countries
- Spread to people through infected saliva via bites, scratches or mucous membrane contamination from rabid animals (in particular dogs)
- Domestic dog = single most important reservoir (responsible for > 99% rabies deaths)
- All mammals appear susceptible – major reservoirs carnivores (dogs, foxes, racoons, skunks etc) and bats



# Why is rabies important?

- Highest case-fatality rate of any infectious disease
- Kills an estimated 59,000 people per year
- Although effective post-exposure treatment (PET) is available, once clinical symptoms develop rabies is almost invariably fatal



# Travel-related human rabies case in England, 2018

- Individual bitten by cat on the hand while on holiday in Morocco August 2018
- Local medical treatment but no rabies PET
- Patient was contacted in early October as a child bitten by the same cat had recently died of rabies, was told he needed urgent PET
- PHE contacted October 2018, arranged vaccine and HRIG
- 1<sup>st</sup> November 2018 – patient attended local hospital. Pain at site of bite, radiating up the arm. Fasciculation in arm and chest. Clinical symptoms of rabies
- Patient died 3 days later – rabies confirmed



# Travel-related human rabies case in England, 2025

- Individual exposed to a dog while in Morocco end of February 2025
- Did not seek medical attention – superficial ‘scratch’ cleaned at the time
- Developed symptoms end of May, presented to ED 2<sup>nd</sup> June (headache and mild neurological symptoms, worsening agitation)
- Rabies confirmed 10<sup>th</sup> June, patient died the next day

## Top stories



**The Guardian**  
Person dies of rabies in Yorkshire after contact with dog in Morocco  
53 minutes ago

**The Independent**  
Person dies from rabies after contact with stray dog in Morocco, officials confirm  
53 minutes ago

**GOV.UK**  
<https://www.gov.uk> > Infectious disease  
Rabies case confirmed following contact with a stray dog during a visit to Morocco  
1 hour ago

**Sky News**  
<https://news.sky.com> > story > person-dies  
Person dies in Yorkshire from rabies after contact with stray dog  
52 minutes ago



**Woman dies of rabies after holiday brush with stray dog**

**British woman dies from rabies after puppy scratch**

A woman had light contact with the stray dog while on holiday in Morocco, her family says.

South Yorkshire · 11h ago



# Rabies post-exposure treatment

## **Immediate and thorough wound washing!**

Apply disinfectant – Postpone suturing until PET has started

### **Rabies Vaccine**

Mainstay of rabies post-exposure treatment

IM into deltoid

Inactivated vaccine (Rabipur)

Globally most rabies vaccines are compatible

Multiple schedules approved by WHO

Schedule recommended by RIGS will depend on the exposure, patient's medical and vaccination history and what treatment already received

### **Human Rabies Immunoglobulin (HRIG)**

Made from pooled plasma of immunised donors (blood product)

Infiltrated at the site of the wound

Reserved for the highest risk exposures

Not given to:

- Previously immunised
- If treatment with vaccines started >7 days ago
- If 2 doses vaccine already received
- exposure occurred >1 month ago OR wound is no longer visible (interim recommendations)

In certain groups (immunosuppressed/children/people exposed to a confirmed rabid animal) dosage is weight dependant (20iu/kg) (interim recommendations)

# Information required for rabies post-exposure risk assessments

## Exposure

Date of exposure

Country

Animal

Type of exposure, was skin broken

Body part exposed

Circumstances

→ **RAG** rating

## Patient

Immunosuppression, clotting disorders & allergies

Previous rabies immunisation

Previous rabies exposures & treatment

Weight (if bodyweight HRIG indicated)

## Treatment

Was any immunoglobulin (HRIG) given? How was it administered?

Were any vaccines given?

**DATES!**

Brand names if possible

# Rabies post-exposure treatment

Country or animal risk	Category 1 exposure	Category 2 exposure	Category 3 exposure
No risk	Green	Green	Green
Low risk	Green	Amber	Amber
High risk	Green	Amber	Red
Confirmed rabies	Green or amber	Red	Red

	Post-exposure treatment		
Composite rabies risk	Non immunised/ partially immunised	Fully immunised	Immunosuppressed
Green	None	None	None
Amber	4 doses of vaccine d0, d3, d7, d21	2 doses of vaccine d0, d3-7	HRIG and 5 doses of vaccine d0, d3, d7, d14 and d30
Red	HRIG* and 4 doses of vaccine d0, d3, d7, and d21	2 doses of vaccine d0, d3-7	HRIG and 5 doses of vaccine d0, d3, d7, d14 and d30

\* HRIG not required for partially immunised patients (unless immunosuppressed)

# Rabies and Immunoglobulins Service (RIGS) (1)

- Rabies is high consequence but comparatively rare in UK
- Telephone helpline for health professionals only (not a referral service)
- National service for England - alternative arrangements in DAs
- Offers support to help risk assess patients who may have been exposed to rabies
- We will help draw up a care plan, and ensure the correct treatment products are delivered to you
- Designed for NHS clinicians but agreements in place with some private providers
- Clinical advice delivered by Nurse Specialists with business and medical support

# How to contact us

## **Post-exposure treatment (PET)**

By telephone on **0330 128 1020**

7/7 service 9:30am-5pm

Aim to get patients started on  
treatment same-day or next-day

<https://www.gov.uk/government/publications/rabies-post-exposure-prophylaxis-management-guidelines>

# Questions...





# Further resources

Rabies risk in terrestrial mammals by country

<https://www.gov.uk/government/publications/rabies-risks-by-country/rabies-risks-in-terrestrial-animals-by-country#primates-and-rodents>

Green Book Rabies chapter

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

Further guidance about rabies post-exposure treatment, risk assessment and management:

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

Guidance about the administration of rabies post-exposure treatment:

<https://www.gov.uk/government/publications/rabies-administration-of-vaccine-and-immunoglobulin>

Leaflets about rabies risks for travellers, or from bats in the UK, are available to download and print at

<https://www.healthpublications.gov.uk/ArticleSearch.html?sp=St-178&sp=Sreset>

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