

# **Rabies prevention advice for travellers**

**Written and designed by  
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# IMPORTANT TO READ

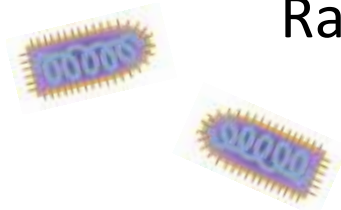
- This tool has been designed for use in a pre-travel health consultation between you, the health advisor and your traveller to enable a greater understanding of the importance of this disease. It is intended **you use** the illustrations to convey the messages, although some text has also been added for the traveller to read, and some (usually in smaller font size) to guide your discussion. Please note, this is an overview and intentionally does not go into great detail. Weblinks to the reference(s) for information is provided on most pages.
- Please note, the information **follows guidance from UK practice** found at <https://www.gov.uk/government/publications/rabies-the-green-book-chapter-27>
- PLEASE BE AWARE that **other country advice and practice may vary** so ensure you follow the guidance within which you work and practice.
- Information regarding further resources on rabies is provided on the last page of this document and at <http://www.janechiodini.co.uk/news/help/rabies/>

## Disclaimer

Travel Health Training Ltd. has taken every care to ensure the information contained within this tools provided is accurate, complete and up to date at the time of publication. As medical knowledge and guidance constantly changes, Travel Health Training Ltd. cannot guarantee that all of the information is accurate and consistent with Current National guidance. If using these materials, it is your responsibility to use them in conjunction with up to date reference sources.

# What is rabies and how do you get it?

Rabies is a virus, transmitted in the saliva of  
**ANY infected warm blooded animal**  
– predominantly dogs.



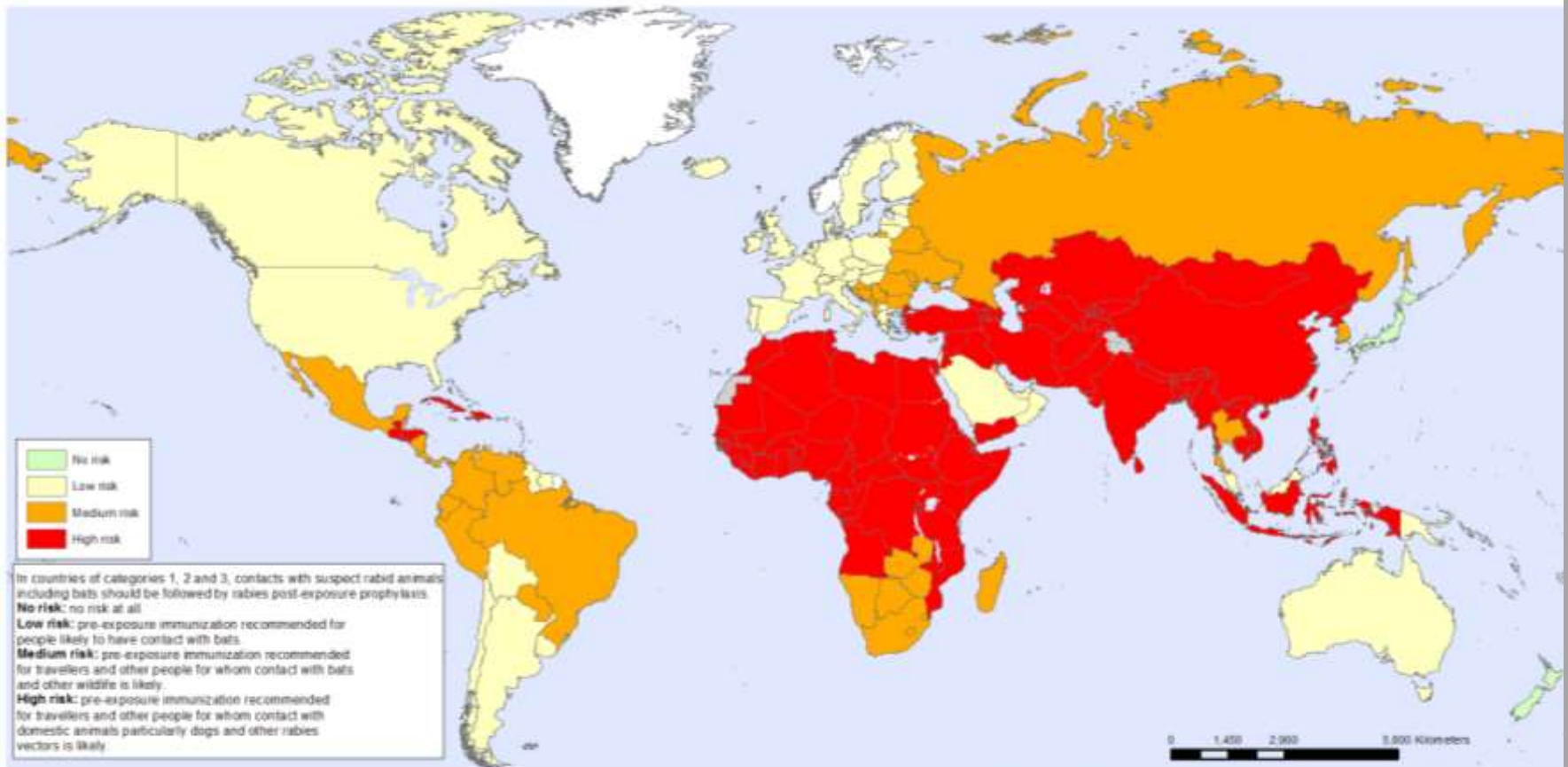
## BASIC ADVICE

When abroad,  
**DO NOT**  
have contact  
with any animals

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

# Where would you find rabies?

## Rabies, countries or areas at risk



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: WHO Control of Neglected Tropical Diseases (NTD)  
Map Production: Health Statistics and Information Systems (HSI)  
World Health Organization



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[http://gamapserv.who.int/mapLibrary/Files/Maps/Global\\_Rabies\\_ITHRiskMap.png?ua=1](http://gamapserv.who.int/mapLibrary/Files/Maps/Global_Rabies_ITHRiskMap.png?ua=1)

# What happens in rabies infection?

Contact comes through the bite, scratch or lick on an open wound from an infected animal. The virus can enter through the wound, travel through the nervous system, up into the brain.



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



# How common is rabies

Since 1946, there have been 25 deaths from rabies in travellers from the UK.

The three most recent British deaths were:



All of these travellers became ill and died after they returned home to Britain.

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

<http://news.bbc.co.uk/1/hi/england/manchester/4705473.stm>

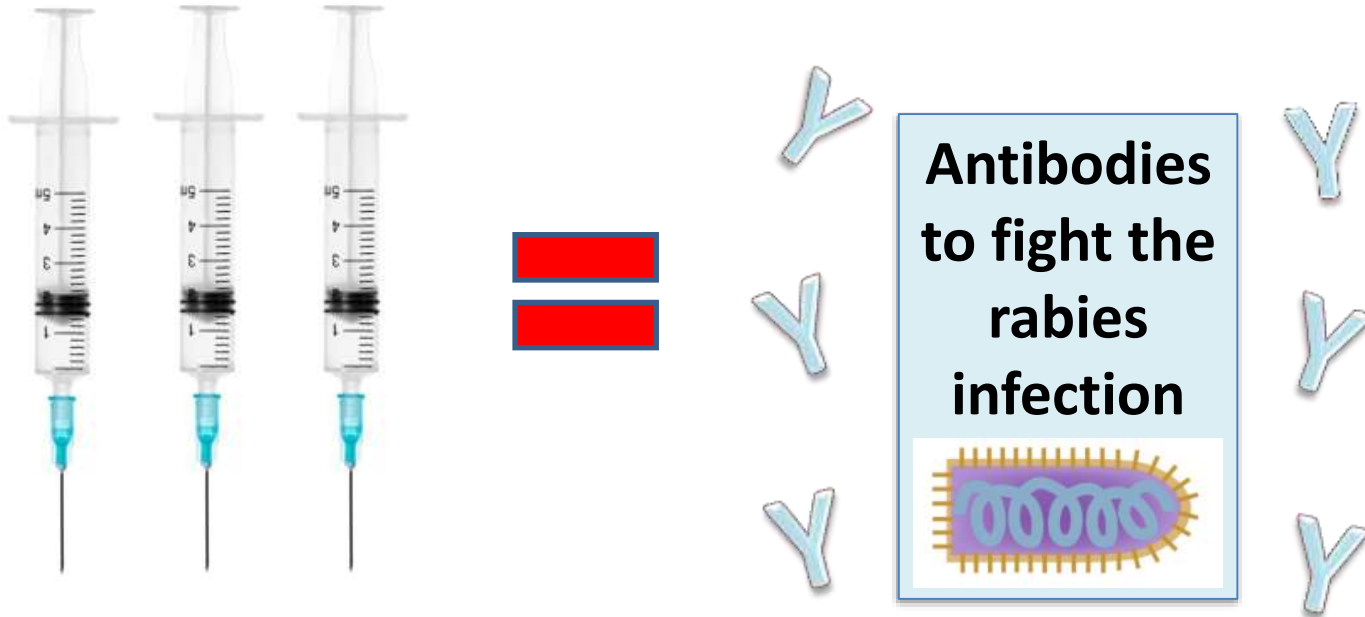
<http://www.telegraph.co.uk/health/healthnews/4144781/Woman-dies-after-contracting-rabies-in-African-animal-sanctuary.html>

<http://www.bbc.co.uk/news/uk-england-18244429>

# What about rabies vaccine?

Rabies vaccine is a private cost before travelling, but a course provides long term protection. When rabies vaccine is given, the human body starts to develop antibodies –

**antibodies mean you will have some protection to the infection.**



**Course of 3 injections  
before travelling**

<https://www.bma.org.uk/advice/employment/gp-practices/service-provision/prescribing/vaccination/travel-immunisation>  
<https://www.gov.uk/government/publications/rabies-the-green-book-chapter-27>

# Benefit of having rabies vaccine before you travel

**NO traveller who has received rabies vaccine pre-exposure has ever died following a rabies exposure.**



**NOTE: Antibody titres after vaccination with cell cultured vaccine (CCV) are usually greater than 10 IU/ml. Antibody induction exceeding 0.5 IU/ml is always achieved, and this level correlates with protection.** Plotkin S, Orenstein W and Offit P (ed.) *Vaccines* 6<sup>th</sup> edition. Elsevier

- Warrell D. Animal attacks, rabies, venomous bites and stings in Travellers' Health – how to stay healthy abroad Dawood R. Ed. Oxford University Press 2012. Ch 6, p176-201.
- Warrell, M.J. Rabies, in Mansons Tropical Diseases, 23<sup>rd</sup> Edition, pg 195-205. Elsevier.



# Risk management of rabies

It may not be possible to know if the contact animal was infected.

So it is essential to treat the contact area, even if you have had vaccine before travelling. Wash the wound with soap and running water for about 15 minutes, then add an antiseptic if possible.



Suitable disinfectants include 40 to 70% alcohol, tincture or aqueous solution of povidone-iodine

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

<http://travelhealthpro.org.uk/rabies/>

# Further risk management of rabies

**Then seek medical help** – never waste time.

This is absolutely essential, whether or not you received rabies vaccine before you travelled.



For most exposures treatment should be started within two working days, however for high risk exposures such as head and neck bites treatment should be started as soon as possible. However, treatment should still be considered even if the interval from exposure is lengthy.

<https://www.gov.uk/government/collections/rabies-risk-assessment-post-exposure-treatment-management>  
<https://www.gov.uk/government/publications/rabies-the-green-book-chapter-27> <http://travelhealthpro.org.uk/rabies/>

# Prevention of rabies infection after contact with an animal

if you have a course of rabies before the potential rabies exposure  
then **two doses of rabies vaccine are needed** after the contact



[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/85762/Green-Book-Chapter-27-v3\\_0.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/85762/Green-Book-Chapter-27-v3_0.pdf)

# Prevention of rabies infection after contact with an animal

if NO vaccine (or less than the 3 doses) given pre exposure, then  
**4 doses of vaccine are needed after.**

If the wound is high risk, rabies immunoglobulin will also be needed



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

# The purpose and importance of rabies vaccine and rabies specific immunoglobulin



Rabies immunoglobulin (HRIG) provides antibodies to the rabies virus, giving **immediate protection** to the infection. HRIG provides only short term benefit and has to be given within seven days of starting the course of rabies vaccine as a treatment.

**The mainstay of rabies post exposure treatment or 'prophylaxis' is rabies vaccine.**

Within days of the vaccine course commencing, multitudes of antibodies via vaccine will have been produced.



<https://www.gov.uk/government/collections/rabies-risk-assessment-post-exposure-treatment-management>  
<https://www.gov.uk/government/publications/rabies-the-green-book-chapter-27>

# The challenges of rabies prevention

HRIG is difficult to obtain in some countries and travellers have been known to have to fly home or travel elsewhere immediately to get it.



<http://travelhealthpro.org.uk/rabies/>



# In Summary

when travelling to a rabies risk area, following pre-travel risk assessment.....

**V**accine before travel – take your vaccine record card

**A**void animal contact – at ALL times

**T**reat wound immediately – urgent and essential



# Links to many rabies resources and other travel health information



[www.janechiodini.co.uk/help/rabies](http://www.janechiodini.co.uk/help/rabies)



[www.janechiodini.co.uk/help/tar](http://www.janechiodini.co.uk/help/tar)

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