



Briefing Note - Serial number 2018/054

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Event First detection of European Bat Lyssavirus-1 in a serotine bat in the UK

Notified by National Infection Service (PHE Colindale)

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PHE NIRP Level n/a

Incident Lead n/a

European Bat Lyssavirus 1 (EBLV-1) has been detected in a serotine bat in England. This is a bat rabies virus, related to the classical rabies virus and can lead to clinical rabies in humans. This is the first time that the presence of EBLV-1 virus has been confirmed in a bat in the UK; although another type of bat rabies (EBLV-2) has been seen in a different type of bat (Daubenton's). Risk assessments were undertaken for contacts of this bat, and post-exposure treatment organised as required.

Background and interpretation:

This dead bat was found in Dorset and tested by the Animal and Plant Health Agency (APHA) as part of their passive surveillance scheme for bat rabies (lyssavirus). Previously, all bat rabies detections in the UK were of a different bat rabies virus - European Bat Lyssavirus 2 (EBLV-2), and these were always in a different species of bat (Daubenton's bats). Only 21 EBLV-2 infected bats have been found in more than 15,000 tests since 1986, so the risk of catching rabies from a bat is very low. However, in 2002, a man died from rabies caused by EBLV-2 acquired in the UK from a bat. Two cases of human rabies caused by EBLV-1 have been reported elsewhere in Europe.

Rabies is an acute viral encephalomyelitis caused by viruses of the Rhabdoviridae family. It is transmitted through infected saliva via bites or scratches from rabid animals (including bats). It is almost invariably fatal once symptoms develop. 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.

Bat bites in the UK are felt rather than seen and may not bleed or leave an obvious mark on the skin. Infected bats may not show signs of illness, and therefore all bats (whatever species) should be considered a potential risk of rabies.

Any person exposed to any type of bat in the UK should receive a prompt risk assessment and may require post-exposure treatment with rabies vaccine.

PHE's Rabies and Immunoglobulin Service (RIGS) has received reports of patients who have been bitten by bats in the UK not receiving appropriate risk assessment and post-exposure treatment. Therefore it is important for health professionals to be aware of the risks of rabies following contact with any bat.

Further information for the public and health professionals on the management of bat bites is available on the [GOV.UK webpage](#) and in a leaflet on [bat contact and rabies risks](#).



Rabies post-exposure treatment:

The Rabies and Immunoglobulin Service (RIgS) operates from 9am-5pm Monday to Friday and can be contacted on 0208 327 6204. [Rabies post-exposure treatment](#) risk assessments can be carried out by RIgS or the local HPT within working hours, or through the Colindale duty doctor at weekends and bank holidays (day time and evening).

In most cases it is not necessary to issue post-exposure treatment at night. The exception is a category 3 exposure to the head or neck with a high country/animal risk (RED risk rating) in an unimmunised individual. Brief risk assessment questions can determine if issue of post-exposure treatment is required overnight. Most cases can then be referred to the RIgS team or Colindale duty doctor the next morning after 9am.

Implications and recommendations for PHE Centres

HPTs are asked to be aware of the risk of rabies in bats in the UK and current arrangements for issuing post-exposure treatment.

HPTs are also asked to ensure local stakeholders are aware that any bats in the UK may pose a risk of rabies by cascading this information to GPs and acute trusts in their area.

Implications and recommendations for PHE sites and services

Lead Public Health Microbiologists are asked to share information on the risks of rabies in bats in the UK with PHE and NHS microbiology departments and other relevant local colleagues as appropriate.

Implications and recommendations for local authorities

Local Authority Directors of Public Health are asked to cascade this information to GPs and acute trusts in their area to ensure they are aware of the risks associated with bat bites within the UK and they know how to contact PHE to carry out a risk assessment and arrange rabies post-exposure treatment if required.

References/ Sources of information

Information for individuals who have been bitten by a bat

<https://www.gov.uk/government/publications/rabies-risks-from-bat-bites/information-for-individuals-who-have-been-bitten-by-a-bat>

Bat contact and rabies risks leaflet

<https://publichealthengland-immunisati.app.box.com/s/l20owjmkk7w2luxk40ys3yfcggk2b788>

Vaccine Update, rabies special edition

<https://www.gov.uk/government/publications/vaccine-update-issue-282-august-2018-rabies-special-edition>

Immunisation against infectious disease - "The Green Book"

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

PHE rabies post-exposure treatment guidelines can be found here:

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

Rabies risks by country and animal can be found here:

<https://www.gov.uk/government/publications/rabies-risks-by-country>