



## SCOTTISH EXECUTIVE

### Health Department

Dear Colleague

#### BATS AND HUMAN HEALTH

Last year a man died of rabies in Tayside. He was known to have had close contact with bats over many years and it is probable that his infection was acquired as a result of being bitten by an infected bat. This tragic incident has raised the profile of the disease and increased public concern in relation to bats.

We are now approaching the end of the bat population's winter hibernation period with the likelihood of human contact with bats increasing in the coming months.

The purpose of this letter is as a reminder, to general practitioners in particular, of the imminent emergence of the bat population and the possibility of patients seeking advice or treatment. There has been no change in the guidance issued towards the end of last year in SEHD/CMO (2002) 11.

All available evidence indicates that the threat from bats to the general public, or to pets and domestic animals, is extremely low. Bats are naturally timid and members of the public should avoid direct contact with them.

However, those engaged in bat conservation activities who routinely handle bats are at risk. This should be reduced by wearing protective clothing and, if not already immunised, obtaining pre-exposure (prophylactic) immunisation with rabies vaccine.

Scottish Natural Heritage (SNH) and SCIEH have drafted a leaflet *Bats and Human Health* which provides basic information and also advice on appropriate action if bats enter homes. **This was published in May 2003 and is available on the SHOW website at:**

[http://www.show.scot.nhs.uk/scieh/documents/bats\\_human\\_health\\_SNH\\_SCIEH.pdf](http://www.show.scot.nhs.uk/scieh/documents/bats_human_health_SNH_SCIEH.pdf)

Yours sincerely

**DR E M ARMSTRONG**

## From the Chief Medical Officer

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#### For action

GPs  
CsPHM (CD&EH)  
Chief Executives, NHS Trusts  
Chief Executives, NHS Boards  
Medical Directors, NHS Trusts

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#### For information

Directors of Public Health, NHS  
Boards  
Directors of Occupational Health  
Consultant Microbiologists  
Infectious Disease Physicians  
Specialists in Pharmaceutical Public  
Health  
General Manager, SCIEH  
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#### Further enquiries

##### Policy Issues

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## Introduction

In 2002 in Scotland there was a fatal case of rabies. The patient was known to have had regular contact with bats and the virus found was similar to the one previously recovered from bats elsewhere in the UK. This raised questions about the safety of contact with bats. This leaflet gives some basic facts so that there is no unnecessary concern about health risks arising from coming into contact with a bat.

There are nine species of bat in Scotland, and all are protected by Law. Three of these species (common and soprano pipistrelles and the brown-long-eared bat) depend heavily on buildings for roosts and are commonly found in roof spaces.

## What is rabies?

Rabies is an infection caused by a virus, of which there are different types. In humans, the virus usually enters the body through a bite and travels up the nerves to eventually infect the brain. Once established in the body it is almost always fatal.

## What are European Bat Lyssaviruses (EBLV) ?

EBLV are related to but different from the virus which causes 'classical' rabies (found in foxes and other animals in Europe). There are two types of EBLV with Type 1 being more common. Unlike the 'classical' rabies virus, it is very rare for EBLV to infect animals other than bats.

In Europe, mainly in the Netherlands, Spain, Denmark and Germany, about 700 bats have been confirmed as infected with EBLV

in the last 25 years. In the UK, the Veterinary Laboratories Agency has tested more than 3,200 bats over the past 15 years and found only two with EBLV. The first was from East Sussex in 1996 although it may have come from outside the UK. The second was in Lancashire in 2002. Both were Daubenton's bats with Type 2 EBLV.

EBLV has not been found in the UK in pipistrelles or brown long-eared bats - those most commonly seen or found in buildings. Daubenton's bats rarely roost in houses.

More work is being carried out to find out just what proportion of bats do actually carry the virus in the UK.

## Human Health Risks

EBLV cannot easily spread to people, but can do so through saliva or nerve tissue from an infected bat. The virus cannot enter through unbroken skin and requires a bite or scratch or contact with membranes such as the eye, nose or mouth. Infection is only therefore spread through contact. You cannot catch rabies by just being in the same room as a bat.

Despite the presence of the virus in bats in Europe, only four people, including the case in Scotland have been reported to be infected with it - one was in Finland and two were in the former USSR - the last of which was in 1985. None of these people had received rabies vaccination before their exposure. Since 1982, more than 200 people in other European countries have reported being bitten or scratched by bats which were later confirmed to be infected with EBLV. All of these people were given

appropriate post-exposure treatment and NONE of them developed the infection.

Infection with EBLV is very rare and taking simple preventative measures can reduce the risk further.

## What you should do if you are in contact with a bat

If you have been bitten or scratched by a bat you should immediately wash the wound with soap and water. This alone is very effective in reducing any risk but you need to seek medical advice to see whether additional treatment is required. If you have already been vaccinated, you may be given booster injections. If you have never been vaccinated you may need to immediately start a course of vaccinations.

In cases where doctors consider that there is a high risk of developing infection they may give you rabies immunoglobulin injections for additional protection.

Wherever possible you should keep any bat that has bitten or scratched you or someone else. It might be necessary to have it tested for EBLV, particularly if it has been showing any signs of illness or unusual behaviour. Any bat suspected to be infected with EBLV must be reported to the State Veterinary Service duty vet.

If your work or hobby brings you into contact with bats you should ensure that you are vaccinated against rabies – and keep your boosters up to date. You should seek advice from your GP or your employer on the best way to receive this.

Although the vaccine used in the UK was developed against 'classical' rabies it also appears to protect against EBLV. The evidence from continental Europe supports this. No serious side effects from the vaccine have been reported in the UK although a small number of people have had a local reaction around the injection.

### Handling Bats

Bats sometimes fly into houses and other buildings or may be found during building and other works. Although they are protected species, you can still remove bats from the living space of a dwelling house or care for a sick or injured bat.

If you find a bat it is important to avoid touching it or having contact with its saliva.

Before attempting to move a bat you should put on bite-proof gloves, not kitchen or stretch gloves. You can then move it by covering it with a small box, such as a margarine tub, and sliding a sheet of card under this to trap it. Or, you can cover the bat in a small towel or cloth and use this to pick it up

You should release the bat outside in a sheltered place such as a windowsill or tree trunk, and safely out of the reach of children, cats, dogs and passers-by.

If you wish further advice about handling bats, you should phone your nearest Scottish Natural Heritage Office or the Bat Helpline

### Contacts

Scottish Natural Heritage – (for contact during office hours) see telephone directory or our website [www.snh.org.uk](http://www.snh.org.uk) for our nearest office. Or (and at other times) phone the SNH Bat Helpline **07774 161219**. SNH will operate the Helpline until September 2003 and then review its need.

State Veterinary Service (SEERAD) - Duty vets (available 24 hours)

Ayr 01292 268525

Galashiels 01896 758806

Perth 01738 602211

Inverurie 01467 626300

Inverness 01463 253098

Bat Conservation Trust – 0207 627 2629  
or their website at [www.bats.org.uk](http://www.bats.org.uk).

# Bats and Human Health



## RABIES Vaccine & Immunoglobulin

If a patient presents with an animal bite from a rabies risk area use the following guideline. (The following guidance can also be used following UK bat bites)

- Involve senior staff
- Establish if the area is truly rabies prone. The Health Protection Agency website issues a list of rabies risk according to geographical area.  
<http://www.hpa.org.uk/>
- If patient is to be treated they will require  
Rabies **Immunoglobulin** on attendance  
Rabies **Vaccine** days 0,3,7,14,30
- **Immunoglobulin** is obtained from the Scottish National Blood Transfusion Service. Based at 25 Shelley Road, Glasgow G12 OXB. Contact the duty doctor on 0141 357 7700
- **Vaccine** is obtained from the hospital pharmacy (RAH keeps 3 doses in pharmacy)
- GP should arrange the follow up doses of vaccine. Obviously if the 2<sup>nd</sup> dose is due over a weekend/public holiday then advise patient to reattend A&E for 2<sup>nd</sup> dose. Ensure GP informed of the need for full course.