### 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 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 about 3,000 bats over the past 15 years and found only two with EBLV. The first was from East Sussex in 1996 although it may have came 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 <u>NONE</u> 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 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. 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 are at all uncertain 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 <a href="www.snh.org.uk">www.snh.org.uk</a> 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 – 0845 1300 228 or their website at <a href="www.bats.org.uk">www.bats.org.uk</a>.

# Bats and Human Health





Scottish Centre for Infection and Environmental Health

