



Department
for Environment
Food & Rural Affairs

Rabies Webinar June 2022

For Veterinary Professionals

Introduction to rabies

Dr Helen Roberts

Exotic Disease Control

Senior policy advisor

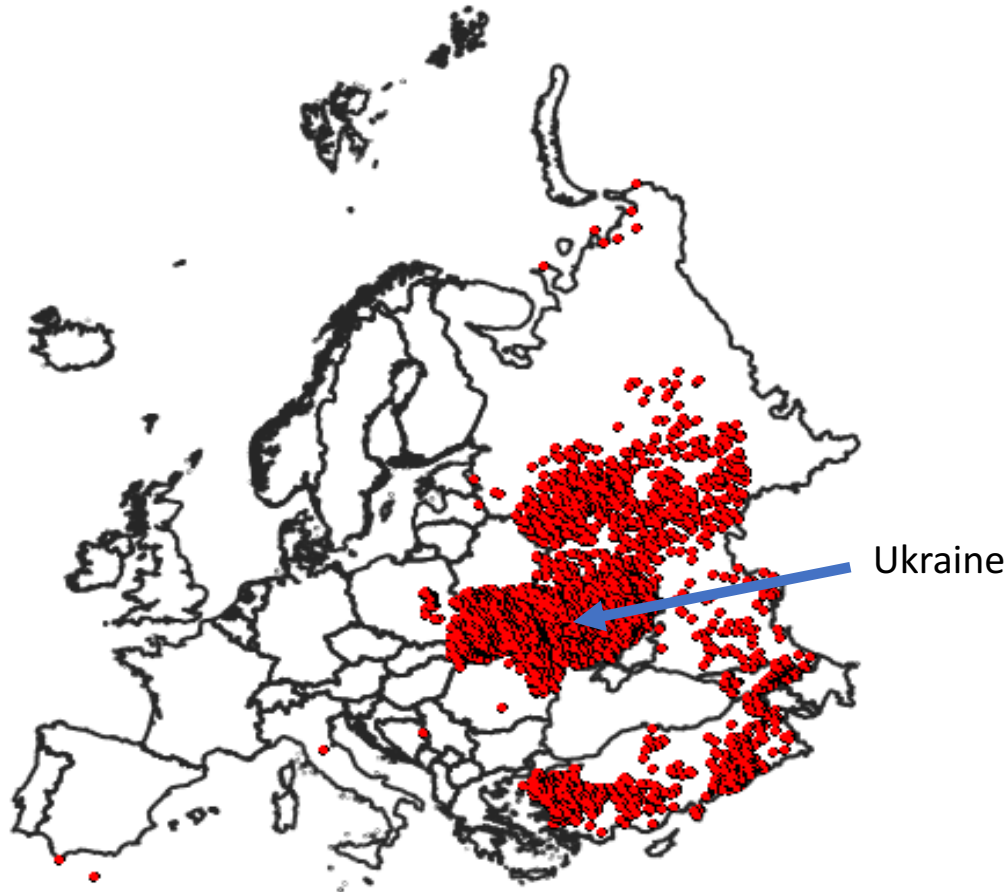
Rabies and current threat level

- GB has been free from terrestrial rabies since 1920's and the only cases in animals have been associated with travel and non-compliant imports.
- Our risk management is based on restricting the movement (import) of pets and commercial dogs, cats, ferrets, captive animals which are considered reservoir hosts, through applying a series of measures, including quarantine, vaccination, blood testing and waiting for clinical signs to appear.
- A **quantitative risk assessment** was conducted in 2011 to allow us to align with EU Pet travel rules, and this concluded the risk level was "very low"
- The results of the QRA, assuming 100% compliance with all regulations, suggest that under EU Pet Movements Protocol the annual risk of rabies introduction from non-UK cats/dogs would increase from 7.79×10^{-5} (5.90×10^{-5} , 1.06×10^{-4}) to 4.79×10^{-3} (4.05×10^{-3} , 5.65×10^{-3}). Which is 1 every 13,272 years to 1 every 211 years.
- As pet imports increased when RO and BG were allowed free movement, the risk increased again, but remained very low to low.

Ukraine crisis

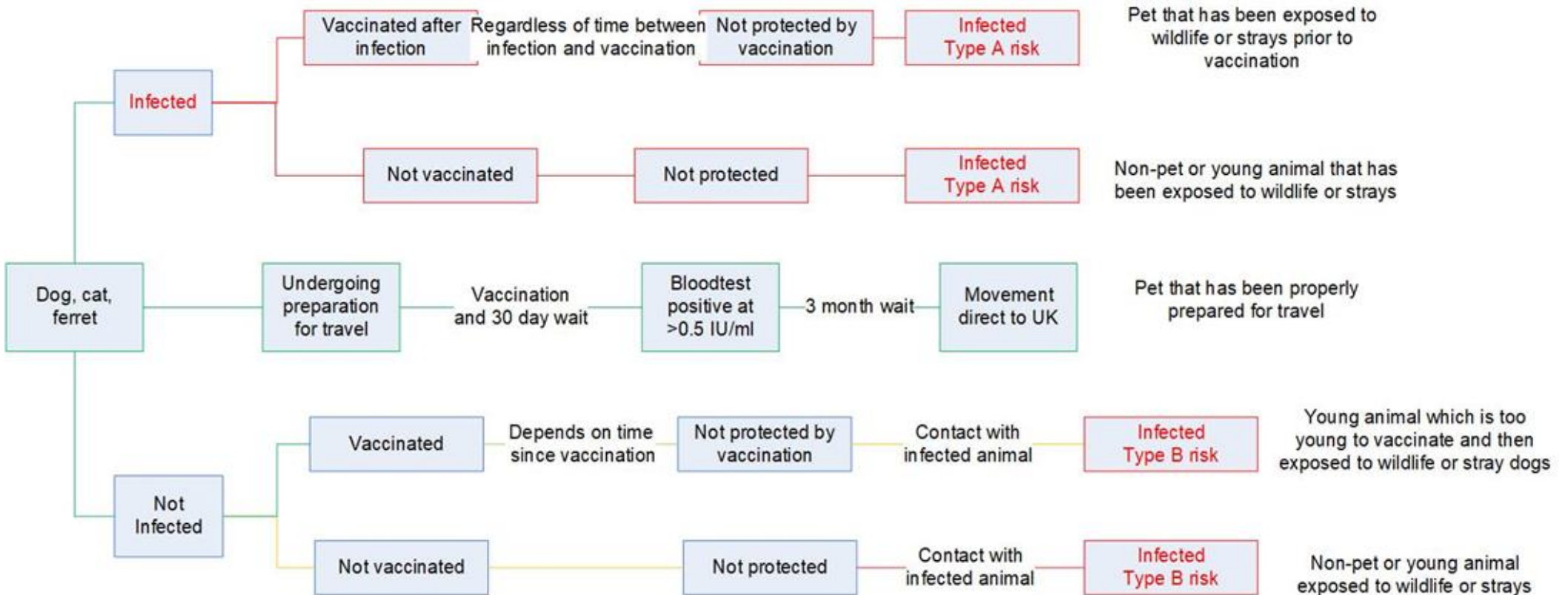
- To help Ukrainian people fleeing the crisis, we have put in place certain measures to reduce the burden on the owner. This is risk-based and still requires quarantine / isolation, proof of vaccination and a wait period.
- Some of the lower risk animals have been moved to home isolation but we recognise there is still a risk that an animal could be incubating rabies prior to vaccination or just after vaccination and could move before clinical signs become apparent.
- We need to therefore consider what if the very rare event happens and we do get a case of rabies in a pet belonging to a person from Ukraine.
- As part of our preparedness measures, alongside exercising our capability, we have developed this series of webinars to help people understand the disease, the risk and the actions which can be taken.

Rabies cases between 2019-2022 in cats, dogs, wildlife, domestic animals



Note: these numbers do not include cases of European bat lyssaviruses

Pet travel rules



Thank you!

Clinical signs of canine rabies

Luke Gamble BVSc DVM&S FRCVS
CEO Mission Rabies - UK

www.missionrabies.com



**MISSION
RABIES**



What is Rabies?

Key Points

- World's deadliest zoonotic disease
- Virus that affects warm blooded mammals
- >99% of all human cases are from dog bites – saliva
- There is virtually no treatment once clinical signs manifest

What is Rabies?



The reason tens of thousands of dogs are indiscriminately beaten, poisoned and killed globally

What is Rabies?

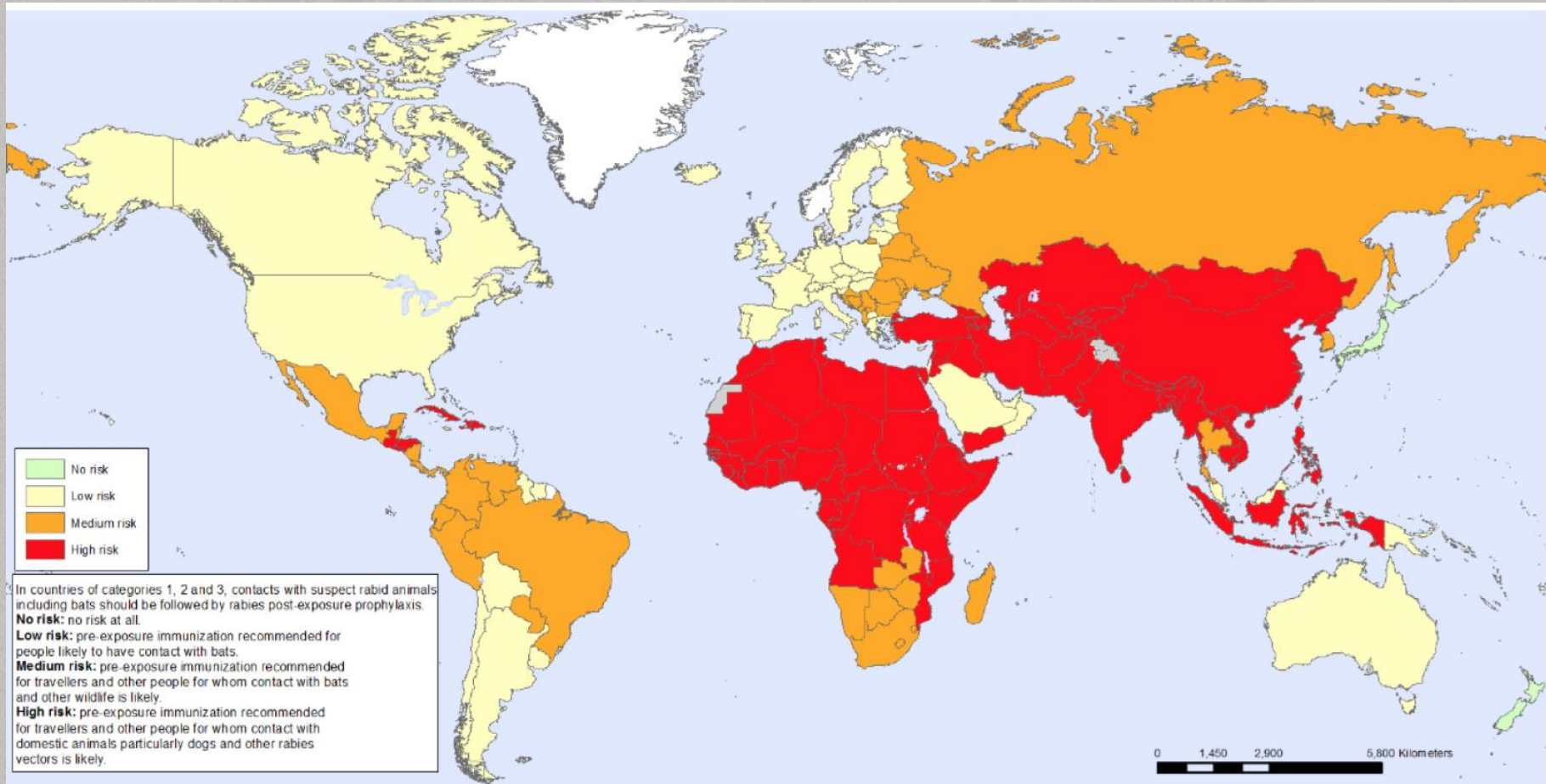


Causes the death of 1 child every ~9 minutes

Global Rabies Situation



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Clinical signs



- Incubation period varies – often around 2-3 weeks but can be 80+days
- First symptoms often nonspecific – lethargy/fever/anorexia/not themselves
- Typically signs progress within days to cerebral dysfunction, ataxia, weakness, paralysis, seizures, hypersalivation, difficulty swallowing, abnormal behaviour, aggression
- Death follows ~5 days after showing acute clinical signs

What to do if you suspect rabies

- Isolate dog and call DEFRA helpline
- Track details of anyone who has come into contact with the suspect animal – to initiate PEP



Rabies in bats and foxes

Graham Smith
National Wildlife Management Centre, APHA



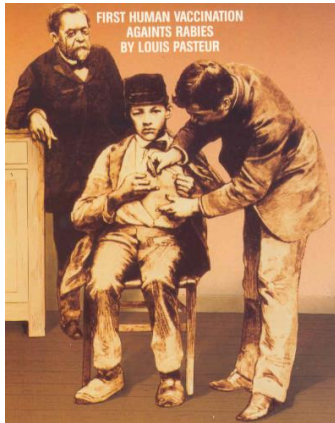


Rabies is the disease

- Rabies (disease) is caused by any of a number of Lyssaviruses and we are finding new ones all the time.
- Lyssaviruses tend to circulate in one or two host species, but can spill over to give disease resulting in death in most other mammal species.
- Classical rabies (RABV) is the one we are most familiar with and is the most common, occurring in dogs, and wild carnivores, and this virus causes most human deaths.

Family *Rhabdoviridae*
 Subfamily *AlphaRhabdovirinae*
 Genus *Lyssavirus*

1885
rabies



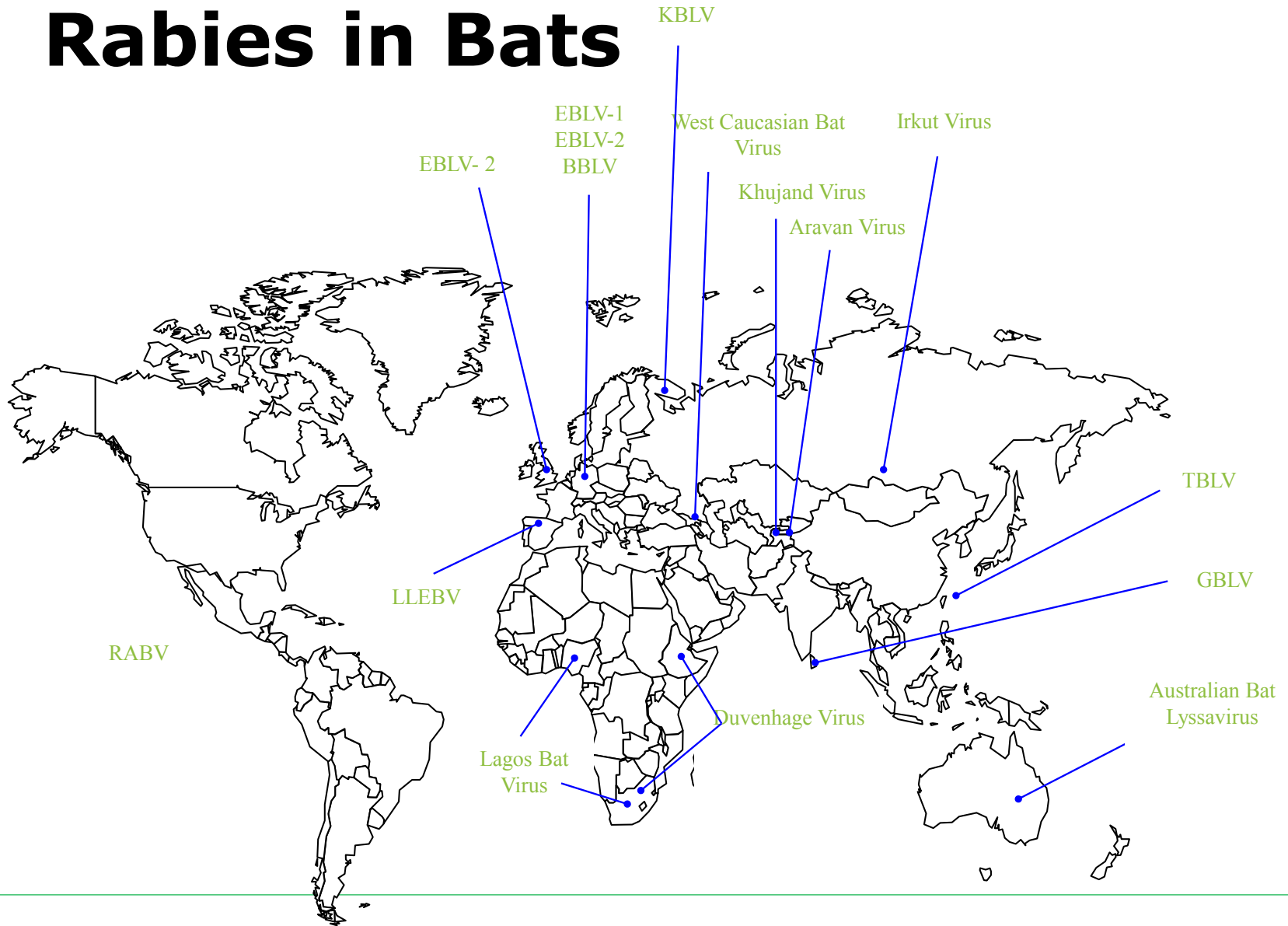
Found in Europe
 Imported into Europe

- Rabies lyssavirus (many countries)
- Lagos bat lyssavirus
- Mokola lyssavirus
- Duvenhage lyssavirus
- European bat 1 lyssavirus (many countries)
- European bat 2 lyssavirus (many countries)
- Australian bat lyssavirus
- Aravan lyssavirus
- Khujand lyssavirus
- Irkut lyssavirus
- West Caucasian bat lyssavirus
- Shimoni bat lyssavirus
- Bokeloh bat lyssavirus (Germany, France, Poland)
- Ikoma lyssavirus
- Lleida bat lyssavirus (Spain, France)
- Gannoruwa bat lyssavirus
- Kotalahti bat lyssavirus (Finland)*
- Taiwan bat lyssavirus*

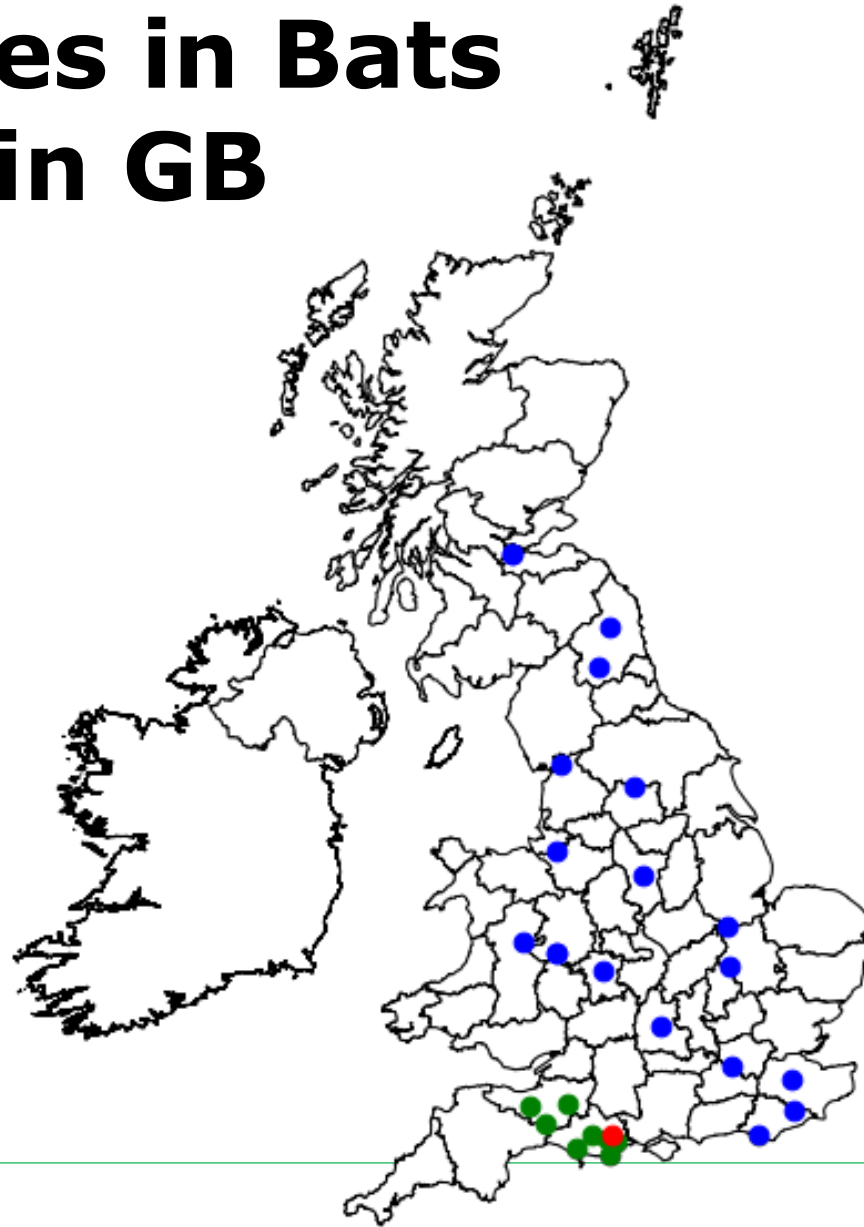
2022
17 ICTV species
1 proposed*



Rabies in Bats



Rabies in Bats in GB



- EBLV-1
- EBLV-2
- Unconfirmed (pip)



Classical rabies in foxes

- Was widespread in Europe last century, but has not occurred in Britain since 1920s.
- Classical rabies spread in foxes but also affected raccoon dogs, dogs, cats, and other wildlife and livestock.
- Typical incubation period of about one month before the animal becomes 'rabid'.
- Rabid foxes may show the aggressive (furious) or the paralytic (dumb) form of rabies, and will die within about 5 days.
- Rabid foxes tend to be more active during the day, but do not usually wander long distances as dogs might do.



Classical rabies in foxes

- Rabies is a notifiable disease, so any suspicion that a wild or domestic animal is rabid needs to be reported to APHA.
- However, other diseases can also cause strange behaviour including biting people.
- Many foxes in urban area have very little fear of people so this is NOT a sign it has a disease.



Control of rabies



- Rabies control is the most successful wildlife disease control using vaccines.
- An oral vaccine delivery was developed in the 1970's and 80's.
- At this time fox rabies was in northern France and a constant concern about it turning up in Britain.

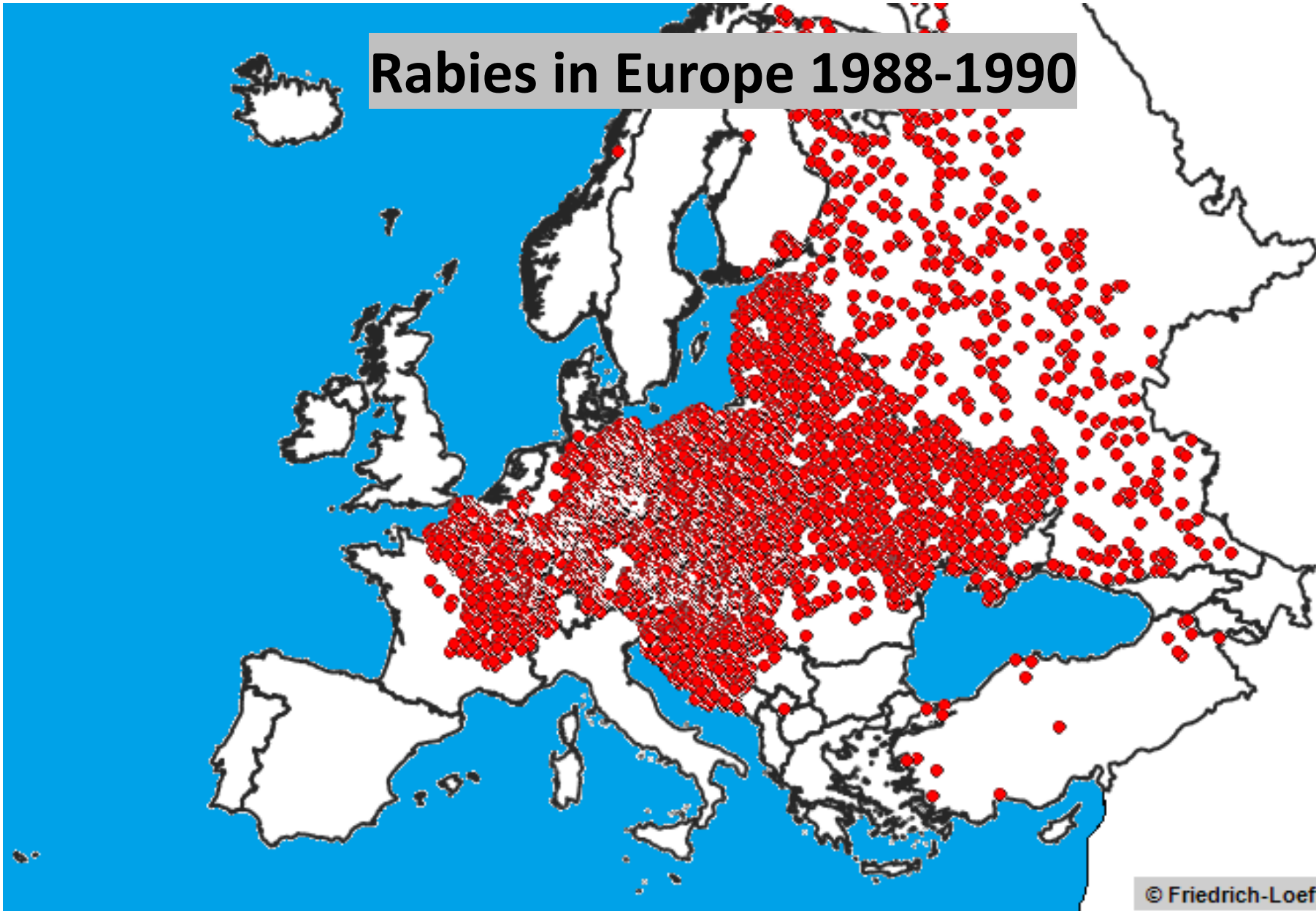


Control of rabies

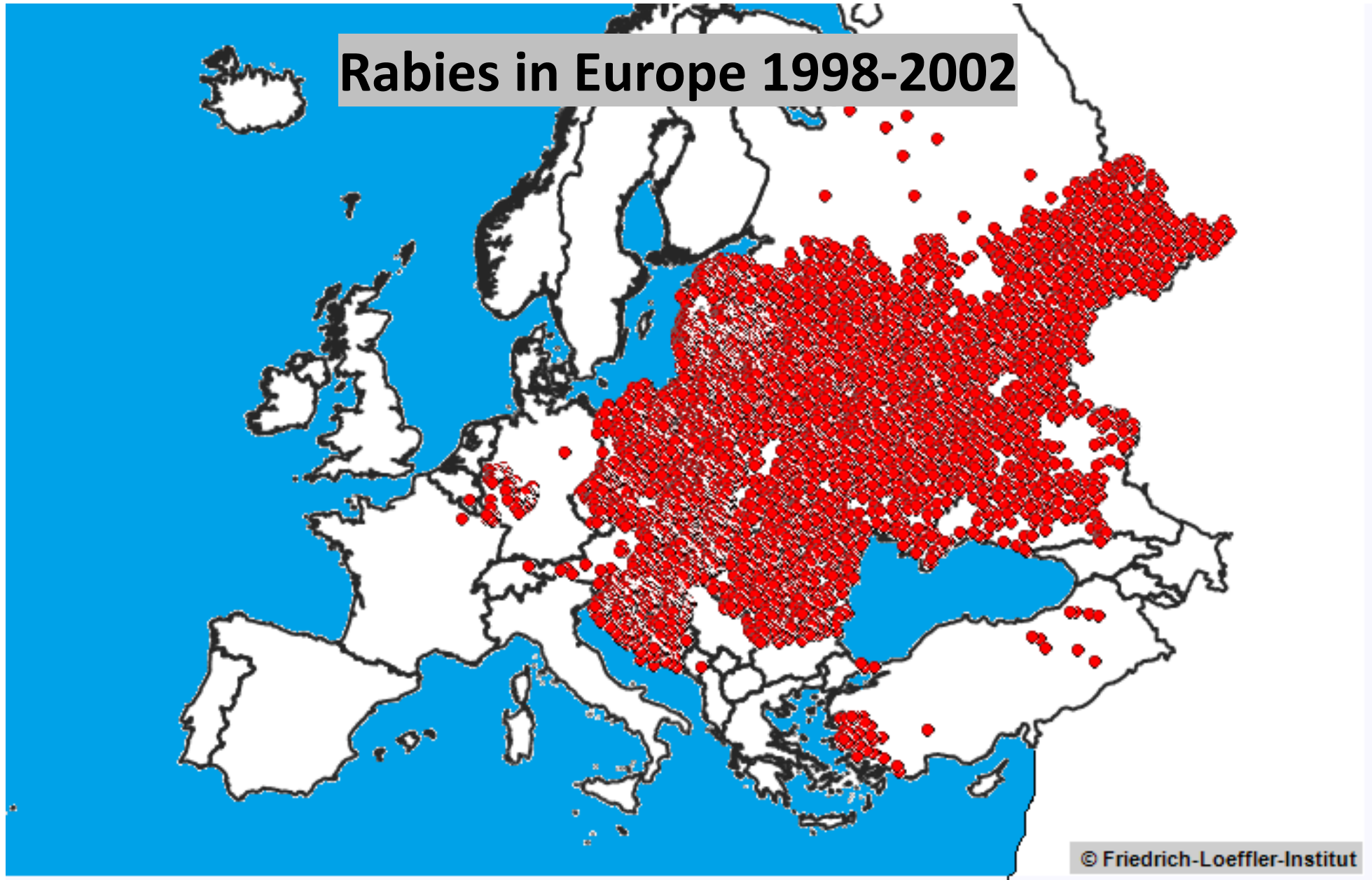


- Rabies control is the most successful wildlife disease control using vaccines.
- An oral vaccine delivery was developed in the 1970's and 80's.
- At this time fox rabies was in northern France and a constant concern about it turning up in Britain.
- Oral vaccines were distributed by aircraft (and by hand) across most of Europe where wildlife rabies occurred.

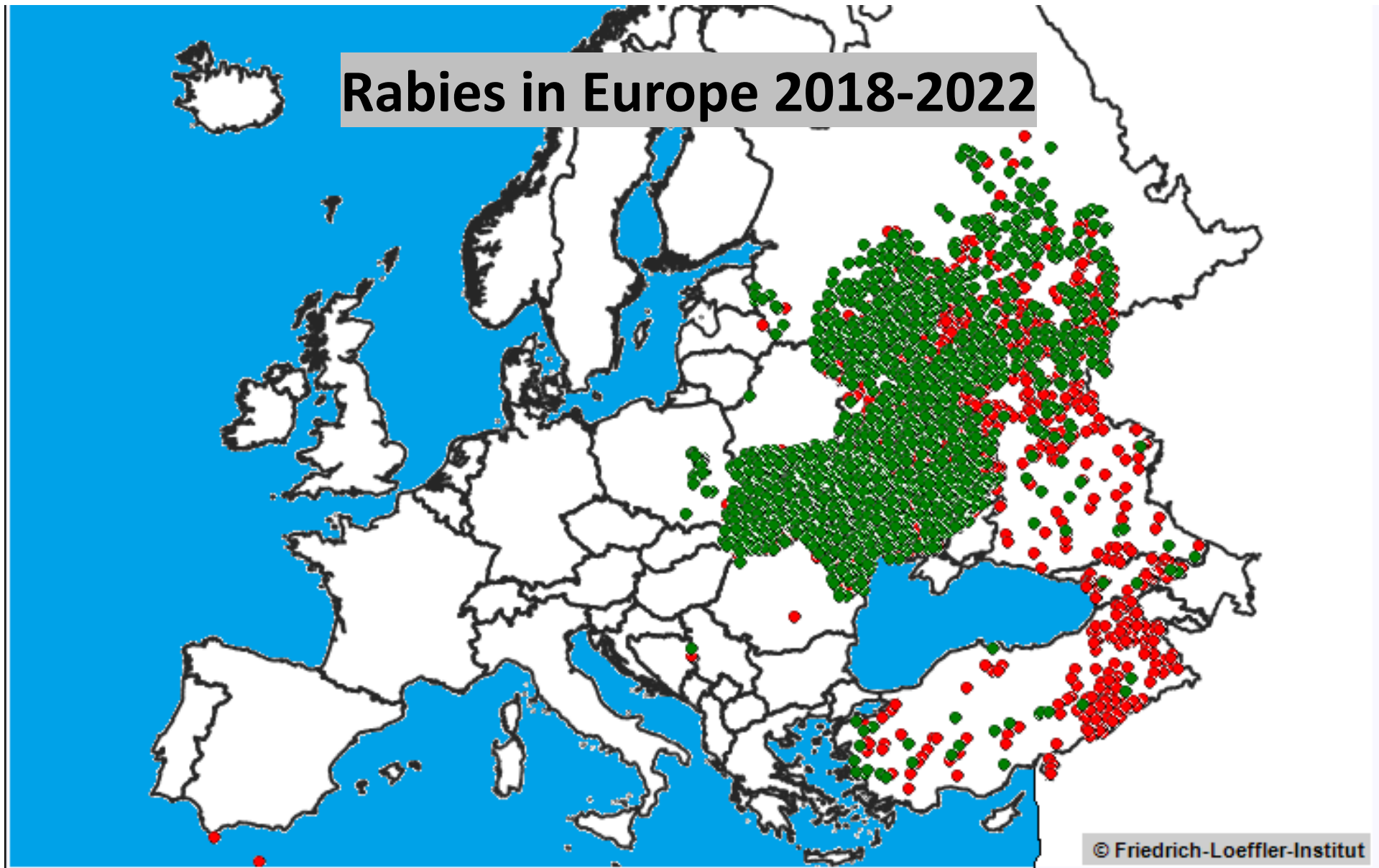
Rabies in Europe 1988-1990



Rabies in Europe 1998-2002



Rabies in Europe 2018-2022





UK rabies control

- The UK has had a contingency plan to deal with a fox rabies outbreak since the 1980s.
- Any case would be imported through the movement of dogs, cats (or other mammals), which is why such animals need to be vaccinated prior to arrival.
- But if an outbreak occurred this would be a focal outbreak with limited geographical extent.
- Given the success of rabies elimination in Europe we can be confident that oral fox vaccination would also eliminate rabies here in Britain.
- To declare the country free of wildlife rabies takes 24 months with no cases so the vaccination will continue for a couple of years.



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References – further information

Rabies Bulletin Europe: <https://rbe.fli.de/site-page/what-rabies>

Bat Conservation Trust: <https://www.bats.org.uk/>



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Reporting Suspicion of Rabies

Caroline Conradi

Veterinary Exotic Notifiable Disease Unit

Animal and Plant Health Agency (APHA)



Reporting disease

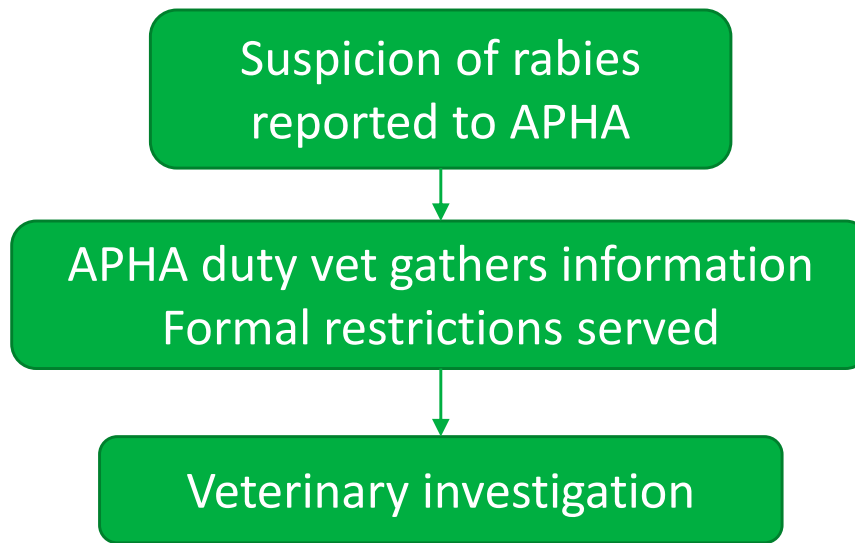
- **Suspicion of disease**

- If you suspect a notifiable animal disease you must report it **immediately** to APHA by calling the Defra Rural Services Helpline on 03000 200 301. In Wales, contact 0300 303 8268. In Scotland, contact your local [Field Services Office](#). Failure to do so is an offence.
- Reports can be made by any person at any time.
- APHA will confirm what exotic notifiable disease is suspected and why, along with determining the location/type of premises, species and number affected and clinical signs.
- Verbal restrictions will be served and the caller will be advised not to move animals, people and things on or off the premises until APHA can visit to investigate.
- Zoonosis - relevant public health agency informed.



Consultation vs Report case

- There are 2 different ways APHA may initially handle an investigation:
 - **Consultation case**
 - If a private vet reports a low level of suspicion of disease and if they remain at the premises, the investigation can be conducted as a consultation case. No formal restrictions served initially.
 - APHA field vet is 'consulting' with the private vet to see if there are grounds for suspecting the notifiable disease. If disease cannot be ruled out, restrictions must be served and the investigation becomes a report case.
 - **Report case**
 - If disease is reported from a member of the public or a private vet not at the premises for example, the investigation is conducted as a report case.
 - Formal restrictions are served.



What happen when suspicion of rabies is reported?



Veterinary Investigation

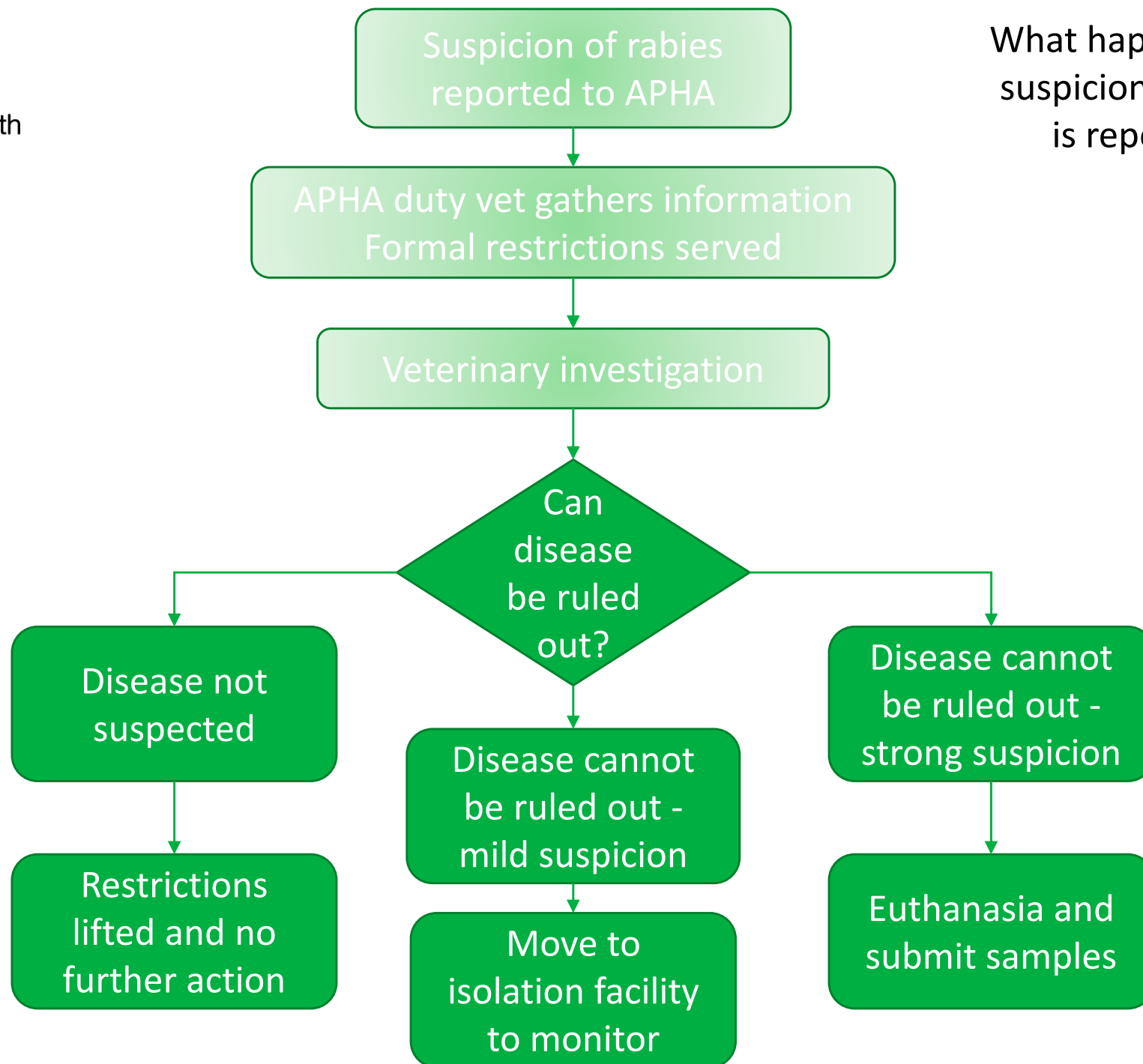
- Maintain high standards of biosecurity on entering premises.
- Serve written restrictions (unless consultation case).
- Record exact location of the affected animal using GPS.
 - **Why?** Help define the site of suspect animal and area under restriction and used to set up control zones on disease confirmation.
- Ensure owner/occupier is kept informed of actions being taken.
- Inspect all animals and clinically examine those affected provided it is safe to do so. We may need to restrain the animal to examine it properly and wear appropriate personal protective equipment (PPE).
- Gather and record information to complete the disease report form.
- Contact will be made with a central team of veterinary advisors in the Veterinary Exotic Notifiable Disease Unit (VENDU) to discuss the case.



Equipment



What happens when
suspicion of rabies
is reported?





Disease cannot be ruled out

- Animal would require euthanasia for testing.
- Notice served to euthanase the animal which may be voluntary or compulsory dependent on the situation and nature of the presenting clinical signs.
- Animal may need to be sedated prior to euthanasia.
- Public Health agencies involved – biting/scratching, in-contact.
- Whole animal must be transported in a suitable transport container to the laboratory for testing.
- Restrictions remain in force pending testing results.



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What happens at the Lab?

Lorraine McElhinney

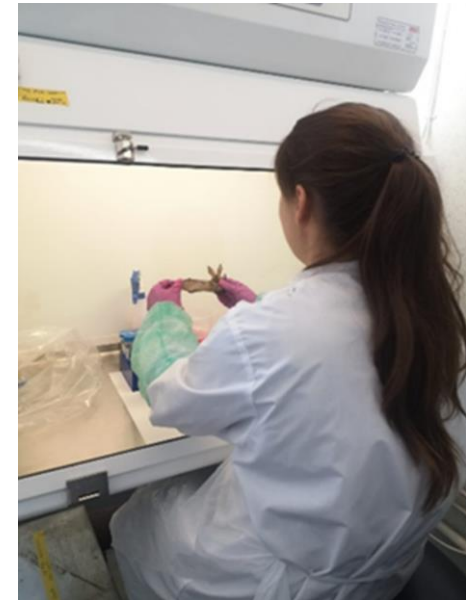
Head of National Reference Laboratory for
Human and Animal Rabies

Animal and Plant Health Agency (APHA)

UK Rabies Diagnosis & Surveillance

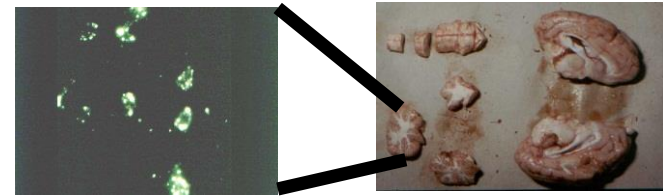
APHA is the National Reference Lab for Human and Animal Rabies

- All animal - Deaths in quarantine
- All animal - Suspects
- All animal - illegal imports
- Bats - Zoo bats
- Bats - passive surveillance
- Bats - suspects
- Pets - post vaccinal serology
- Human - post vaccinal serology (occupational)
- Human - ante-mortem diagnosis
- Human - post mortem diagnosis

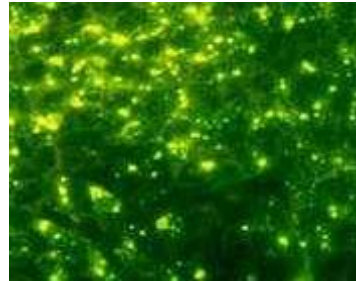


Rabies: Diagnosis

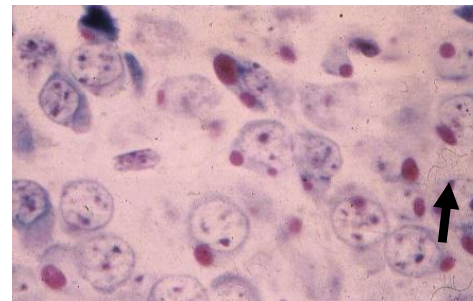
- Immunofluorescent staining of brain sections ⇒ detects rabies virus antigens



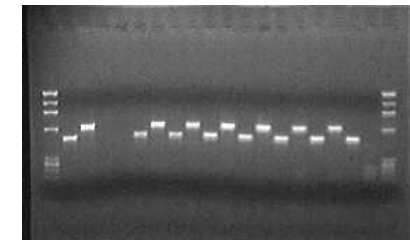
- Rabies Tissue Culture test ⇒ detects virus



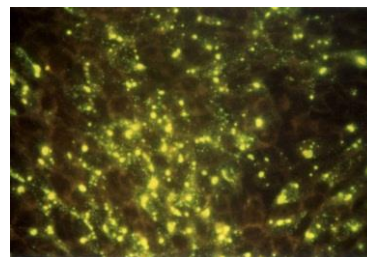
- Histological staining ⇒ detects viral antigen or Negri bodies



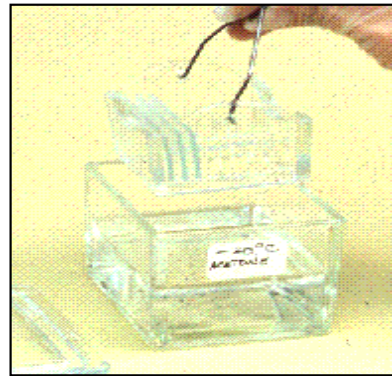
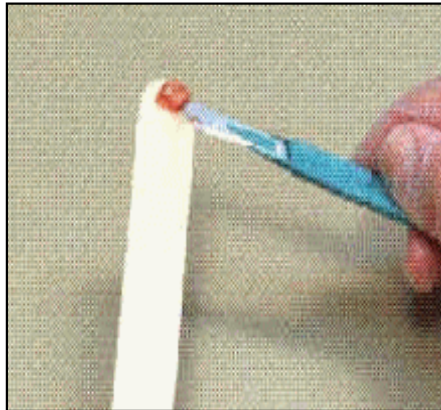
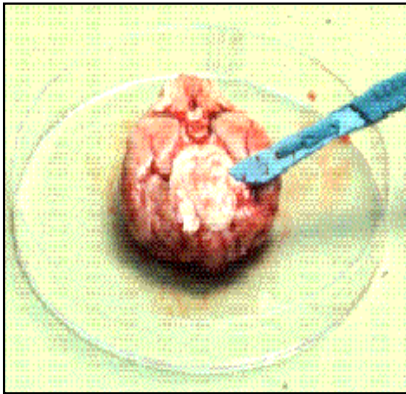
- RT-PCR/qPCR ⇒ detects viral RNA



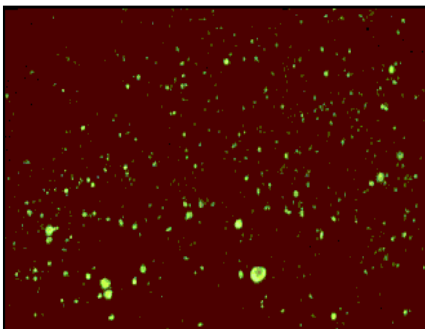
- Virus neutralization assays ⇒ detects antibodies



Fluorescent Antibody Test (FAT)

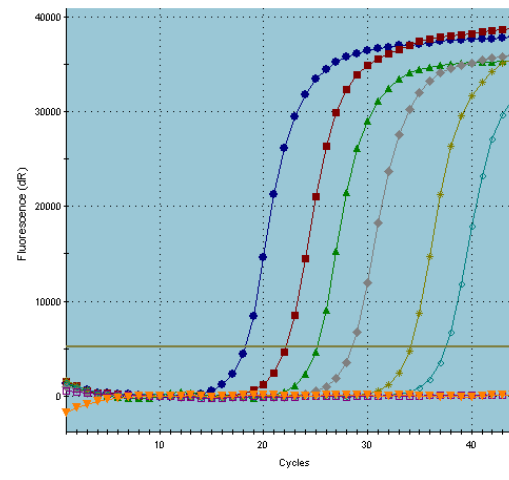


- 'Gold-standard' test
- Antigen detection
- Brain impression smear
 - Hippocampus, medulla, cerebellum
- Fixed with acetone
- Stained with a fluorescently labelled antibody
- Apple green staining
- Approx 2 hrs within the lab
- Fresh tissue should be examined, whenever possible
- Highly specific and sensitive
 - Sensitivity reduced in autolysed samples



Real-time RT-PCR Assays

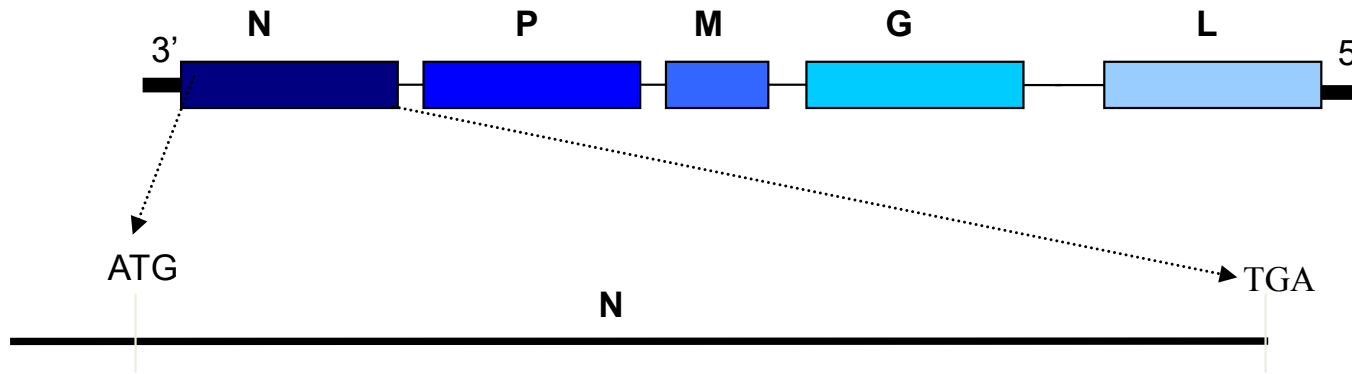
- Real-time detection of viral RNA
- Rapid (from RNA to result in 2 hrs)
- Closed tube so less chance of contamination
- Sensitive pan lyssavirus assay
- Use either probe based (TaqMan[®]) or chelating dye (SYBR[®])



Watch the APHA Rabies Team demonstrate the real time RT-PCR:

<https://www.jove.com/t/59709/pan-lyssavirus-real-time-rt-pcr-for-rabies-diagnosis>

Sequencing PCR products from hnRT-PCR

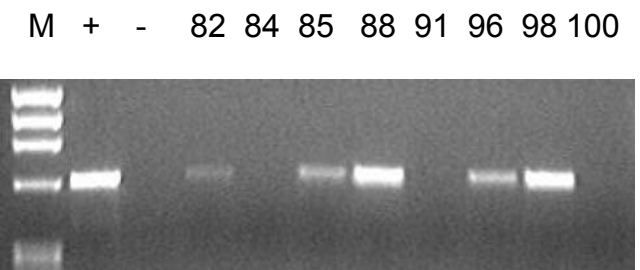


JW12 (55-73)

606 bp

JW6 (660-641)

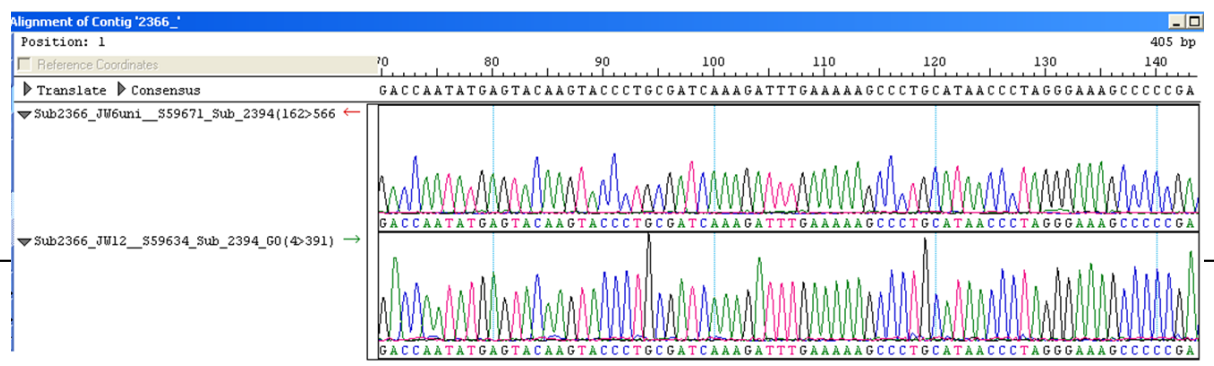
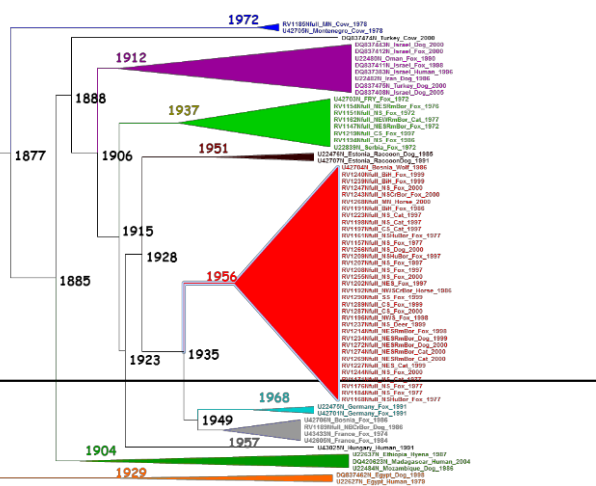
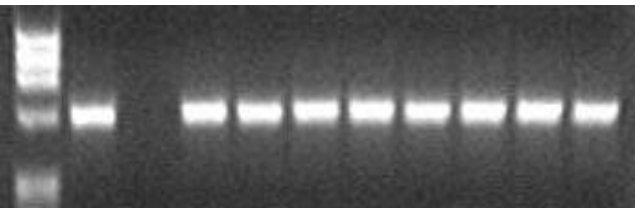
1st round PCR (primary) 606 bp



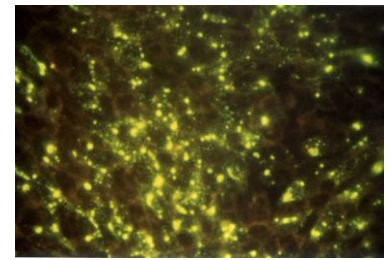
586 bp

JW10 (636-617)

2nd round PCR (hemi-nested) 586 bp



Rabies Serology



Rabies induced antibodies only in late disease.
Rabies specific antibodies in a healthy animal indicates vaccination.
Two types of test:

Fluorescent Antibody Virus Neutralisation (FAVN)

- OIE accepted protocol
- EU & DEFRA accepted protocol for PETs

ELISA for antibody detection

- Not accepted for pet travel
- Validated assay used for fox and human serology
- Emergency use to rapidly confirm vaccination to facilitate pet movements from quarantine to home isolation



APHA High throughput serology



Usual Test Turnaround Times

Handling of suspect rabies cases:

- Rabies diagnosticians on call 24/7
- Carcasses arrive at security and on call staff notified of arrival
- Taken to high containment lab (SAPO4/BSL3)
- FAT reported within 4 hours of receipt at APHA
- Real time RT-PCR reported within 24 hours
- Sequencing results often within 48 hours
- All results are reported directly to VENDU via sample management system and then disseminated through the NDI report. Positive results phoned through (index cases)
- Carcase cannot be returned from high containment lab

ELISA Serology

- reported within 36 hours of receipt (often same day)
- Border staff can check results via an online tracker





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Rabies outbreak response and control measures in GB

Tharindu Sri Premachandra

Policy Advisor: Companion animal diseases, Rabies
and One Health

Exotic Disease Control team

May 2022

Rabies incidences in the UK

The UK is classical rabies-free.

- **1902** - last recorded case of terrestrial rabies being transmitted to a human.
- **1922** - last recorded case of classical rabies arising from transmission between terrestrial mammals.
- **1969** - Incident with an imported dog. There were two cases of rabies in dogs after release from quarantine, at least one of which was thought to have been infected whilst in quarantine.
- **2002** - A licensed bat handler died in Scotland from infection with European Bat Lyssavirus, a rabies-like virus.
- **2008** - A puppy in quarantine from Sri Lanka was found to be rabid, but as the puppy was kept under quarantine we do not consider this as a case of rabies incursion.
- Annually a small number (2-3) of bat rabies cases are reported in GB and this does not affect the UK's rabies-free health status under international guidelines.

Rabies: legislative powers

Rabies is a notifiable disease

- The Rabies (Control) Order 1974.
- The Rabies (Importation of Dogs, Cats and Other Mammals) Order 1974 (as amended).
- The Rabies (Compensation) Order 1976.
- The Animal Health Act 1981.
- The Movement of Animals (Restriction) (England) Order 2002.
- The Zoonoses Order 2009.



The Rabies (Control) Order 1974 - Control measures

RCO is not underpinned by EU legislation, therefore very flexible.

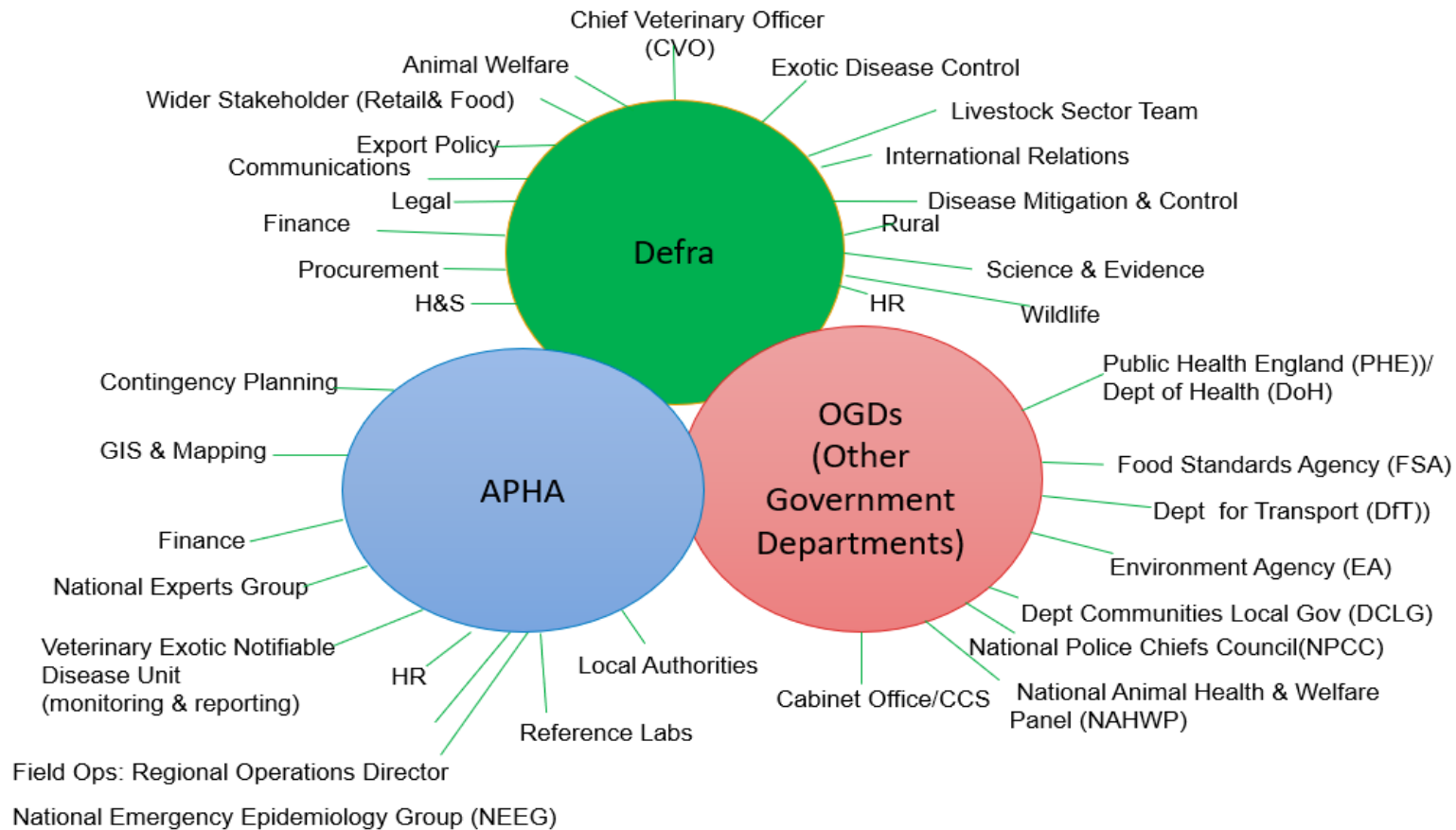
- **Infected Zone** - Declaration of infected places and infected areas. No statutory Protection or Surveillance Zones. Restriction zones can be of any size and shape. Zones can be sub-divided and have varying levels of control in each sub-zone.
- **Restrictions** - Restrictions on animal movements and gatherings.
- **Leashing/Muzzling** - Muzzling and leashing of domestic animals.
- **Detention** - Detention and destruction of stray animals.
- **Vaccination** - Compulsory vaccination of pets/wildlife.
- **Euthanasia** - Euthanasia of infected animals. Culling of foxes.



Rabies control: Example outbreak scenario and control measures

Scenario Action	Companion animal in quarantine	European pet or imported dog/cat	GB mammal - wildlife	GB mammal - captive
Declaration of infected place	NO	YES	YES	YES
Area restrictions around suspect premises	NO	YES	YES	YES
Restricted access to animals	YES	YES	YES	YES
Notice of intended euthanasia	YES	YES	N/A	YES
Muzzling / leashing of sus. animals	NO	YES	YES	YES
Vaccination in an IA	NO	YES	YES	YES

Rabies control: Multi agency response



Rabies control: Multi agency response

- The way forward and control measures would be dependant on the circumstances surrounding the outbreak.
- Start with early discussions with experts, APHA vets, senior officials, comms and devolved administrations.
- National Emergency Epidemiology Group (NEEG) would begin tracing investigations.
- Local authorities and operational partners such as Royal Army Veterinary Corps and The National Police Chiefs Council would aide the enforcement and disease control.
- Animal(s) that have had direct contact with the suspect animal would be isolated for observation and euthanased if necessary.
- Persons having direct contact with animal(s) would be risk-assessed for required post-exposure treatment by Public health authorities.
- Consideration of other restrictions and movement licences.



Rabies control: DEFRA's role in a rabies outbreak

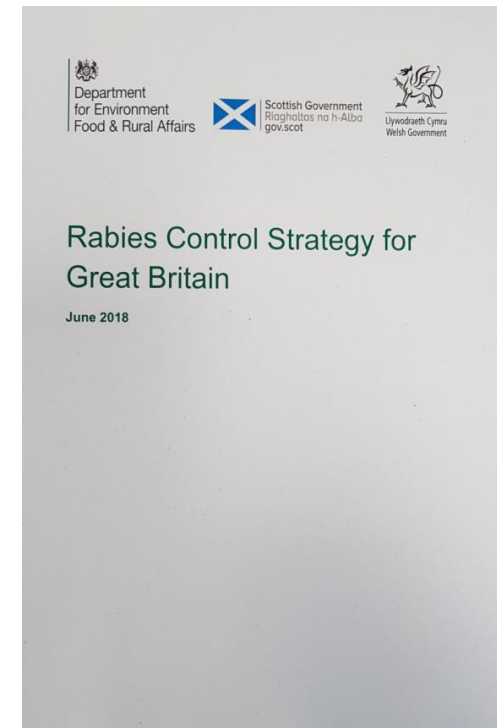
- DEFRA is the lead government department for notifiable exotic animal disease outbreaks in England.
- Together with its executive agencies, local authorities and other government department sit is directly responsible for the delivery of both the local and national disease control response in England.
- In a similar manner, Devolved Administrations would lead the outbreak control in their respective administrations.
- The detailed operational advice on how to deal with an outbreak is set down in the contingency plan for exotic notifiable diseases of animals.
- The Rabies Control Strategy sets out the framework detailing how a rabies outbreak would be managed in Great Britain. In addition to this, the 'GB & NI' plans provides an overview of disease response at the UK level.



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Rabies control: Exit strategy

- Determined by outbreak circumstances:
 - Size, number and type of affected premises.
 - Geographical factors (size of infected area, density and type of animals present).
 - Number and species of animals testing positive.
 - Number of contact animals.
 - Affected animal species that may have varying disease incubation periods.
- Key factor is source of infection.
- NEEG would advise policy leads.
- Could be up to two years before 'OIE disease freedom' is regained.
- Heightened passive surveillance during this time.



Useful links:

GB Rabies Control Strategy:

<https://www.gov.uk/government/publications/animal-disease-control-strategy-rabies>

Rabies (Control) Order 1974:

<http://www.legislation.gov.uk/ukxi/1974/2212/contents/made>

Rabies (Importation of Dogs, Cats and Other Mammals) Order 1974:

<http://www.legislation.gov.uk/ukxi/1974/2211/contents/made>

Rabies in animals (.GOV.UK page):

<https://www.gov.uk/guidance/rabies>

Rabies in bats (.GOV.UK page):

<https://www.gov.uk/guidance/rabies-in-bats>



UK Health
Security
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Rabies

Public health aspects and post-exposure treatment

Dr Katherine Russell
Head of Emerging Infections and Zoonoses, UKHSA
May 2022

Rabies - background

- An acute viral encephalomyelitis caused by infection with classic rabies virus or related lyssaviruses
- Domestic dog is the single most important reservoir and responsible for >99% rabies deaths globally
- Spread to people through infected saliva via bites or scratches from rabid animals
- Although effective post-exposure treatment (PET) is available, once clinical symptoms develop rabies is almost invariably fatal
- Global burden of rabies: 40-70,000 deaths/year (WHO)
- Majority of deaths occur in children (more likely to sustain severe head and neck bites)
- Control of rabies in animals is the mainstay for prevention of human rabies



Human Rabies

- Typical presentation:
 - Pain/parasthesiae at site of bite
 - Radiates centrally
- Two major forms of neurological presentation:
 - Furious rabies
 - Hydrophobia, aerophobia, autonomic features
 - Death within 1 week
 - Paralytic (“dumb”) rabies
 - Ascending flaccid paralysis
 - Death within 30 days



Human rabies cases in the UK

- 29 cases in UK since 1902 (26 from infection abroad)
- Majority from dog bites in Indian subcontinent

Year	Country of exposure	Age	Sex	Animal involved
2001	Philippines	55	M	Dog
2001	Nigeria	52	F	Dog
2002	UK	55	M	Bat
2005	India	37	F	Dog
2009	South Africa	35	F	Dog
2012	India	58	F	Dog
2018	Morocco	58	M	Cat

- Common elements – none received PET before presentation, except 2018 case who had started PET, but > 5 weeks after the bite

Post exposure treatment (PET)

There are two key aspects to the management of potential rabies exposures:

- **Wound care:** immediate and thorough wound cleansing, using soap and water, detergent, or water alone. Suturing of wounds should be avoided.
- **Risk assessment** of the exposure and post-exposure treatment if indicated
- A risk assessment should be done, no matter how long ago the exposure was
- All NHS trusts in England should have access to rabies vaccine
- UKHSA Rabies and Immunoglobulin Service (RIgS) can be contacted by health professionals to carry out the risk assessment

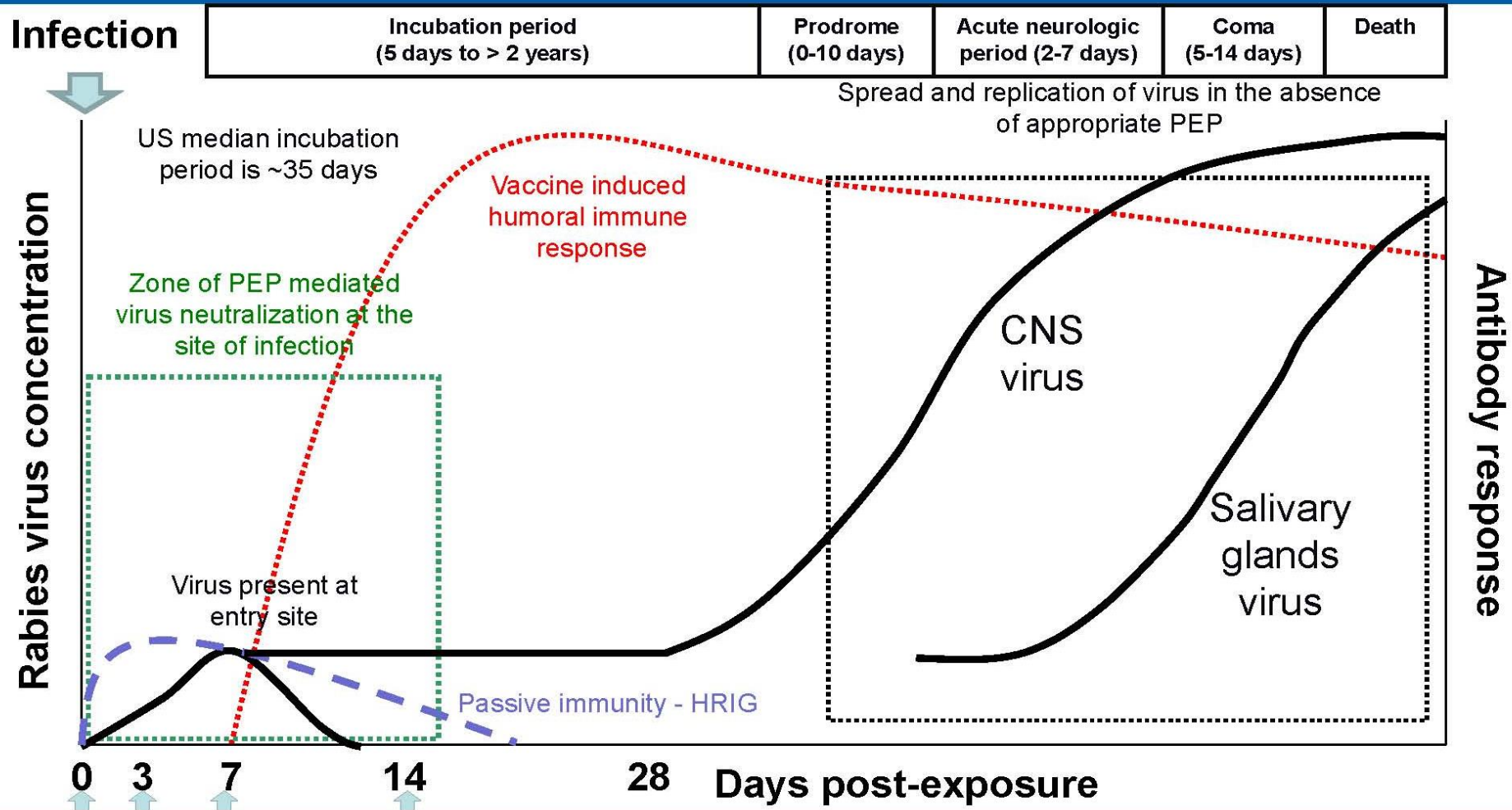


Post exposure treatment (PET)

- Post exposure treatment for rabies includes rabies vaccine +/- human rabies immunoglobulin (HRIG)
- UK schedule is four dose of rabies vaccine given on Day 0, 3, 7, and 21
- HRIG is given on Day 0
- The mainstay of rabies post exposure prophylaxis is rabies vaccine as the antibody induced by vaccination is much greater than that by HRIG
- HRIG is used after high-risk exposure to mop up live virus at the **wound site** and may give rapid protection.
- HRIG should not be given to those who have started a course of PEP seven or more days ago, or have been fully immunised previously



Post-exposure treatment (PET)



Rabies risk assessment

To complete the risk assessment we need the following information

- patient name, date of birth, age, address, and NHS number if possible
- date of exposure
- country of exposure
- species and current health status of animal involved
- category of exposure
- site of exposure
- whether the patient is immunosuppressed or has any allergies
- any previous rabies vaccinations or immunoglobulin treatment

PHE Rabies and Immunoglobulin Service

Request form for Rabies Post Exposure Treatment

Form version: 30 High Res

Date (DDMMYYYY): 08/11/2021 Time of call (h:mm): 17:15

Caller details: Source of call: Phone number: Phone number: Caller name: Address: Postcode: Caller organisation: Address: Postcode: Patient details: Patient name: Family name: Party name: Phone number: Phone number: DOB: (dd/mm/yyyy) (dd/mm/yyyy) Address: Address: Patient address: Postcode: Country: Exposure details and Risk Assessment (for recent incidents click here): Date of exposure: (dd/mm/yyyy) Rabies Risk: RNA Country: (Choose from list) Country/ Animal risk: RNA Species of animal: Exposure risk: RNA Site of exposure (body part): (Choose site) Exposure risk: RNA Any additional information: Significant medical history: Is the patient severely immunosuppressed? (see chapter 8 in Green Book) Full details reducing coxses: Other relevant Hx (allergies, coagulopathy): Previous rabies vaccination history: Details of previous courses: Vaccination status: (Choose an item) Treatment recommendations (for PHE guidelines click here): RNA Treatment based on risk assessment: (Choose an item) Treatment already given? Hx: No of vaccine doses: Type of vaccine: (Choose from list) Dates and details of previous treatment: d0 d5 d7 d14 Further treatment required: Vaccine Required? No of doses: Standard UK schedule is vaccine given into alternate arms by intramuscular inoculation on days 0, 3, 7, and 21 Start UK schedule at: Immunoglobulin Required? Hx: No of doses: 289 IU/kg Weight of patient (kg): (dd/mm/yyyy) Vol: 2.3 ml Dose of immunoglobulin: (dd/mm/yyyy) As much as possible of the immunoglobulin to be infiltrated at the site of the bite/laceration. Maximum dose of 20 IU per kg of body weight, which must not be exceeded. Volume of immunoglobulin: (dd/mm/yyyy) How soon should treatment be started: (dd/mm/yyyy) All standard doses of vaccine and RIG from Colindale is Monday-Thursday (before 4.30 pm) for next day delivery. Additional advice: Information given: Antibody test required? (Yes/No) Doctor/Nurse performing risk assessment: Enter name: Enter name: Date: PHE authorisation: Enter name: Signature: OMC No: Enter OMC #: PHE role: Consultant name: Enter name: Signature: Date: OMC number: Enter OMC #: Comment:



Summary of risk assessment and treatment

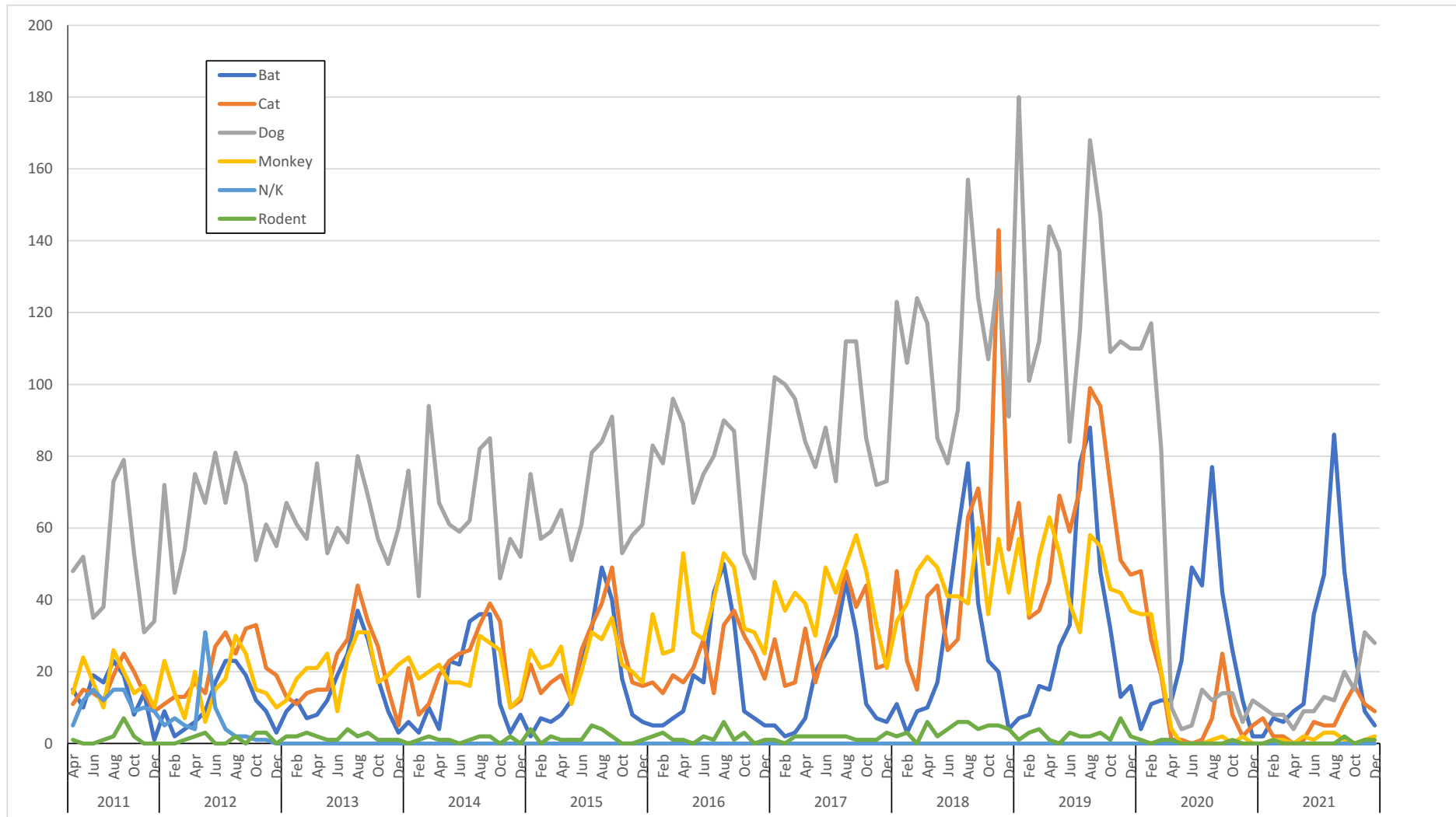
1. Determine the combined country/animal risk
2. Determine the category of exposure
3. Determine the composite rabies risk
4. Determine the post-exposure treatment required

Category	Terrestrial mammals	Bats
1	No physical contact with saliva	No physical contact (ie no direct contact with the bat's saliva)
2	Minimal contact with saliva and/or unable to infiltrate wound with HRIG if needed	Uncertain physical contact (ie where there has been no observed direct physical contact (with saliva) but this could have occurred)
3	Direct contact with saliva	Direct physical contact with bat's saliva

Country/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/Amber	Red	Red

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

UKHSA Rabies calls received (2011-2021)



Terrestrial animals in UK

If suspicion that a pet is illegally imported:

No indication for starting rabies PET
Contact Trading Standards/Animal Health, City of London

If suspicion of rabies in an animal:

Rabies is a notifiable disease
Legal requirement to notify APHA
UKHSA is guided by DEFRA/APHA on the risk in the animal

Decision to offer PET is made by UKHSA (not vet or Trading Standards)
Normally treatment can be withheld until after the results of testing

If animal is under observation/quarantine:

No need to start PET unless there is a high suspicion of rabies
Normally treatment can be with-held until after the results of testing
UKHSA should be informed of all cases where rabies is suspected and will advise on the need for PET

Further information

UKHSA Rabies guidance:

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

Green Book rabies chapter:

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

UKHSA Rabies and Immunoglobulin Service:
0330 128 1020

What are the risks from contact with a bat?
Bats, like any wild animal, can carry a number of different viruses, some of which can kill people. One of these is rabies, which can be passed through a bat bite, scratch with the bat's saliva. It is known as bat lyssavirus in many countries and including the UK.
Rabies, although rarely from bats, can be fatal. Symptoms appear. No treatment with rabies exposure is effective at disease. All bat bites, other exposures, in UK or abroad, should promptly by a health so they can arrange post-treatment if needed.

What should I do if I find a bat?
Infected bats may not show signs of

Information for Health Professionals
If a patient presents themselves following a bat contact incident in the UK or worldwide, you must ensure a risk assessment is carried out and they are given appropriate post-exposure treatment. Bat bites, especially in the UK, are often felt and not seen. They usually do not leave a mark and may not bleed; therefore the history of the exposure is more important than the physical examination. Scratches and bat saliva on open wounds or mucous membranes also constitute an exposure.
For specialist advice, support on completing the rabies risk assessment and provision of free rabies vaccine for post-exposure treatment, please contact:
PHE's Rabies and Immunoglobulin service (RIGS)
The RIGS service can be contacted on 0208 327 6204, or your local health protection team - see www.gov.uk/health-protection-team for contact details.

Further information
NHS Choices
www.nhs.uk/conditions/rabies
The Green Book
www.gov.uk/government/publications/rabies-the-green-book-chapter-27
Public Health England
www.gov.uk/government/collections/rabies-risk-assessment-post-exposure-treatment-management

What treatment is required after contact with a bat?
Anyone in direct contact with a bat should be assessed by a health professional to ensure they receive appropriate post-exposure treatment.
Please take this leaflet with you as it has useful information for your health care professional.
Post-exposure treatment involves vaccine against rabies virus:
• Four doses of vaccine given over 21 days vaccine before
• a shorter course may be given if you have had previous rabies vaccine
• if the bat exposure happened abroad, additional treatment may be needed

Bat contact and rabies risks

Public Health England

Animal & Plant Health Agency
Department for Environment, Food & Rural Affairs

Public Health England

Rabies

Information for travellers

Public Health England

Animal & Plant Health Agency
Department for Environment, Food & Rural Affairs

Thank you!

- Please remember the following:
 - Rabies is a notifiable animal disease and can be prevented by vaccinating animals and post exposure treatment of people.
 - If you suspect it in an animal, you must report it immediately.
 - Contact the following –
 - England - the Defra Rural Services Helpline on 03000 200 301
 - Scotland - **Ayr** 03000 600703
Galashiels 03000 600711
Inverness 03000 600709
Inverurie 03000 600708
Perth 03000 600704
 - Wales - 0300 030 8268
 - For more information please see the Defra website [Rabies: how to spot and report the disease in animals - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/consultations/rabies-how-to-spot-and-report-the-disease-in-animals)
 - You can contact the Exotic Disease Policy team at exotic.disease.policy@defra.gov.uk