



THE
**VET
REPORT**

Current Affairs in
Pet Health 2014

Vets4Pets
Petting your pet first.

Companion Care
Vets



Welcome

The Pets at Home Veterinary Group, made up of Vets4Pets and Companion Care, are pleased to welcome you to The Vet Report. The first in a series of regular publications, The Vet Report is aimed at raising understanding and awareness of current affairs in pet health amongst pet owners and the general public.

Our commitment to improving animal health and welfare and supporting clinical research was the driving force behind the selection of topics highlighted in this year's report.

We hope that you find The Vet Report to be interesting and informative, and we look forward to bringing you future issues which will feature new insights into the health and welfare of our pets in the UK.

Kind regards

Huw Stacey B VetMed DipAS(CABC) MRCVS
Head of Clinical Services



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The UK's pet population
A nation of pet lovers

The UK - a nation of pet lovers

We have an estimated

65

MILLION
PETS BETWEEN US

ranging from tiny guppy fish to giant Clydesdale horses

46%

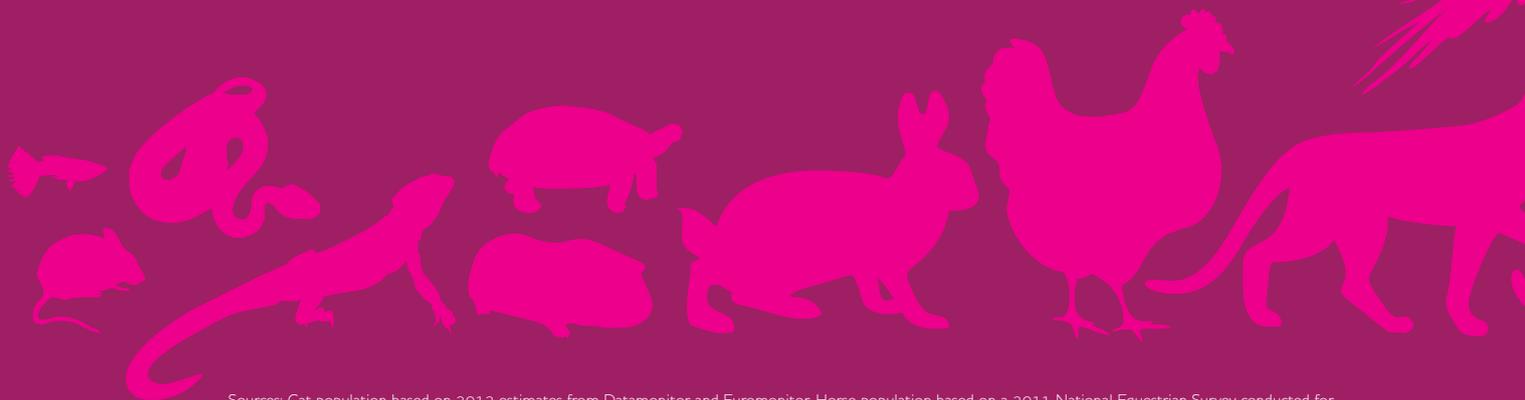
of UK households include at least one pet and with more than one pet for every person in the country, this figure is greater than for any other nation in Europe.

Pet ownership preferences vary throughout the UK: Northern Ireland, Wales, Scotland and the North of England have the highest levels of dog ownership, while in London and the East cats are more popular.

Whichever type of pet owners decide to keep, they all share a desire to love their pet and to keep it in the very best of health.

A strong network of veterinary professionals across the UK, combined with advancements in medical knowledge, gives owners access to better healthcare for their pets than ever before.

Information on pet health has become more accessible, with the internet offering a vast amount of material on nearly every topic. It has allowed owners to become better informed than ever before, but also presents the challenge of identifying credible sources of that information. It is a concern of the veterinary profession that incorrect advice may lead an owner to delay in seeking veterinary attention when it is required. **The aim of this publication is to highlight some key current pet health issues and to provide trustworthy resources for additional learning about each topic.**



Sources: Cat population based on 2012 estimates from Datamonitor and Euromonitor. Horse population based on a 2011 National Equestrian Survey conducted for the British Equestrian Trade Association by Sportswise. All other pet population totals taken from Pet Food Manufacturers' Association (PFMA) Pet Population Report 2014 (Sample 6000/TNS). All pet populations quoted are estimates.

Together, Vets4Pets and Companion Care make up the Pets at Home Veterinary Group, which is the largest network of veterinary practices across the UK.

Every one of our 305 practices, 841 veterinary surgeons and 747 veterinary nurses is dedicated to improving the health and welfare of the pets entrusted to their care.

**During
2013...**

Our practices provided 492,003 consultations, administered 665,035 vaccines, implanted 126,066 microchips, took 50,527 X-rays and performed 70,951 dental procedures.

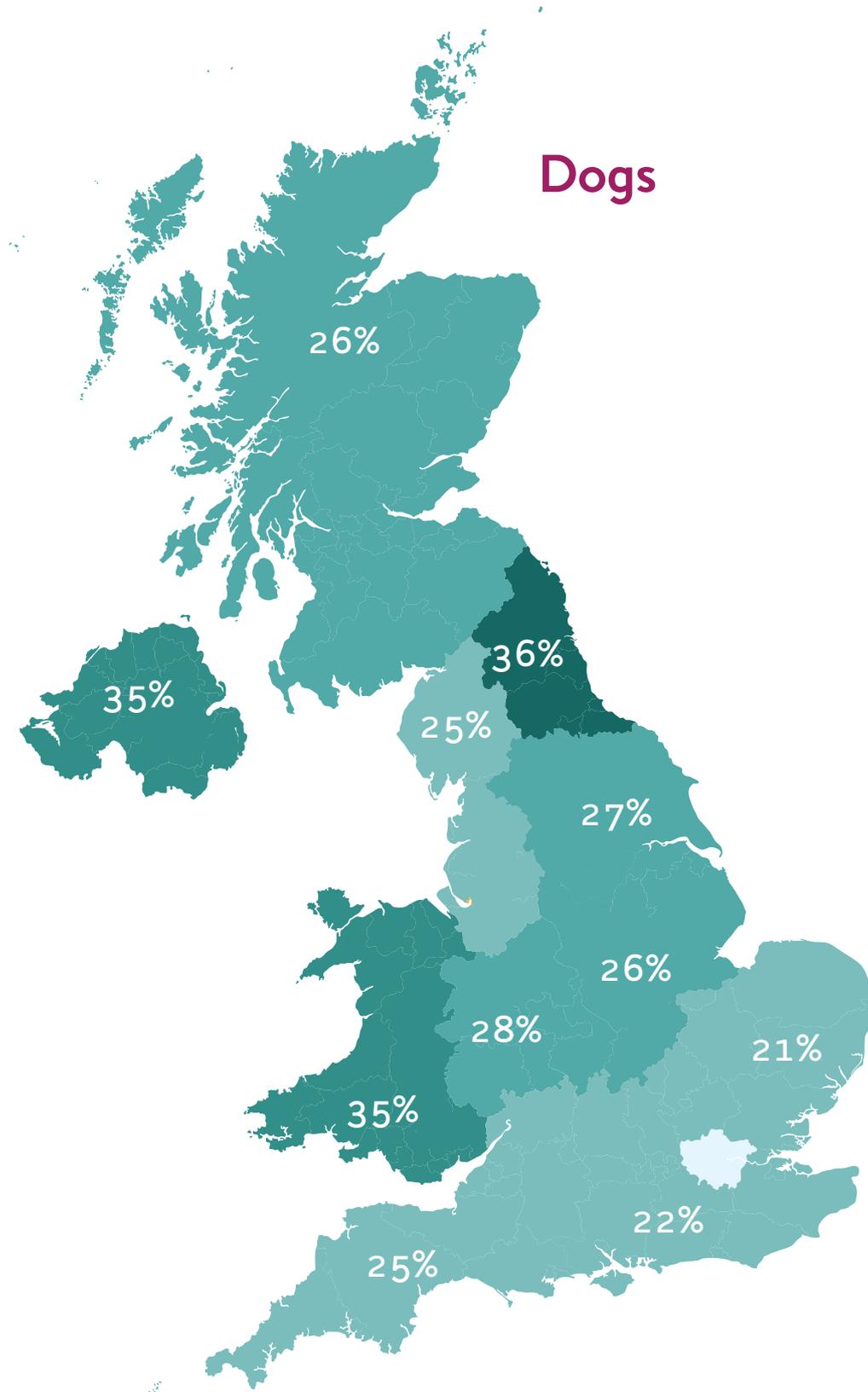
Alongside many other practices across the UK, Vets4Pets and Companion Care are proud to be contributing to the Veterinary Companion Animal Surveillance System, or VetCompass.

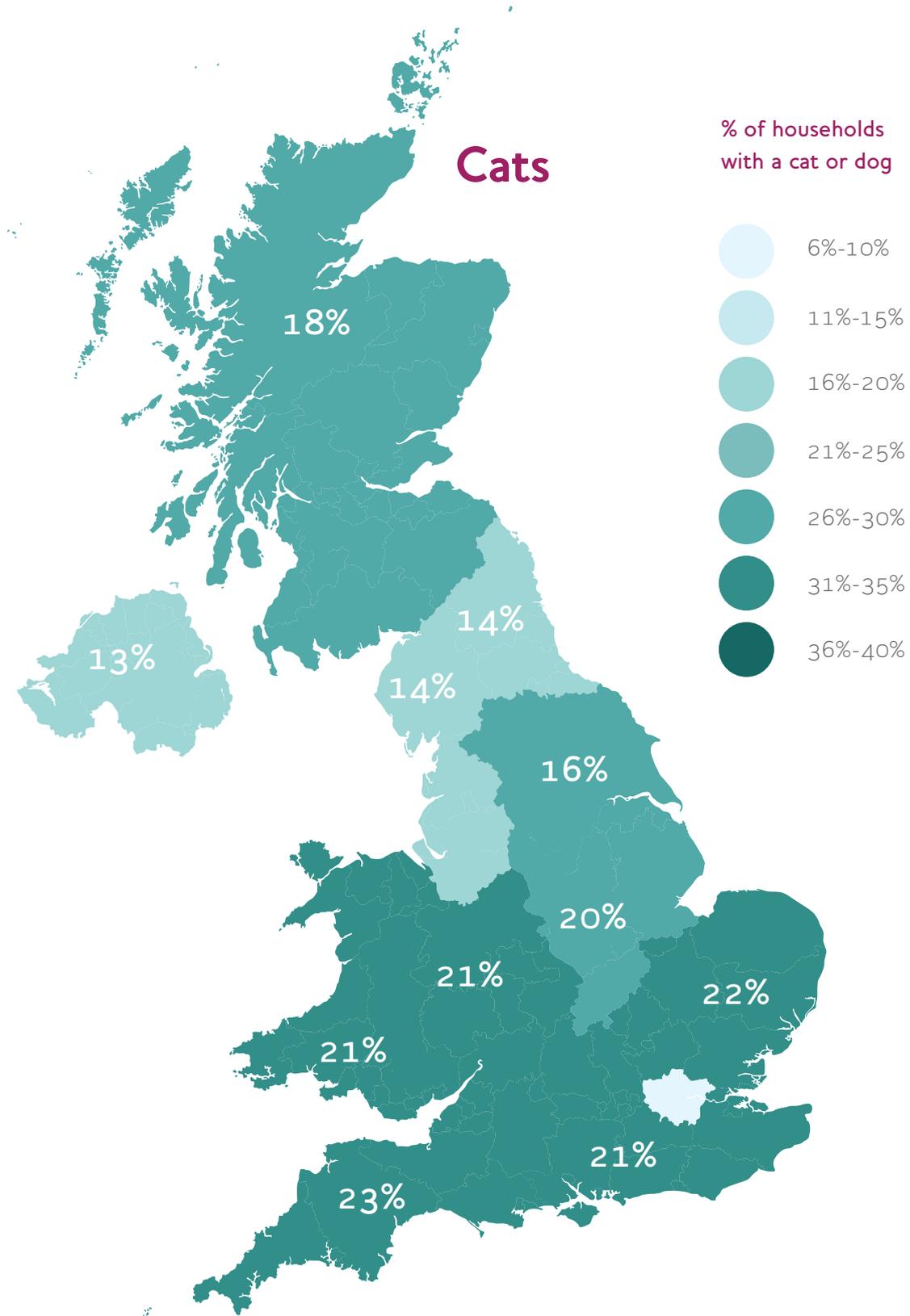
The VetCompass Project is led by the Royal Veterinary College, in collaboration with the University of Sydney and with colleagues at Cambridge and Lincoln Universities. The Project collects and analyses information from veterinary consultations, in order to provide an enhanced understanding of the UK pet population and the health issues that affect it.

It has also given member practices new insights into their own data, some of which we can share here.

Collectively, our vets have over

**4,000
YEARS
OF EXPERIENCE**



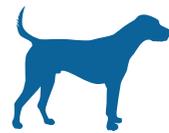


Reigning cats and dogs

The most popular breeds in the UK

Three quarters of dogs are recorded in their clinical records as being of a single breed. Interestingly, the proportions of breeds seen by our vets do not reflect the numbers of those breeds registered with The Kennel Club.

This may reflect that many dogs are not registered with The Kennel Club, even though they have the physical appearance of a 'pure breed'. Some popular breeds may instead be registered with their own society, for example Border Collies may instead be registered with The International Sheep Dog Society.

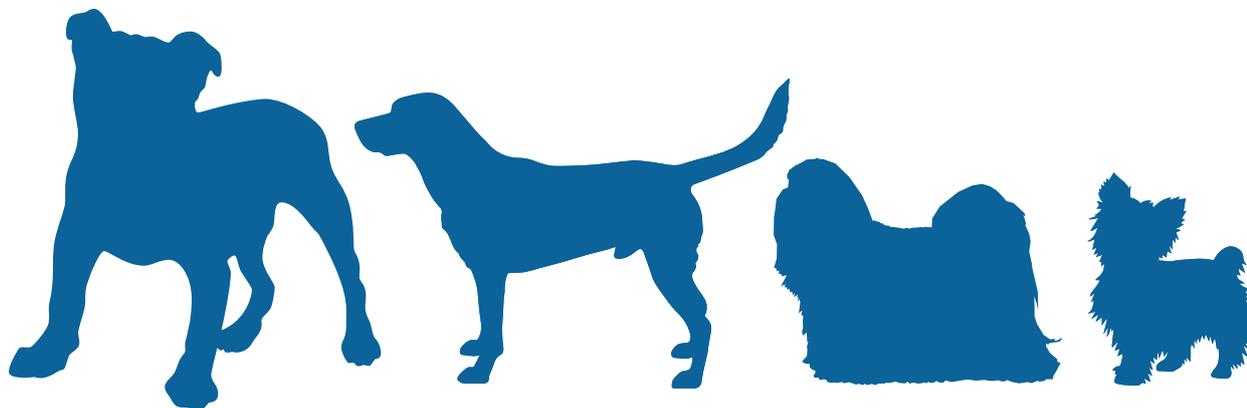


According to Pets at Home Vet Group data, Labradors are 20% more likely to be neutered or microchipped, and twice as likely to be insured, as Staffordshire Bull Terriers are.

'Purebred' dogs in order of popularity

Vets4Pets
Putting your pet first

Companion Care
Vets



1

**Staffordshire
Bull Terrier**

2

**Labrador
Retriever**

3

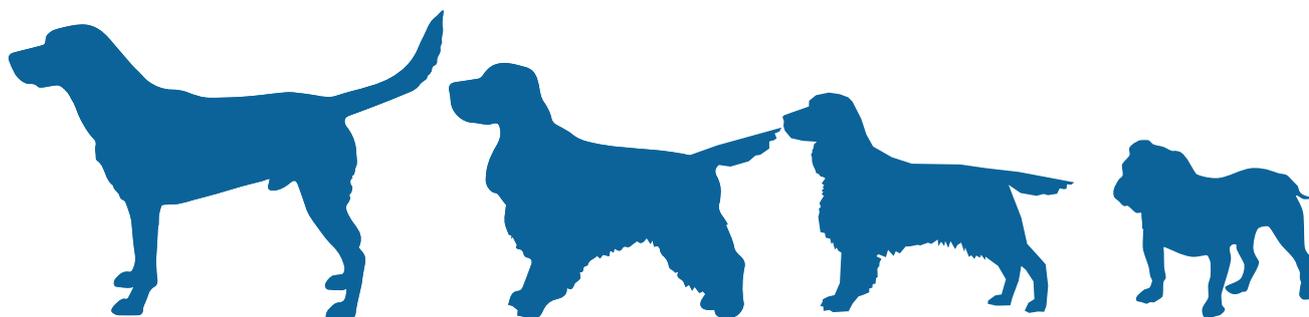
Shih-Tzu

4

**Yorkshire
Terrier**



THE KENNEL CLUB
Making a difference for dogs



1

**Labrador
Retriever**

2

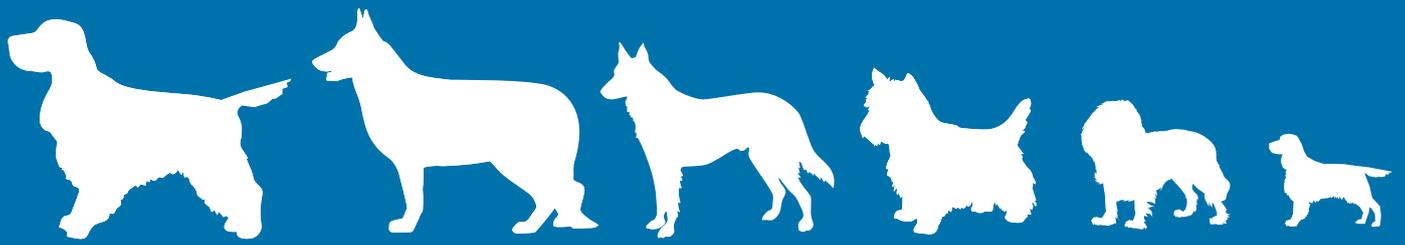
**Cocker
Spaniel**

3

**Springer
Spaniel
(English)**

4

Pug



5

Cocker
Spaniel

6

German
Shepherd

7

Border
Collie

8

West
Highland
White
Terrier

9

Cavalier
King
Charles
Spaniel

10

Springer
Spaniel



5

German
Shepherd

6

Golden
Retriever

7

French
Bulldog

8

Border
Terrier

9

Bulldog

10

Staffordshire
Bull Terrier

Designer Dogs

It takes two

Dogs that are bred from two different purebred parents have become popular in recent years. These are sometimes referred to as 'designer dogs' and are usually named by combining the names of their parent breeds.

We think of this as a modern phenomenon but in fact 'designer dogs' have been bred since mediaeval times. The Lurcher is a traditional cross between a sighthound (such as a greyhound, whippet or deerhound) and another breed, such as a herding dog or terrier.

The cross was selected to tailor the dogs' instincts and physical attributes to a particular task such as poaching or hare coursing.

Today's 'designer dogs' are largely bred to be pets with new and interesting appearances.

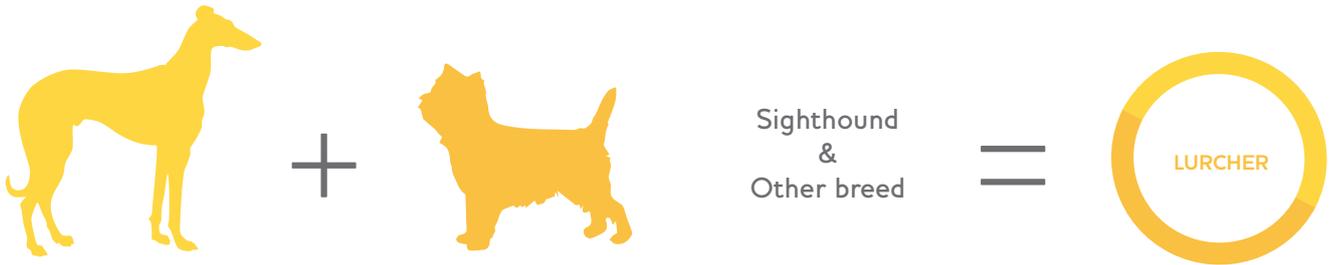
Most Popular 'Designer Dogs'

Vets4Pets/Companion Care



Cocker Spaniel & Poodle

COCKAPOO



Sighthound & Other breed

LURCHER



Labrador Retriever & Poodle

LABRADOODLE



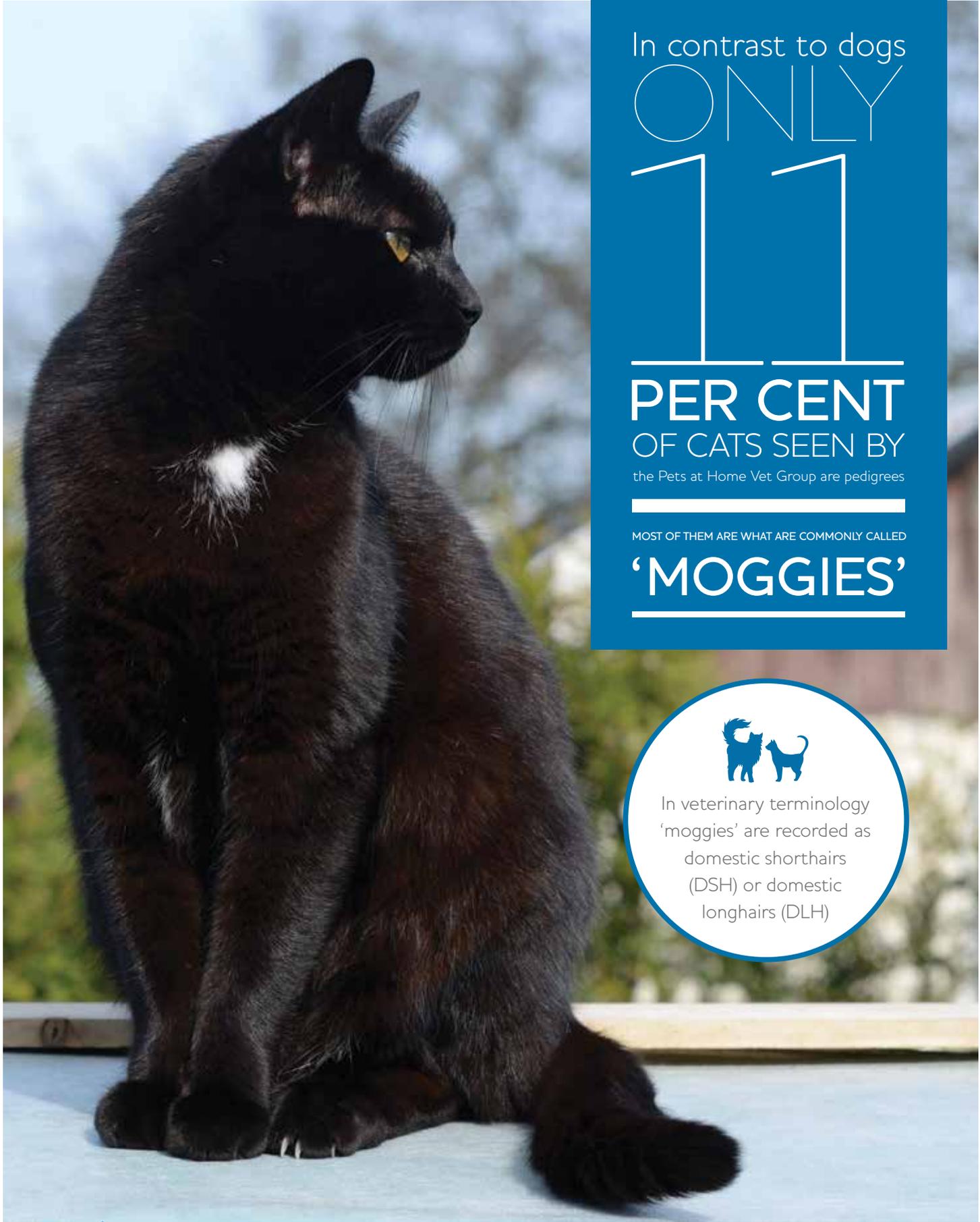
Cocker Spaniel & Springer Spaniel

SPROCKER



Cavalier King Charles Spaniel & Poodle

CAVAPOO



In contrast to dogs

ONLY

11

PER CENT
OF CATS SEEN BY

the Pets at Home Vet Group are pedigrees

MOST OF THEM ARE WHAT ARE COMMONLY CALLED

‘MOGGIES’



In veterinary terminology
‘moggies’ are recorded as
domestic shorthairs
(DSH) or domestic
longhairs (DLH)

Most popular breeds of cat

Vets4Pets/Companion Care



01

British Shorthair

The British Shorthair is the pedigreed version of the traditional British domestic cat, with a distinctively chunky body, plush coat and broad face. The most familiar colour variant is the 'British Blue', a solid blue-grey with copper eyes, but the breed has also been developed in a wide range of other colours and patterns, including tabby and colourpoint.

02

Bengal

The Bengal is a hybrid breed of domestic cat. Bengals result from crossing a domestic feline with an Asian leopard cat. They have a 'wild' appearance with large spots, rosettes, and a light/white belly.



03

Persian

The Persian is a long-haired breed of cat characterized by its round face and shortened muzzle.



04

Ragdoll

The Ragdoll is a cat breed with blue eyes and a distinct colourpoint coat. It is a large and muscular semi-longhair cat with a soft and silky coat. First introduced to Britain in the 1980s, it is best known for its docile and placid temperament and affectionate nature.



05

Siamese

The Siamese is one of the best known breeds of oriental cat. One of several breeds native to Thailand, the Siamese became popular in Europe and North America in the 20th century.



Chips with everything

All you need to know about microchipping



What exactly is a microchip?

Does my pet really need one?

A microchip is a very small electronic device, about the same size as a grain of rice, that is implanted under your pet's skin. Every chip has a unique 15-digit number stored within it, on circuitry this is encased in a protective shell made of glass or biopolymer. This casing helps to prevent the microchip from causing a reaction or moving around, which can make it difficult to read. Microchips are designed to last the lifetime of your pet. The microchip is read from close range using a special scanner.

Although no one likes to think of their pet getting lost or stolen, unfortunately it does happen, as each and every year some 250,000 pets go missing. Collar identification tags are a legal requirement for dogs, but are not the best solution in themselves as they can fall off, break, or be removed. Microchipping is a permanent solution that greatly increases the chances that a lost pet will be reunited safely with its owner. If a pet is stolen and recovered by authorities, a microchip might provide the only means to identify and contact the owner.





If you plan to take your pet abroad, a microchip is required under the Pet Travel Scheme.



Case Study

When Flossie and Sidney the Labradors were found running around the centre of Harrogate in the middle of the night, it was clear that they were a long way from home.

Fortunately a kind member of the public made sure they were safe and the next day Vets4Pets Harrogate were able to reunite them quickly with their worried owner, thanks to their microchips.



Flossie and Sidney

Is microchipping a must?

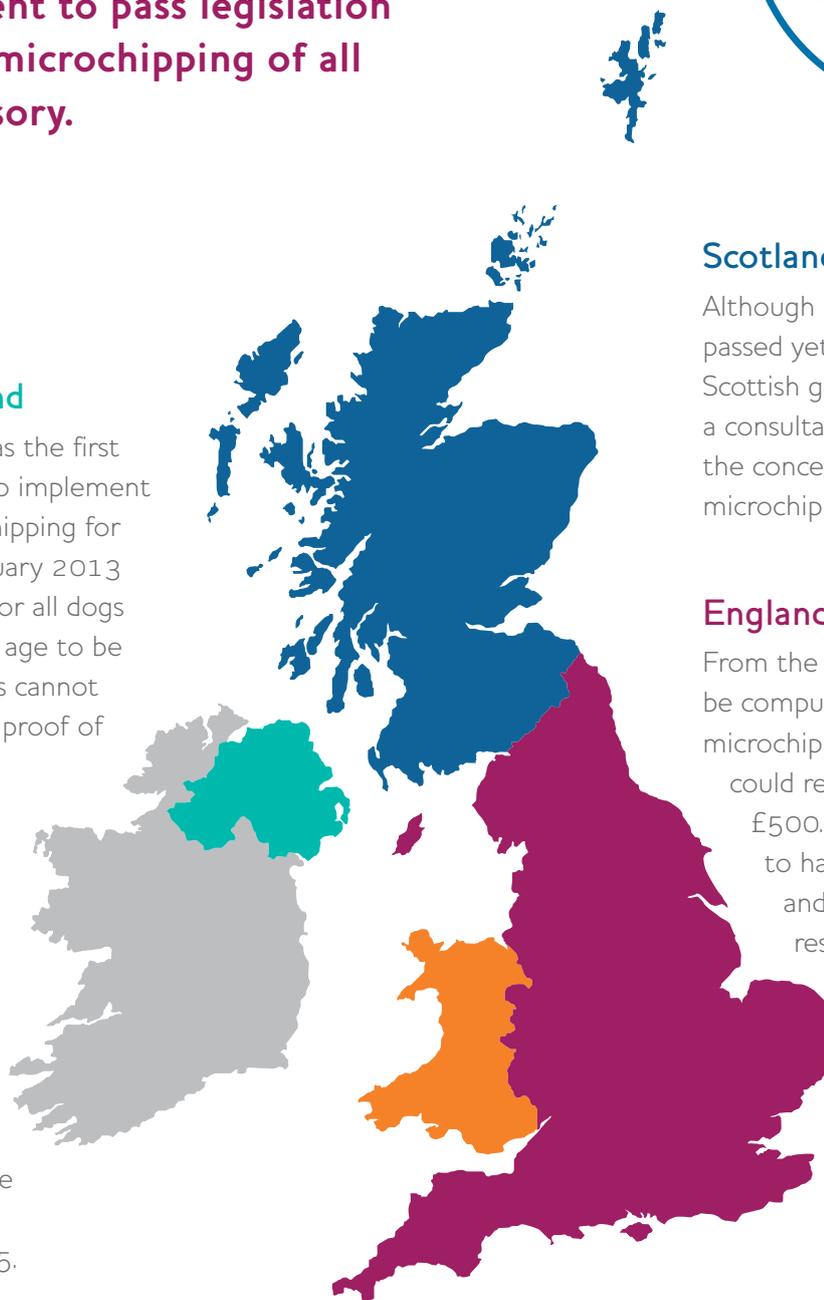
The many benefits that microchips have brought have encouraged the UK government to pass legislation to make the microchipping of all dogs compulsory.

Northern Ireland

Northern Ireland was the first country in the UK to implement compulsory microchipping for dogs. Since 1st January 2013 it is a requirement for all dogs over eight weeks of age to be microchipped. Dogs cannot be licensed without proof of microchipping.

Wales

Compulsory microchipping will be required in Wales starting March 2015.



Scotland

Although no law has been passed yet, in 2013 the Scottish government opened a consultation to review the concept of compulsory microchipping.

England

From the 6th April 2016, it will be compulsory for all dogs to be microchipped. Failure to comply could result in fines of up to £500. All existing dogs will need to have been microchipped, and dog breeders will be responsible for microchipping puppies before the new owners take possession. Any dog being imported into England will require a microchip prior to obtaining entry.



It is the responsibility of the owner to ensure that the contact details remain up to date on the microchip database.

What happens if my microchipped pet is lost?

If your pet is lost, it is important to contact the database which holds your pet's contact details as soon as possible. The database company will often be able to assist you in contacting local authorities to help in the search for your missing pet. It is also a good idea to contact all veterinary practices in the area in which your pet went missing. If you have lost a dog you should also contact the dog warden.

When a lost pet is taken to a vet, dog warden or rehoming centre, he or she should be routinely scanned for the presence of a microchip. If a microchip is found then the owner's contact details can be retrieved from the appropriate database and the process of reuniting the lost pet with its owner can begin.

Updating my pet's details

Why is it so important?

Case Study



When Thunder and his family moved house they did everything right. They settled him into his new home and kept him in the house to allow him to get used to his new surroundings.

Once they felt he was ready, they decided to let him go and explore outside. Thunder didn't return home and after looking high and low for him, his owners thought that the worst must have happened and that they would never see him again.

Some two and a half years later, Thunder's owners received a phone call from a Companion Care surgery in Fareham. Someone who suspected Thunder was a stray had picked him up and taken him in. The practice team had checked him over and then scanned him for a microchip. To their relief he was microchipped and a quick phone call to Petlog revealed his name and family's contact details.

Thunder's owner arrived at the surgery later that day and, to her amazement, there was her beloved Thunder. She picked him up and he snuggled into her neck, giving her a big hug. Needless to say there wasn't a dry eye in the surgery!



Where can I get my pet microchipped?

A qualified microchip implanter will place the microchip under the skin between the shoulder blades of your pet. The procedure is very quick, and most pets experience little to no discomfort. It is very important to have this done by a qualified individual as complications can arise if performed incorrectly. The microchip only needs to be placed once as it is designed to last for the life of the pet.

In a recent study, Petlog found that 51% of owners didn't know whether the contact details for their pet's microchip were up to date. Had Thunder's details not been kept up to date then the joyous reunion may never have occurred.

Where is my pet's contact data stored?

Whenever a pet is microchipped, the owner's contact details are recorded and submitted along with the chip number for storage in a national database. There are several such databases in the UK including Petlog, Anibase, Pettrac and Pet Protect. Each microchip manufacturer has partnered with one of these databases to store the contact details for each chip they manufacture.

According to the Office for National Statistics, 2.71 million residents moved house in England and Wales between July 2012 and June 2013. Many more of us change our mobile numbers or email addresses every year. Ensuring that your pet's contact information is kept up to date is vital for a swift reunion should the unthinkable happen and your pet get lost. It is also important to change the contact details should a pet be rehomed.

Chip Number Prefix	Brand	Database	Phone Number	Website
968	Petcode	Anibase	01904 487 600	www.anibase.com
985	Identichip			
978 or 90008	Backhome			
977	Avid	Avid	0800 652 9977	www.pettrac.co.uk
978	Pet Protect	Pet Protect	0845 603 1294	www.petprotect.co.uk
981	Tracer Advance	Petlog	0844 4633 999	www.petlog.org.uk
956	Pet Detect			
968	Indentitrac			
952	Jecta			
967 or 958	Pet ID			
900032 or 9001	Micro-ID			
934	Identics			
941 or 968	Peddymark			
961	CoreRFID			

How do I update my pet's contact information?

The first step in updating a pet's contact details is to determine which database your pet's microchip is registered on. Each microchip manufacturer contracts with a specific database.

01

At the time your pet is microchipped, you should have received paperwork regarding the database registration company.

02

If you do not know which database to contact, but do know the manufacturer of your pet's microchip, start by visiting that company's website. Here you should find the contact details for the database which is associated with your pet's microchip.

03

If you do not know either the microchip manufacturer or the database but do have the microchip number of your pet, you can use this table to determine which database to contact.

04

Finally, if you do not know any information about your pet's microchip or database, phone your vet to see whether they have your pet's microchip number on file or to arrange to take your pet in to have them scanned for the microchip number.



Alabama Rot in dogs

Alabama Rot, clinically known as idiopathic cutaneous and renal glomerular vasculopathy or CRGV for short, first appeared in the late 1980s affecting Greyhounds in the United States.

The mysterious disease presented with ulcer-like skin sores and/or sudden kidney failure in affected dogs. Although first recognised in Alabama as the name implies, cases throughout the United States were later diagnosed. Alabama Rot was confined primarily to the Greyhound breed, which suggested a genetic predisposition was involved. With time, case reports of Alabama Rot decreased and the disease all but disappeared from the literature. Unfortunately it is not yet fully understood what causes the disease, only that it could be identified by the collection of clinical signs that it produces.

When did the rot first set in, in the UK?

Since November 2012, a small number of dogs with clinical signs similar to those described for Alabama Rot have been reported across the UK. Although the greatest concentration was seen in and around the New Forest region of Hampshire, both confirmed and unconfirmed reports of the disease have surfaced throughout England and as far as Northern Ireland, in one unconfirmed case. By July 2014 a total of 44 cases had been confirmed across the UK. Although these cases are of great concern, it must be recognised that this represents a very small percentage of the overall dog population that present with skin sores or sudden kidney failure.

What is Alabama Rot?

- Idiopathic:** Of unknown cause
- Cutaneous:** Affecting the skin
- Renal:** Affecting the kidneys
- Glomerular:** The structures in the kidneys where the blood is filtered
- Vasculopathy:** A disease affecting the blood vessels



Confirmed cases

- 16 Hampshire
- 5 Greater Manchester
- 5 Dorset
- 3 Surrey
- 2 Somerset
- 2 Lancashire
- 1 Cornwall
- 1 Worcestershire
- 1 Co Durham
- 1 Nottinghamshire
- 1 Yorkshire
- 1 Monmouthshire
- 1 Shropshire
- 1 Northamptonshire
- 1 Kent

Alabama Rot : Diagnosis and prevention

What does CRGV look like?

The first sign that is normally seen is a **skin sore** not caused by any known injury. Most commonly, **these sores are found below the elbow or knee** and appear as a **distinct swelling**, a **patch of red skin**, or are open and ulcer-like. Within approximately **two to seven days**, the affected dogs develop **outward signs of sudden kidney failure** which can include **vomiting, reduced hunger**, and an **unusual tiredness**. Skin sores and sudden kidney failure are **not unique to this disease alone**, and are actually more likely to be caused by some other disease. Your vet will run a number of tests to determine the underlying cause.

How would my vet diagnose CRGV?

Your vet will first need to examine your dog's general health. Keeping detailed records of what signs of illness your dog exhibited and when those signs were discovered will help your vet to narrow the possible causes. Next, your vet will want to examine any skin sores to try and determine how they could have been caused. Your vet may then run one or more blood and urine tests to evaluate kidney function. These may need to be repeated over several days to establish whether there are any trends that would indicate a deterioration in function.

How can I prevent my dog from becoming affected?

As the cause of CRGV is still unknown, there is no known way to prevent your dog from contracting the disease. Unlike the Alabama Rot that presented in US Greyhounds, the disease in the UK does not seem to target any specific breed, age, sex or weight of dog. Although there have been cases of closely associated dogs becoming affected, it is not yet known whether the disease was passed between them or whether the dogs simply became affected at the same time due to their common lifestyles and local environments. It does appear there is some seasonal fluctuation to the disease, with the majority of cases appearing between November and June. So far there have been no identified cases of a human contracting the disease from their dog.



Unlike the Alabama Rot that presented in US Greyhounds, the disease seen in the UK does not seem to target any specific breed, age, sex, or weight of dog.



If you own a dog, you can help with the research by completing the questionnaire here:

www.aht.org.uk/alabamarot

If a dog becomes infected with Alabama Rot, the best outcome results from early and intensive veterinary care. Your vet will treat the skin sores and kidney failure and may need to refer your dog to a specialist hospital. Although some affected dogs have successfully recovered after treatment, sadly others did not survive the disease. **If you think your dog may have any of the clinical signs listed you should contact your vet immediately.**

What is being done to better understand the disease?

Anderson Moores Veterinary Specialists and the Animal Health Trust are working tirelessly to better understand this disease and how it may be treated and prevented. Experts in both the veterinary and human medical fields have collaborated on the research and clinical work. Frequent updates are posted on the Anderson Moores Veterinary Specialists website and also on the Forestry Commission website.

Resources

<http://www.andersonmoores.com/vet/news/>

<http://www.forestry.gov.uk/alabamarot>

Tuberculosis in cats

Background information

Tuberculosis (TB) is a bacterial disease that affects humans as well as a wide range of animals and is one type of disease that can be caused by mycobacteria. Within the TB complex group there are a number of species of mycobacteria, each with a varied degree of preference for different animal hosts. Common to many is the formation of tubercles, which are small, rounded and inflamed nodules.

Mycobacterium tuberculosis prefers humans as the primary host, although it can also infect a number of different animal species. Interestingly, cats show a high resistance to this species of *Mycobacterium*. *M. tuberculosis* accounts for the vast majority of human TB infections within the UK. It is generally transmitted directly from person to person, with infection more likely to occur in areas where people are living in close quarters, such as jails, and/or when they are infected by HIV or immunosuppressed for another reason.

Mycobacterium bovis shows a preference for cattle, but again has a broader range of animals that can become infected, including cats, dogs, badgers and humans. The bacteria can be transmitted through the ingestion of raw milk and infections were common before the widespread pasteurization of milk. Pasteurization kills the bacteria thereby preventing infection. With modern pasteurization techniques *M. bovis* infections within the general public are now rare, and in 2012 only accounted for 0.7% of cases of human tuberculosis.



Tuberculosis in cats

How common is it?

Although cats can acquire tuberculosis infections, this is relatively rare today. A study by the Royal (Dick) School of Veterinary Studies and the Roslin Institute found that approximately 1% of the feline tissue samples that were submitted for routine analysis had indications of mycobacterial infection. Of the samples that went on to be cultured, only 15% were found to contain *M. bovis*. Historically the transmission of *M. bovis* from a cat to a human has been very rare, with only one isolated group of two people with confirmed transmission.

What is the risk of transmission to humans?

Prior to 2012, there had been no fully documented cases of TB transmission from cats to humans. In late 2012 an unusually high concentration of cats in the Newbury area were diagnosed with TB infection caused by *M. bovis*. Shortly after, two related cases of human TB infection were diagnosed that matched the specific strain of *M. bovis* found in the infected cats, some of which had wounds which were draining infected pus. These represented the first documented cases of TB transmission from cat to human in the world. There have not been any additional transmissions reported since these isolated cases. However, as TB infections represent a serious disease in humans, care must still be taken.



“Thousands of cattle are diagnosed with *M. bovis* every year in the UK, but only a small number of infections in pets, mostly cats, are recorded”

– Animal Health and Veterinary Laboratories Agency (AHVLA)

In 2012 there were 8,130 cases of human TB in England, of which only 26 (or less than 0.5%) were identified as *M. bovis*.

Public Health England has released the following statement regarding feline tuberculosis:

“These are the first documented cases of cat-to-human transmission, and so although PHE has assessed **the risk of people catching this infection from infected cats as being very low**, we are recommending that household and close contacts of cats with confirmed *M. bovis* infection should be assessed and receive public health advice.”

It is thought that most cases of feline TB occur through contact with wild animals such as rodents or badgers that are harbouring the infection.

Feline tuberculosis: Signs and treatments

What are the signs?

Tuberculosis infections in cats first appear, most commonly, as **skin wounds that fail to heal with associated swollen lymph nodes**. The **skin sores or bite wounds** are found on **varied locations** of the body, but **generally appear on the legs and head**. **Hunting prey and territorial fighting** are the two most frequent routes of infection.

Less commonly, **cats may become infected by drinking unpasteurized milk, in which case the disease will present first in the stomach or intestines**.

Also less common, a cat may acquire the infection through inhalation of the mycobacteria on the respiratory discharge of an infected animal. Disease acquired through this route will present first in the airways or lungs.

Regardless of the location of the primary infection, the disease can progress to a systemic infection where the clinical signs will appear as weight loss, coughing, or trouble breathing.

It should be noted that these clinical signs are not exclusive to TB and a vet should be consulted immediately to diagnose the disease. If a vet suspects the condition then they will submit samples to the AHVLA for investigation.

If *M. bovis* is identified in any animal in the UK then it is mandatory that the AHVLA is informed.

Feline Tuberculosis

What treatments are available?

Treatment of TB in cats is difficult for many reasons and **must be discussed in depth with your vet**. There are no drugs licensed in the UK for direct treatment of animals with TB. Antibiotics have shown some degree of success, but **treatment is long term and often requires several drugs in combination**. A large percentage of cats won't recover from the disease, even with treatment. There also exists the possibility for antibiotic resistance to develop, which must be considered carefully as TB is a serious human infection. Finally, there is a possibility for those in close contact with the cat to become infected. **Depending on the circumstances, treatment may not be recommended.**



Treatment of TB in cats is difficult for many reasons and must be discussed in depth with your vet.

Further Reading

<https://www.gov.uk/government/news/cases-of-tb-in-domestic-cats-and-cat-to-human-transmission-risk-to-public-very-low>

<http://www.icatcare.org:8080/advice/cat-health/mycobacterial-diseases-cats-tuberculosis>

Reptiles as pets

Their growing popularity in the UK



Reptiles

as pets

Reptiles have become an increasingly popular pet in the UK. This rise in popularity may in part be due to the busy lifestyle of today's pet owner. The care of reptiles, depending on species, can often be met with a comparatively low ongoing time commitment. They don't need to be taken for walks and are generally happy to spend their time alone at home while their owner is at work.

In fact, the British Veterinary Zoological Society has stated that: "Certain species of Non-Traditional Companion Animals may make more suitable pets than the traditional companion animals in contemporary society, assuming their welfare needs are met." These specific welfare needs vary for each species of reptile and must be fully understood before taking on the responsibility of reptile ownership. A failure to address these needs can lead to health problems that would otherwise be preventable. By doing a little upfront research though, you can help your reptile to live a healthy and full life.

General care and advice

Reptiles are often described as cold-blooded animals which rely heavily on the provision of an appropriate environment for their survival. They live in a wide variety of habitats and have a broad range of needs so whilst some species can make very suitable pets, it is important that the specific needs of your chosen pet are researched before you acquire them.

Reptiles comprise groups such as snakes, lizards, tortoises and turtles.



What is the best way to house reptiles?

The goal of housing any reptile species is to mimic its natural environment in a safe and controlled artificial setting. As reptiles have evolved to live in many different parts of the world, the ideal environment will vary greatly for each species and is likely to be very different from the local environment where you are living in the UK.

Temperature, lighting, and humidity must all be controlled to suit your individual reptile's needs. Fortunately, modern vivariums and accessories can help to automate this process. It's important to research your reptile's needs before bringing one home, purchase the correct size and type of housing and accessories, and check regularly to make sure the equipment is operating properly.

Your reptile's environment will also need to be designed to mimic the local landscape in which it would be found. Some reptiles live in the trees and need plenty of branches to climb high within the vivarium. Other reptiles are natural burrowers and need areas to dig and hide. The ideal flooring substrate for your vivarium will vary based on the type of reptile. The ease and ability to clean that substrate must also be considered.

Water is crucial to all life, including reptiles

The manner in which that water should be presented to your reptile will differ greatly though. Some reptiles live their entire life in water, while others may prefer the opportunity to go for the occasional swim. Some reptiles may not drink from a pool of water at all and will only lick droplets of water from plants. Again, the important part is to research the water needs of your reptile and then to recreate that environment in your vivarium.

What is the best temperature environment for my reptile?

As with all environmental factors, temperature requirements will be unique to each species. All reptiles rely on the temperature of their surroundings to regulate their own body temperature and activity level. For this reason, there must be areas of appropriate temperature difference within the vivarium. This will allow your reptile to self regulate by moving to colder or warmer areas.

Ideally, you should have multiple thermometers to ensure the different temperature zones are within the ideal range for your reptile.

There are various ways to regulate the temperature within your vivarium. Heat should be provided using either a heat mat below and/or a lamp above the vivarium, connected to an appropriate thermostat. If you need to use a lamp for heating, it must be kept at a proper distance with safeguards to ensure your reptile cannot directly contact the lamp. Heat mats should cover one third to one half of the floor space to allow your reptile to regulate their body temperature by moving from warmer to cooler zones, and should never be in direct contact with the animal.

Along with controlling temperature, the humidity level must also be matched to your specific reptile's needs. The first step is to set up a humidity gauge to monitor and maintain a constant level. This can be achieved by misting the enclosure regularly or automating the process by purchasing a humidity control device.

Reptiles:

Lighting and feeding

Reptiles kept as pets generally require special lighting that recreates the full spectrum of wavelengths produced by the sun's natural light. Without this they are unable to synthesise vitamin D₃, which will cause deformities as they grow. Unlike humans, reptiles can also see the ultraviolet wavelength, and providing this visual stimulation is important for their wellbeing.

Each species of reptile differs in its UV requirement and you will need to choose the reptile-specific light that provides the correct UV level for your pet. The correct light will also depend on the distance the light source will be placed above your reptile's basking spot. The output of all fluorescent lights diminishes over time and most should be replaced after six months, even if they still appear to be working. Lights should be controlled by a timer.

What should my reptile eat?

There is no universal reptile diet as each species has evolved with different nutritional requirements. The bulk of a reptile's diet will include plants, insects, small mammals, or a combination of these. The quality and presentation of the food is vitally important to your reptile's health. Although this topic is too broad to be discussed in detail, a few key concepts will be outlined.

For reptiles which feed on insects, it is important to remember the 'gut loading' principle. As the insects are fed alive and whole this includes what is contained in their gut. Live insects should be well cared for and fed nutritious foods (or 'gut loading' products) and 'dusted' with a vitamin and mineral powder immediately prior to being fed to your reptile.





Case Study

A Sumatran Red Blood Python was recently taken in to Vets4Pets Cramlington by its concerned owner, with a serious skin condition that was causing its scales to come away.

The vet diagnosed a mite infestation, and treated it with a topical spray as well as instructing the owner to thoroughly disinfect or replace all housing.

Thanks to this prompt attention the Python has made a full recovery.



Safeguarding snakes

Most pet snakes are fed a diet consisting of defrosted frozen rodents, with the most common choice being mice or rats. The easiest way to feed rodents is to buy them frozen and then defrost them before feeding. They should be fully defrosted to room temperature by placing them between absorbent paper towels and should never be defrosted in a microwave. Carefully dispose of the towels after use and disinfect any surfaces that may have come into contact with them.

Young snakes are usually fed small mice or rats, with the size of the prey increasing to adult rodents as the snake grows. Feeding tongs should be used to hold the food in front of the snake and imitate live prey. Do not dangle the rodent by its tail in the cage, as this is a very unnatural presentation for your snake and will not stimulate its hunting instinct. Remember that reptiles are cold blooded and need a warm area to rest and properly digest their meal.



Reptiles:

Common preventable diseases

It is vitally important to get to know your reptile and understand its normal behaviour. When reptiles present with an illness, one of the first signs you will see is a change in behaviour. By picking up on this behaviour change, you can help your reptile before the disease becomes more serious. The following are a few of the common diseases seen in reptiles. Importantly, all of these can be minimized by simple improvements in the care of your reptile.

01

Incomplete Shedding

Shedding an old layer of skin is a normal process for reptiles. Occasionally, the skin does not shed off completely and sections remain on the animal. Most commonly this retained shed is found over one or both eyes. **Incomplete shedding is a sign of an underlying problem** with your reptile. **The problem could stem from vivarium environmental conditions, diet, stress, or illness.** You should first examine your overall care and husbandry to ensure the conditions are correct for your reptile. **Do not attempt to simply pull off the shed yourself as this can injure your reptile's skin.** For minor cases, you can give your reptile a warm bath to help dislodge the retained shed. For more serious or recurring cases, you should consult your vet.

02

Parasites

Reptiles often carry a low level of certain **parasites** without any associated health problem. However, if the animal becomes stressed or ill then parasites may take advantage of this weakened state and multiply to unhealthy levels. **Improving your reptile's environment will help to reduce illness and stress.** Keeping a clean environment for your reptile will help to reduce the overall parasite numbers. Finally, you should have your vet undertake **annual testing for parasites to ensure your reptile is healthy.**

03

Metabolic Bone Disease

This disease is caused by an imbalance in calcium, phosphorus, and/or vitamin D. This can either be from a dietary deficiency or a lack of UV light. The initial signs of this disease include softening of the bones, swollen joints or, in turtles, abnormal shell growth. **More advanced signs include tremors, shaking movements, broken bones, and weakness or lethargy.** Your vet should be contacted immediately for diagnosis and treatment. As with all of these diseases, prevention is the best treatment. **By feeding your reptile a proper, well balanced, and supplemented diet combined with the correct lighting, this disease can be avoided completely.**

04

Impaction/Constipation

Impaction and constipation are generally **secondary signs that something else is wrong with your reptile.** Reptiles often ingest the flooring substrate in small amounts and pass it without issue. However, food and substrate can become stuck if the reptile is otherwise unhealthy or weak. **Improper temperatures can frequently lead to these sorts of digestion problems.** You will need to contact your vet immediately for assistance. A change in the reptile's environment will need to be made in order to avoid repeat problems.

Reptiles

Where to source pet reptiles

There are many ways to obtain any pet, such as via pet shops, classified advertisements or private sellers from internet forums. Pet shops are bound by their licences to sell healthy animals capable of feeding themselves and to provide care information at point of purchase. They are licensed and inspected by their local councils, some may even be part of independent accreditation schemes. The same is not true of other sources, however, most responsible independent breeders or keepers will ensure that a prospective owner knows about the species in question and in many forum-based classifieds for more unusual species, 'experienced owners only' is stipulated.

The most commonly-kept and popular reptile species are virtually always available as captive-bred individuals, these are therefore used to human contact, whereas wild-caught individuals may not be as tolerant of human contact and may be more prone to health problems. Unlike mammals bought via classified adverts, there is no advice to see the parents of reptiles, however most reputable breeders will be more than happy to show the parents of the reptiles. Always satisfy yourself that the source of your reptiles is legitimate and that they have the reptiles' welfare at heart.



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Putting your pet first

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