

Health and welfare information about your rabbit from Vetlexicon Lapis.



Mites and skin parasites

Ectoparasites is the term used to describe parasites that live on the outside of the animal. In rabbits these can include mites, fleas and other skin parasites. Often an infestation is not life-threatening but can be unpleasant for the rabbit, some can act as hosts for other diseases or be transferred to people and other rabbits. It is important to get a correct diagnosis, so your vet can start the right treatment as soon as possible.

What mites can my rabbit contract?

The most common mite seen on rabbits is *Cheyletiella*, often termed as ‘walking dandruff’ since the mites are usually visible to the naked eye and if watched closely enough they can be seen to move. This is a zoonotic mite and can therefore in certain circumstances, be passed onto humans.

The common signs to look out for are flaky bald patches of skin, often down the spine, at the back of the neck and around the rump of the rabbit. The infestation is intensely itchy for the

rabbit and they may appear to be constantly scratching or trying to rub the area on something.

Spot on or injectable forms of the drug Ivermectin at the recommended intervals for 3-5 weeks are needed to clear up the problem. Other 'off license' treatments have been used successfully by vets but must be under veterinary direction and your vet will ask you to sign an 'off license treatment form'. All in contact rabbits must be treated even if they are showing no signs.

Cleaning of the rabbit's environment, consisting of removing and changing all substrate, washing bedding, etc is also necessary throughout the treatment.

Cheyletiella can also act as a vector for myxomatosis so it is important to ensure your rabbit's annual vaccination against myxomatosis is up to date.

All rabbits carry some *Cheyletiella* mites and normal grooming keeps the numbers at a level that doesn't cause clinical signs and problems. When the rabbit doesn't groom properly, is stressed or immunocompromised with another illness, the mite's numbers multiply and start to cause problems. Therefore, there is often an underlying reason why a rabbit has an outbreak of *Cheyletiella* and a full veterinary examination is recommended.

Are there any other mites my rabbit could get?

Leporacus gibbus is a fur mite and different to *Cheyletiella*, although it is also a non-burrowing mite and can just about be seen with the naked eye.

The empty eggs can be seen attached to the hair shafts, much like louse eggs, and can even persist after treatment has killed the live mites.

In severe infections clinical signs may be apparent; these may include fur loss and an abnormal moulting pattern. The treatment is imidacloprid spot on or ivermectin injections.

Can rabbits get fleas?

Yes, they can, but as rabbits don't mix with other unknown rabbits, like dogs and cats do, they aren't commonly found! The cat flea (*Ctenocephalides felis*) is found on pet rabbits. The rabbit flea, *Spilopsyllus cuniculi* (the European rabbit flea) is also found and this is a common vector for Myxomatosis.

The most common signs you may notice include black flecks in the fur, which when dampened and placed onto a wet piece of cotton wool, will turn red. These are the flea droppings, which are dried blood from where the fleas suck the hosts blood. It is uncommon to see live fleas unless the infestation is in an advanced stage.

You may also observe bald patches, which may appear irritated and scabby if the rabbit is scratching at the area.

Fleas are rarely life-threatening unless the rabbit is very young or small, or has a substantial infestation, when anaemia has the potential to occur.

The main concern with fleas is that they are also a vector for myxomatosis, since they have the potential to transfer the infection from one rabbit to another, including transfer from wild rabbits to pets. For this reason, all rabbits must be kept up to date with their myxomatosis vaccination.

If you have dogs and cats within your household then prophylactic flea prevention treatment should be implemented at all times for them. All wild rabbits should be kept out of gardens and away from pet rabbits.

Products containing imidacloprid and selamectin are effective and deemed safe to use on rabbits (although will be off license). Flea powders, sprays, shampoos, etc aren't effective and do little to get rid of the infestation since the eggs of the adult fleas will continue hatch out after the rabbit has been treated, and the infestation will persist. These are also stressful to use, and rabbits should never be bathed. Products containing Fipronil (commonly Frontline®) must never be used on rabbits, since deaths have been attributed to these.

What are the signs of ear mites?

Psoroptes cuniculi is responsible for ear mite infestations in rabbits. Sometimes this is referred to as ear canker. The condition is highly contagious and generally spread through rabbit-to-rabbit contact, although environmental transmission is possible. Infected rabbits

shake their head, which transfers the eggs into the environment, infecting other rabbits.

Initially the only clinical symptom may be excessive head shaking or ear scratching, but as the mites multiply and spread up the ear onto the pinna (ear flap), the crusts become noticeable.

By this stage the rabbit is often extremely itchy and irritated. Sometimes rabbits will scratch their head and ears to the point of self-trauma, making them bleed.

Secondary bacterial infections of the skin can occur if the condition is left untreated, and often the infection can spread and invade the middle and inner ear resulting in vestibular disease (head tilt, nystagmus (eye rolling) and loss of balance, etc).

Ear mites require treatment by a vet. This will consist of ivermectin injections or imidacloprid spot-on treatment to kill the mites. If a secondary bacterial infection is present, then antibiotics may also be prescribed.

The condition is often very painful, so non-steroidal anti-inflammatory drugs (NSAIDs) such as meloxicam, are also prescribed.

You should never attempt to pick off the crusts, since this will be immensely painful and damage the delicate skin on the rabbit's ears. Once the mites are killed, the crusts will dry off and naturally fall off over the next few weeks.

Is ringworm a worm, mite or fungus?

Ringworm (dermatophytosis) is a fungal infection. *Trichophyton mentagrophytes* and *Microsporum canis* are the species that are found on rabbits.

Ringworm gets its name from the ring-shaped lesions seen on the skin of infected humans. In rabbits, ringworm causes hair loss and crusty lesions that are usually itchy and found around the eyes, nose and extremities, eg toes. Ringworm must be differentiated from other causes of scabs and sores.

Ringworm can be treated in two ways. The first option is antifungal ointment applied directly to the affected area. Secondly, antifungal medicine can be given by mouth. This works by becoming incorporated into the developing hair so that the fungus cannot survive.

Treatment may take several weeks, and treatments are not licensed in rabbits, so are used off license.

Ringworm is a zoonosis, so care should be taken when handling an infected rabbit until the lesion has healed. If you think you may have caught ringworm from your rabbit, then you will need to book an appointment with your GP for treatment. The use of gloves when handling or cleaning out your rabbit can help to reduce the risk of infection.

Ringworm can be transmitted by direct contact with an infected animal, or contact with an item, eg grooming brush, bedding, etc that is contaminated with the spores from an infected animal. Young animals and those under stress, eg overcrowding, high humidity, poor sanitation, illness, etc are often at an increased risk of developing ringworm.

It is possible to diagnose ringworm through several different methods. A popular but not always accurate way to diagnose the disease is through the use of a specialised black light called a Wood's lamp. However, it is estimated that up to half of the most common species of *M. canis* do not fluoresce, and *T. mentagrophytes* does not fluoresce, so this is not always a good diagnostic tool in rabbits.

The best and most accurate way to identify a ringworm infection is by collecting scales and crusts from the lesion and performing a culture. There are special culture mediums designed specifically for identifying ringworm infections. Your vet will be able to arrange this for you.

How can I prevent mites and skin problems?

The best way is to make sure you check your rabbits daily for signs of mites, flaky skin, bald patches, red and sore skin, black flecks in the fur, excessive scratching or ear shaking. These are all signs that your rabbit may have a skin problem, mites or fleas.

Keep your rabbit's environment as clean as possible. Make their enclosure as stress free as possible as most rabbits carry some degree of mites all their life, but these multiply when the rabbit is stressed or ill for another reason.

If you are concerned your rabbit has an infestation, you must contact your vet straight away. Giving the wrong treatment can be dangerous and make the problem worse.

