

External Parasites in Rabbits

Fleas, ticks, mites, lice, and fly larvae can all cause skin problems in rabbits. Safely preventing and eliminating these parasites from your rabbit is important for your bunny's health and well-being. It is imperative to proceed with caution, however, because not all insecticide products sold for cats and dogs are safe to use on rabbits.

Fleas

Rabbits are vulnerable to the same species of flea that prey on cats and dogs, *Ctenocephalides felis* and *Ctenocephalides canis*. Rabbits that venture outdoors are certainly exposed, but indoor rabbits can also get flea infestations, especially if there are cats and dogs in the home. Symptoms of flea infestation can range from none to a dull hair coat, itchiness, and secondary bacterial dermatitis. In severe cases, anemia and death can occur. Diagnosis of flea infestation is usually easy because fleas and flea excrement can be seen with the naked eye. Flea excrement looks like small black coffee grounds on a rabbit's skin, and the fleas themselves can be identified after removing them from the hair coat with a flea comb.

If your pet is suffering from fleas, the safest and most effective product for rabbits over 8 weeks of age is Advantage® II, a topical medication containing imidacloprid. You can purchase this medication from your veterinarian, a local pet store, or online. The medication is placed on the skin at the back of your bunny's head. Use Advantage® every 3 to 4 weeks to kill and prevent fleas. Rabbits that are less than 4 pounds (1.8 kg) can be given 0.4 ml of the 9.1% imidocloprid solution, which is sold as Advantage® Small Cat (5 – 9 pounds). If this dose is not effective for larger rabbits over 4 pounds, use the 0.8 ml dose, which is sold as Advantage® Large Cat (>9 pounds). Another medication that can be used for fleas is Revolution® (selamectin). Unlike Advantage®, however, Revolution® is rapidly metabolized by the rabbit's body and needs to be applied every 7 days for effective flea control. Revolution® is great, however, for treating mites, and there is more information below about using it for that purpose.

If your indoor bunny has fleas, your house has fleas too. All dogs, cats, and rabbits in the home will need to be treated for fleas to eliminate the infestation entirely. Wash all bedding in hot water, and vacuum carpets daily. In severe cases, insecticides may need to be applied to your home as well as your pets. If this occurs, ask your veterinarian what is safe to use in your household.

Mites

Mites are tiny, spider-like insects that can live on your rabbit's skin or fur, causing itching, discomfort, and secondary infection. Unlike fleas, which jump on and off your pet, mites tend to live on their hosts full time. The most common mite infections we see in rabbits are from the rabbit ear mite *Psoroptes cuniculi*; the fur mite, *Cheyletiella parasitovorax*; and the common fur mite, *Leporacarus gibbus*. Your

veterinarian can diagnose and identify mites after looking at samples under a microscope.

Rabbit ear mites create thick tan to reddish-brown scabs inside of a rabbit's ear canals. Occasionally, these lesions spread to other parts of the body. Ear mite infections are quite painful and itchy. If left untreated, the lesions can put the inner ear at risk of infection and subsequent hearing loss. Affected rabbits will often shake their heads and scratch their ears excessively. These mites are very contagious and generally spread by direct contact from an infected to a non-infected animal. The environment can also become contaminated when an animal scratches or shakes.

Cheyletiella parasitovorax and *Leporacarus gibbus* are fur mites that produce flaky skin and hair loss along a rabbit's back. As these diseases progress and become more severe they can also become itchy, and rabbits can create wounds from scratching. The *Cheyletiella* mite is zoonotic and can produce mild skin lesions in people.

The two most common medications used for treating mites in rabbits are ivermectin and Revolution® (selamectin). Ivermectin is an injectable medication, and Revolution® is a topical medication. Both of these medications require a prescription from your veterinarian.

Lice

The rabbit louse *Haemodipsus ventricosus* is infrequently found on rabbits. These lice are small insects that live on the fur of rabbits. Lice cause less damage than do mites, but their presence is irritating to rabbits. Lice are best treated with the topical medication Revolution®.

Ticks

Ticks are common in our part of California, and rabbits that go outdoors will encounter them. While rabbits seem adept at removing ticks from the parts of their body they can reach with their teeth, they are often unable to remove ticks from their face and ears.

The safest and quickest method of dealing with ticks on your bunny is direct removal. Have a friend hold the rabbit for you, then using tweezers, firmly grasp the tick near where it attaches to the skin and pull. Revolution® is labeled for the prevention of tick infestations in dogs and may also work in rabbits, although it hasn't been formally tested. However, due to the rabbit's quick metabolism this protection is unlikely to extend much longer than a week. Any rabbit that spends time playing outdoors should get daily tick checks. The only 100% effective method of preventing ticks on your bunny is to keep it indoors.

Fly Larvae

Myiasis, or fly strike, can occur in outdoor rabbits that have skin wounds from trauma, matting, feces or urine accumulation, or chronically moist skin. Flies are attracted to these wounds and lay their eggs or larvae (maggots) onto the wound. Depending on the fly species, maggots will be visible within one to four days. Any wound of this severity should be evaluated by a veterinarian as soon as possible. Affected rabbits often require medical stabilization, maggot removal, antibiotics, and pain medications. Some rabbits will also need anesthesia and surgery to clean the wound.

Never use Frontline® on a rabbit!

Please make sure to never use the flea and tick product Frontline® on a rabbit. The package insert for Frontline® specifically states “DO NOT USE ON RABBITS”, and for good reason. Exposed rabbits develop seizures, and will often die. If your rabbit is exposed to Frontline® accidentally, wash the area off immediately with dish soap and then get the rabbit to a veterinarian.