



E. cuniculi in Rabbits | Encephalitozoon Cuniculi

Overview

- *E. cuniculi* is a tiny parasite that affects rabbits by causing damage to the brain, nervous system, kidneys and other important organs.
- It can cause a wide variety of symptoms, such as a head tilt, paralysis, and seizures (fits).
- *E. cuniculi* is treated with an anti-parasite drug, special nursing care, and medications.
- Sadly, if *E. cuniculi* isn't treated in its early stages, treatment won't always be successful.
- Contact your vet if you think your rabbit has *E. cuniculi* or symptoms of a brain or nervous system problem.

General information

Encephalitozoon cuniculi (E. caniculi) is a tiny parasite that affects rabbits by damaging their brain, nervous system, liver, kidneys, heart and lungs.



This rabbit has a head tilt caused by E. cuniculi





It spreads in urine and usually passes from rabbit to rabbit on contaminated surfaces. *E. cuniculi* affects each rabbit differently; some rabbits live with it for years before showing any signs, whereas others develop serious symptoms very quickly. It's important to treat *E. cuniculi* quickly because left untreated, it can cause severe damage and even be fatal.

Symptoms

E. cuniculi affects many different parts of the body and can cause a wide range of symptoms. Some of the most common include:

- Head tilt (holding their head to one side)
- Weak, stiff or wobbly back legs
- Paralysis (being unable to use their legs)
- Urine incontinence (unable to control peeing)
- A dirty bottom
- Drinking and peeing more
- Eye problems and cataracts
- Uncontrollably rolling over
- Collapse
- Tremors or seizures (fits)
- Death

When to contact your vet

It's important to contact your vet as soon as possible if your rabbit has any of the symptoms listed above, or you think they might have *E. cuniculi*. Catching and treating it early gives your rabbit a better chance of survival.

You know your rabbit best, always contact your vet if you're concerned.

Find out more about PDSA's veterinary services

Diagnosis

There are a range of tests available to check for *E. cuniculi*, but it is often very difficult to diagnose because it's a tiny parasite that hides inside organs. For this reason, most rabbit's with suspected *E.cuniculi* are started on treatment based on their symptoms.





Treatment

Parasite treatment. To treat *E. caniculi*, your rabbit will need an anti-parasitic treatment such as fenbendazole (Panacur, Lapizole). Normally the treatment comes as a liquid or paste, and is given daily for 28 days.

Other treatment. If your rabbit has stopped eating, they may need drugs to keep their guts moving (to prevent gut stasis). If they have developed a bacterial infection, they may need antibiotics (*E. cuniculi* can affect the immune system and increases the chance of another infection). If your rabbit is extremely unwell, they may need to stay in the hospital for intensive care and a fluid drip to keep them hydrated. In some circumstances, it may be necessary to transfer your rabbit to a specialist vet for treatment.

Caring for your rabbit. If your vet has asked you to treat your rabbit at home, you will need to keep them somewhere stress free and quiet. If they are struggling to eat, they may need a special diet, or syringe feeding, and you will need to help them if they are struggling to groom, especially around their back end.

Letting your rabbit go. *E. cuniculi* can cause a lot of damage to the vital organs, including the brain. This can be very serious and it may be necessary to consider <u>putting your rabbit to sleep</u> to stop them from further suffering, especially if there isn't much chance treatment will help them.

Protecting your other rabbit(s). If one of your rabbits is diagnosed is diagnosed with *E. cuniculi* it's important to get all other rabbits in your household checked by your vet. This includes their companion rabbit(s) and any other rabbits that have been in the same area or shared their hutch, run, food and water bowls or bottles.

Disinfection. *E. cuniculi* spores can live in the environment so it's very important to clean all your rabbit's living space and equipment. Ask your vet about disinfectants that kill *E.cuniculi*.





Outlook

If your rabbits have *E. cuniculi* but no symptoms then they often have a good outlook. Some rabbits live with *E. cuniculi* for their whole lives and never have any signs of disease. If your rabbit has mild symptoms, treatment can help your rabbit make a full recovery. Unfortunately with more serious symptoms even after treatment your rabbit may continue to have problems, for example kidney disease or a permanent head tilt. This is due to the damage the parasite has done to their organs before they were treated. In severe cases, *E. cuniculi* can be fatal or cause so much damage that it's kindest to <u>put your rabbit to sleep</u>.

Prevention

There is no way to completely prevent your rabbits getting *E. cuniculi* because it's found in the environment, and in wild rabbits. However, there are ways to reduce the risk of your rabbits getting the disease.

- Keep their living space clean. Keep your rabbits' environment clean, and regularly use a pet safe disinfectant that kills *E. cuniculi* spores. If you're not sure which cleaner is best then talk to your vet for advice. It's also best not to share items, hutches or runs between groups of rabbits to reduce the risk of diseases spreading between them.
- **Isolate and treat new rabbits.** We recommend that any new rabbits are kept separate from your existing rabbits for a month to check they are healthy and happy before they're introduced. It's also sensible to treat new arrivals with a 4-week course of parasite treatment during this time.
- **Protection from wild rabbits and rodents.** One of the best ways to prevent *E. cuniculi* is to prevent your rabbits having contact with wild rabbits and rodents. Using a double fence will reduce their chances of picking up diseases such as *E. cuniculi*, and also help to keep them safe and secure from predators such as foxes.





Cost

E. cuniculi can be an expensive condition to manage, especially if your rabbit needs hospitalisation or intensive care. It's important to speak openly to your vet about your finances, the cost of treatment, as well as what you think is right for your rabbit.

Consider insuring your rabbits as soon as you get them, before any signs of illness start. This will ensure you have all the support you need to care for them.

FAQs

How do rabbits get *E. cuniculi*?

E. cuniculi can come from wild rabbits, or infected pet rabbits (some rabbits don't show symptoms). It spreads in urine, and is most often picked up from contaminated surfaces (such as grass, food, water, a toy, something in the garden or their hutch). *E. cuniculi* can live for a long time in the environment; it survives on most surfaces for about 4 weeks.

Can people catch E. cuniculi?

Yes, humans can catch *E. cuniculi*. The parasite can cause can cause disease in people, especially in they are immunocompromised. People most commonly pick up the parasite by drinking contaminated water. It is also possible for a person to catch *E. cuniculi* from an infected rabbit. If you are concerned that you or someone you know may have *E. cuniculi*, it is best to contact your doctor, or the NHS for advice.

Can rabbits have *E. cuniculi* with no symptoms?

Yes, it's fairly common for a rabbit to have *E. cuniculi* but no signs of disease. Some rabbits without symptoms develop them later in life, but some just continue to carry the parasite without any problems. Unfortunately, some of these silent carriers can shed *E. cuniculi* to other rabbits, which is why it's especially important to take steps to protect your rabbits from diseases like *E. cuniculi*, especially if you bring any new rabbits into your household.

Published: March 2021

