



MITES - A SURVIVAL GUIDE

If your hamster is experienced an outbreak of mites, it can be a miserable experience, for them and for you. In some cases, a mite infestation can make your hamster very unwell, or even cause their death.

Recent years have seen an explosion in the mite population. The internet is full of misleading information about mites, over-the-counter medication often doesn't display the correct or effective dose, and myths and misinformation are commonplace.

There's a strange stigma in the proper-care community around mites: that somehow by finding them, your care is substandard or neglectful. This is FAR from true: the very best hamster carer can suddenly discover mites, and be at a loss with how to cope because there's so little knowledgeable discussion.

We've invested 22 months of research into mites and mite treatment: here we'll attempt to demystify hamster parasites, and most importantly, share how you get rid of them and keep them away.

WHERE DO MITES COME FROM?

Infested bedding (especially hay, or bedding from factories handling hay)

Infested sprays, food and forage

Infested hamsters nearby

Infested dogs and cats in the home (ear mites stick to ear canals in larger animals, but overpopulate a hamster's ear canal quickly)

On human carriers, brought in from outside

All common mite species in the UK can climb the sides of enclosures, survive in carpet for several days, and travel by scent to other food sources.

They are resistant to water exposure, undamaged by heat under 40c, and can't be squashed whilst on the hamster as the pressure required is too forceful.

THE THREE MOST COMMON MITE SPECIES THAT CAN INFEST HAMSTERS

All mite species are parasites. Mites feed on skin, blood and organic matter on the hamster. The hamster never benefits, and can rapidly become unwell or even die if they are severely infested. We can give more information on your particular new best friends once, or if ever, diagnosed!

Demodex mites: *demodex criceti*

Barely visible if at all, demodex infest the hair follicle, and mostly consume dead skin cells.

Hamsters get demodex mites from their mother in the nest. They are present and harmless at normal levels on all hamsters, but can overpopulate if a hamster is immunocompromised, older, or under the weather. Demodex do not infest or bite humans but can cause major discomfort, flaking skin and fur loss in hamsters.

Demodex themselves are uncomfortable and must be treated, but are not a danger to life in themselves. They are often an early warning that your hamster has another unlying health issue: the most common cause of a demodex overpopulation is an underlying condition or environmental factor that is reducing the effectiveness of a hamster's immune system. Your exotics vet will need to look for the underlying cause of this, and you should explore potential stressors in your hamster's living conditions.



Ear mites: *Otodectes cynotis*



Visible to the naked eye as little black dots moving slowly in your hamster's fur. Mites who have recently fed are red in colour and larger. These mites also congregate and breed in the hamster's nesting area, and are most visible when the hamster wakes up. Ear mites are blood feeders, will bite hamsters and humans, and breed rapidly. They lay multiple batches of eggs which hatch over time; they're the mites that "suddenly" appear and are everywhere. They do not always start their infestation in the ear canal.

Ear mites are an immediate and serious health risk to hamsters. From our observations, roborovskis are particularly vulnerable to rapid blood loss from their bites. You must seek treatment urgently and consult an exotics vet.

Tropical rat mites: *Ornithonyssus bacoti*

Black dots with visible legs moving along the fur. Rat mites are rare, but potentially dangerous for your hamster as they bite often, drain a lot of blood, and can reproduce rapidly and in huge numbers. They will also bite humans and leave large, angry, itchy sores. Dwarf species are most vulnerable. Always see a vet, urgently.

Ear mites are an immediate and serious health risk to hamsters and other mammal species. You must seek treatment urgently and consult an exotics vet. You may also need to report an infestation to your local authority's Environmental Health department.



Spider Mites: *tetranychus urticae*

We've recently been contacted with several reported cases of spider mites entering and living in hamster enclosures.

Spider mites appear white to the naked eye, and move relatively fast.

We are currently researching this species, their impact on hamster welfare and the most effective safe methods of eradication. If you believe you may have a spider mite infestation, please contact us for our latest findings.

We verify everything with clinical research before we share it publicly but we're happy to discuss our learnings so far.



GENERIC MITE SYMPTOMS

Visible mites on hamster or in bedding (except demodex)

Unusual scratching: more than usual, or preoccupying the hamster

Hunching & inactivity, or unusual overactivity

Abandoning an established nest or regularly re-nesting

Balding fur in acute cases, especially around rump and sides where they can reach to scratch with their hind paws. The skin can appear flakey and leathery

Some hamsters may become lethargic and **change their sleep patterns** due to exhaustion and poor sleep quality

Humans may notice mites, bites or itching on hands and arms after handling or spot-cleaning, or around their home in areas where their hamster has spent time

TREATMENT

Ideally, a suspected case of mites should immediately be seen by an exotics vet. A good exotics vet will be able to diagnose the type of mite, and prescribe a treatment appropriate for the species, size, age and circumstances specific to your hamster.

It's important that mites are dealt with urgently to protect your hamster and avoid spread, and it isn't always possible to get an urgent vet appointment.

Our advice is intended to offer emergency guidance in such cases. It does not replace veterinary advice, which should always be sought.

The only effective treatment against mites is IVERMECTIN, an antiparasitic drug that can be purchased over-the-counter, or prescribed by a vet and given directly onto the skin. In rare cases it can be given orally/by injection on prescription, by an EXOTICS VET ONLY, in acute or resistant cases.

Do not feed your hamster ivermectin: in most cases, hamsters are too small to cope with high concentrations in their digestive system: ivermectin affects the body differently if given this way. Small quantities entering their mouths through grooming treated fur are too low to cause harm.

Do not put ivermectin directly into your hamster's eyes or mouth. It is not safe for use as an eye drop and can cause severe damage. A fellow rescue recently dealt with a tragic case.

We suggest Beaphar pipettes as they are the easiest to get hold of quickly and stocked by major pet chains.

We also know that they contain no potentially harmful ingredients, or unnecessary/ineffective active ingredients.

Please note that the dosage in Beaphar pipettes advertised as "for hamsters" is too low to kill all mites AND their eggs. Bright Horizon's exotics vets put some time into working out safe doses for us, using the Beaphar pipettes advertised as "for rabbits and guinea pigs", that contain an effective dose.



Other ivermectin products are available fast and are safe: always ask an ethical-care rescue if you are unsure. Bright Horizon has a list of other safe brands.

Please ask us for the safe dose for your hamster's species and size. We do not publish medical dosages and we will assist case by case directly.

HOW DO I HELP MY HAMSTER BE MORE COMFORTABLE

- **COMPLETE, IMMEDIATE FULL BEDDING CHANGE** will remove as many mites and eggs as possible
quickest

- **SALINE** (sterile/pre-boiled salt water) can be used to clean any open bites or sore patches

- **PURE COCONUT OIL** is safe to use, and can really help your hamster with the itching and sore patches

- **CLEAN SAND**, changed daily, will help your hamster to follow their instinctive method of coping, which is comforting for them

- **KEEP THINGS FAMILIAR**, such as lighting and routine, because the disruption to their enclosure will be stressful



HOW TO GET RID OF MITES FOR GOOD

Complete ALL stages, and continue even if/when you cannot see the mites any more!

If we don't do this thoroughly, especially cleaning and sterilising the hamster's enclosure and all equipment, the mites will survive and we'll be repeating it from the start, at huge cost and continued discomfort to the hamster. Ear mites are especially resilient, and have a three-week egg cycle that can only be broken and the mites eliminated with the "full service", just as an antibiotics course should always be completed. A minimum of three weeks' treatment is essential to ensure all eggs are gone.

Time and time again, we are contacted by people who've discovered more mites, or can't shake them, and it's always because a step was skipped or a corner cut. Sadly, in order to be rid of them permanently in the safest, shortest and least expensive way, this is what is necessary.

YOU WILL NEED:

Ivermectin

The only effective treatment for mites on hamsters, available both over-the-counter (pet stores and online) and as a vet prescription.

Ivermectin is sold in various concentrations and marketed for all kinds of animals from pigeons to livestock, but all we need to check is:

- That ivermectin is the only active ingredient (other parasite control chemicals can be very dangerous for hamsters)
- We know the concentration, and get the dose right for the size and species.

Kleen Green spray (manufactured by Natural Enzymes)

The "holy grail" of mite products; entirely natural and safe for hamsters and humans, you can use it in the shower! It kills mites by breaking down their carapaces, rather than poisoning them with chemicals. The single most effective and safe product available.

A carrier or enclosed small cage

For immediately after treatment/ during enclosure cleans, so the mites drop off in a contained space

Replacement bedding and substrates

Enough for a month of weekly full changes: white bedding is best as the mites are more visible



50cm clearance around each animal enclosure if you have multiple animals

Rescues: avoid enclosures right next to each other, or on racking if at all possible

Indorex brand spray (alert: permethrin toxicity)

A permethrin-based spray pesticide for treating home areas OUTSIDE of the hamster's enclosure, never in it, and only as described here - high exposure is toxic to hamsters. **We've expanded on this in a recent pinned social media post for those interested or concerned.**

We do not recommend the use of any brand except Indorex: the concentration and dispersal rate in this brand are thoroughly tested and safe if used as directed here.

Light breathable fabric, or a separate enclosed room/space For covering or isolating enclosures during Indorex treatment, or getting hamsters completely out of the room if this feels more comfortable

METHOD

- Treat the hamster with ivermectin, and put them in the temporary cage or carrier with fresh bedding
- Remove all items from the enclosure, and put them in a sealed bag
- Remove all bedding from the enclosure, and dispose of immediately
- Fully clean the enclosure with Kleen Green, including all seams, cracks and corners. If you do not have Kleen Green to hand, use very hot very soapy water and make sure you rinse very thoroughly
- If using, spray the area around the enclosure with Indorex; allow to disperse in the air for 1 hour. Don't go mad with it!

CLEAN THE ENCLOSURE ITEMS AS FOLLOWS:

WOOD: Bake at 180c, for 10-15 minutes (kills mites and eggs)

OTHER PLANT BASED (grass mats, sprays, any organics): freeze 24h+, defrost 24h+, freeze again 24h+

PLASTICS, CERAMICS: Wash in hot water and Kleen Green

- Kleen Green the area where you did that, the route to the bins, the carpet, the hooverbag etc
- Refill the enclosure white bedding/pale substrate only, and WELL VENTILATED plastic and disposable items only for now
- Check your hamster (the mites should have left their body)
- Check bedding daily and repeat on sight of a mite
- Otherwise every 5-7 days, NEVER leave it beyond 7 days as eggs can hatch
- Repeat weekly **for a minimum of 4 weeks.**

ONGOING PREVENTION

At Bright Horizon, all of our fosters practice prevention techniques to ensure that mites have the smallest possible chance of entering and overrunning our hamsters. We recommend that all hamster carers do the same.

Once again, this is a personal choice! We've extensively researched the safe use of ivermectin long term. It is at each individual carer's discretion: if you have other animals, spend a lot of time outside, or can't always freeze incoming bedding/organic products, you will make a different decision than a single hamster carer with lots of time and resources or someone who has just to experience the full and frightening impact of a mite infestation. If you base your care on science, you will already be aware that prevention is safer than the health risk from mites.

- Treat your hamster(s) with ivermectin every week (“sense-check” this in our social media!)
- Health check your hamster every few days
- Be vigilant whilst spot cleaning
- Switch to white bedding
- Freeze all bedding on arrival
- Freeze, bake or wash every single new item that enters the hamster’s enclosure or play area - including dry food
- Routinely use Kleen Green when deep cleaning.