



# Guide to Treating Ringworm

*PAWS is committed to saving animals with Ringworm that are at risk of euthanasia because it's an incredibly treatable condition! Unfortunately, it also happens to be a contagious one, which means we are limited in the number of animals we can help by the space that we have in our Ringworm Isolation Ward. Every cage that a foster parent or adopter opens up by taking a Ringworm cat or dog home means there is another at-risk animal we can save.*

*Beyond that, animals with Ringworm respond best to treatment in a low-stress home environment where they can be socialized, cared for, and monitored closely. While our team provides the treatment and care they need onsite, we are not able to provide as much one-on-one attention as a loving home can. This at-risk population is one of the most vulnerable and in need of foster care and adoption!*



---

## Table of Contents

• Overview of Ringworm	1
• Treating Ringworm	4
• Options For & Scheduling Ringworm Treatment	5
• Cleaning Ringworm	6
• Supplies to Keep Stocked	8
• Adoption Process for Ringworm Pets	9

---

## Overview of Ringworm

### What is Ringworm?

Ringworm is a mild skin infection common in mammals and similar to Athlete's Foot. You may have heard of it before, since it is often found in warm-weather climates, children's daycares, workout gyms, and amongst wrestlers. While Ringworm can be a little annoying, it is not life-threatening to people or animals, and in cats and dogs it usually clears up within 6-8 weeks from when treatment is started.

### **Contrary to its name, "Ringworm" is not a worm at all, but a fungus!**

Properly called a "dermatophyte," meaning "plant that lives on the skin," the fungi live on the surface of the skin, in the skin follicles, and sometimes in hair shafts, feeding on dead skin tissue. In the past, the circular lesions made by the fungus were thought to be caused by a worm, hence the name Ringworm. While this circular lesion is one form Ringworm can take, it is not the only pattern. Crusts, scabs, and areas of hair loss that are not circular can also be caused by a dermatophyte. The most common species causing fungal skin lesions in cats and dogs are *Microsporum canis*, *Microsporum gypseum*, and *Trichophyton mentagrophytes*.

## What are the signs of Ringworm?

- Hair loss - sometimes circular in animals, but not always
- Crusting forming on your pet (most commonly around their face, ears, tail, or paws), often reddish
- Spots glowing green under a Wood's Lamp (a special UV light that can help detect Ringworm)
- Clumps of hair are coming out easily, skin may appear flaky underneath

## How does one get Ringworm?

Ringworm needs certain circumstances to begin to grow: it needs a break in the skin (*such as dry, cracked skin, or a scratch*) and it needs an immunocompromised host. Shelter animals are more susceptible because they are often stressed or sick when coming in. Removing the Ringworm spores from your skin and clothes by washing is the best way to prevent getting it or spreading it further.

## Can humans and other animals catch Ringworm from animals with Ringworm?

Yes. Humans can contract Ringworm by touching an animal with Ringworm or coming into contact with spores in the environment. Ringworm can spread while petting or grooming animals with Ringworm. Humans can also get Ringworm from mice, rats, cows, goats, pigs, and horses. Ringworm on humans tends to have a more circular ring pattern.

While all animals (including humans!) are susceptible to Ringworm, healthy adult animals usually have more robust immune systems and may not develop signs of the disease. Younger animals, including kittens and puppies, as well as human children, are more susceptible because their immune systems are not fully developed. Similarly, older animals, or animals that have an autoimmune condition or other underlying diseases, are also more susceptible. Many animals may be carriers of Ringworm but show no symptoms. They can, however, still infect other animals or humans.

## How can Ringworm spread, and who can get it?

Transmission of Ringworm can occur by direct contact with another infected animal or person, or by contact with an infective spore in the environment. The fungal spores can live in the environment for a long time and can be found in carpets, bedding, grooming equipment, etc., and can infect an animal when it comes into contact with those objects. The incubation period is 7-14 days, meaning 7-14 days after contact can pass before any lesions develop. In many cases, Ringworm can also be spread by contact with infected soil. The fungus can live for months in soil if conditions are right. Fleas and mites can also spread Ringworm, so make sure to keep your pets current on flea preventatives!



## What do you do if you think your foster pet has Ringworm?

1. *The very first thing to do is stay calm!* Ringworm is frustrating and contagious, but it's not deadly.
2. The pet should be kept confined to an easy-to-clean area separated from other pets, such as a large crate isolated within a room, or in a low-traffic, isolated room that does not have carpets or rugs, like a spare bathroom or bedroom.
3. Contact the PAWS Foster Team immediately with a photo of the concerning hair loss or crusting, and plan to bring your foster to PAWS Foster Walk-in Vet Clinic hours to be examined and cultured by our Vet. Please come towards the end of FWI hours to prevent contaminating other animals, and if possible, wait in your car with your foster until the medical team is ready to see them.

## How does PAWS diagnose Ringworm?

PAWS Vets will usually use a combination of tests to determine if Ringworm is present. Because it is not possible to make a diagnosis simply by looking at the skin, if the Vet suspects the presence of Ringworm, we start treatment right away while we confirm the diagnosis with other tests.

- **A Wood's lamp** is a special UV light used to cause fluorescence (bright green illumination) of microbial by-products on the skin or hair. It identifies a chemical reaction that occurs due to the infection, but cannot identify spores or infective material. While it is a helpful tool to identify dermatophytes, not all species of Ringworm react to a Wood's lamp, and a Wood's lamp will also react to things other than Ringworm (including a few bacterial infections, yeast infections, and certain parasites), so it cannot be the only tool used to diagnose Ringworm. Although it looks like one, it is NOT a blacklight.



- **A fungal culture** is used to grow dermatophyte species that are present on the skin or fur. Brushed or scraped samples from lesions are placed onto a culture plate that allows optimal growth conditions for the fungus. The resulting growth is then observed under a microscope and assessed for characteristics of Ringworm, specifically fungal spores or "macroconidia." A positive result may be seen in as few as 4 days, but to be considered a true negative result, it must be monitored and produce no growth for 14 days. **At PAWS, to be considered cleared of Ringworm after a positive culture result, there must be two consecutive negative cultures (producing no growth for 14 days), taken 7 days apart. PAWS animals being treated for Ringworm can have new diagnostic cultures taken once a week.**



- **PCR Tests (Polymerase Chain Reaction)** are a diagnostic tool for dermatophytosis in cats and dogs, and can provide diagnostic results in as little as 3 working days, but sometimes can take up to a week. However, they can only detect the presence of a Ringworm cell, not whether or not it is still alive. This means that while they are reliable for negative results, they should not be the sole diagnostic test for positive results. They are also expensive. Because tests need to be run often to monitor the success of what can be a long course of treatment, PCR tests are only cost-effective for PAWS in particular cases. *PCR tests may be requested by fosters and adopters, but the cost will not be covered by PAWS unless our Vets specifically recommend it.*

---

## A Quick Thank You!

*Thank you so much for treating ringworm! It may feel overwhelming at first, which is completely normal, but once you get into a routine, it should take you no longer than ~1 hour or so of extra time a day to treat and manage these patients, and to clean! Blocking off time in your schedule and setting reminder alarms can help you keep on top of your foster's ringworm care routine.*

**More Resources:** Kitten Lady has some great resources about caring for cats with Ringworm. You can check them out here: [youtube.com/watch?v=9vGKFmYUjOs](https://www.youtube.com/watch?v=9vGKFmYUjOs) and here: [youtube.com/watch?v=j0-11kPQHqA](https://www.youtube.com/watch?v=j0-11kPQHqA)

## Treating Ringworm

PAWS offers lots of options at no cost to you, as long as the care is done at our facility and the PAWS treatment plan is properly followed.



### What is the treatment timeline?

Each case varies because different levels of infection and different types of fungus might take longer to clear. Our protocol is that any animal that tests positive for Ringworm should *continue with treatment until they receive two consecutive negative results from cultures taken 1 week apart*.

Ringworm-positive animals will still need to be cultured once a week and kept up to date on treatments.

Ringworm usually clears up within 6-8 weeks from when a patient starts treatment. Every animal's treatment length is different. If you are experiencing multiple positives, reach out to PAWS staff if you need any advice or additional tips to help clear your foster of their infection more quickly.

### How does PAWS treat Ringworm?

PAWS Vets will start a treatment plan based on the animal's age and our Ringworm Protocol. Typically, the treatment plan includes an oral medication, baths in lime sulfur, and taking diagnostic cultures.

- **Environmental Decontamination:** See Ringworm Cleaning Protocols below. *This is very important!*
- **Medication:** Your pet will be started on one of these two oral treatments, if big enough:
  - **Itrafungol:** a liquid given by mouth once per day for seven days on alternating weeks (give every day for a week, skip a week, then give again for a week, etc.)
  - **Terbinafine:** a pill given by mouth once per day, every day, until cleared.
- **Lime-sulfur baths:** May also be referred to as “dips”. Lime sulfur is a smelly, yellow liquid solution that needs to be diluted with water. It’s a great treatment to help resolve Ringworm by deactivating spores on the body. Baths in a lime sulfur diluted solution are recommended one to two times per week.
- **Culturing:** a new culture should be taken about once a week and not any sooner. It takes **14 days** to confirm that a culture is negative, but a positive result may be confirmed sooner.
  - **Culture results:** Once our vet techs have read your foster’s culture results, *you will get an email!* If you have questions, email [foster@phillypaws.org](mailto:foster@phillypaws.org). Our team’s job is to look into these cultures on your behalf!



# Options & Scheduling Ringworm Treatment

## 1. Schedule weekly [Ringworm Care Appts](#) at PAWS (2900 Grays Ferry Ave)

- **Service options:** *lime sulfur baths, cultures, medication refills, booster vaccines/deworming (if due).* We only have the staffing capacity for appointments/baths once a week.
- Ringworm appointments are led by our Vet Techs. Their schedules are tight, so **please be sure to be on time!** If you're late, you may be asked to reschedule. Check in with our front desk staff upon arrival at our clinic, and they will direct you to the Ringworm trailer when ready for the next pet.
- For any questions related to scheduling or your Ringworm appointment, please email [routinecare@phillypaws.org](mailto:routinecare@phillypaws.org) (instead of [foster@phillypaws.org](mailto:foster@phillypaws.org)).

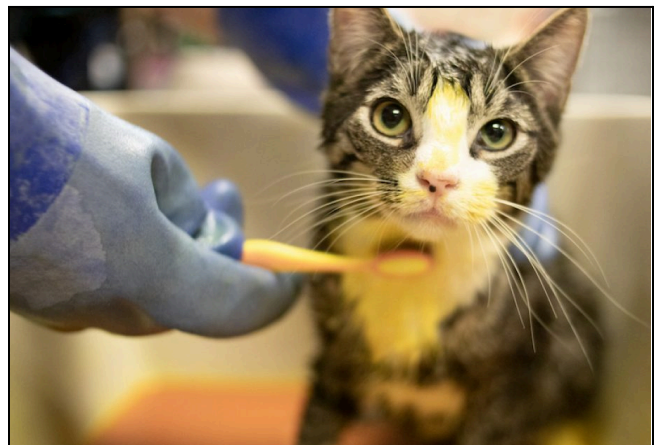
## 2. Can't make a Ringworm appointment time slot?

- **Foster Walk-in Vet Clinic** at PAWS (2900 Grays Ferry Ave) can be used for current Ringworm foster pets and pre-adopted pets who are being bathed at home.
  - **Service options:** You can come to the **end of Foster Walk-in Vet Clinic** for *cultures, medication refills, booster vaccines/deworming (if due), health issues, and testing for FIV/FelV (\$20 for foster/adopter).* **No lime sulfur baths will be done during these visits.**
  - **Fill out the [Foster Walk-in Form](#)** so our staff is aware if you will be arriving on that day. Make sure to note they are being treated for Ringworm on your walk-in form, and please **\*\*arrive toward the end of clinic hours (~30 mins before clinic ends)\*\***, to reduce the risk of contaminating other foster pets. Our hours may change, so please check for any posted schedule change alerts!

**Reminder:** We have multiple vet technicians and veterinarians who handle both PAWS resident pets and public clients; they may not know all the specifics of your foster's situation if you ask questions on site. Please contact the foster team instead by emailing!

## 3. Give lime sulfur baths at home

- Bathe at home 1-2 times a week, and schedule a Ringworm appointment or come to Foster Walk-in Vet Clinic every week for a culture. When you come in for cultures, our team can also refill meds, give any vaccines/dewormers due, and at Ringworm Appts, we can save you some time by bathing them that day– but you will be mostly bathing at home. *Bathing 2 times a week at home can help speed up the recovery process!*



**How to give a *lime sulfur bath* at home:**

1. Try to **schedule the time for baths and cleaning** in your calendar to help keep the process from becoming overwhelming. Remind yourself that Ringworm is not deadly, just annoying!
2. Lime sulfur smells like eggs and can stain, so **use old towels and a plastic basin or bucket for treatment**. If you have a basement or temperature-controlled garage, use that space. Otherwise, a bathroom tub or shower works best. Use a basin or bucket for lime sulfur in the tub to avoid staining. Rinse your tub after lime sulfur baths to prevent staining if lime sulfur were to dry on your tub.
3. **In your basin, dilute the lime sulfur with water: 8 oz (1 cup) to 1 gallon water or 4oz (½ cup) to ½ gallon water**. Use warm water to keep the cat as comfy as possible.
4. Place the cat in the basin, then using your gloved hands, a sponge, or an old washcloth, gently apply it to a dry cat. **Make sure head to tail are coated, and massage to the root of their coat**. Other effective ways to apply lime sulfur include using a spray bottle or a [small garden sprayer](#). [Here is a video on how to use the sprayer method!](#)
5. **For their faces**, avoid getting the lime sulfur in their ears, mouth, nose, or eyes (it will sting!). Use a cloth, toothbrush, or sponge to apply to the face and ear areas.
6. Once treated, the pet should be placed in a hard-sided carrier in a warm space for the treatment to air-dry on the pet's fur. *Lighter colored pets may look yellowish for a bit!*
7. **What to do while the pet dries: CLEAN!** Now is the time to deep-clean everything in the room. *See our Ringworm Cleaning Protocol below.*
8. Don't place dripping wet pets back into your sparkly clean foster space...they will make a mess, especially with the litter! We recommend waiting until they're dry.

---

## Ringworm Cleaning Protocols

*Ringworm spores can live for a long time unless they are removed from the environment or prevented from being shed in the first place, so please be diligent with cleaning after each lime sulfur bath to ensure a quick recovery!*

### How long does Ringworm live in the environment?

Ringworm spores can stay alive on clothing, bedding, and elsewhere as long as their food supply (dead skin cells) is present, and they have a moist and warm environment. Because Ringworm can stay alive on hair, anywhere a pet's hair can land, Ringworm can then live. Spores can live for as long as 12 to 20 months in the right environment, so clean thoroughly!

### How to set up the space to limit transmission, re-infection, and spreading spores through your home?

- The best way to limit the spread of Ringworm in a home is to **keep the affected pet in one easy-to-clean room** without carpet or rugs, like a spare bathroom or bedroom. Avoid letting them roam the house or setting them up in a high traffic space, like a bathroom, office, or common space that is used frequently. This will increase the risk of transmission.



- **Remove any non-essential or difficult-to-clean items from the room** where they will be staying (ideally before they arrive). Avoid putting a lot of bedding or soft toys in the space. This will make it easier to clean later and lessen the risk of recontamination. Use easy-to-clean plastic toys and throw-away enrichment like cardboard boxes and toilet paper rolls. Set up their litter box with litter, food dish, and water dish in the space as well, and be sure to deep clean these items along with the entire space after each bath.
- We suggest **changing clothes and shoes when leaving a room** with foster pets that are symptomatic of Ringworm. You can have a set outfit and shoes, scrubs, or use PPE. Plastic flip flops work great! Just make sure to wash any clothing regularly. Having a trash receptacle, storage bin, or laundry bag outside the door to store PPE can also help reduce tracking spores throughout your home.
- **Wash your hands thoroughly** with soap and then rinse with water. Be sure to clean under your fingernails and around jewelry.
- After bathing your pet and while they air dry in a carrier, **deep clean their space thoroughly after each bath**, before placing your bathed foster pet back in the space. This avoids recontaminating the pet.



### Have other pets in the home?

To avoid transmission, other pets need to be kept separate, not share any bedding, toys, etc., and you should change your clothes and wash your hands after being in close contact with an affected pet. Monitor your pets for signs of Ringworm. Healthy adult animals usually have more robust immune systems and may not develop signs of the disease.



### What if the pet had access to the entire home?

If your foster pet had access to the entire home, deep-clean the entire home. Limit access and try to place them in their isolation space after a deep clean. They can hang out in a carrier while you clean, but also make sure to always clean the carrier and wash any bedding in the carrier.

After the Ringworm is gone, studies show that a full, extra thorough cleaning twice can remove nearly all the Ringworm spores from a home.

### What cleaners and cleaning methods kill Ringworm spores?

We recommend either 1/10 dilution of bleach (10% bleach solution) or an accelerated hydrogen peroxide product like Rescue (diluted Rescue cleaning product - 1:16 ratio or 8 oz per gallon of water), Cavicide, Virex, PERdiem, or Oxivir, as well as the physical removal of spores (*through vacuuming or washing*) in hot water (*including steamers*). You can use different methods depending on the surface (you may launder a blanket, steam a couch, or wipe Rescue on a table). Rescue and other disinfectants must sit for 5 minutes over the contaminated area before wiping.

**Steps to Deep Clean & Decontaminate** (More cleaning tips: [youtube.com/watch?v=8yS4oaJgPeM](https://youtube.com/watch?v=8yS4oaJgPeM))

1. After bathing the pet, place them in a clean plastic carrier to start air drying in a warm place. While the pet air dries, thoroughly clean their isolation space.
2. Use the triple cleaning technique:
  - a. *Mechanical removal of hair, dirt, etc. (Vacuuming, wiping away, mopping), but then you'll need to disinfect the vacuum cleaner or mop. Use electrostatic cleaners such as Swiffers or damp mopping in preference over sweeping.*
  - b. *Wipe down the area with a cleaning agent.*
  - c. *Disinfect with 1:10 bleach or a properly diluted Rescue cleaning product where possible, allowing the area to stay 'wet' for 5 minutes.*
  - d. *The MOST important steps are a and b, ie. good old-fashioned cleaning, which will keep an environment spore-free! Think of spores like dust.*
3. Minimize how much you stir up spores through sweeping, shaking bedding, etc.
4. Fabrics and linens can be washed twice with regular detergent to remove spores on HIGH heat with an extra rinse cycle. Use the longest cycle and do not overload the washer. It is the mechanical motion that removes the spores.
5. Carpets must be steamed at a temperature high enough to kill the fungus, and you can also use Rescue cleaner in the mixture.
6. Once the space is clean, you can place the bathed pet back into the space when they're dry.
7. You want to repeat this cleaning process after every lime sulfur bath. You don't need to deep clean more often than you bathe them.
8. Once the Ringworm has resolved and the foster pets have been released from isolation, the room should be thoroughly cleaned twice.

---

## Supplies to Keep Stocked

- **Cleaning solutions:** [Rescue Cleaner](#) (recommended) or Bleach (10% solution).
- **Hard-sided carrier:** For transport/ holding a pet after a lime sulfur bath. They are easy to clean and will help avoid recontamination. Having an extra hard carrier on hand can make life easier!
- **Medication refills** (from PAWS): If you *only* need a refill of medication or lime sulfur solution, make sure to email [foster@phillypaws.org](mailto:foster@phillypaws.org) at least two days before you run out, so the foster team can put a refill request in for you! Then you can pick it up without bringing the pet with you.
- **Heat source** to make sure they stay warm, like a warm room, a space heater, or a [snuggle disc](#).
- **Bathing at home?**
  - Lime sulfur solution (concentrate from PAWS, mix with water)
  - Gloves ([reusable ones](#) are great; PAWS can supply starter gloves in a pinch)
  - Old towels or sheets (PAWS can provide on request)
  - [Plastic Bin](#)
  - Sponges or toothbrushes; Optional: [Hand Sprayer](#)
  - Clothes you don't mind getting stained

## Adoption Process for Ringworm Pets

### How does Ringworm affect the adoption process?

Ringworm doesn't need to hold up the adoption process! If there aren't any concurrent medical concerns, unaltered foster pets with Ringworm can be promoted through our Pre-Adopt Program, and altered pets with Ringworm can be promoted through our normal adoption program.

Because undergoing surgery with a skin infection can help bacteria and fungi find their way inside a pet's body, it's safest to wait until the Ringworm is cleared before the pet has surgery, including spay or neuter surgery. We also need to avoid contaminating our surgery room and other patients having surgery.

### Pre-Adopt Program:

Because Ringworm treatment can be a lengthy process, we offer the option to adopters to "pre-adopt" Ringworm pets that aren't yet fixed because they're still waiting to be cleared of Ringworm, whether in foster care or housed at our shelter. Adopters pay a \$100 refundable deposit that they will get back once the pet is fixed. If the adopters elect to get their spay/neuter surgeries with PAWS, the cost of their surgery is included in their adoption fees.

The adoption fee stays the same; there is no extra charge for all of the follow-up care we provide for Ringworm care. Our team will have a detailed conversation with any potential adopters about Ringworm care and will contact the adopter about the schedule of their new pet's cultures. Our team is always available to answer any questions as adopters go through the process. PAWS commits to the pet's full Ringworm treatment, and we're here to support our fosters and adopters every step of the way!

### How to Find Adopters for Ringworm Pets:

- **Adoption profile:** Submit clear photos and a bio including your foster pet's personality, ideal home, and the foster parent's email to [phillypaws.org/weblistings](http://phillypaws.org/weblistings). *See more promo tips here!*
  - Your foster pet will be posted on our website for adoption. Our adoption team will be the first point of contact for Ringworm pets.
  - Adopters will need to be prepared to continue Ringworm treatment, so when you submit your foster's photos and bio, make sure to note that your foster is currently being treated for Ringworm. Our promotion team will add a disclaimer to their online posting.
  - Plan to submit new photos and video regularly!
  - Your foster pet will be included on our **weekly adoptable pets email!**
- **Word of mouth & social media:** Share with your family, friends, and coworkers to find adopters! Create a foster Instagram, share on Insta Stories and tag @phillypaws, post on Facebook, share in neighborhood/work groups.
- Pets with Ringworm are not eligible to go to a PAWS adoption center unless they get cleared of Ringworm.



## Steps to Finalize Pre-Adoption:

1. **Email [adoptions@phillypaws.org](mailto:adoptions@phillypaws.org) to check if an adopter is both approved AND approved to pre-adopt.**
  - **Pre-adopt approval:** Our adoption staff needs to have a conversation with an adopter about Ringworm care prior to approving them for pre-adoption. There are a number of reasons an otherwise-approved adopter might not be approved for Ringworm pre-adoption, including: if they have unaltered animals in the home, have young children or immunocompromised household members, don't have a suitable quarantine space to keep their new pet away from their resident pets, live too far from our clinic, or are unable to commit to the schedule required for continuing Ringworm treatment, they might not be a fit for our pre-adopt program.
2. **They are approved and want to adopt, now what?** Email [adoptions@phillypaws.org](mailto:adoptions@phillypaws.org) and cc the adopter, so we can help get the Pre-Adopt paperwork started (this is for unaltered Ringworm fosters). Staff will handle the collection of a special Pre-Adopt agreement and the \$100 surgery deposit; foster parents will still be responsible for collecting the regular adoption contract, disclaimers page, and regular adoption fee. We do not process the adoption contract until spay/neuter surgery is completed.
  - When talking to adopters about your foster, you should also be going over their specific treatment plan and making sure the adopter is prepared to take the next steps in the treatment process. If you need help, ask our staff!
3. **See your PAWS Foster Program materials for all the steps to finalize an adoption!**

## Frequently asked questions during the adoption process:

- **I have kids. Is it okay to adopt a pet with Ringworm?** We really can't advise on this. We recommend you talk to your pediatrician first if you have concerns about the possibility of your children contracting Ringworm. Young children don't have fully formed immune systems and may be more prone to catching Ringworm than the average healthy adult.
- **I have other pets. Is it ok to adopt a pet with Ringworm?** We also can't advise on this. If you decide you are comfortable adopting and treating a pet with Ringworm, we recommend keeping the adopted pet fully separated from your resident pets until they are cleared of Ringworm. There is still a risk of transmission, especially if any of your pets have other health issues.
- **An adopter wants to wait until the pet is cleared of Ringworm. Is that ok?** PAWS does not hold or reserve animals for adoption. You can let them know if they are still available once cleared, but we will still be advertising them for adoption.

