What is Ringworm and How to Safely Treat It?

Ringworm, despite its name, is not caused by a worm but by a group of fungi known as dermatophytes. These fungi can affect various animals, including dogs. Ringworm infections in dogs are relatively common and can appear in different ways. Here's a description of ringworms on a dog and an explanation of its location within the body:

Appearance and Symptoms: Ringworm in dogs typically manifests as one or more circular or irregularly shaped, hairless patches on the skin. These patches may be red, scaly, and itchy. The affected areas often have broken or brittle hair that appears as if it's been clipped very short. The term "ringworm" comes from the characteristic ring-like appearance of the lesion, with the center often healing as the infection spreads outward.

Other common symptoms of ringworms in dogs may include:

- 1. **Itching and discomfort:** Dogs with ringworms may scratch or lick the affected areas due to itching and irritation, and cross-contaminate their paws, nails, and body.
- 2. **Crusty skin:** In some cases, the skin around the lesion may become crusty or develop pustules.
- 3. **Spread:** Ringworm can spread to other areas of the dog's body and may even affect the claws or nails, causing them to become brittle and discolored.

Location within the Body: Ringworm is a superficial fungal infection, which means it affects the outer layers of the skin, hair, and sometimes the nails. It is not a subdermal (below the skin) organism. Ringworm fungi live on the surface of the skin and hair follicles, feeding on keratin, a protein found in these structures.

Ringworm spores can survive in the environment and are contagious. Dogs can contract ringworms through direct contact with an infected animal or by coming into contact with contaminated objects such as grooming tools, bedding, or environmental surfaces.

If you suspect your dog has ringworms, it's essential to consult a veterinarian for a proper diagnosis. Their treatment typically involves antifungal medications and topical treatments. But now, there's a totally Safe and Non-Toxic Treatment called ZymeAway!

ZymeAway is A Very Safe and Highly Effective Treatment Comes from the #1 Enemy of Mold or Fungus and that is... ZymeAway's Cysteine Based Protease Enzyme!!

People, Ringworm, and Pets

People can get ringworms as well, and one of the common sources of human infection is contact with an animal, such as a dog or a cat, that has ringworm. Ringworm is a zoonotic disease, which means it can be transmitted from animals to humans.

Here's how the transmission typically occurs:

- 1. **Direct Contact:** The most common way for people to get ringworms from animals is through direct skin-to-skin contact. If you touch an infected area on your pet's skin, you can transfer the fungal spores to your own skin.
- 2. **Indirect Contact:** You can also get ringworms from touching objects or surfaces that have come into contact with an infected animal. This can include items like grooming tools, pet bedding, or furniture.
- 3. **Airborne Spores:** In some cases, the fungal spores responsible for ringworms can become airborne when an infected animal sheds hair or skin flakes. Breathing in these spores may lead to respiratory ringworms, although this is less common.
 - See the following page on [Respiratory ringworm also known as pulmonary ringworm or fungal pneumonia].
- 4. The symptoms of ringworms in humans are similar to those in animals, including circular or irregular skin lesions that can be red, scaly, and itchy. The affected areas often have a raised, ring-like appearance.

To prevent the spread of ringworms from pets to humans:

- 1. If you suspect your pet has ringworm, see our treatment procedure below using ZymeAway with two ounces (2oz) of ZymeAway Concentrate into each gallon of "Tepid Water" needed for the treatment.
- 2. Practice good personal hygiene, including frequent handwashing, especially after handling your pet. You must use latex gloves to greatly assist in preventing contact with your own skin while treating ringworms and a facemask.
- 3. Be sure to wash and thoroughly clean any and all objects or surfaces that your infected pet may have come into contact with. Use the same mixture of ZymeAway and water for all cleaning of these suspect objects and surfaces.
- 4. If you have contracted (dermal) skin ringworm, you can safely use our ZymeAway cleaning solution and protocol as below. It's safe and effective on the skin. Just rinse your skin after using it to prevent drying of the skin.

Respiratory Ringworm is also known as Pulmonary Ringworm or Fungal Pneumonia

Contracting airborne or respiratory ringworm is a less common but still important concern for individuals, especially those who are in close proximity to animals with ringworms or who work with animals regularly, such as veterinarians, pet groomers, or shelter workers. *Here are some serious concerns associated with contracting airborne ringworm:*

- 1. **Respiratory Infection:** When fungal spores responsible for ringworm become airborne, they can be inhaled by humans, leading to respiratory ringworm infection. Inhaling these spores can result in a fungal infection within the respiratory system, which can affect the lungs and airways.
- 2. Symptoms: Respiratory ringworm can present symptoms such as coughing, sneezing, wheezing, shortness of breath, and chest discomfort. These symptoms can be similar to those of other respiratory infections, making it important to consider the possibility of ringworm when assessing respiratory complaints.
- 3. **Risk Factors:** Individuals at higher risk of contracting respiratory ringworm include those with compromised immune systems, respiratory conditions, or underlying health issues that make them more susceptible to infections. Additionally, people who are consistently exposed to environments where animals with ringworms are present are at greater risk.
- 4. Preventive Measures: To reduce the risk of contracting respiratory ringworm, individuals working with animals should consider wearing appropriate protective gear such as masks, gloves, and protective clothing. Adequate ventilation in animal facilities can help disperse airborne spores. Regular cleaning and disinfection of animal enclosures, grooming tools, and equipment can also reduce the environmental spore load.
- 5. **Seeking Medical Care:** If someone suspects they have contracted respiratory ringworm, it's crucial to seek medical attention promptly. Early diagnosis and treatment are essential to prevent the infection from worsening, especially in individuals with compromised immune systems.
- 6. **Occupational Concerns:** Occupational exposure to respiratory ringworm can be a concern for individuals who work in animal-related fields. Employers should provide education and training on infection control measures, and employees

- should be vigilant about practicing good hygiene and using personal protective equipment when necessary.
- 7. **Public Health:** While respiratory ringworms are relatively rare, it's important for public health authorities to monitor and respond to outbreaks, especially in settings where multiple animals or people may be affected. Proper communication, infection control measures, and treatment are crucial to containing and preventing the spread of the infection.

In summary, while respiratory ringworms are not as common as the cutaneous form of the disease, it is a concern for individuals who have close contact with animals with ringworms. Awareness, prevention, and early medical intervention are essential to mitigate the risks associated with airborne ringworm infections.

Treatment for Respiratory Ringworm

Respiratory ringworm, also known as pulmonary ringworm or fungal pneumonia, is a less common form of ringworm in humans but can be a serious concern. It occurs when fungal spores responsible for ringworm are inhaled, leading to an infection in the respiratory system. The treatment for human respiratory ringworm typically involves antifungal medications and supportive care. Here's an overview of the treatment:

- 1. **Antifungal Medications:** The primary treatment for respiratory ringworm is antifungal medication. Depending on the severity of the infection and the specific fungal species causing it, a healthcare provider may prescribe one or more of the following antifungal drugs:
 - Oral Antifungals: Drugs such as itraconazole, fluconazole, or voriconazole
 are commonly prescribed for treating systemic fungal infections like
 respiratory ringworm. These medications are taken orally and work to
 eradicate the fungal infection from within the body.
 - Intravenous (IV) Antifungals: In severe cases or when oral medications are ineffective, intravenous antifungal medications like amphotericin B may be used. IV antifungals are typically administered in a hospital setting.
- 2. **Supportive Care:** In addition to antifungal medications, supportive care may be necessary to manage symptoms and help the patient recover. This can include:
 - Oxygen Therapy: If the infection has caused significant respiratory distress, supplemental oxygen may be provided to ensure adequate oxygen levels in the blood.

- Fluids and Nutrition: Maintaining proper hydration and nutrition is crucial for individuals with respiratory ringworm, especially if they are experiencing symptoms such as fever or loss of appetite.
- **Respiratory Support:** In severe cases, mechanical ventilation may be necessary to assist with breathing.
- 3. **Monitoring and Follow-Up:** Patients with respiratory ringworm will require close monitoring by healthcare providers to assess their progress and adjust treatment as needed. Follow-up appointments and imaging studies, such as chest X-rays or CT scans, may be necessary to track the resolution of the infection.

It's essential for individuals with suspected or confirmed respiratory ringworm to seek immediate medical attention. This condition can be serious, particularly in people with compromised immune systems, so early diagnosis and treatment are crucial for a successful outcome. Patients should follow their healthcare provider's recommendations regarding medication dosages, duration of treatment, and any necessary lifestyle or hygiene changes to prevent reinfection.

The choice of antifungal medication and the duration of treatment will be determined by the healthcare provider based on the specific circumstances of the individual case.

As with any medical condition, it's important to follow medical advice and take prescribed medications as directed to achieve the best possible outcome.

NOTE: ZymeAway is not and cannot be prescribed or used internally at all. It is designed for use outside of the human or animal body.

ZymeAway Comment: Respiratory Ringworm is a widely misdiagnosed illness as it has similar symptoms as the common flu and other respiratory ailments/illnesses. So, when you are ever treating ringworm with your Pets and you [within a few days] begin to develop symptoms such as (coughing, sneezing, wheezing, shortness of breath, and chest discomfort), please contact your Primary Physician and let them know that you've just been interacting with and/or treating your (PET) for ringworm and you believe you may have possibly inhaled some of the fungal spores. Please ask them to first consider diagnosing for Respiratory Ringworm, Pulmonary Ringworm, or Fungal Pneumonia. Again, this can become a very serious respiratory illness. Always err on the side of CAUTION!! Protect yourself and those around you!

ZymeAway the Organic Enzyme Cleaner's RINGWORM TREATMENT PROTOCOL FOR PETS

- 1. Add 2 ounces of ZymeAway Super Concentrate into each gallon of water needed. I believe that most cleaning treatments will only need 1 gallon, but you may need additional. Please keep that in mind. The 2 ounces of concentrate is plenty to get the job done. More IS NOT Better! Too much can unnecessarily dry out the pet's skin which will needlessly irritate and aggravate the pet. 2 ounces is the correct mixture for each gallon of water needed.
 - a. **NOTE:** Depending on the size of your pet and the degree of ringworm infestation, the only change in treatment will depend on the "Container Size the Pet will be cleaned and treated in."
 - b. Example: Dogs basically can be treated in the bathtub with a pail of 1 or 2 gallons of ZymeAway mixture solution in a ready position inside the same bathtub. Smaller animals and cats can be cleaned and treated in a Utility Sink or Kitchen Sink.
 - The following procedures are always the same no matter where the cleaning treatment is conducted.
- 2. Get clean fresh water (1 gallon to start) and add 2ozs of ZymeAway concentrate into that gallon of water. Please ensure that the water is comfortably warm "tepid" in temperature.

NOTE: Too cold and too hot is uncomfortable for the pet and they will try to fight the cleaning procedure and exit the container they are in.

Remember to be considerate of the Pet and do this procedure in a calm and reassuring method for them.

Always let your pet know how good they are doing and how good they will feel once this treatment is completed, and all that scratching and itching will be gone!

Treatment Procedure

Before You Begin, Do the Following

- 1. First and Most Important... ALWAYS PROTECT YOURSELF AND OTHERS FIRST!!
 - a. **Put on an N-95-rated facemask** same as used with COVID-19. This will stop the ringworm (fungal spores) from entering your nose and mouth and causing a more serious concern... respiratory ringworm **this is not good at all and can become very serious.**
 - b. **Put on a pair of Latex Gloves** to protect your hands and fingernails from exposure to the fungus spores as well.
 - c. **Wear old clothing** that you can wash immediately after the treatment is completed. NOTE: When you have completed the present treatment, immediately take off your clothing while you keep wearing your facemask and gloves and place the clothes inside a plastic bag.
 - d. **Next, cleaning treatment for your pet.** Using a washcloth or towel, soak it in the 2-oz mixture and begin to wash down the animal. Keep dipping and soaking the washcloth to ensure that you are depositing a good amount of mixture onto the fur of the pet and be sure it is soaking down to the target ringworm location(s) on their skin. This is where you want to be sure you are depositing enough solution to destroy the fungus infection.
 - e. **Continue this soaking procedure for 10 minutes.** Believe me Cat Owners, we are a Feline Rescue family and have performed this procedure many times and... Yes, we have had interesting bouts with cats screaming and clawing, but with the proper gloves and clothing, you will be well protected. Keep that in mind when working with our feline friends and always be calm and talk gently to them **they know instantly when we're stressed!!**
 - f. After this procedure you need to rinse off the pet totally. Again, using clean fresh WARM WATER – <u>Not Hot!!</u> By rinsing, you prevent any potential for drying out the pet's skin and that would cause unnecessary irritation.
 - g. **Next, clean your clothing.** Remove your clothing as mentioned above and place it either into the bathtub or utility sink or even in the kitchen sink if it is large enough to comfortably hold the clothing. Now, apply a drainstopper to prevent the new soaking water from escaping down the drain. Add 2 more ounces of ZymeAway Concentrate into **HOT TAP WATER Yes, NOW... Hot Tap Water** and allow the clothing to soak for ½ hour. Occasionally press down the clothing to ensure all the fibers are soaking in the ZymeAway solution

- h. **Final cleaning of your clothing.** After soaking for ½ hour, you can wring out the clothing and place them into your washing machine to wash and dry as normal. **NOTE:** There will still be enough enzymes left on the clothing fibers to assist in the washing machine action.
- i. **Discard your facemask and gloves** and be ready to put a new mask and pair of gloves on for the next treatment. **NOTE:** Ringworm treatment can require several treatments. If the infestation is minimal and isolated to a small location, it may take only 1 or 2 treatments. We recommend 1 treatment a day for 3 days and that has virtually eliminated all ringworm.
- j. Contact Us: With all of our guidelines and directions, if you have any questions whatsoever, please contact us through our CONTACT US Form at the bottom of our Website's Home Page. Scroll down the home page to the very bottom and the CONTACT US Form is located there just above the map at the complete bottom of the home page.
- k. Please fill in all the information and include your phone number as there are many times that an email reply takes far too long to go back and forth to try to answer some complex questions, and I want to be sure I'm answering all of your questions and those that may come up during our conversation.

ZymeAway has been successfully used since 2009 without any negative feedback from a pet owner. If you are looking for a Safe and Highly Effective Treatment for Ringworm, Fleas, Mange, Parasites, and Mites... Always Use ZymeAway!

It's 100% Biodegradable, and Non-toxic, Non-Caustic, and Non-Flammable SAFE TO PEOPLE, PETS, AND OUR ENVIRONMENT!

Thank you for sharing your valuable time to review this document on Treating Ringworms on Pets. Please visit our website often as we are constantly adding new support information. https://zymeAway.com/

Good Wishes to You and Yours,

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