

Technical Information Sheet

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What is Ringworm and How Can It Be Prevented?

By Roger McFadden
Vice President Technical Services
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Summary of what you will learn in this article

- Ringworm is a contagious fungus infection of the scalp, the body, the feet (athlete's foot), and the nails. People can get ringworm from: 1) direct skin-to-skin contact with an infected person or pet, 2) indirect contact with an object or surface that an infected person or pet has touched, or 3) rarely, by contact with soil.
- ☐ Ringworm can be treated with fungus-killing medicine.
- ☐ To prevent ringworm, 1) make sure all infected persons and pets get appropriate treatment, 2) avoid contact with infected persons and pets, 3) do not share personal items, and 4) clean and disinfect common areas with an appropriate disinfectant.

What is ringworm?

Ringworm is a contagious fungus infection that can affect the scalp, the body (particularly the groin), the feet, and the nails. Despite its name, it has nothing to do with worms. The name comes from the characteristic red ring that can appear on an infected person's skin. Ringworm is also called tinea.

What is the infectious agent that causes ringworm?

Ringworm is caused by several different fungus organisms that all belong to a group called "dermatophytes." Different dermatophytes affect different parts of the body and cause the various types of ringworm:

Ringworm of the scalp

Ringworm of the body

Ringworm of the foot (athlete's foot)

Ringworm of the nails

Where is ringworm found?

Ringworm is widespread around the world and in the United States. The fungus that causes scalp ringworm lives in humans and animals. The fungus that causes ringworm of the body lives in humans, animals, and soil. The fungi that cause ringworm of the foot and ringworm of the nails live only in humans.

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How do people get ringworm?

Ringworm is spread by either direct or indirect contact. People can get ringworm by direct skin-to-skin contact with an infected person or pet. People can also get ringworm indirectly by contact with objects or surfaces that an infected person or pet has touched, such as hats, combs, brushes, bed linens, stuffed animals, telephones, gym mats, and shower stalls. In rare cases, ringworm can be spread by contact with soil.

What are the signs and symptoms of ringworm?

Ringworm of the scalp usually begins as a small pimple that becomes larger, leaving scaly patches of temporary baldness. Infected hairs become brittle and break off easily. Yellowish crusty areas sometimes develop. Ringworm of the body shows up as a flat, round patch anywhere on the skin except for the scalp and feet. The groin is a common area of infection (groin ringworm). As the rash gradually expands, its center clears to produce a ring. More than one patch might appear, and the patches can overlap. The area is sometimes itchy. Ringworm of the foot is also called athlete's foot. It appears as a scaling or cracking of the skin, especially between the toes. Ringworm of the nails causes the affected nails to become thicker, discolored, and brittle, or to become chalky and disintegrate.

How soon after exposure do symptoms appear?

Scalp ringworm usually appears 10 to 14 days after contact, and ringworm of the skin 4 to 10 days after contact. The time between exposure and symptoms is not known for the other types of ringworm.

How is ringworm diagnosed?

A health-care provider can diagnose ringworm by examining the site of infection with special tests.

Who is at risk for ringworm?

Anyone can get ringworm. Scalp ringworm often strikes young children; outbreaks have been recognized in schools, day-care centers, and infant nurseries. School athletes are at risk for scalp ringworm, ringworm of the body, and foot ringworm; there have been outbreaks among high school wrestling teams. Children with young pets are at increased risk for ringworm of the body.

What is the treatment for ringworm?

Ringworm can be treated with fungus-killing medicine. The medicine can be taken in tablet or liquid form by mouth or as a cream applied directly to the affected area.

What complications can result from ringworm?

Lack of or inadequate treatment can result in an infection that will not clear up.

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Is ringworm an emerging infection?

Although ringworm is not tracked by health authorities, infections appear to be increasing steadily, especially among pre-school and school-age children. Early recognition and treatment are needed to slow the spread of infection and to prevent re-infection.

How can ringworm be prevented?

Ringworm is difficult to prevent. The fungus is very common, and it is contagious even before symptoms appear.

Steps to prevent infection include the following:

- Educate the public, especially parents, about the risk of ringworm from infected persons and pets.
- Keep common-use areas clean, especially in schools, day-care centers, gyms, and locker rooms. Disinfect sleeping mats and gym mats after each use.
- Do not share clothing, towels, hairbrushes, or other personal items. Infected persons should follow these steps to keep the infection from spreading:
 - Complete treatment as instructed, even after symptoms disappear.
 - Do not share towels, hats, clothing, or other personal items with others.
 - Minimize close contact with others until treated.
 - Make sure the person or animal that was the source of infection gets treated.

What Disinfectant Can Be Used Against Ringworm on Wrestling Mats?

Schools, athletic clubs and universities are concerned about the transmission of dermatophytoses or ringworm on their wrestling mats and other cross contamination points. A disinfecting agent effective against the primary causative agent, *trichophyton metagrophytes* is recommended. When using any disinfectant it is important to use the product according to label directions. Even though these disinfectants are effective in killing *trichophyton metagrophytes* on

environmental surfaces, there is no guarantee that the fungus will not be transmitted directly from one wrestler to another or from one wrestler to the mat and to the other wrestler. We suggest that preventative measures in addition to continuing use of a disinfectant be instituted.

The following Coastwide Brand disinfectants and disinfectant cleaners are effective against *Trichophyton metagrophytes*: 256Q, Lemon DC, Hepastat 256, Pine DC, Pine Q, Power Q, Ultra Phene, Virustat DC, Virustat TBQ and Virustat 128. Please contact one of our customer service or technical service representatives for more information.

This article has been prepared and offered as a fact sheet and is not intended to be used for self-diagnosis or as a substitute for consultation with a physician. If you have questions about Ringworm or believe that you might have a fungus infection, consult a physician or health care provider.