Fungal Infections

Several different types of fungi can cause fungal infections in the skin and nails. The type of infection is based on where it is located on the body.

What are dermatophytes?

Fungi that cause infections in the skin are called dermatophytes, and infections caused by *dermatophytes*

are also known as "ringworm" or "tinea." One example of a very common fungal infection is athlete's foot, also known as tinea pedis. Another common fungal infection is jock itch, an infection affecting the groin area, also known as tinea cruris.

Fungal infections due to dermatophytes can affect almost any surface of the body ranging from the scalp, arms, and legs all the way to the feet, groin, and nails. These infections are itchy, and may include a red, scaly, or ring-shaped rash.

How are fungal infections spread?

Fungal infections are usually spread through direct contact with an infected person or animal. Clothing, bedding, and towels can also become contaminated.

Many species of dermatophytes can cause infections in humans. The most common types are *Trichophyton rubrum* and *Trichophyton tonsurans*, which are usually transmitted from person to person. *Microsporum canis* is transmitted to people from animals such as cats and dogs.

Who develops fungal infections?

Fungal infections are very common, and they can affect healthy individuals. Fungal infections can affect people who use communal baths, people who are involved in contact sports such as wrestling, and people who live in close contact with animals. Some species of fungi are found in warm moist areas. Fungal outbreaks can happen in schools, households, and institutional settings.

How is a fungal infection diagnosed?

Healthcare providers diagnose fungal infections based on the patient's symptoms and a physical examination. Sometimes a sample of the affected skin or nails is sent to a laboratory for fungal culture.

How are fungal infections diagnosed at the lab?



Practicing good hygiene is one way to avoid fungal infections.

Tissue from a biopsy is sent to a pathology lab. There the tissue is prepared on glass slides and reviewed by a pathologist, a clinician who has specialized in the diagnosis of disease. At Inform Diagnostics, all of the pathologists have further specialized in their specific field of practice, such as dermatopathology for

dermatology conditions.

The pathologist looks for abnormal cellular changes under a microscope. He or she interprets the findings under the microscope in the context

of the clinical information provided by the healthcare provider. Some cases require additional special analysis to evaluate proteins, RNA and/or DNA.

At Inform Diagnostics, difficult and unusual cases are reviewed together by our specialists at large multiheaded microscopes to render the most accurate and definitive diagnosis possible.

The pathologist creates a pathology report with all the important findings, including critical information to help guide treatment and assess prognosis, which is sent back to the healthcare provider.

Treatment Options

The medication and duration of the treatment will depend on the location of the infection. Infections in the scalp require treatment with an oral antifungal medication. Other areas of the body may be treated with topical antifungal creams or ointments. The duration of the treatment is dependent on the severity of the infection and may range from two to six weeks or more.



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How can these infections be prevented?

Good hygiene and hand washing are great ways to prevent infections. People should avoid sharing hairbrushes, hats, and other pieces of clothing that may come into contact with infected areas. Beauty salons and barbershops should have their instruments properly sterilized, and pets should be taken to a veterinarian if they have any signs of skin disease.

This material is intended for patient education and information only. It does not constitute advice, nor should it be taken to suggest or replace professional medical care from your healthcare provider. Your treatment options may vary, depending upon medical history and current condition. Only your healthcare provider and you can determine your best option. Provided as a service by Inform Diagnostics. © 2018 Inform Diagnostics, Inc. All rights reserved. DE0076 8.18

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