

# Your Quick Guide to TOENAIL FUNGUS INFECTIONS



## What is a toenail fungus infection?

Toenail fungus infections or onychomycosis are fungal infections of the toenails. A common, treatable, yet contagious condition, it is estimated to account for up to 50% of all nail problems.

Onychomycosis is progressive and will not go away on its own without medical treatment. Proper diagnosis and early intervention can increase your chances of success and prevent long-term damage to the nail.



## What causes toenail fungus infections?

Toenail infections are most often caused by a fungus. The fungus usually invades the nail at the free edge and then spreads down the side towards the base. The fungi thrive in warm, moist conditions commonly associated with wearing shoes and socks.

This organism can also lead to fungal infections of the skin. Toenail fungus infections are contagious and can be transferred from person to person, as well as from one toenail to another.

## Who is at risk of toenail fungus infections?

Although everyone is potentially susceptible, there are several risk factors that make a person more likely to get infected.

- People over 55 years or older
- People with diminished blood circulation
- People with previous or existing injury or infection of the nail
- People with a weakened immune system (HIV/AIDS, diabetes)

Walking barefoot in public areas, like fitness studios, locker rooms, spas and swimming pools can increase the likelihood of contracting a fungal infection.

## How can I prevent toenail fungus infections?

While it isn't possible to eliminate the possibility of infection, there are steps you can take to reduce your chances of infection and reoccurrence.

- **Keep feet clean and dry**
- **Avoid nail polish and acrylic nails (these prevent air from reaching the surface)**
- **Avoid walking barefoot in public showers, pools and locker rooms**
- **Change shoes and socks frequently**
- **Keep nails clipped short and straight across**
- **Wear well-fitting socks and shoes made of breathable materials**
- **Disinfect clippers and other instruments used to treat nails**

## What are the psychological and social impacts of toenail fungus infections?

Toenail fungus infections can be emotionally distressing and have a negative effect on quality of life. In a survey conducted by Leger Marketing, 50% of the Canadians surveyed said they avoided going barefoot or wearing sandals because of how their toenails look.

Many sufferers feel extremely self-conscious and embarrassed about their nails' appearance especially during the summer when they are more visible.

**1 in 5**   
Canadians have or have had a toenail fungus infection

## Do you have a toenail fungus infection?

Toenail fungus infections are contagious and can cause pain, discomfort and mobility issues and may lead to serious complications. If you have the following symptoms, it's advisable to consult a doctor.

- Toenails that are brittle and crumbly
- Yellow, white or brown nail discoloration
- An accumulation of debris under the nail
- Toenails that become thicker

## How are toenail fungus infections diagnosed?

Temporary changes in how your nail looks shouldn't be a cause for alarm. However, if you notice a change in the appearance of your nail that lasts for longer than two weeks, speak to your doctor.

He or she will perform a physical exam, may take a sample for testing or refer you to either a dermatologist who specializes in treating skin, hair and nails or a podiatrist specializing in conditions affecting the feet.

A toenail fungus infection will not go away on its own.



## How are toenail fungus infections treated?

While toenail fungus infections won't go away on their own, a number of treatment options are available. The kind of treatment or combination of treatments will depend on the severity of your infection. Your doctor is the best person to treat this condition. Physician administered or prescribed treatments for toenail fungus infections are divided into three categories:

### 1. Topical Treatments

Topical treatments are generally applied directly to the affected nails and have a local effect, meaning that they act against the fungi in the nail and nail bed. Topical treatments are often used to treat mild to moderate toenail fungus infections.

Because topical treatments are absorbed by the body in smaller quantities, they interact less with systemic medications (oral, parenteral) being taken. Topical treatments are much less likely to have severe adverse effects, and their side-effect are usually mild and restricted to the area where the medication is applied.

### 2. Systemic or Oral Treatments

Oral treatments have a systemic effect, meaning the blood stream carries the medication to the nail bed, without needing to bypass the tough nail plate. For severe toenail fungus infections that affect the nail root or matrix, oral treatments will often be required.

Because they absorb systemically, oral treatments can interact with other medications and can be toxic to the liver, so liver function needs to be monitored while taking oral antifungal medications.

### 3. Physical and Light Treatments

Parts of or the entire infected nail can be removed so that topical treatments can be applied directly to the affected part of the nail or nail bed. The procedure can be done in your physician's office. Lasers are a relatively new area where there may be potential for treating fungal infections but evidence suggests that laser treatment alone is not very effective and may need to be used in combination with other therapies.

Available oral and topical prescription treatments for toenail fungus infections include:

Brand Name	Available in Canada	Form	Liver Toxicity Potential	Drug Interactions
JUBLIA™	2014	Topical	NO	N/A*
LAMISIL®	1993	Oral	YES	YES
PENLAC™	2004	Topical	NO	N/A*
SPORANOX®	1993	Oral	YES	YES

\*Studies have not been done

In addition to prescription treatments there are also over-the-counter remedies available for use that do not need to be prescribed by a doctor. Common side effects can include minor irritation

to the skin next to the affected nail as well as harmless discoloration (whitening) of the affected nail. For additional details on prescription and non prescription treatment options please visit [www.nailfungus.ca](http://www.nailfungus.ca).

## What should I expect from treatment?

While most prescribed treatments are effective, curing a fungal infection takes time. A nail fungus infection will not clear until a new healthy nail, which is fungus free, replaces the damaged nail. As nails grow slowly, it can take 12 to 18 months for toenails to become clear, even when the medication is working.

Be patient and stick to the medication prescribed by your doctor. This will help you prevent a recurrence and lower the risk of transmitting the infection to others.

## For more information visit [nailfungus.ca](http://nailfungus.ca)

The information contained in this brochure is not a substitute for a call or visit to your physician. You are encouraged to consult with your physician if you suspect that you might have a toenail fungus infection.

This guide has been made available as a resource to enhance knowledge and information on toenail fungus infection.



Your Quick Guide to Toenail Fungus Infections has been endorsed by the Canadian Skin Patient Alliance

