

Fungal Nail Infections

Fact Sheet



A fungal nail infection, medically referred to as onychomycosis, describes the infiltration of a toenail by a living fungus. This causes a change in the appearance of the toenail as the infection grows. Up to 50% of all abnormal changes to the appearance of toenails are caused by fungus and around 10% of adults suffer from fungal nail infections.

Fungus, or fungi (plural), are microscopic and so are invisible to the human eye - until they start infecting the nail and causing symptoms. Fungal nail infections are caused by a group of fungi called **dermatophytes**. They grow and survive by feeding on keratin - a protein that is present in your nails.

What are the symptoms of fungal nail infections?

The symptoms you see are a result of the byproducts of the fungus eating away at the keratin in the nails. This causes the nails to appear:

- Brittle
- Crumbling or flaky
- Thickened
- White/yellow/brown discolouration
- Worm-eaten appearance

You may also develop **whitish streaks or spots in the nail**, and the nail may begin to come away from the nail bed. An **odour** may also develop.

How are fungal nail infections caused and spread?

Fungus spreads through spores that move through the air, as well as through direct contact. For an infection to occur, the fungus must come in contact with the nail and the infection must take hold without the body's immune system clearing the infection first. Certain conditions make people more susceptible to infection. These include:

- Poor circulation
- Increased age
- A compromised immune system
- Previous injury to the toenails
- Family history of infection
- Diabetes

Because fungus thrives in warm, moist, and dark environments and doesn't require direct sunlight, **wearing closed in footwear, thick socks, and having sweaty feet** creates the ideal environment for fungus to grow. It also means that places such as **gyms, saunas, public pools, showers and nail salons** also create an environment where the fungus can easily spread from foot to foot.

Caring for fungal nail infections at home

There are various treatment options for fungal nail infections currently available, including:

- Topical antifungal creams and lacquers
- Oral medications
- Cold laser therapy
- Hot laser therapy

Of these, topical antifungal creams and lacquers are the only solutions available for purchase by the general public. These are a good starting point if this is your first fungal nail infection. Always read the instructions carefully, ensure you are eligible to use the medication, and use as instructed.

When to see a Podiatrist & how they can help

If you've tried a topical solution without success and want another solution, or would like a recommendation on the best product to use prior to starting, we recommend that you book in with your Podiatrist. They will be able to confirm that the change in the appearance of your nail is from a fungal nail infection and is not a result of a different condition like psoriasis, for example.

They'll be able to assess the severity of your fungal nail infection and document the appearance to track your progress. Your nails can also be cut back and filed down using an electric burr to remove more of the infected and unsalvageable nail.

Often, treating a fungal infection means not only treating the infected nails but also disinfecting your environment (shoes, socks, showers, surfaces, all other non-infected nails) to reduce the risk of re-infection. Your Podiatrist will discuss these best-practice principles to give you the best chance of successfully overcoming your fungal nail infection.

Disclaimer: This document is an informative guide only and is not a tool for diagnosis or a replacement for a consultation with a Podiatrist. If you suspect that you have a fungal nail infection or are worried about the appearance of your toenails, we recommend that you see your Podiatrist for an accurate diagnosis and an appropriate management plan. Referrals are not required to see a Podiatrist.