

Fungal infections and Breastfeeding

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If you have any questions about this information, you can contact the Drugs in Breastmilk team through their [Facebook page](#) or on druginformation@breastfeedingnetwork.org.uk.

Fungal skin infections are usually mild and can generally be treated with over-the-counter topical preparations, such as creams, gels, washes, ointments or sprays.

Fungal nail infections are not serious, although they can take a long time to treat. Topical preparations can usually be used while breastfeeding.

You can continue to breastfeed as usual when you have a fungal infection.

Introduction

Fungal infections can be itchy and irritating. They are common, affecting up to 2 in 10 people at some point in their life. They are usually minor in nature despite how annoying they can feel. Fungal infections are not a reflection on personal hygiene. They mostly affect the skin, hair, and nails and less commonly the mouth and vagina.

Treatments will depend on your symptoms, as well as clinical circumstances according to local protocols. Fungal infections should be diagnosed by an appropriately trained healthcare professional. If your local pharmacist is unsure what is affecting you, they will refer you to your family doctor for assessment. We need to reserve the use of antifungal medicines for appropriate infections, like we protect antibiotics for bacterial infections, to preserve their effectiveness and avoid increasing antifungal resistance which is a growing concern worldwide.

This factsheet will cover four main types of fungal infection:

1. fungal skin infections
2. oral candidiasis
3. fungal nail infections
4. seborrhoeic dermatitis

To talk to a mum who knows about breastfeeding call the National Breastfeeding Helpline 0300 100 0212

Calls to 0300 numbers cost no more than calls to UK numbers starting 01 and 02 and will be part of any inclusive minutes that apply to your provider and call package.

1. Fungal Skin Infections

Fungal skin infections are common, more so in the summer months when we are hot and sweaty because that creates a perfect environment for fungal infections to grow. Common types of fungal skin infection include tinea, pityriasis versicolor and candidiasis.

Tinea fungal skin infections

Contagious fungal infections of the body are often known as tinea. They are caused by types of fungus called dermatophytes. Tinea infections can be shared from person to person.

Tinea infections are often called ringworm. They are also named according to their location, including:

- Tinea pedis- fungal infection of the foot, known as athlete's foot
- Tinea unguium- fungal infection of the fingernails and toenails, and the nail bed
- Tinea corporis- fungal infection of the arms, legs, and trunk
- Tinea cruris- fungal infection of the groin area, often called jock itch
- Tinea manuum- fungal infection of the hands and palm area
- Tinea capitis- fungal infection of the scalp and hair, also known as scalp ringworm, less common in adults.
- Tinea faciei- fungal infection of the face
- Tinea barbae- fungal infection of facial hair

Infections commonly referred to as [ringworm](#) are not caused by a worm. Tinea corporis and tinea pedis (often referred to as ringworm and [athlete's foot](#)) are the most common fungal infections.

Avoiding sharing a tinea skin infection- To avoid spreading a tinea infection it is important that you:

- × Do not share towels
- × Do not itch or scratch a fungal rash or infected area
- ✓ Wash your hands after touching an infected area
- ✓ Wash your bedding regularly
- ✓ Thoroughly dry your skin after washing, use a separate towel for the infected area to avoid spreading it
- ✓ If you have athlete's foot, change your socks every day
- ✓ If you have athlete's foot, choose cotton socks if possible

Pityriasis versicolor fungal skin infection

[Pityriasis versicolor](#) is another type of fungal skin infection. It is caused by a different fungus known as *Malassezia*, which is part of normal skin flora in more than 90% of adults. Pityriasis versicolor is a common infection that can cause patchy discolouration of your skin rather than the commonly seen "ring" caused by ringworm or tinea corporis. The discolouration may be hypopigmented (lighter than your usual skin colour) or hyperpigmented (darker than your usual skin colour), varying in colour from pink to brown or red. Conditions that allow *Malassezia* to grow to the point it can become an infection include warm, humid environments, hyperhidrosis (excessive sweating), occlusive dressings (dressings that aren't breathable), tight clothing, ointments, or creams, malnutrition, immunodeficiency or immunosuppression. Most infections of pityriasis versicolor happen in healthy people.

For more information on pityriasis versicolor, see the British Association of Dermatologists [Skin Health Info-pityriasis versicolor](#) factsheet.

Candidiasis fungal skin infection

Candidiasis is another type of fungal infection, caused by *Candida albicans*. *Candida* is a commensal yeast-like fungus. Commensal fungi live on our bodies without benefit or harm to us. They are part of our normal body flora. *Candida* is commonly found within the respiratory, gastrointestinal and female genital tracts without causing infection. It can also be found on the skin of healthy people in low numbers (without infection).

Candida yeast can be freely passed back and forth between individuals, without causing infection. *Candida* will only multiply and overgrow, causing a candidiasis infection, in the right environment. This means that although *Candida* yeast can be passed between individuals, a **candidiasis infection is not contagious** (unlike tinea fungal infections) and is not expected to be passed from person to person ([NHS](#), BASHH).

The skin acts as a barrier and the immune system prevents widespread infection from *Candida* in healthy people. *Candida albicans* cannot infect the skin of the nipple or areola, or deeper breast tissues in healthy people as these environments are not right for overgrowth of *Candida* leading to candidiasis.

Candidiasis infections include:

- Intertrigo (skin fold inflammation) – this most commonly occurs in the groin, under the breasts and in the arm pits. It may also affect the inside of the elbow, tummy button, perineum, between the fingers or toes, neck creases and folds of the eyelids. Intertrigo is skin inflammation caused by friction in skin folds. The moist, damaged skin associated with intertrigo is the perfect environment for various bacterial or fungal infections to take hold. *Candida* is the most common fungus associated with intertrigo fungal infections.
- Oral candidiasis (infection of the oral mucosa/ mouth). See section below on oral candidiasis for more details.
- Genital infections, including vulvovaginal candidiasis. See our factsheet on [Vaginal Thrush and Breastfeeding](#) for more information on vulvovaginal candidiasis.
- Chronic paronychia (infection around the nail). See section on fungal nail infections below for more details.

Fungal Skin Infection Treatments

Treatments will vary and are usually available over the counter. They are each marketed for a specific type of infection. You can ask your community pharmacist about your symptoms, and they can support you to choose the right treatment for you. The NHS website also discusses [antifungal medicines](#).

The cream treatments discussed below can cause sensitivity reactions and side effects. It's advisable to avoid them coming into direct contact with your child to prevent accidental contact reactions or ingestion by licking in preparations that are not safe to swallow.

Treatments should be reserved for fungal skin infections. If you're not sure if you have a fungal skin infection, your local pharmacist can help. Oral antifungal medications may be prescribed in line with local guidelines for more widespread infections, or if you are immunocompromised. Please contact the Drugs in Breastmilk team for more information on the compatibility of oral antifungal medicines when breastfeeding or if you're unsure.

- ✓ **Clotrimazole (as own brand preparations and Canesten®)**- Available over the counter to treat tinea infections, candidiasis, intertrigo and small areas affected by pityriasis versicolor.
- Clotrimazole preparations are compatible with breastfeeding.

- ✓ **Miconazole (as Daktarin® preparations)**- Available over the counter for fungal skin infections.
- Miconazole is compatible with breastfeeding.

Ketoconazole topical treatments:

- ✓ **As Daktarin Gold® cream**- Available over the counter for fungal skin infections including athlete's foot, jock itch and intertrigo.
- ✓ **As Nizoral® Cream**- Available by prescription only, for small areas affected by pityriasis versicolor.
- ✓ **As own brand medicated shampoo, Nizoral® Shampoo and Dandrazol® Shampoo**- Available over the counter, ketoconazole medicated shampoo may be used to treat pityriasis versicolor.
- Ketoconazole topical treatments are compatible with breastfeeding.
- ✓ **Terbinafine topical (as Lamisil® preparations)**- Available as a cream or topical solution over the counter to treat athlete's foot.
- Topical terbinafine cream for athlete's foot is compatible with breastfeeding.

2. Oral Candidiasis Infections

Oral candidiasis, also known as oral thrush, is caused by *Candida*. Symptoms include red areas in the mouth with white patches. You may experience cracks in the corner of your mouth, an unpleasant taste in your mouth/ difficulty tasting things in the usual way or your mouth may be sore, causing difficulty eating and drinking.

Oral candidiasis is not contagious. It's less common in healthy adults, but you may experience an infection if you're taking a long course of antibiotics or if you use steroid asthma inhalers. If you think your oral candidiasis is caused by your steroid inhaler, your respiratory healthcare professional at your GP practice will be able to review your treatment and make changes or suggestions to prevent this from recurring. You can find more information on oral candidiasis on the [NHS website](#).

Oral Candidiasis Treatments

Usually, your pharmacist can help you choose the right treatment for you if you think you have oral candidiasis.

Currently, there is a supply problem with the usual over the counter treatment, Daktarin® Oral Gel, which contains miconazole. This supply problem is expected to last until 2026. During this time, your GP practice will be able to prescribe an alternative such as nystatin, which is available by prescription only.

- ✓ **Nystatin oral suspension- (Available as nystatin, Nystan®)**- This prescription medicine is applied in your mouth.
 - Nystatin is not absorbed through your stomach into your system so cannot reach your milk.
 - You can continue to feed your baby as usual while using nystatin oral suspension.

- ✓ **Miconazole Oral Gel- (Available as Daktarin® Oral Gel)**- miconazole oral gel is available to purchase over the counter and is suitable for use from the age of 4 months.
 - Miconazole is poorly absorbed when taken orally and unlikely to reach your milk in any significant quantities.
 - You can continue to feed your baby as usual while using miconazole oral gel.
 - See our factsheet on [Miconazole Gel and the Breastfed baby with oral Thrush \(Candida\)](#) for information on oral candidiasis infections in babies and children.

3. Fungal Nail Infections

Fungal nail infections are not serious. They are often classed as a trivial "cosmetic" issue. However, some people can be distressed by the changes in their nail due to discolouration, thickening and distorted shape caused by the infection.

Fungal nail infection, also known as onychomycosis, can involve any part of the nail. Toenails more likely to be affected than fingernails.

Fungal nail infections are caused by dermatophytes in around 90% of cases. Less commonly, non-dermatophyte moulds and yeasts such as *Candida* are involved. Treatment can take a long time, often up to a year to fully clear a fungal toenail infection. Fingernails usually take less time to treat.

For more information, the NHS website discusses [fungal nail infection](#).

Fungal Nail Infection Treatments

Fungal nail infection treatments fall into two types, topical and oral. Topical treatments are available over the counter in your local pharmacy, while oral treatments are prescription only medicines. Topical treatment success is low, at between 15-30% clearance rate. They are poorly absorbed through the nail, so considered compatible while breastfeeding.

- ✓ **Amorolfine 5% nail lacquer** is available to purchase over the counter.
 - Amorolfine is used in early, limited, or superficial dermatophyte or *Candida* nail infection.
 - Amorolfine nail lacquer can be used whilst breastfeeding.

- ❖ **Oral terbinafine 250mg tablets-** Terbinafine tablets are a prescription only medicine usually supplied when nail clippings confirm dermatophyte infection.
 - The amount of terbinafine that could be absorbed by your baby could be significant, particularly in newborns or premature infants.
 - Before and during treatment, you will require blood tests to check your liver function. This is because in rare cases terbinafine can affect liver function. Blood tests enable your healthcare professional to monitor you for any changes and to stop your treatment to protect your liver if necessary.
 - It is unlikely you will be able to access the same monitoring for your baby if you are taking oral terbinafine tablets.
 - Alternatives are preferable due to the lack of monitoring available for your baby and lack of evidence of use while breastfeeding.
 - ✗ Avoid terbinafine tablets while feeding newborn or premature infants.
 - Contact the DiBM team for more information if you have been advised you need terbinafine tablets.

4. Seborrhoeic Dermatitis

Seborrhoeic dermatitis is a common skin condition occurring in areas with many sebaceous glands including the scalp, the sides of the nose, eyebrows, and chest. It's usually seen as red patches with yellowing scales. Seborrhoeic dermatitis is not contagious. The causes of it are not fully clear, but it may be a reaction to a yeast called *Malassezia*, which is found on the skin. When present on the scalp, seborrheic dermatitis is often known as dandruff in adults, or cradle cap in babies. For more information, you can visit the [NHS Dandruff page](#). The British Association of Dermatologists discuss [Seborrhoeic dermatitis](#) in more detail too.

Seborrhoeic Dermatitis Treatments

- ✓ **Hydrocortisone cream-** A short course of a mild steroid cream may be used to treat inflammation alongside antifungal treatment.
 - Hydrocortisone cream is compatible with breastfeeding.
- ✓ **Steroid scalp applications and dandruff shampoos-** these are not antifungal but can usually be used while breastfeeding.
 - Common steroid scalp applications contain betamethasone valerate, mometasone or clobetasol propionate. These are compatible with breastfeeding.
 - Some scalp applications contain **salicylic acid**, which helps the other active ingredients reach their target.
- ✓ **Salicylic acid** containing scalp applications are compatible with breastfeeding.
 - You should not use products containing salicylic acid on large areas of your body or for long periods whilst breastfeeding.
 - Avoid applying products containing salicylic acid to your breasts or other parts of your body that your child will come into direct contact with ([NICE](#), [Lactmed](#), [E-Lactancia](#)).
- ✓ **Ketoconazole medicated shampoo-** Available as own brand, Nizoral® Shampoo and Dandrazol® Shampoo.
 - Ketoconazole medicated shampoo may be used to treat body or scalp seborrheic dermatitis.
 - Ketoconazole is an antifungal agent which can be used as a shampoo/ body wash on the affected area while breastfeeding.
- ✓ **Ketoconazole cream-** Available on prescription as Nizoral® Cream.
 - Ketoconazole cream may be used to treat body or facial seborrheic dermatitis.
 - Ketoconazole cream is compatible with breastfeeding.
- ✓ **Clotrimazole cream-** Available as own brand or Canesten® Cream.
 - Clotrimazole cream may be used to treat body or facial seborrheic dermatitis.
 - Clotrimazole cream is compatible with breastfeeding.

- ✓ **Miconazole cream** – Available as Daktarin® Cream.
- Miconazole cream may be used to treat body or facial seborrheic dermatitis.
- Miconazole cream is compatible with breastfeeding.

Related fact sheets

[Vaginal Thrush and Breastfeeding](#)

[Miconazole Gel and the Breastfed baby with oral Thrush](#)

[Creams and Ointments Applied to the Skin](#)

[Eczema and Breastfeeding](#)

[Asthma and Breastfeeding](#)

[Patient information leaflets – what do they mean?](#)

Bibliography

- British National Formulary – <https://bnf.nice.org.uk/>
- Drugs and Lactation Database (LactMed®) - <https://www.ncbi.nlm.nih.gov/books/NBK501922/>
- Specialist Pharmacy Service: <https://www.sps.nhs.uk/>
- NHS medicines website: <https://www.nhs.uk/medicines/>
- E Lactancia website: <https://www.e-lactancia.org/>
- NICE Clinical Knowledge summaries: <https://cks.nice.org.uk/topics/>
- Hale T. W. Medications in Mothers Milk. www.halesmeds.com
- Dr Wendy Jones, Breastfeeding and Medication website: <https://breastfeeding-and-medication.co.uk/>
- [Fungal skin infection - body and groin | Health topics A to Z | CKS | NICE](#)
- [Candida - skin | Health topics A to Z | CKS | NICE](#)
- [Candida - oral | Health topics A to Z | CKS | NICE](#)
- [Candida - female genital | Health topics A to Z | CKS | NICE](#)
- [Fungal nail infection | Health topics A to Z | CKS | NICE](#)
- [Fungal skin infection - foot | Health topics A to Z | CKS | NICE](#)
- [Fungal skin infection - scalp | Health topics A to Z | CKS | NICE](#)
- [Pityriasis versicolor | Health topics A to Z | CKS | NICE](#)
- [Seborrheic dermatitis | Health topics A to Z | CKS | NICE](#)
- [British Association of Dermatologists \(bad.org.uk\): Fungal nail infections](#)
- [British Association of Dermatologists: Tinea Capitis](#)
- [Itraconazole - Drugs and Lactation Database \(LactMed®\) - NCBI Bookshelf \(nih.gov\)](#)
- [Terbinafine: Uses, Interactions, Mechanism of Action | DrugBank Online](#)
- [Terbinafine and breastfeeding. Are they compatible? \(e-lactancia.org\)](#)
- [Terbinafine - Drugs and Lactation Database \(LactMed®\) - NCBI Bookshelf \(nih.gov\)](#)
- [Hale's Medications & Mothers' Milk - TERBINAFINE \(halesmeds.com\)](#)
- [Terbinafine | Drugs | BNFC | NICE](#)
- [Clotrimazole Cream 1% - Summary of Product Characteristics \(SmPC\) - \(emc\)](#)
- [Daktarin 2% Cream - Summary of Product Characteristics \(SmPC\) - \(emc\)](#)
- [BASHH national guideline for the management of vulvovaginal candidiasis \(2019\)](#)
- [Prevalence | Background information | Fungal skin infection - scalp | CKS | NICE](#)
- [Fungal infections - GOV.UK](#)
- [Dermatophyte Infections | AAFP](#)
- [Diagnosis and Management of Tinea Infections | AAFP](#)
- [Diagnosis and Management of Common Tinea Infections | AAFP](#)
- [Tinea- PCDS clinical guideline UK](#)
- [Tinea corporis: an updated review - PMC](#)
- [On Commensalism of Candida - PMC](#)
- [Intertrigo - PCDS clinical guideline UK](#)
- [Seborrheic Eczema - PCDS clinical guideline UK](#)
- <https://www.skinhealthinfo.org.uk/condition/seborrheic-dermatitis/>
- [Scenario: Topical treatment | Management | Corticosteroids - topical \(skin\), nose, and eyes | CKS | NICE](#)
- [Interaction of Candida Species with the Skin - PubMed](#)
- SPS Medicines Supply Tool: <https://www.sps.nhs.uk/home/tools/>