

Hand Eczema Guide

Eczema Education Series



www.eczemahelp.ca

What is hand eczema?

Hand eczema, or hand dermatitis, describes any type of eczema that develops on the hands. It is commonly job-related and can be made worse by factors including frequent hand washing and exposure to chemicals. Hand eczema may require specific testing and treatments.

It may cause itchy, dry, scaly patches of skin that cracks and flakes. This can occur acutely, but may also be a condition referred to as chronic hand eczema (CHE) or chronic hand dermatitis (CHD). Hand eczema, and CHE can profoundly affect everyday living and one's quality of life.

Chronic hand eczema may not respond to traditional eczema management strategies such as frequent moisturizing, protecting the hands, and topical prescription treatments, and the appropriate treatment plan will depend on a number of factors.

Who does hand eczema affect?

Hand eczema occurs commonly among the following occupations:

- bricklayer
- mechanical industry worker
- hair dresser
- health care worker
- janitors and housecleaners
- florists
- food service industry workers
- agricultural workers

Hand eczema can happen to anyone, however, you are more likely to be affected if:

- you had similar skin problems, eczema, hay fever, or other allergies as a child.
- your hands get wet a lot, whether at home, work or with leisure activities.
- your job exposes your hands to irritating chemicals or very frequent hand washing and disinfection.
- you frequently wash your hands around the house or at work, which breaks down the skin's natural protective barrier.



What causes hand eczema?

Often, the cause is unclear; however there can be one or more conditions present. The three most common conditions related to hand eczema are irritant contact dermatitis, allergic contact dermatitis, and atopic dermatitis.

The most common is Irritant Contact Dermatitis. Repeated exposure to irritants such as water, soaps, detergents, solvents, degreasers, lubricants, oils, coolants, fiberglass dust, food products, metals, and plastics can inhibit the repair of the skin barrier.

What are the signs and symptoms?

- affects the fingertips and web spaces
- skin is dry and chapped, with areas of itchy, red, scaly, and swollen skin
- skin may sting or burn when in contact with irritants, and may eventually crack and bleed

The next most common is Allergic Contact Dermatitis. Common allergens include nickel, certain food additives and fragrances, and preservatives. Occupational allergens could include antibacterial soaps and solutions, organic dyes, rubber, plastic resins, and plants.

What are the signs and symptoms?

- soon after exposure, small blisters may appear with itchy, swollen, red skin
- later, the skin may dry out and with crusts, scales, and cracks
- prolonged exposure to the allergen can cause the skin to darken and it may become thick and leathery
- it may appear all over the hands and fingers, particularly on the inside of the hands and finger tips

Hand eczema can also be caused by Atopic Dermatitis, whereby skin in other areas of the body is also affected.

What are the signs and symptoms?

- intense itchiness
- acute skin lesions
- the condition is chronic
- skin is thickened

Speak with your doctor to get a diagnosis on your specific condition, and to talk about treatment options that are right for you.

How is hand eczema diagnosed?

Without proper diagnosis and treatment, hand dermatitis can persist and become chronic. It can often become disabling because it affects one's ability to perform at work and home. Additionally, hand dermatitis may interfere with sleep, cause emotional discomfort, and negatively affect interpersonal interactions.

A thorough history and physical examination is essential in helping to deduce the possible cause(s) of hand dermatitis. Medical, occupational and social history are important. It is often challenging to distinguish irritant contact from allergic contact dermatitis.

Patch Testing

Patch testing should be considered for all with chronic hand dermatitis. The gold standard method for diagnosis of allergic contact dermatitis is patch testing which is an office procedure, in which allergens are applied to the back.

Your doctor should strongly consider patch testing if:

- You have chronic hand dermatitis
- You are not able to manage your dermatitis
- Your dermatitis responds to treatment but flares immediately when you stop using your topical treatments

See your doctor!

The longer the condition goes undiagnosed and untreated, the more likely you are to suffer with chronic hand eczema.

What are the treatment options?

Self Care & Lifestyle Modification

Lifestyle modification and self care are the first line of defense. This includes:

Moisturizing and Gentle Cleansing

Use hand cleansers and moisturizers that are free of irritating ingredients and fragrances.

Moisturizing regularly will help to replenish skin moisture, and will help you to keep your eczema under control.

Apply a rich moisturizer immediately after bathing, hand washing, and anytime in between.

Choose moisturizers and cleansers that are suitable for the sensitive skin of eczema. Look for the ESC Seal of Acceptance on products at your local drugstore.



If your eczema has cleared up, and you are no longer using your prescription treatments, continue with a diligent moisturizing routine, which may help to prolong the period between flares.

Hand washing is destructive to the skin barrier and should always be followed by applying moisturizer. Hand sanitizers may be a helpful alternative to frequent hand washing, however avoid fragranced hand sanitizers, which may be irritating.

Lifestyle Modifications

- Where possible, avoid or minimize wet-work.
- Avoid excessive sweating and dry conditions which are sometimes triggers.
- Avoid scratching which worsens the condition and may cause cracks allowing bacteria to enter leading to infection. Sometimes applying cold compress to the area reduces itch. Keep fingernails short.
- Avoid the substance(s) causing the irritation or allergy. Avoiding all substances can be very difficult-if not impossible-especially if these substances are encountered at work. Using barrier cream, wearing gloves, and practicing glove hygiene is often helpful.
- Minimize contact with fruit juices, fruits, vegetables and raw meat while preparing food, or wear gloves.
- Protect hands by using cotton gloves as a liner under vinyl gloves.
- Shampoo and style hair while wearing vinyl gloves, if possible.
- Take off rings before wet-work or hand washing.
- Use emollients frequently to help restore normal skin barrier function. A thin smear of a thick barrier cream should be applied to all affected areas before work, and reapplied after washing and whenever the skin dries out.
- Stress triggers flare-ups in many people so reducing stress may be beneficial.



Topical Therapy

To treat inflammation, topical corticosteroids are commonly used. Use only as needed – that is, when your eczema is actively flaring. Prolonged use can cause thinning of the skin. Fearing side effects, patients more commonly use too little rather than too much.

If your response is unexpectedly slow, discuss the possibility of corticosteroid allergy with your doctor.

Pimecrolimus (Elidel[®]) and tacrolimus (Protopic[®]) may be helpful as an alternative to topical corticosteroids.

Phototherapy (Light Therapy)

Narrow-band UVB light and PUVA are helpful for their local immunomodulatory effect. Speak to your doctor about the possibility of Phototherapy as a treatment option. There are specific Phototherapy units that are used to treat the hands.

Antibiotics

Antibiotics are sometimes needed if infection develops, and most infections are caused by staph.



**Protect
your
hands!**

Oral Corticosteroids

Oral corticosteroids (e.g. Prednisone) may be effective in a short course for recurrent pomphylx and dyshidrotic hand dermatitis. Warning about serious side effects of prednisone must always be given.

Retinoids

Toctino® (alitretinoin) is an oral retinoid. A once daily treatment, it is available for patients suffering from severe symptoms that never go away completely or keep coming back even after using potent topical steroids. Research has demonstrated significant clinical improvement in patients with chronic hand eczema, especially for the variant known as hyperkeratotic dermatitis. Side-effects include headache and flushing.

Strict pregnancy prevention is required 1 month before, during, and for 1 month after treatment with alitretinoin for women of child bearing potential due to the teratogenicity of the product (the product can cause birth defects).

Speak with your doctor about finding a treatment plan that is right for you.

The Eczema Society of Canada is a registered Canadian charity dedicated to eczema education, providing support, raising awareness, and supporting research.



Eczema Society of Canada
Telephone: 1-855-ECZEMA-1
Email: info@eczemahelp.ca

www.eczemahelp.ca

This guide was generously reviewed by:
Dr. Neil H. Shear
Professor & Chief of Dermatology
University of Toronto Medical School

The information contained in this guide offers current opinions from recognized authorities, but does not dictate an exclusive course of treatment. Persons with questions about a medical condition should seek the advice of a qualified physician.