

Contact dermatitis

Contact dermatitis is a rash caused by your skin reacting to a substance it has come into contact with. You may need patch testing to identify the causative substance. A steroid cream or ointment will usually clear the rash. However, the long-term treatment is to avoid contact with the thing that's causing it.

What is dermatitis?

Dermatitis just means inflammation of the skin. Dermatitis is also called eczema. It causes red, itchy skin which may also blister. Dermatitis is common. There are several types of dermatitis.

However, dermatitis is generally grouped into two main types:

- **Dermatitis caused by a problem from within the body.** For example, atopic eczema (atopic dermatitis) is a common condition which runs in families. If you have atopic eczema you are born with a tendency for your skin to become inflamed. Various parts of the skin tend to flare up with inflammation from time to time. [See the separate leaflet called Atopic Eczema for more details.](#)
- **Dermatitis caused by a substance from outside the body.** This typically causes patches of inflammation on areas of skin which have come into contact with the allergens. This is called contact dermatitis. If you avoid the offending substance, the skin inflammation should go away.

The rest of this leaflet is only about contact dermatitis.

What is contact dermatitis?

Contact dermatitis is any kind of dermatitis caused by substances coming into contact with your skin.

What causes contact dermatitis?

There are two types of contact dermatitis – irritant and allergic.

Irritant contact dermatitis

This type of contact dermatitis is caused by direct contact with a substance which irritates the skin.

It most commonly affects the hands. Irritant substances are those that can cause inflammation in almost everyone if they are in contact for long enough, often enough and in strong enough concentration.

For example:

- Water. Hands being in water for long periods of time is one of the most common causes. It is more likely if the water is hard, chalky or contains a lot of chlorine.
- Detergents (washing-up liquid, soaps, bleach, etc). People who do a lot of cleaning are prone to irritant contact dermatitis.
- Solvents (such as petrol), oils and other chemicals used in various places of work.
- Acids and alkalis, including cement.
- Powders, dust and soil.
- Certain plants (for example, ranunculus, anemone, clematis, hellebore, mustards).

You can develop irritant contact dermatitis quickly from a single exposure to a strong irritant. For example, from contact with a strong chemical in a work situation.

However, you may also develop irritant contact dermatitis because of repeated exposures to weaker irritants. For example, from a detergent that you use when washing up dishes regularly.

There is often a vicious circle. A patch of skin may become sore after being in contact with an irritating substance. This causes some skin damage. Once damaged, the skin is more easily affected by irritants. So, further contact, even with small amounts of the substance, may cause further inflammation and damage and so on.

Allergic contact dermatitis

This occurs when your immune system reacts against a specific substance. The substance is then called an allergen. You only need a small amount of allergen in contact with your skin to cause the rash.

You are not born with this type of allergy - you must have previously come into contact with the allergen which has 'kick-started' your immune system. Once sensitised, your skin reacts and becomes inflamed when it comes into further contact with the allergen. This is why you can suddenly develop a skin allergy to something you have come into contact with many times before. It is not clear why some people have allergic reactions to some substances and most people do not.

Many substances can cause allergic contact dermatitis. Common ones include:

- Nickel - this is the most common cause. Nickel occurs in many types of metal - for example, jewellery, studs in jeans and other clothes, bra straps, etc. So it is common to develop an itchy rash on the skin next to such things.
- Cobalt - traces of this metal may be found in some jewellery.
- Chromate - a metal which may be found in cement.
- Cosmetics - particularly perfumes, hair dyes, preservatives and nail varnish resins.
- Additives to leather and rubber (in shoes, clothes, etc).
- Preservatives in creams and ointments.
- Plants - the most common culprits being chrysanthemums, sunflowers, daffodils, tulips and primula.

Sometimes the cause is not clear and you may need tests to find the cause (see below).

Photocontact dermatitis

Photocontact dermatitis is a skin reaction that may occur when certain chemicals are applied to the skin and then exposed to the sun. Photocontact dermatitis may occur with some sunscreens, coal tar products, fragrances, and some insecticides and disinfectants.

[Seborrhoeic dermatitis](#) is a common, chronic, or recurring form of eczema/dermatitis but it is not a form of contact dermatitis. It mainly affects areas with many sebaceous glands, such as the scalp, face, and trunk.

What does contact dermatitis look like?

The following photo shows a case of contact dermatitis from sensitivity caused by a bandage used to cover a burn:



By Digitalgadget at English Wikipedia, Public domain, via Wikimedia Commons

This photo shows a close-up view of a skin reaction to contact with poison ivy:



By Britannic124 (Own work), [CC BY-SA 3.0](#), via [Wikimedia Commons](#)

Contact dermatitis symptoms

Irritant contact dermatitis

The main symptoms are redness, burning, stinging and soreness of affected areas of skin. The onset of the skin reaction is usually within 48 hours of coming into contact with the irritant. Strong irritants can produce immediate reactions, whereas mild irritants require longer or repeated exposure to cause a reaction. The symptoms only occur on areas of skin exposed to the irritant.

Allergic contact dermatitis

The main symptoms are redness, itch and scaling of affected areas of skin. There is often a delay of many hours to several days before symptoms develop following contact with the sensitising object or chemical (allergen). The site of the rash and skin symptoms is mainly where the contact has been. For example, eyelids and cheeks if the allergy is to a cosmetic. However, as it is a true allergy, **other areas of skin that were not in direct contact with the allergen may develop a rash**. So for example you might be allergic to the nickel in a belt buckle, but the skin on your face could get red.

How long does contact dermatitis last?

The rash caused by contact dermatitis can develop within minutes to hours of exposure, and it can last 2 to 4 weeks. However the rash may become more severe and last much longer if you are unable to avoid the irritant causing contact dermatitis.

Is contact dermatitis contagious?

Contact dermatitis isn't contagious. However a possible complication of contact dermatitis is skin infection by bacteria or fungi. Most infections can be treated with antibiotics or antifungal medication. Bacterial infection may lead to a condition called [impetigo](#), which is very contagious.

Can you have different types of contact dermatitis at the same time?

Yes. For example, you may be born with a type of eczema such as [atopic eczema](#). Your job may involve frequent use of a solvent which may cause an irritant contact dermatitis. In addition, you may also develop an allergy to nickel. You may then get patches of inflammation over jean studs, or if you wear jewellery that is made of that metal, etc.

Testing for contact dermatitis

In many cases no tests are needed, as it is often clear which substance has caused the rash. However, sometimes it is not clear what is causing the rash. Or, it may be a substance which is an additive to various things and you cannot pinpoint what it is. This is where patch testing may be advised.

Patch testing

Patch testing (allergy testing) helps to find the cause of allergic contact dermatitis. You need to be referred to a skin specialist (dermatologist) for patch testing. Small amounts of various substances that may be causing the rash will be placed on to your skin. This is usually done on the skin of your back, in sets of 10. The skin is then covered with an adhesive dressing.

After two days the dressing is removed and the skin is examined to see if there is a reaction to any of the tested substances. The skin is also usually examined again after a further two days in case you have a delayed reaction to any substance. Sometimes the skin may be examined again a week after the initial substances were put on your skin.

If no skin reaction occurs on patch testing then this can also be helpful to rule out allergic contact dermatitis as a cause of your skin problem. [See the separate leaflet called Patch Testing for Contact Dermatitis for more details.](#)

Contact dermatitis treatment

The main treatment is to avoid the offending substance. However, your skin may also be sore, itchy and scaly so various initial treatments may be suggested to help clear your symptoms.

Moisturisers (emollients)

If the inflamed or dry skin is not too bad then just using a [moisturiser](#) frequently may be all that you need until the inflammation settles and the rash clears. Soap substitutes may also be suggested. Instead of using soap, you may be advised to use a moisturising cream such as aqueous cream.

Topical steroids

[Topical steroids](#) are creams, ointments and lotions which contain steroid medicines. They work by reducing inflammation in the skin. They come in different brands and strengths. As a rule, you should use the mildest one that works. You can buy a mild steroid cream (hydrocortisone) from pharmacies, without a prescription. If a mild one does not work, a stronger one can be prescribed by your doctor.

Topical steroids are usually applied once or twice daily in a thin layer on the affected area until the inflammation has gone. This may take up to a couple of weeks or more. Once the inflammation has gone, stop the topical steroid. You should wait for 30 minutes after you have used a moisturiser before you apply a steroid cream.

Short courses of topical steroids (less than four weeks) are usually safe and usually cause no problems. Side-effects may develop if topical steroids are used for long periods, or if short courses are repeated often. The main concern is if strong steroids are used on a long-term basis. Most people with contact dermatitis only need a short course. [See the separate leaflet called Topical Steroids for Eczema for more details.](#)

Other treatments

An [antibiotic](#) may be prescribed if the inflammation becomes infected. This is uncommon in most bouts of contact dermatitis. Rarely, a course of steroid tablets is needed if you have a large and severe area of skin inflammation.

Also rarely, if steroid treatment does not clear contact dermatitis then other treatments may be suggested. These would be advised by a skin specialist. Options may include [tacrolimus cream](#) and treatment with medicines such as [azathioprine](#), or [ciclosporin](#). Ultraviolet (UV) light exposure, sometimes helped by taking a medicine called psoralen, is also sometimes recommended. This is known as psoralen combined with ultraviolet A (UVA) treatment (PUVA).

What is the long-term treatment for contact dermatitis?

Once the inflammation has settled, the main aim is to prevent it from happening again.

Avoid the cause

If the offending substance can be identified then if you can avoid it, the dermatitis will usually clear and not return. (There are some exceptions. For example, irritant contact dermatitis caused by chromium in cement can sometimes lead on to a long-term skin rash – even if the contact with chromium stops.)

Avoiding an irritant or allergen may be easier said than done. For example:

- Some substances which cause allergic contact dermatitis are additives to everyday things such as leather shoes and clothes, rubber, metals, cosmetics, etc. They may be difficult to avoid fully. However, your doctor or skin specialist can give you advice on where the substance is likely to occur and how to avoid it.
- For some people, their job involves using substances that can cause irritant contact dermatitis. Unless you change your job, you may not be able to avoid the substance completely. Good hand care (described below) may help.

Hand care

About 3 in 4 cases of contact dermatitis involve the hands. Many cases are due to irritants (rather than allergies) from chemicals or other substances used at work. To help prevent contact dermatitis of the hands, get into a routine of good hand care:

- Don't keep your hands in water for very long.

- Use protective gloves wherever possible when working with chemicals, detergents, etc.
- Use a mild skin cleanser rather than soap to clean your hands.
- Dry your hands thoroughly after washing.
- Use lots of moisturising cream and apply it frequently. This helps to keep the skin on your hands supple and to prevent chapping.

Intermittent use of topical steroid

Topical steroids will ease a flare-up of symptoms but are not a long-term cure for contact dermatitis. The only long-term cure is to identify the cause and to avoid it.

However, it may be useful to have a topical steroid in your home medicine box. You may develop a flare-up of symptoms if you accidentally come into contact with a substance you are allergic to. For example, if you use a new cosmetic or some jewellery which you did not realise contained your allergen. A short course of topical steroid will then be useful to ease the rash and inflammation.

Contact dermatitis and work

Contact dermatitis is often related to the job you do. If this is the case, it is called occupational contact dermatitis. You may come into contact with substances that cause it, or have your hands in water a lot. Employers have a duty to keep the risk of you getting skin problems at work low. They should make sure your exposure to all possible causes is kept as low as possible. They should also provide gloves or protective clothing where appropriate. They should provide hot and cold water and soap substitutes where appropriate. They should teach you about the harmful substances involved in your work and how to protect yourself.

If your doctor diagnoses contact dermatitis due to your work, you or your doctor should tell your employer. They have to report this to the Health and Safety Executive (HSE). In the rare case of you being significantly disabled by your skin condition, you should contact the Department for Work and Pensions (DWP). You may be entitled to a special kind of disability benefit (Industrial Injuries Disablement Benefit). This is unusual; however, some people do find they have to change jobs because of their contact dermatitis. So it can have quite an effect on your life.

Further reading

- [Work-related skin disease](#); Health and Safety Executive (HSE)
- [British Association of Dermatologists' guidelines for the management of contact dermatitis 2017](#); British Association of Dermatologists (2017)
- [Dermatitis - contact](#); NICE CKS, July 2018 (UK access only)
- [Corticosteroids - topical \(skin\), nose, and eyes](#); NICE CKS, June 2022 (UK access only)
- [Oosterhaven JAF, Schuttelaar MLA](#); Responsiveness and interpretability of the Hand Eczema Severity Index. *Br J Dermatol.* 2020 Apr;182(4):932-939. doi: 10.1111/bjd.18295. Epub 2019 Sep 5.
- [Johansen JD, Bonefeld CM, Schwensen JFB, et al](#); Novel insights into contact dermatitis. *J Allergy Clin Immunol.* 2022 Apr;149(4):1162-1171. doi: 10.1016/j.jaci.2022.02.002. Epub 2022 Feb 18.

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Authored by:	Peer Reviewed by: Dr Toni Hazell	
Originally Published: 19/11/2023	Next review date: 30/01/2023	Document ID: doc_4243

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