

Contact dermatitis

What is dermatitis?

Dermatitis or eczema are two words used to describe a common complaint which produces redness, flaking and cracking of the skin, sometimes with small water blisters. It is very itchy and may at times feel hot and sore. Repeated scratching and rubbing leads to thickening of the skin with a dry, wrinkled appearance.

Are there different types of dermatitis?

Yes. There are several different types of dermatitis and these have different causes.

What is contact dermatitis?

Contact dermatitis is a dermatitis that is caused by something in the outside world that comes into contact with the skin. The offending substance may come into direct contact with the skin or sometimes is carried in the air. If all further contact with this substance is avoided the dermatitis should get better.

The two main types of contact dermatitis - irritant and allergic

Irritant contact dermatitis - is a very common skin problem, which affects many people at some stage of their life. It is caused by contact with substances that damage the outer layers of the skin and typically affects the hands. One of the commonest situations giving rise to irritant contact dermatitis is repeated contact with mildly irritant substances such as water and detergents (washing-up liquid, soaps, etc.). Other irritant substances include solvents, e.g. petrol, cleaning chemicals, oils and metalworking fluids used in industry. The skin problem often starts as chapping, soreness and redness and, if untreated, leads to a stubborn dermatitis. Once damaged, the skin is no longer a barrier against the outside world and can easily be irritated further. This sets up a vicious circle that can be difficult to break.

People doing certain kinds of work are more at risk of getting irritant contact dermatitis than others. This includes jobs where the hands are frequently wet, such as hairdressing, catering, cleaning, housework and nursing. Irritant contact dermatitis may affect people of all ages but is commonest in adults during their working years.

People who have or have had bad atopic eczema are more vulnerable to irritant contact dermatitis, as their skin is less resilient to damage by irritant substances.

Allergic contact dermatitis - is less common than irritant contact dermatitis. It happens because the body's immune system reacts against a specific substance or *allergen* that has previously come into contact with the skin. People are not born with this type of allergy but develop it during life, usually in adulthood. Allergic contact dermatitis usually affects only a minority of people who come into contact with the allergen. What makes an allergy develop at a certain time is unknown and why one person gets affected while others don't is also unclear.

The commonest cause of allergic contact dermatitis in women is nickel, which is found in metallic jewellery. About one in ten women have this type of allergy and typically develop itchy sore red patches under inexpensive earrings after wearing them. Other things that commonly cause allergic contact dermatitis include perfumes, rubber additives, leather additives and

preservatives in creams and cosmetics. Allergies can also develop to medicated creams and ointments and sunscreens.

Can a person have more than one kind of dermatitis?

Yes, a person can actually suffer from more than one type of dermatitis. For example, someone with atopic eczema (i.e. constitutional eczema) who works as a hairdresser could get skin irritant on their hands from frequent shampooing (i.e. irritant contact dermatitis) and also develop an allergy to hair dyes (i.e. allergic contact dermatitis).

What are patch tests?

Patch testing is a special investigation carried out by dermatologists in hospital. It helps to find out if a person's dermatitis is caused by contact allergy and identifies what substance(s) are likely to be causing the problem. Patch testing does not diagnose irritant contact dermatitis and is not used to investigate other types of allergy such as food allergies.

The tests involve having small quantities of the suspected substances put on the skin (usually the upper back) under adhesive dressings (patches). The patches are removed two days later, and the skin examined to see if a reaction has developed to any substance. A final skin examination is usually carried out after another two days or so. The procedure is safe and painless but the patches may feel a little itchy. The area of skin where the patches have been applied should be kept dry throughout the tests. At the final visit, the dermatologist will inform you if you have any allergies and what steps you need to take to avoid further contact with these substances in your daily life.

Who can have patch tests?

Patch tests can be carried out in people of most ages but are not usually carried out on babies and children, as allergic contact dermatitis is unlikely in this age group. They are also best avoided during pregnancy.

Examples of common causes of allergic contact dermatitis

Nickel is found in cheap jewellery, jeans studs, metal objects including coins.

Fragrance is found in perfumes, toiletries and cosmetics.

Chromate is found in leather items and wet cement.

Preservatives are found in cosmetics and creams (cleansers, moisturisers, etc).

Rubber additives are found in rubber gloves, shoes.

Sometimes the results of patch testing are negative and no allergies are found. This can be helpful as it excludes the likelihood that a dermatitis is caused by an allergy.

Occupational dermatitis

In some cases a person's dermatitis is caused primarily by substances to which they are exposed at work. These may be irritants or allergens, depending on the nature of the job. Patch tests should be carried out if the work involves exposure to substances that can cause allergy.

Managing contact dermatitis

Preventing further dermatitis

- Minimise contact with all irritant substances at work and at home.
- **Avoid skin contact with the substances you are allergic to.**

Active treatment

- Treatment of the dermatitis with frequent application of moisturisers and regular use of steroid creams or ointments once or twice a day.

General hand care

- Avoid frequent contact with water and use protective gloves where possible.
- Use gloves and barrier creams if provided at work.
- Avoid direct contact with other harsh substances such as the juices from fruit and vegetables.
- Use a gentle skin cleanser instead of soap for washing with warm water and dry the hands thoroughly afterwards to prevent chapping. Use plenty of moisturisers and reapply them frequently (e.g. during tea and coffee breaks, whilst watching television and before going to sleep at night).

It can take several months for the skin to recover completely from an episode of dermatitis, so even when it looks apparently normal it is still vulnerable. Try to find the time to look after your skin and treat it with respect - its got to last you a lifetime!

Contacting us

<p>Department of Dermatology South Block Royal Berkshire Hospital London Road, Reading RG1 5AN www.royalberkshire.nhs.uk</p> <p>Telephone 0118 322 5111 Dermatology Secretary 0118 322 7417/ 8975/ 8145 For minor operations, Sue Alder 0118 322 7581</p>	<p>Department of Dermatology Outpatient Department West Berkshire Community Hospital London Road, Benham Hill Thatcham RG18 3AS www.berkshire.nhs.uk/newbury</p> <p>Telephone 01635 273417 Fax 01635 273345 Dermatology Secretary 01635 273566 (Wed & Fri only)</p>
---	---

Modified from the British Association of Dermatologists' patients information leaflets
http://www.bad.org.uk/patients/skin_disease_info/index.htm

Other Dermatology leaflets are available on the Trust website:
www.royalberkshire.nhs.uk

Department of Dermatology

*Written: August 2003, Revised July 2005, January 2007, January 2008
Review due: January 2009*