

Skin disorders are one of the most common occupational diseases. Occupational skin disorders are caused by skin contact with substances encountered within the workplace. Dermatitis is a term used to describe the reaction that occurs when the skin becomes inflamed. This accounts for the majority of skin disorders. Contact Dermatitis occurs as a result of repeated contact with a substance that causes either irritation (Irritant Contact Dermatitis) or specific sensitisation (Allergic Contact Dermatitis).

Examples of substances that may cause dermatitis include:

- chemicals
- biological agents, e.g. plants, bacteria and fungi
- prolonged or frequent contact with water, e.g. more than two hours a day
- alcohols (e.g. alcohol gel)
- disinfectants, petroleum products, soaps and cleaners
- gloves
- repeated friction
- a combination of the above.

Any job that either involves frequent hand washing, having wet hands either frequently or for long periods of time, or in direct contact with certain products (e.g. gloves) or chemicals can cause dermatitis. The environment at work can also cause skin problems or make them worse, e.g. extremes of temperature (hot or cold) or a very dry atmosphere can make skin dry and inflamed.

The main feature of dermatitis is dry, red and itchy skin. Swelling, flaking, blistering, cracking and pain may follow. Symptoms can vary from being a minor discomfort to becoming a painful and inconvenient problem. It can also become quite significant if not picked up early and treated effectively as it can potentially lead to skin infections, sickness absence; affecting an individuals' fitness to do their job.

Irritant contact dermatitis

This is the most common form of hand dermatitis. It is a non-allergic condition that is reversible provided contact with irritants is avoided. It can develop in the workplace after repeated or prolonged low-grade exposures to an irritant substance. Symptoms may occur such as redness, soreness, dryness or cracking of the skin. Frequent hand washing, strong scrubbing agents, soaps and detergents can also cause skin problems or make them worse.

Allergic contact dermatitis Type IV

This reaction has similar symptoms to irritant contact dermatitis. The reaction tends to be local, appearing only where the skin has had contact with the irritant substance. Symptoms can appear several hours or days after contact with the offending substance. Once sensitivity occurs, contact with only small amounts will produce the reaction.

Immediate allergic reaction Type I

Although rare, some individuals can have an allergic reaction almost immediately or within 5-30 minutes of exposure to a substance

There is generally localised swelling and itching, but a more general reaction may occur:

- Urticaria - a rapid skin response often referred to as a 'wheal (swelling) and flare (red mark)' reaction or hives. It is different from irritant contact dermatitis and allergic contact dermatitis in that it quickly follows skin contact and disappears again within hours.
- There may be the presence of rhinitis (itchy eyes, runny nose),
- conjunctivitis,
- facial swelling,
- respiratory distress (e.g. wheezing, chest tightness), asthma and
- In severe cases circulatory collapse (severe anaphylaxis), which can be a life threatening condition.

Latex glove use

As natural rubber latex can cause Urticaria in individuals who have become sensitised, in line with the University's policy for the use of latex disposable gloves, where latex gloves are worn at work, they must be powder free and a risk assessment undertaken and reviewed annually. For further information on glove selection and chemical permeation through different glove materials, see the University's guidance available on the Health and Safety Office website:

<https://www.safety.admin.cam.ac.uk/publications/hsd168c-glove-selection-guidance-handling-chemicals>

Hand care - Do's

- Use a mild soap whenever an antiseptic is not needed
- Wash, rinse and dry your hands thoroughly with non-abrasive hand towels
- Cover cuts and grazes with a permeable waterproof dressing
- Apply emollient hand cream / lotion - first thing in the morning, during breaks at work and at the end of the working day, allowing sufficient time for the cream to be absorbed before donning the gloves
- Avoid direct contact with irritants such as:
 - shampoo and hair dyes
 - citrus fruits e.g., oranges, lemons and grapefruits
 - floor, shoe and furniture polish
 - polishes for windows and cars
 - white spirit and petrol
 - chemicals and solvents
- Do seek advice if you have any work-related skin concerns.

Hand care - Don'ts

- Don't use oil based creams under the gloves, this will degrade the material
- Don't use communal pots of hand cream
- Don't expose your hands to extreme temperatures
- Don't ignore symptoms.

Further information can be found at:

<http://www.oh.admin.cam.ac.uk/advice-and-guidance/skin-care-work>

<http://www.ncbi.nlm.nih.gov/books/NBK144008/>

<https://www.hse.gov.uk/skin/>

What to do if you think that you may have a skin problem

If the preceding advice is followed and adverse symptoms do not resolve or if the initial symptoms are severe or systemic, please contact Occupational Health immediately for further advice:

University of Cambridge

Occupational Health

16 Mill Lane

Cambridge

CB2 1SB

Tel: 01223 336594

Email: OccHealth@admin.ac.uk



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Information for staff and students

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