

Skin Care

Good skin care is vital for the prevention and management of occupational contact dermatitis and eczema. Undamaged skin provides an excellent natural barrier to skin irritation and the development of allergy. Understanding what substances or conditions aggravate the skin and avoiding them is also very important.

Skin care involves several different components, and it is like a package: all are important. It includes glove use, avoiding irritating soaps and hand cleaners, use of a soap substitute, use of moisturisers and barrier creams and use of topical corticosteroids if necessary.

Where there is the potential for skin problems, workplaces should have a skin care plan implemented for all workers to follow. This should spell out appropriate use of hand washes, moisturisers and gloves which are appropriate for the particular work environment.

Skin protection

General glove use and advice:

- Use gloves for any washing, cleaning, or work where you need to wash your hands frequently (try not to choose rubber gloves if you already have damaged skin, as you can become allergic to either latex or the rubber chemicals).
- If your hands get sweaty under gloves, wear some cotton gloves inside (cotton-lined gloves are not as good), as they help absorb the sweat. These can then be washed and re-used.
- If you get a hole in the gloves, throw them out
- Avoid wearing natural rubber latex gloves which are powdered, as they can cause allergy.
- Wear gloves that fit correctly, that is not too big or small.

At work:

- Wear the right gloves for the task being performed , as not all gloves are suitable for all tasks
- Sometimes a fabric glove will be helpful for dry tasks, but a waterproof glove will be needed for other tasks
- Always use protective gloves when dipping your hands into parts cleaner
- Consult a glove manufacturer to find out what gloves are best for the tasks you are performing or chemicals being used
- More information is available at www.ansell.com
- Do not wash or re-use disposable gloves
- Do not share gloves with co-workers
- In particular, we have found that people using epoxy resins do not wear the correct gloves. Epoxies and some other chemicals easily penetrate readily available gloves, such as those used for dishwashing. Solvex® gloves by Ansell are one variety that are safe to use when handling epoxy resin.

At home:

- For light work at home, like dusting, use cotton gloves that can be washed; and for heavier work, like gardening, use heavy duty fabric gloves; this will stop you having to wash your hands as often
- Have several pairs of gloves for washing and cleaning around the house where you need them, such as the kitchen, laundry and bathroom
- If you have a dishwasher, use this rather than hand washing, or get someone else to do the washing
- For food preparation, use disposable gloves- such as polyethylene (clear plastic) or vinyl (almost clear plastic), especially when handling citrus fruits, tomatoes, potatoes and seafood

Hand washing

Hand washing is an important component of the skin care routine for contact dermatitis and eczema. There is a range of different hand washing products available, and the one used will depend on the task being performed. Washing with very hot water is damaging to the skin, warm water is preferred. Excessive amounts of hand washing can also aggravate eczema and cause the development of irritant contact dermatitis.

There are a range of hand cleansers available:

1. Soaps

In the workplace, some soaps and hand cleansers can be too harsh or strong for the skin. Soap which has sand in it can be additionally damaging and drying.

Cleaning with solvents and thinners will immediately dry the skin and cause irritation.

Talk to your safety supplier about a suitable type of hand cleanser for your workplace, one which is supplied in a dispenser is both convenient and hygienic, preventing contamination of the product, and dispenses the correct amount required.

2. Alcohol based hand rubs

Alcohol based hand cleansers are routinely used in the healthcare industry. However, their popularity is now growing in other industries with products now being developed for the construction, mechanical and metal working industries.

These cleansers minimise the need for hand washing and contact with soaps, and cater for those who do not always have access to hand washing facilities such as builders and other trades persons.

3. Soap substitutes

Soap substitutes are less irritating than normal soaps as they have a similar acidity (pH) to that of the skin, and therefore are preferred for people with dry or damaged skin, or have eczema.

Soap free washes include:

- Ego QV wash and Ego QV Intensive
- Hamilton's wash
- Dermaveen shower and body oil
- Neutrogena
- Cetaphil cleanser
- Wipes

Sometimes wipes, impregnated tissues like baby wipes, can be a good way of removing substances from the skin. These can be especially useful for those who have limited access to hand washing facilities or need to minimise contact with soaps and water. An example of these wipes is Stoko Kwik wipes.

Dry your hands using a fabric towel whenever possible, as paper towel can be damaging to the skin. And don't forget to dry between your fingers and under rings.

At work

At work, when washing your hands, use a specific cleanser suitable for the substance used in the workplace. We recommend that you do not use harsh gritty cleanser or solvents, if it is not really needed, as they too are damaging to the skin.

Moisturising the hands

Moisturising creams used regularly can repair and maintain moisture in the skin. They are the most important treatment measure for irritant contact dermatitis. They may prevent dry skin from becoming inflamed, and turning into dermatitis.

When selecting a moisturiser there are several things to consider:

- A greasy **ointment** (they are usually thick and clear, like Vaseline) is most effective for healing damaged skin, but not always practical for day use. Ideally it should be used when you get home and before bed. If an ointment can't be used, a less greasy **cream** purchased in a tub or tube is next best.
- Moisturising **lotions** are also available. A lotion is a thin and watery substance often purchased in a pump pack. Pump packs of sorbolene lotion are convenient and useful for moisturising during the day, but are not generally as effective moisturisers as an ointment or cream.
- Some oil-based moisturisers may not be suitable for use under some gloves, as these moisturisers can damage the protective functions of the gloves. Generally we do not recommend the use of moisturisers under occlusive (tight-fitting, waterproof type) gloves. However at night, creams may be applied under cotton gloves.

Examples of moisturisers are:

- Neutrogena hand cream- Norwegian formula
- Ego QV Moisturising cream and Intensive moisturiser
- Dermaveen eczema cream and Dermaveen moisturising cream
- Hamiltons
- Cetaphil moisturising cream and intensive cream
- Dermeze
- Hydraderm cream
- Aqueous cream. This can be purchased from pharmacies. Glycerine and olive oil may be added.

Important tip:

If your cuticles (the area around the edge of your fingernails) are damaged and disappear, protect them by 'sealing the gap' with a greasy ointment before your hands become wet. If the cuticle is damaged, water may get in and damage the growing nail. This causes ridging in the nail. It may also lead to nail fold inflammation ('paronychia').

Barrier creams

To date, some evidence about the effectiveness of barrier creams is conflicting.

Barrier creams often do not act as the protective shield which may be claimed, and other precautions such as wearing gloves, will still be required. However, applying barrier cream before work can make cleaning the skin easier at the end of the day, such as when working with grease or oil.

Just as all gloves are not suitable for every job, not all barrier creams are right for the job. Some are made to help protect against water-based substances and other are made to protect against oil-based substances. A safety supplier will provide advice on the best type to use in your workplace.

In many situations, use of specific barrier creams is not necessary, and a moisturising cream may have a similar effect. Again, there is most research available which suggests that after-work moisturizing is most important.

Prescription treatments

In addition to the use of moisturisers, some hand rashes will also need prescribed treatments, such as corticosteroids either as a topical application or oral tablet form.

Topical corticosteroids (applied directly to the skin) are available as either white cream or a clear greasy ointment. Dermatologists usually prefer to prescribe ointments rather than creams, as they are more moisturising and they do not contain preservatives, which sometimes cause allergy.

These treatments may include:

- Advantan
- Betnovate
- Celestone
- Diprosone
- Eleuphrat
- Elocon
- Novasone

Generally the topical corticosteroids available over the counter, such as Dermaid or Sigmacort, are not strong enough to help dermatitis on the hands and/or body. However, they may be suitable for the face. As a rule, it is suggested that hydrocortisone is the only steroid used on the face.

Sometimes following skin splitting or cracking, sores can develop, which may indicate an infection has started. A prescription antibacterial ointment can be helpful. In some cases, a tar based cream may be helpful to treat thickened scaly skin. Antibiotics may sometimes be needed.

Important things to remember when using corticosteroid treatments are:

- They are most effective if used frequently and early during the itchy or inflammatory phase of dermatitis
- Use sparingly on affected areas and stop once the skin becomes normal
- Use them when you won't need to wash your hands, such as before bed. If used this way, the corticosteroids remain in the skin and will be most effective.

In severe cases of eczema and dermatitis, oral corticosteroids may be prescribed.

Other prescription creams or ointments which are not corticosteroid-based include Elidel and Daivonex.

Other treatments-topical, physical, systemic

We would caution against the use of other topical agents on the skin (substances applied to the skin). We have seen a number of cases of allergic contact dermatitis to neat or concentrated tea tree oil applied directly to the skin. Other essential oils if applied undiluted may cause problems. Some creams containing bufexamac (such as 'Paraderm' or 'Paraderm Plus') occasionally cause allergies, especially when applied to damaged skin.

Physical treatments may be helpful, and include ultraviolet light treatment. The Skin and Cancer Foundation, where the Occupational Dermatology Clinic is based, is also fortunate to have access to a specialized form of low dose radiation treatment, Grenz ray, which we find to be very helpful.

Finally in severe cases, dermatologists may prescribe oral tablets, also known as 'steroid-sparing' agents. These include azathioprine (Imuran), cyclosporin (Neoral), methotrexate and acitretin (Neotgason). A new retinoid (like acitretin) may soon be available in Australia (alitretinon).