

# GUIDANCE ON THE PREVENTION OF DERMATITIS CAUSED BY WET WORK



**Australian Government**

**Australian Safety and Compensation Council**



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ISBN 0642325308



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THESE GUIDELINES AIM TO ENCOURAGE EMPLOYERS AND THEIR EMPLOYEES TO BE MORE AWARE OF WET WORK AND WHAT WET WORK CAN DO TO A PERSON'S SKIN.

WET WORK MAY LEAD TO DERMATITIS WHICH CAN OFTEN BE AVOIDED WITH SOME FORWARD PLANNING IN THE WORKPLACE.

## WHAT IS WET WORK?

'Wet work' is where any part of your body is:

- > in water or other liquids for longer than 2 hours a shift
- > in waterproof or other occlusive personal protective clothing for longer than 2 hours a shift
- > handling wet things for longer than 2 hours a shift
- > hands are washed more than 20 times a shift
  - workers often do not realise the number of times that they wash their hands each day.

## WHAT ARE THE EMPLOYER'S RESPONSIBILITIES?

A duty of care requires everything 'reasonably practicable' to be done to protect the health and safety of everyone in the workplace. This duty is placed on:

- > all employers
- > their employees (including contractors), and
- > others who have an influence on the hazards in a workplace.

**These guidelines recommend that employers:**

- > minimise the amount of time spent undertaking wet work as much as possible

- > eliminate skin contact with liquids where possible
- > provide a skin protection plan for their employees at risk.

**A good skin protection program consists of:**

- > assessing the tasks performed in the workplace
- > following the steps in this guide to reduce wet work
- > providing a skin care plan for the workplace.

## WHAT IS DERMATITIS?

Dermatitis is the inflammation of the skin caused by contact between the skin and substances to which the skin is sensitive.

It usually affects the hands.

Eczema is also a type of inflammation of the skin, but you are born with a tendency to develop this condition. It is often associated with asthma and hay fever, and tends to run in families.

Sometimes doctors use the words 'dermatitis' and 'eczema' to mean the same thing, which can be confusing.

**There are two main types of dermatitis:**

- > **irritant contact dermatitis, which is the most common, and**
- > **allergic contact dermatitis.**

**Sometimes people can have both of these skin problems at the same time.**



## WHAT IS IRRITANT CONTACT DERMATITIS?

Continual wetting and drying of the skin, as well as handling 'skin irritants' will cause the skin to dry out. This is the first sign that dermatitis is starting, and will often begin in the web spaces between the fingers.

Usually irritant dermatitis builds up over time, following frequent periods of wet work and repeated contact with skin irritants, such as soap, detergent and solvents.

The skin may take many months to heal, even once it looks like it has returned to normal.

*What can irritant contact dermatitis look like?*

- > red and itchy skin
- > dry skin
- > splitting and cracking
- > flaking and peeling
- > burning and stinging
- > small blisters.

*What are the main causes of irritant contact dermatitis?*

- > water and wet work
- > soaps and detergents
- > solvents – e.g. thinners, petrol, kerosene, nail polish remover
- > oils and cooling fluids
- > acids and alkalis – e.g. lemon juice, wet cement
- > heat and sweating – e.g. wearing waterproof clothing for long periods.

## WHAT ELSE CAN PLAY A PART IN MAKING DERMATITIS WORSE?

### Past eczema

People who have a personal or family history of eczema, asthma or hay fever are at a higher risk of getting dermatitis in jobs with frequent exposure to irritants. Even if they only had eczema as a baby, they are still more likely to develop this condition.

It is extremely important that these people take precautions to protect their skin from the beginning of their working life.

### Gloves

Many gloves are protective against hazardous substances, so that nothing can get in or out. Although it is important to protect your skin, gloves can cause sweating which then irritates the skin. Sweating will be increased when hot water or hot temperatures are encountered.

Cotton gloves can be worn underneath (inside) the outer gloves to cut down the sweating. These may need to be changed often during the day, especially if they get damp. They should be disposed of or washed regularly.

It is important to realise that different gloves will protect the skin against different substances. Wearing the wrong gloves may also allow skin irritants to pass through the gloves and contact the skin.



Other factors include:

- > a very dusty workplace – e.g. fine powder, fabric fibres, fibreglass
- > friction – e.g. handling rough surfaces, using tools that rub the skin
- > dry air
- > existing skin conditions
- > very hot or very cold temperatures
- > drying hands repeatedly with paper toweling
- > people often have out-of-work activities which might include a lot of hand washing and wet work, such as child and family responsibilities. This may add a further burden on the skin
- > age and gender.

#### How to avoid getting irritant contact dermatitis?

There are things you can do to help prevent getting dermatitis. These include:

- > minimise the amount of time spent undertaking wet work as much as possible
- > share the wet work jobs with others
- > look after your skin with regular use of moisturiser

- > understand what you are using at work
  - suppliers of products will provide workplaces with information called MSDSs (material safety data sheets). These explain the right way to use each product and any dangers to people handling it
- > use the right protective clothing for the task
- > if you have a skin problem, talk to your supervisor and see your doctor.

**No one is allergic to water but continual wetting and drying can affect your skin.**

## WHAT IS ALLERGIC CONTACT DERMATITIS?

People can become allergic to things they touch at work and home. If the skin is already dry and damaged such as with irritant dermatitis, then allergic contact dermatitis can occur. This condition may look the same as irritant contact dermatitis, but might be more severe. The reaction is delayed, 4-24 hours following contact. Once a person is allergic to something, the allergy is likely to last forever.





Some common causes of allergic contact dermatitis

- > chromates (present in cement and used in the tanning of leather)
- > epoxy resin (used in 2-pack glues and surface coatings)
- > hair dye, perm solution, bleach (particularly for hairdressers)
- > colophony (a wood rosin found in some hair removal wax and sticking plaster)
- > preservatives and other ingredients in many substances which come into contact with the skin (e.g. oils and coolants, antiseptic hand washes).

Another less common allergic condition to be aware of is called contact urticaria. It is an immediate reaction to certain plant and animal products.

Some common causes of contact urticaria:

- > disposable, powdered, latex gloves
- > bleach (used by hairdressers, can cause both types of allergy)
- > flour (used by pastry cooks and bread makers)
- > seafood and other raw food.

### **What to do if you suspect that you have dermatitis?**

If you have a skin problem, please see your doctor.

## WHAT JOBS HAVE A LOT OF WET WORK?

- > healthcare e.g. nursing, personal care and medicine
- > hairdressing and beauty therapy
- > food handling e.g. cooking, kitchen work, waiting and bartending
- > motor mechanical and metal working
- > cleaning
- > some areas of building and construction work.

## ISSUES TO BE CONSIDERED WHEN ASSESSING WET WORK RISK IN YOUR WORKPLACE

Employers and employees assessing the workplace together can look at the following issues:

- > is contact with water or other liquids occurring for longer than 2 hours a shift?
- > are employees wearing waterproof clothing for longer than 2 hours a shift?
- > are employees handling wet things for longer than 2 hours a shift?
- > are hands being washed more than 20 times a shift?
- > is the correct protective clothing being used?
- > is the workplace very dusty?
- > is there friction on the skin?
- > is the air dry?
- > is the workplace temperature very hot or cold?
- > is the water temperature too hot?
- > is skin being frequently dried with paper towelling?
- > are employees standing in water or working in wet areas for longer than 2 hours a shift?

## GO THROUGH THE FOLLOWING STEPS IN ORDER TO REDUCE WET WORK

**1 The first step** is to remove the cause of the problem if you can. For example; if a particular irritating substance or wet work activity is not really needed then get rid of it, that means you are removing the hazard altogether.

**2 The second step** is to change the way wet work tasks are done, for example by getting a machine to do it – dishwashers in kitchens; automated cleaning processes for machines; also the use of ‘no-touch’ techniques for handling wet objects – such as tongs, or baskets/crates which can raise products out of the liquid.

**3 The third step** is to replace the irritating substance or wet work activity with a less irritating one e.g. use a more ‘gentle’ soap or mild hand cleanser; the use of waterless hand cleansers such as those used in hospitals will reduce exposure to water during hand cleaning, provided they are used correctly.

**4 The fourth step** involves bringing in policies and procedures for safe handling of irritating substances and for safer wet work practices for example:

- > a job rotation policy, where:
  - wet work for each worker is minimised as much as possible
  - workers are not spending long periods wearing waterproof clothing.
- > a skin protection plan should also be implemented and include:
  - supply of a mild hand cleanser
  - supply of an after-work moisturiser
  - instructions on skin care and cleaning procedures.

This plan should be readily available to all employees, be easily understood and be located in a visible position, such as above basins or change rooms.

Training sessions should be undertaken with employees regarding: the hazards of wet work; appropriate skin protection measures; providing information and training on selection and care of personal protection equipment including gloves, boots and other clothing.

**5 The fifth and final step** is to provide personal protective equipment (PPE). Other options should always be considered first before the supply of PPE. When resorting to the use of PPE, it is important to be aware that different types of PPE provide different protection. To be effective in the control of hazards, the correct PPE for the specific task must be supplied by the employer. Check PPE manufacturer websites, or ask your safety supplier for advice.

The worker also needs to use PPE correctly when carrying out the task. A combination of the above control options may need to be used to adequately minimise the risks associated with wet work.

#### **Are the above control measures still working?**

Review the workplace regularly to check that:

- > everyone is continuing to comply with the policies and plans that have been agreed
- > any new work tasks comply with the steps above
- > all new employees have been trained.



## WHAT IS A GOOD SKIN CARE PLAN?

Skin care is vital in both the prevention and treatment of dermatitis. Undamaged skin is a good barrier to irritation, and to the development of allergy.

Set up skin care systems which are easy for employees to use, e.g. wall mounted dispensers side by side at all wash stations, including barrier cream if required.

### Moisturising creams

Moisturising creams used regularly, especially at the end of a shift, will repair and maintain moisture in the skin. A sorbolene lotion, often purchased in pump packs, is useful for moisturising during the day, but is not as effective as a cream or ointment. A fragrance-free greasy cream, often purchased in a tub or tube, is best and should be used at the end of a shift and before bed because of its increased effectiveness.

Moisturisers can prevent and heal dermatitis in irritated skin.

### Hand cleaners

In the workplace situation, some soaps and hand cleaners are too harsh or strong for the skin. Cleaning skin with solvents or thinners, or soap which has sand in it, can be very damaging.

Ask your safety supplier for a suitable brand that is effective on the substances used in your workplace. Cleansers that include a dispenser would probably be the most convenient and encourage use.

Less irritating soap substitutes are preferred for people with dry or damaged skin.

### Barrier creams

There is a lot of conflicting scientific information about the effectiveness of barrier creams. The concern has been that workers might mistakenly believe that barrier cream will act like a shield and that they do not need to take other precautions. However, applying a cream before work certainly makes cleaning the skin easier.

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

In many situations use of specific barrier creams may not be necessary, however a moisturising cream applied before work can have a similar effect.

If application of any skin care products make your skin condition worse, please see your doctor.



## FOR FURTHER INFORMATION VISIT THE FOLLOWING SITES:

### **Australian Safety and Compensation Council**

[ascc.gov.au](http://ascc.gov.au)  
02 6121 6000

### **ACT WorkCover**

[workcover.act.gov.au](http://workcover.act.gov.au)  
02 6205 0200

### **WorkCover NSW**

[workcover.nsw.gov.au](http://workcover.nsw.gov.au)  
131 050

### **NT WorkSafe**

[worksafe.nt.gov.au](http://worksafe.nt.gov.au)  
1800 019 115

### **Department of Industrial Relations QLD/ Workplace Health and Safety**

[dir.gov.au/workplace](http://dir.gov.au/workplace)  
1300 369 915

### **SafeWork SA**

[safework.sa.gov.au](http://safework.sa.gov.au)  
1300 365 255

### **Workplace Standards Tasmania**

[wst.tas.gov.au](http://wst.tas.gov.au)  
1300 366 322

### **Victorian WorkCover Authority**

[workcover.vic.gov.au](http://workcover.vic.gov.au)  
1800 136 089

### **Department of Consumer Employment Protection**

[worksafe.wa.gov.au](http://worksafe.wa.gov.au)  
1300 307 877

### **Occupational Dermatology Research and Education Centre**

[occderm.asn.au](http://occderm.asn.au)  
03 9639 9633

### **Ansell Australia**

[ansell.com.au](http://ansell.com.au)  
[ansellchemsafe.com](http://ansellchemsafe.com)  
1800 337 041

### **Protector Alsafe**

[protectoralsafe.com.au](http://protectoralsafe.com.au)  
1300 360 765

### **MSA Australia (Mining and Safety Appliances)**

[msa.net.au](http://msa.net.au)  
1300 728 672

### **RSEA (Road Safety Equipment Australia)**

[rsea.com.au](http://rsea.com.au)  
132 100



