



Royal College  
of Nursing

# Tools of the trade

*RCN short guide for health care staff on glove use and the prevention of contact dermatitis*



## Tools of the trade

As a health care worker your hands are one of your most important tools. Keeping them clean is essential to protect patients, but it also important to protect yourself from the potential impacts of exposure to chemicals used in the workplace, gloves use or frequent hand hygiene (washing or sanitising). Gloves play an important part in protecting you and your patients but can also present risks if the wrong type of glove is selected or gloves are overused.

This short guide highlights: the key issues to help you look after your hands, how to select the right gloves at the right time; what your employer should be doing and what to do if you have skin problems or concerns.



Please note, this guide focuses on examination and protective gloves; it does not include surgical gloves or non-clinical use of gloves such as utility (heavy duty) gloves.

Further details can be found in the accompanying full length resource *Tools of the trade* (RCN, 2012) publication code 004 224, available at [www.rcn.org.uk/publications](http://www.rcn.org.uk/publications)

## Why your hands are important

As well as being the largest organ in the body, the skin acts as an important barrier to prevent fluid loss, prevent micro-organisms from gaining entry to the body and also to modify the effects of pressure radiation, heat, chemicals and trauma.

If this barrier becomes damaged the skin can react and becomes inflamed. This is known as dermatitis. Symptoms can range from redness; warmth and dryness through to the formation of blisters; flaking and cracking; and itching. Dermatitis can occur on any part of the body but the skin on the hands is the most commonly affected area.

There are a number of causes of dermatitis including things you regularly come in contact with at work and home, including:

- detergents
- perfumes
- natural rubber latex or other chemical products found in gloves.



Reddening of skin after hand washing (image © HSE)

There are two main types of dermatitis; allergic or irritant. Although cold weather or dry environments can also cause problems

Health care workers are particularly at risk as a result of frequent hand hygiene or wearing gloves for long periods, both of which may jointly affect the skin's barrier function and lead to dermatitis.

## Glove use and infection prevention and control

A close relationship exists between glove use and infection prevention and control, as inappropriate glove use (under or over use of gloves) places patients or staff at risk of contact dermatitis, transmission of infection or missed opportunities for hand hygiene.

Hand hygiene is one of the most effective ways of preventing the spread of micro-organisms between patients and staff that may result in infection. It is key to protecting both patients and staff but must be undertaken in the right way at the right time. In practice either hand sanitisers, for example, alcohol hand rubs, or hand washing can be undertaken. Hand sanitisers are both efficient and effective when used on visibly clean hands but may not be appropriate for use in certain infections, such as norovirus or *Clostridium difficile*. Gloves are not an alternative to hand hygiene and the washing of gloves is not acceptable.

Staff with dermatitis may be unable to tolerate frequent hand washing or use hand sanitisers. Practically this means that they are unable to work in clinical environments as this places both the patient and staff member at risk. Staff with dermatitis are at risk of becoming colonised with micro-organisms from the patient or the patient's surroundings and therefore advice should be sought from their occupational health service, GP or health and safety adviser.

Remember keep an eye out for the early signs and symptoms of dermatitis and report any concerns promptly.

Occupational dermatitis can and should be prevented following a three-step approach: avoid-protect-check.

**Avoid** direct contact between unprotected hands and hazardous substances and/or wet work where this is sensible and practical.

**Protect** the skin if you cannot avoid contact.

**Check** hands regularly for the first signs of itchy, dry or red skin.

More information can be found at [www.hse.gov.uk](http://www.hse.gov.uk)

Dermatitis can be a debilitating and painful condition and can lead to time off work. If not picked up early and steps are not taken to address the cause, it can even be career ending.

**Remember dermatitis can be prevented!**



Dermatitis showing crusting/thickening of skin (image © HSE)

## Gloves – when to wear and what to wear

Gloves provide an important means of protecting yourself and your patient from biological hazards such as micro-organisms found in blood and body fluids/excreta. They can also protect from the damaging effects of chemicals found in disinfectants and hazardous drugs such as cytotoxic drugs.

Different types of gloves exist and fall into two main categories depending on their purpose and the European standard required to ensure they are fit for purpose:

Glove type	Purpose	European standard required	Comments
Examination gloves or medical examination gloves.	Protection of patients for routine care and protection of staff from blood and body fluids.	EN455	Not classified as (PPE) as do not prevent permeation of chemicals through gloves to skin. Classified under Medical Devices Directive.
Protective gloves.	Protection of staff.	EN420	Classified as PPE under the Personal Protective Equipment Directive. To protect against chemicals, gloves must meet standard EN374.

It is important to remember that not all gloves meet both European EN standards and therefore staff need to understand which gloves are suitable for which activities locally. This is an essential part of your employer's (COSHH) assessment for your work environment.

Wearing gloves for too long or too often can cause problems. The components of gloves can cause contact dermatitis and the over-use of gloves can lead to soggy or damaged skin.

Powdered latex gloves should not be used. Proteins found in natural rubber latex can attach themselves to the powder and become airborne and inhaled. This can lead to asthma, skin rashes and in some cases serious allergic reactions.

## When to wear gloves

It is essential gloves are only worn when necessary and that the right type of gloves is selected for the procedure. The following table highlights key principals associated with when to wear or remove gloves.

<b>Gloves on</b>	<ul style="list-style-type: none"> <li>• Before an aseptic procedure.</li> <li>• When anticipating contact with blood or another body fluid, regardless of the existence of sterile conditions and including contact with non-intact skin and mucous membrane.</li> <li>• Contact with a patient (and their immediate surroundings) during contact precautions.</li> <li>• When anticipating contact with chemical hazards such as disinfectants or preserving agents.</li> </ul> <p>Please note, any cuts or abrasions present on hands should be covered (e.g. with a plaster) prior to donning gloves.</p>
<b>Gloves off</b>	<ul style="list-style-type: none"> <li>• As soon as gloves are damaged (or non-integrity suspected).</li> <li>• When contact with blood, another body fluid, non-intact skin and mucous membrane has occurred and has ended.</li> <li>• When contact with a single patient and their surroundings, or a contaminated body site on a patient has ended.</li> <li>• When there is an indication for hand hygiene.</li> <li>• When contact with chemicals has ended.</li> </ul>

Adapted from WHO, 2009

## What to expect from your employer

Under health and safety laws, your employer has a legal duty to ensure that any work related risks of dermatitis are properly managed. Your manager should carry out a risk assessment to identify how to reduce the risk of dermatitis and ensure that the appropriate gloves are provided and worn.

Your employer should also introduce a programme of regular skin checks to identify any early warning signs of work-related dermatitis and provide information and training on the risks and measures in place to reduce the risks.

There should also be systems in place for reporting cases of occupational dermatitis.

## What you can do to prevent problems

As well as taking care of your hands by following correct hand washing procedures and wearing the appropriate gloves, it is important that you follow your place of work's policies and procedures. It is also important that you attend training and participate in skin check programmes.

Moisturising creams can also help to protect skin by restoring the moisture levels and should be applied after hand washing and at the end of a shift.

## What to do if you have problems

If problems arise you should tell your manager immediately. Most dermatitis affects the hands, so show them your hands. You should also contact your occupational health department for advice. If you don't have access to occupational health services then contact your GP.

If you have an RCN safety representative at your workplace they can also advise you on what steps to take, raise concerns on your behalf and check that your employer is taking all necessary steps to support you and address the problem.

Don't ignore the problem; get advice so steps can be taken to prevent the condition getting worse.

### Further information

For further information please refer to the RCN's full version of *Tools of the trade* available at [www.rcn.org.uk/publications](http://www.rcn.org.uk/publications), publication code 004 224.

Further resources are also available from the Health and Safety Executive at [www.hse.gov.uk](http://www.hse.gov.uk)

### References

Royal College of Nursing (2012) *Tools of the trade, RCN guidance for health care staff on glove use and the prevention of contact dermatitis*, London: RCN.

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