

Skin

WORK PLACE HAZARDS WHICH CAN AFFECT THE SKIN

Physical: direct skin contact from physical hazards

- Heat
- Cold
- Wind
- Sun – UVA and UVB rays can burn the skin, dryness and can cause cancer
- Sharp items – breaks the protective barrier of the skin and increases the risk of infection
- Excessive moisture – working in water for long periods, excessive sweat can cause irritation or increase the permeability
- Abrasive materials – removes the outer surface layers of the skin exposing more delicate layers of the skin, nerve endings and capillaries
- Dirt and grime – aggravate the skin by blocking pores and reduces ability to sweat

Chemical: chemicals can enter the skin through permeation i.e. pass through the skin layers which does not cause visible damage or through damaged skin i.e cuts, abrasions or through skin conditions already present such as dermatitis can increase absorption of chemicals.

- Acids and alkalis can damage skin by burning it.
- Solvents and mineral oils break down the lipid structure of the skin and increases the permeability of the skin.
- Cleaning agents and detergents can cause skin irritation
- Any substance that is labelled hazardous.

Why do I need health surveillance?

Under the Control of Substances Hazardous to Health Regulations 2002 (COSHH), all work involving the use of substances hazardous to health must be **risk assessed**. Employers must also provide information, instruction and training and provide **health surveillance** where required. It is essential that you are made aware of work-related skin diseases and the causes to help you to look after your skin and identify the first signs and symptoms of work related skin disease.

WORK RELATED SKIN DISEASES

Work-related dermatitis

Dermatitis describes the reaction of the skin when it becomes inflamed. There are 2 types of dermatitis.

- **Irritant contact dermatitis:** can develop after a single exposure (acute) or repeated, prolonged exposure (chronic) to hazardous substances which causes irritation. Irritants can be chemical, biological, mechanical or physical. Prolonged and repeated contact with water can also cause irritant dermatitis. In some cases, more than one substance will be involved, for example water and detergents. Other examples of substances which cause irritant dermatitis are: soaps, shampoos, solvents, metalworking fluids and oils and greases.
- **Allergic contact dermatitis:** can occur when an individual develops an allergy to a substance. Once someone is sensitised, it is likely that it is permanent and any further contact with the substance will cause allergic contact dermatitis. Often skin sensitisers are also irritants. Common causes of allergic contact dermatitis are: adhesives, wet cement, some plants and some foods and UV cured printing inks.

Signs and symptoms



Reddening of the skin



Cracking and flaking



Blistering and swelling

Checking your skin regularly can help to detect dermatitis early and which can make it easier to treat.

Links: [Poster – Skin Dermatitis](#)

Urticaria

If the skin comes into contact with an irritant, there may be an instant reaction. The symptoms of urticaria are: itching, tingling or burning sensations, rash or hives with swelling (wheals). The itch and/or rash occur within minutes or up to an hour of contact. The symptoms disappear within 24 hours but usually within a few hours. Another type of urticaria is when a person has a reaction because of a sensitisation to a substance e.g. latex protein in gloves. There is no requirement to carry out health surveillance for urticaria but signs and symptoms should be reported to your line manager and discussed with Occupational Health who will monitor the symptoms as required.



Skin cancer

Skin cancer is the most common cancer in the UK. Most skin cancers are caused by sun exposure damage to the skin. If you are exposed at work to: UV rays from the sun from work outside; ionising and non-ionising radiation or some chemicals or unrefined mineral oils there is a risk of developing work-related skin cancer or add to the risk of developing cancers in other parts of the body. Work involving specific substances with a cancer risk may require health surveillance as determined by risk assessment. For UV exposure it is essential to carry out self-monitoring of the skin and if there are any concerns contact your GP and Occupational Health for further advice.

It is important to check for early signs of cancer. Try and get to know your skin and look out for normal moles and marks on your body so that you know if there have been any changes. See your GP if there are any changes and advise Occupational Health if you are concerned about the changes in your skin are work-related.

Links

[Skin Cancer](#)

[Publication – Keep Your Top On](#)

Skin Protection: AVOID , PROTECT AND CHECK (APC) APPROACH (HSE)

AVOID

The simplest way to protect the skin from harm is to avoid exposure to the hazard but this may not be practical so protection is the next step.

- Work at a SAFE WORKING DISTANCE to prevent exposure and follow the safe systems of work in the risk assessments
- Use the control measures put in place to reduce the risk of harm to your skin such as personal protective equipment (PPE) - gloves and overalls to prevent skin contamination

- Recognise the early signs and symptoms of any skin problems
- Report any symptoms to your line manager and the Occupational Health Service as early as possible. If you think you have a work-related skin problem advise Occupational Health Service and they will advise you about getting the right treatment
- Attend the GP if you believe that you have a skin problem. Tell your GP what you do as part of your course work and that you think it might be caused by or made worse by your work.

Poster - Skin Contact

PRINCIPLES OF GOOD SKIN CARE

Take good care of your skin by paying particular attention to good hand hygiene techniques, appropriate use of gloves and use of conditioning (moisturising) after work creams.

- Pre-work creams: can help with cleaning substances from the skin and reduce the need for powerful skin cleanser. Pre-work creams are not true 'barrier' creams as chemicals will always work their way through the cream to the skin. **They do not replace gloves.** There are a variety of creams available depending on hazards and working conditions by limiting the contact between the two and facilitate subsequent cleansing. This allows use of the mildest possible cleansers.
- Cleansing: use the mildest possible cleanser. A cleanser with a scrubbing agent works by abrasion which can damage the skin and should be used sparingly.

Take special care in hand washing. Wash your hands in lukewarm water if you have dermatitis. Make sure that you rinse your hands carefully to remove all traces of soaps and detergents, and dry them thoroughly, paying particular attention to the spaces between your fingers.

Soap, detergents and water as well as other substances such as oils, resins can collect under rings and make it difficult to have clean dry skin. It is best to avoid wearing finger rings at work. Wear only a plain wedding ring if you have to wear a ring at all, and take extra care to rinse and dry beneath it.

- After work creams which condition/moisturise should be used frequently throughout the day, to keep the skin well hydrated and which will prevent the skin from drying. Apply creams carefully and ensure that you include the spaces between your fingers. These creams vary from very greasy (emollient) used for moderate to severe dryness to less greasy (cream) used for mild dryness. Conditioning creams should be non-perfumed. Some people may become sensitised to an ingredient with creams such as lanolin which is a mild sensitiser. Individuals with skin allergies should check ingredients of the creams used and seek advice from Occupational Health where necessary.

General skin care advice:

- Cover cuts and abrasions with a waterproof dressing
- Do not eat, drink or smoke in work areas
- Apply the same standards of good skin care and appropriate use of gloves away from work
- Welfare facilities: your workplace should have adequate washing facilities away from areas used to prepare and eat food.

Links

<http://www.hse.gov.uk/skin/posters/skinmethod.pdf>
<http://www.hse.gov.uk/skin/posters/skinwashing.pdf>
<http://www.hse.gov.uk/skin/posters/skindermatitis.pdf>

Skin health surveillance

Work-related skin diseases are very common but if the signs are detected early through health surveillance and steps are taken to reduce workers' exposure to the substances responsible the disease may be reduced or cured. The aim is to protect your health and to check the effectiveness of the control measures that are in place for your health and safety.

Skin Health surveillance will be offered to all employees who are identified, by risk assessment, as working with substances that may cause harm to the skin. It is repeated at 2 yearly intervals or more frequently, if required. A confidential skin questionnaire is completed and returned to the Occupational Health Service. If signs and symptoms are identified then you need to attend Occupational Health Service for an appointment.

Outcome of health surveillance

- **Occupational Health will advise you of any concerns with your health and with your consent advise your GP.**
- **Fitness for work**
Occupational Health will advise your line manager in writing that you are fit to work or if any adjustments to your work are required. No medical information will be passed to your department without your written consent and this is only requested when deemed necessary for your health and safety.

Reports will be made to your line manager with your consent, if changes in the work process are required to prevent or reduce skin problems. Anonymous statistical evidence from the programme should be used to guide managers on further improvement of control measures if problems are identified.

- **On cessation of exposure**
Legislation requires that health surveillance health records are confidentially stored for 40 years after cessation of exposure or when an employee leaves the University of Strathclyde.

Information Sessions/Tool box talks Drop down heading

When a department identifies through risk assessment and occupational hygiene monitoring, which can be arranged by Safety Services, that there is a risk of exposure to employees' skin and advises Occupational Health Service of the need for skin health surveillance, information sessions will be provided by Occupational Health to the identified employees. In collaboration with the department, Occupational Health will provide information on risks of exposure to skin, signs and symptoms of work related skin diseases and the health surveillance programme. Information sessions should take place prior to baseline health surveillance taking place.

Key Messages

- Having your hands wet for a long time or having them frequently wet during the day can irritate your skin leading to dermatitis.
- Some hazardous substances can cause work related skin disease.
- Some cleaning products are corrosive and can cause skin burns.
- Enclose the process as far as possible and when necessary extract harmful vapours and mists.
- Use good work techniques that avoid or minimise contact with harmful substances and minimise leaks and spills and contamination.

- For some tasks, you may also need to provide personal protective equipment like protective gloves, aprons, and eye protection.
- Practice good hand care – remove contamination promptly, wash hands properly, dry thoroughly and use skin creams regularly.
- Health surveillance is vital to detect and respond to early signs of damage.