



Preventing Workplace Contact Dermatitis: Keeping Ontario's Workplaces Healthy

Workplace contact dermatitis (painful redness, itching, swelling, and blistering of the skin) affects workers of all ages in many kinds of jobs. It is caused by contact with chemicals, detergents or cleaners, and can occur in many workplaces. Workplace contact dermatitis is not an infection and cannot pass from one person to another.

Contact dermatitis injures workers and affects an employer's business:

- workers may become permanently disabled, and
- workers may be less productive.

Preventing workplace contact dermatitis

To prevent workplace contact dermatitis, cooperation is needed among the:

- employer
- workers
- joint health and safety committee (or health and safety representative).

Controls at the source

As with all hazardous conditions in the workplace, the best control is at the source of the problem. Usually, a team is needed to prevent dermatitis. The team should include health and safety specialists, production engineers, line managers and workers.

With the joint health and safety committee or health and safety representative, review the Material Safety Data Sheets (MSDS). Find anything that may cause dermatitis. MSDSs are required under the Workplace Hazardous Materials Information System (WHMIS).

The data sheets may not list the specific ingredient that causes the problem. Contact the manufacturer for this information. It is the employer's responsibility to have this done.

If it is possible to identify the cause of the dermatitis, look for ways to:

- use a safer product
- change the work process to remove the cause, for example:
 - make the process automatic
 - buy safer equipment
 - clean machinery before a mechanic begins maintenance work
 - remove a hazardous step from the process

Controls along the path to the worker

It is also effective to use controls to keep the hazard from reaching the worker. For example:

- enclose the process or change the form of the substance (e.g., granules instead of powders or liquids)
- provide and use local and general ventilation to keep air concentrations of toxic chemicals, metal-working mists, gases, aerosols, dusts, glass fibres and solvent vapours very low:
 - local exhaust ventilation can reduce concentrations making contact with the worker's skin and lungs
 - even if levels of the hazard are well below the legal limit , they may affect skin.
- provide isolation booths or cabs for workers.

Controls at the worker

The last choice of controls requires workers to take extra precautions. These precautions include using:

- handling equipment
- good personal hygiene
- personal protective equipment
- good housekeeping.

These controls also include:

- orientation and training
- inspections
- review of new materials.

Handling equipment

Use equipment to handle hazardous substances. The employer must provide the equipment and make sure that workers use it properly. For example, put an item to be degreased in a wire basket with long handles and then put the basket into the solvent tank.

Personal protective equipment (PPE)

Use PPE only when no other method of controlling exposure makes sense. Examples of such situations include:

- very occasional, short-term exposure (such as during maintenance)
- an emergency
- where the hazard is minor, such as washing dishes.

Read the manufacturer's information to find the right type of protection. It may include gloves, shields, goggles, clothing, aprons, boots and barrier agents that prevent contact with skin.

Protective clothing

Choose protective clothing that:

- resists chemicals and physical hazards
- is flexible enough for the job
- is comfortable.



Choose gloves designed to protect against the specific chemical or chemicals of concern. Take care of protective clothing and gloves:

- maintain protective gear regularly
- check the clothing regularly
- throw out any protective gear that has holes or tears.

Sometimes protective clothing may cause rather than prevent contact dermatitis. For example:

- irritation due to sweating or rubbing of the clothing against the skin
- increased skin absorption due to accidental trapping of irritating or allergy-causing substances under the clothing
- contact allergy to additives in the protective clothing.

Consider wearing cotton liners under gloves to reduce or prevent irritation.

Barrier agents

A barrier agent is a cream, lotion or ointment, provided by the employer. When put on the skin it forms a protective layer against the hazard. Barrier creams:

- are easy to put on and take off
- are relatively comfortable on the skin
- may make it easier to remove sticky oils, grease and resins from the skin, decreasing the need to use irritating abrasives and waterless cleansers.

There is no all-purpose protective cream-- different types protect against different hazards.

Barrier creams are not as effective as other types of PPE. Consider using a barrier cream instead of gloves, when wearing gloves would:

- decrease the workers' ability to use their hands
- be hazardous such as when working with machinery.

Some problems with barrier creams are that:

- they are not always applied properly--many spots such as the skin between the fingers are missed
- they do not provide 100% protection.
- creams are intended for use on normal skin--they may make the dermatitis worse if they are applied to sore or sensitive skin.

Good personal hygiene

The employer should encourage good personal hygiene practices by providing:

- convenient places to change, clean and eat
- mild soaps that do not remove naturally protective skin oils.

About washing hands:

- If using rough soaps, use only on the palms, where the skin is thick and not easily irritated
- After, use waterless hand cleaners
- Dry hands thoroughly then use a skin moisturizer.

Good housekeeping

The employer should encourage good housekeeping practices. For example:

- keep equipment and work areas free of dust, dirt and drippings
- throw out waste often
- clean up spills quickly
- store chemicals properly
- use "wet" sweeping or vacuuming for dusts and fibres.

Orientation & Training

Training about hazard awareness begins with orientation then moves on to ensuring workers have the information they need to start and continue working safely.

Employers should make sure that all workers know:

- about hazards to their skin and health
- about job activities that may expose them to allergens and irritants
- how to keep clean and use safety equipment, including protective clothing.

Employers should make sure that all workers and supervisors know how to:

- recognize the first signs of contact dermatitis
- get proper diagnosis and treatment
- use protective clothing, barrier creams and the right hygiene practices.

Employers must:

- have policies about training workers to use safe work practices (e.g. WHMIS) and PPE.
- update and repeat training regularly and make them part of health and safety routines.
- use several training techniques, including: individual instruction, information meetings, written materials (e.g., posters, booklets), videos, written guidelines.

Inspections

Make sure that there are regular checks to ensure controls are in place. These checks can be done during regular inspections. (For details about safety inspections, see the WSIB fact sheet called *Developing an inspection plan*.)

Review new materials

Have the joint health and safety committee or the health and safety representative review new materials before they come into the workplace.

Return to work after a diagnosis of workplace contact dermatitis

If the worker can return to work, use good work practices to prevent skin contact so that he or she can work safely. Whether the worker can stay on the job depends on the kind of dermatitis, how bad it is and the treatment. The worker's doctor decides:

- if and when the worker can return to his or her former job
- if any changes or restrictions are needed.

If a claim is filed for workplace contact dermatitis, an adjudicator works with an occupational medicine consultant from the Workplace Safety and Insurance Board. Together, they:

- make sure that the diagnosis is correct
- find out whether any injury is permanent
- look for any work restrictions.

For more information on treatment of workplace contact dermatitis and return to work, see the WSIB fact sheet *Workplace Contact Dermatitis: Facts for Workers in Ontario (0451)*

Want more information about preventing dermatitis at work?

- check out the Canadian Centre for Occupational Health and Safety 1-800-668-4284 or www.ccohs.ca
- visit the National Institute of Occupational Health and Safety (NIOSH) web site at www.cdc.gov/ncidod/dbmd/diseaseinfo
- see the WSIB's *Resource Sheet for Workplace Health and Safety* available from 1-800-663-6639 or www.wsib.on.ca
- get more details about the *Occupational Health and Safety Act* online at www.gov.on.ca/LAB/ohs

Workplace Safety and Insurance Board

Ontario's Workplace Safety and Insurance Board (WSIB) plays a key role in the province's occupational health and safety system. Funded by employers, the WSIB is one of the top 10 disability insurers in North America. In addition to a strong prevention mandate, the WSIB provides insurance for injuries and illnesses incurred in workplaces covered under the *Workplace Safety and Insurance Act* and supports early and safe return to work for injured workers.

This information is available in several languages by calling our information hotline at 416-344-4999 toll-free 1-800-465-5606 or Telephone Service for the Deaf (TTY): 1-800-387-0050
Pour obtenir un exemplaire en français, composez le 1-800-465-5606.