

Occupational Contact Dermatitis

WHAT IS OCCUPATIONAL CONTACT DERMATITIS?

Contact dermatitis is the most common occupational skin disorder, and can occur whenever the skin comes in frequent contact with chemicals and other materials used at work. Symptoms may include red, painful, and itchy skin, blisters, and swelling. Many work-related cases are on exposed parts of the body, notably the hands and arms.



OCCUPATIONS AT RISK

Any worker whose job includes the use of chemicals, metals, and liquids that can contact the skin are at risk for contact dermatitis. Some of the jobs and industries where workers are at risk for potentially harmful exposures of the skin include:

- Food service workers
- Cosmetologists and hairdressers
- Health care workers
- Agricultural and outdoor workers
- Building cleaning and maintenance workers
- Painters
- Mechanics
- Metalworkers
- Construction trades



CASUES OF CONTACT DERMATITIS

Chemical agents are the main cause of occupational skin diseases and disorders. Irritants, such as cleaning materials, solvents, acids, detergents, and abrasives, cause ongoing injury to the outer layers of skin. Many of these materials are used together at work, which can increase the risk for developing dermatitis.

In many jobs, workers often need to wash frequently, or have their hands in water frequently, which also irritates the skin and makes it easier for other materials to damage skin.

Other materials may be sensitizers, which can lead to allergic reactions on the skin when workers come into contact with them. Some examples of allergic sensitizers are nickel and chromium metal materials, epoxy glues and resins, rubber chemicals, germicidal cleaners, and poison ivy.

Exposure to the skin usually occurs when workers handle materials, like cleaners, directly. Contact with the skin can also occur from surfaces where materials have been used, spraying, when aerosols are formed, or from accidental events such as splashes.



Some of the main types of irritants found in many jobs include:

- Acids and alkalis
- Bleaching agents
- Cement
- Cleaning agents
- Detergents
- Disinfectants
- Dust
- Dyes
- Fertilizers
- Foods (fruits and vegetables)
- Gasoline
- Glues
- Greases
- Metalworking fluids
- Nickel
- Oils
- Pesticides
- Soaps
- Solvents
- Thinners
- Wet work

If allergic dermatitis is suspected, workers may be referred to a dermatologist for specialized skin patch testing to materials that may be causing the disorder.

TREATING CONTACT DERMATITIS

Avoiding the specific irritant is important. This may be through changes in the materials that you use at work, or changes in your job to avoid using irritants. Wearing gloves may help with keeping hands away from contact with irritants, but they may also increase problems if the hands are damp or sweat inside them.

Sometimes barrier creams that repel chemicals on the skin are used at work to protect skin as well. Your physician may recommend treatment with topical steroids, such as cortisone-type creams, as for other dermatitis, and with emollient creams that reduce redness, dryness and cracking of the skin, however, most patients do not improve if they continue to remain exposed.



PREVENTION

Employers must have workplace controls in place to prevent occupational diseases. If elimination or substitution of the irritant is not possible, engineering controls such as ventilation systems or isolation booths for spraying can prevent contact. Wash stations and other equipment to promote cleaning-up after using oils, solvents, cleaners and paints are helpful in removing these irritants at the end of a workday.



Personal protective equipment such as gloves, safety glasses or goggles, shop coats or coveralls, and boots can be provided to individuals to prevent exposure. Employers should ensure that gloves fit and protect exposed areas, are replaced when they wear out or develop holes, and that workers change them frequently to reduce dampness or sweating on the hands when gloves are worn for long periods.

Employees should be trained on proper use and the health effects of the chemicals and materials they use at work. They should have access to safety data sheets for all hazards and chemicals. All products and chemicals should be properly labeled and provide information on how to manage accidental exposures to workers.



The information is for educational purposes only and is not intended as a substitute for medical advice, diagnosis or treatment. Always seek the advice of your physician or other qualified health care provider with any questions you have regarding your medical care.



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