



TEAMSTERS Safety & Health FACTS

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DERMATITIS (SKIN DISEASE)

Skin diseases are the most common occupational illness in the United States, accounting for more than 65% of all work-related diseases.

What Is Dermatitis?

Dermatitis is an inflammation of the skin caused by exposure to irritants. Although the skin has tough built-in protection, it is no match for harsh workplace exposures. Skin irritations may vary from a slight reddening with mild itching to a rash or small eruptions with intense itching. Blistering, hardening, swelling, cracking, and flaking may also appear.

Common Causes

Chemical Compounds

Acids
Caustics
Detergents
Salt/saline solutions
Germicides
Mold cleaning solutions
Glass coatings
Degreasing solutions
Formaldehyde
Phenol/Urea
Hydrochloric acid

Physical Agents

Heat/Cold
Friction
Moisture/Steam
Hot water

Biological Agents

Bacteria
Viruses
Fungi
Parasites

Physical and biological agents are primary skin irritants. Chemical compounds act as primary irritants and/or sensitizers.

A primary irritant causes an irritant effect that disappears within a short time after initial exposure.

Exposure to a sensitizer, on the other hand, will not always cause irritation when first exposed. However, repeated exposure may cause the development of an allergic reaction. Once sensitized, extremely small amounts of the irritant can cause a severe outbreak of dermatitis. Because of the time the sensitizing process takes, you may work around a chemical or product for years and then suddenly react to it. Other types of skin problems caused by irritants include acne-like disease, pigment changes, and ulcerations.

Acne-like problems are usually caused by close contact with fats and oils that clog pores. Pigment changes involve either a loss of pigment or a darkening of pigment. Germicidal agents that contain phenolic compounds are examples of irritants that produce a loss of pigment when they react with skin. Ulcerations are pit-like holes caused by irritants such as acids and caustics.

Prevention: Methods of Control

Engineering controls include good local exhaust ventilation to collect irritating dusts, vapors, mists, or fumes; enclosing the process within a booth; or installing splash guards to reduce skin contact with the irritant.

Substitution of a less toxic chemical is frequently the best course of action.

Personal hygiene involves keeping the skin clean and frequently changing contaminated work clothes. Management should provide clean, well-designed and conveniently located washbasins and showers. Since some types of dermatitis are contagious, i.e., those caused by fungi, employers should also provide disposable paper towels. The cleansing soap or detergent must be safe for skin. NEVER WASH SKIN WITH SOLVENTS, MINERAL OILS, OR INDUSTRIAL DETERGENTS – THESE ARE NOT SAFE FOR SKIN CLEANSING.

Protective barrier creams are another way to protect your skin. There are five types, depending on the irritants in use:

- ♦ Soap base (vanishing cream type);
- ♦ Solvent repellent type;
- ♦ Water repellent type;
- ♦ Oil repellent type; and
- ♦ Special types.

Barrier creams are the least effective way of protecting the skin, and should be used only when gloves or face shields cannot be worn.

Protective clothing should be provided for jobs that may cause skin diseases. Good quality protective coveralls, aprons, boots, and gloves must be made of a material that is resistant to the specific irritant in use. Since workers frequently complain that their hands become sweaty when

wearing protective gloves, employers should provide replaceable cotton liners that absorb sweat. Workers should change these liners when they become damp.

In addition, different types of material provide better protection for different products. For example, rubber gloves provide good protection from acetone and alcohol, but do not protect against methylene chloride. Therefore, be sure to have the proper type of protective equipment for the product in use.

There is a wide assortment of gloves and sleeves for protection against hazardous situations. Employers need to determine what hand and skin protection their employees need. The employer should study the work activities of the employees to determine the dexterity required; the duration, frequency, and degree of exposure to hazards; and the physical stress applied. Before purchasing gloves the employer should request documentation from the manufacturer that the gloves meet the appropriate test standards for the hazards anticipated.

Preferred Gloves for Specific Irritant Chemicals

IRRITANT	PREFERABLE GLOVE
Inorganic acids	Heavy rubber, neoprene, polyvinyl chloride
Organic acids	Heavy rubber, neoprene, nitrile
Aliphatic solvents	Neoprene, nitrile
Aromatic solvents	Nitrile
Chlorinated solvents	Nitrile
Vegetable oils	Neoprene, nitrile, polyvinyl chloride
Soaps and detergents	Heavy rubber, neoprene, polyvinyl chloride