Contact Dermatitis

Dermatitis simply means inflammation of the skin. What is Contact Dermatitis? Contact Dermatitis is an inflammation that occurs when a substance comes into contact with skin. The skin is irritated and there is an abnormal reaction. How does the skin react? Areas of irritated skin may be red, swollen, tender, hot, painful or itchy. If the reaction is severe, the skin may blister or weep and can become crusty. There may be some scaling as the skin heals. Skin affected for several weeks by dermatitis tends to thicken and change to a deeper color. Sometimes there may be a reaction only when direct sunlight and an irritating substance are on the skin at the same time. This kind of contact dermatitis looks a lot like sunburn. Scratching or rubbing itchy skin can make dermatitis symptoms worse.

What are the high risk industries or occupations? In women, contact dermatitis occurs most frequently in hairdressing, food handling, nursing and cleaning, whereas it most commonly affects men who are plant operators, construction workers, food handlers, laborers and mechanics.

Which substances cause contact dermatitis? Many of the chemicals used in industry will cause a sudden and very strong reaction when they come into contact with bare skin. Safe work systems should be developed for such substances as:

- acids
- alkalis
- oils
- solvents
- petroleum products

Some manufactured products with chemicals that may cause problems are:

- cement
- synthetic rubber
- plastics
- fiberglass
- resins
- glue
- Metal objects with nickel and chromium (both used in electroplating) can cause contact dermatitis if handled or worn close to the skin.

Natural plant and animal products may cause a skin reaction in some people. Sawdust from some varieties of wood and natural oils used in perfume are some of the plant products that may cause a skin reaction. Sometimes the skin may be affected by chemicals used to process natural products – such as the dyes in leather, fur, wool and cotton, and preservatives in cosmetics, creams and ointments. Different people will react differently to each substance, and some workers may not be affected by them at all.

How long after contact will dermatitis develop? Some irritating substances will have an immediate and obvious effect on the skin. Other substances could be used regularly for a long time before the skin begins to react. After the first reaction occurs, dermatitis will develop fairly quickly each time there is contact with that substance.
What are the effects of dermatitis?
As well as causing pain or discomfort, dermatitis in some cases can result in long periods away from work. At times the same work cannot be resumed because the person has become sensitized to the substance.

What can be done to prevent contact dermatitis?
EMPLOYERS are required by occupational safety and health legislation to provide a workplace where employees are not exposed to hazards. Keep the work area clean. Provide material safety data sheets for substances causing contact dermatitis in your work area. If possible remove the irritating substance from the work area. Replace it with a less hazardous substance. Include information about contact dermatitis in your safety training program. Provide protective clothing and barrier creams where appropriate.

EMPLOYEES are required to protect themselves by following the employer’s safe work practices and using the protective equipment provided. Keep the work area clean. Avoid spills, splashes and sprays of the substance and clean them up promptly. Wash hands with a mild soap and water, and then dry them thoroughly after work. Use a cleanser made from vegetable oil to remove grease or other substances that will not come off with soap and water. Some barrier creams applied before work may make it easier to remove substances that tend to stick to the skin. Do not use solvents like kerosene or turpentine for cleaning hands! Wear clean protective clothing. Use of protective clothing is recommended instead of barrier cream except in circumstances where protective clothing such as gloves poses a hazard or where barrier cream has been prescribed. Barrier creams may be necessary to protect skin that will be wet for long periods. Do not use barrier cream on damaged skin. Treat minor cuts and abrasions promptly.