5-minute safety talk

Protect Skin from **Contact Dermatitis**

Your skin is one of the most vulnerable parts of your body. It's also your first line of defense against the elements. No matter your industry, at some point you've probably been subjected to substances on the job that are potential skin irritants or allergens. An adverse reaction can be extremely painful and damaging.

Most occupational skin disorders originate from contact dermatitis, a skin inflammation caused by direct contact with an irritating or allergy-causing substance. Although this disease can affect any part of the body, it typically attacks the hands and fingers. Symptoms include pain, itching, inflammation, swelling, skin lesions or rash, and cracked or peeling skin. These indicators generally appear on the area of skin exposed. The reaction may vary from slight to severe.

Types & Causes

The two primary categories of contact dermatitis include:

- **Irritant contact dermatitis**: Irritant contact dermatitis, the most common type of contact dermatitis, is inflammation resulting from direct contact with a substance that is caustic or corrosive to the skin. The reaction generally resembles a burn. Exposure can irritate the skin through long-term, low-level exposure or short-term, heavy exposure.
- **Allergic contact dermatitis**: Allergic contact dermatitis is inflammation caused by exposure to a substance to which the person has become hypersensitive or allergic. The reaction may vary depending on the irritant, body part, and sensitivity of the individual. Exposure may cause immediate reaction, or the allergy may develop over time.

Contact dermatitis can occur in any type of occupational setting. Agents that can potentially harm the skin can be classified as:

- **Chemicals**: The primary source of skin hazards, including common irritants such as acids, alkalis, cleaning solvents and detergents, metallic salts, oils, lubricants, metal working fluids, rubber, latex, epoxy resins and select gases.
- **Mechanical**: Friction, pressure, and trauma resulting in abrasions, lacerations, contusions, and the introduction of foreign bodies into the skin.
- **Physical**: Temperature extremes, radiation (including sunlight), and high-energy sources.
- **Biological**: Bacteria, fungi, viruses, parasites, and plant and animal material.

Prevention

- Identify all irritants and allergens in the workplace. Substitute substances that are less irritating or allergenic where possible.
- Inform workers about the substances they work with and their potential hazards. Train them on the importance of proper handling and storage, frequent disposal of wastes, and prompt clean-up of spills.
- Implement regular cleaning of machinery, floors, walls, ceilings, windows, and entire work areas.
- Equip machinery with enclosures or hoods, splash guards, and drip pans.
- Keep work areas well-ventilated, and keep humidity at a comfortable level.
- Provide workers with the proper protective equipment required for the job, such as aprons, eye and face shields, finger cots, gloves, chemical-resistant clothing, sleeves, and special chemical-resistant footwear. Train workers how to use each item.
- Issue barrier cream when protective clothing cannot be worn and exposure to a contaminant is unavoidable. Seek advice from a professional as to the type of cream needed. Train workers on proper application.
- Install workplace hygiene facilities and instruct workers on the importance of showering and changing clothing before leaving the site if contaminants can be potentially carried home.
- Make sure workers understand the importance of personal cleanliness. Encourage them to wash hands frequently with soap and water (or waterless hand cleansers), dry hands completely, and apply barrier cream after washing if needed. Also, wash clothing frequently, and check for worn spots and holes.

Treatment

Workers should immediately report all skin disorders to the plant doctor, industrial nurse, occupational physician or designated first aid contact. In many instances, contact dermatitis can be treated through the use of creams, compresses, ointments, or skin cleaners. However, it's important to consult a trained medical professional to establish a proper diagnosis and treatment plan.

Cleaning your skin – if you come into contact with an allergen or irritant, rinse the affected skin with warm water and an emollient as soon as possible.

Using gloves to protect your hands – but take them off every now and again, as sweating can make any symptoms worse; you may find it useful to wear cotton gloves underneath rubber gloves if the rubber also irritates you.

Changing products that irritate your skin – check the ingredients on make-up or soap to make sure it does not contain any irritants or allergens; in some cases, you may need to contact the manufacturer or check online to get this information.

Applying emollients frequently and in large amounts – these keep your skin hydrated and help protect it from allergens and irritants; you could also use emollient soap substitutes rather than regular bar or liquid soaps, which can dry out your skin.

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