

OCCUPATIONAL SKIN PROBLEMS AND HAIR DRESSERS



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THE ISSUE. 1000 CLAIMS ARE REPORTED EACH YEAR IN ONTARIO FOR CONTACT DERMATITIS.¹ CONTACT DERMATITIS RESULTS IN INFLAMMATION OF THE SKIN (RASH) THAT MAY OCCUR WHEN THE SKIN IS TOUCHED BY IRRITANTS OR SUBSTANCES THAT CAUSE AN ALLERGIC REACTION.² Occupational skin problems in professionals dealing with the art of hair care and design are caused by contact with substances and metals at work. Due to the fact that most contact is made with the hands and forearms, it is these areas of the human body that are largely affected, but spread to other areas may also occur. There are two types of contact dermatitis that may be incurred.

Allergic Contact Dermatitis results when a person becomes allergic to a substance (*allergen*). The person then becomes sensitized to the substance and whenever they are in contact with the substance, their body will respond no matter how minute the amount of exposure.

Irritant Contact Dermatitis occurs when the skin is exposed to a mild irritant (*such as detergent or solvents, which are called irritants*) repeatedly over a long period of time or a strong irritant (*such as acid, alkali, solvents, strong soaps or detergents*) which can cause immediate skin damage. Only that section of the skin that comes in contact with the substances will be affected. Early signs of both conditions include, inflammation, dryness, redness, itching, swelling, cracks, scaly skin and development of blisters.³

The most common occupational factor leading to dermatitis is frequent immersion of hands in water, especially if the skin is exposed to substances in shampoos and dyes, as they eventually strip the skin of its natural protective layer.⁴

Other sources include, latex rubber in gloves, bleaches, dyes and dye removers, permanent wave lotions and neutralizers, hair strengtheners, depilatories, hair-sprays, fragrances, lanolin as well as cosmetics.¹ Occupational dermatitis can also result from broken skin that can lead to infections from a number of sources including clients.

CAUSAL CULPRITS: WHAT TO LOOK OUT FOR!

Hairdressers are susceptible to skin irritation due to the nature of their work. There are multiple factors that may contribute to the development of skin complications.

WATER:

Hairdressers are required to frequently submerge their skin into water and other liquid substances, such as rinsing out cosmetics, washing hair, cutting wet hair, and washing hands after performing their work duties. All hairdressers are subject to an excess of water exposure, approximately greater than 2 hours per day.

HAIR COSMETICS:

Hair cosmetics contain irritant substances which are present in high concentrations and can cause skin irritation. Perm fluids, hair dyes and blinding agents contain high concentrations of sensitizing compounds which cause allergic eczema among hairdressers.

HAIR DRYERS:

The dry air from the hair drying procedures also contribute to the irritation of skin on the hands and forearms.

As per the Workplace Safety and Insurance Board, some examples of irritants include, permanent wave solutions, shampoos, bleaching agents and wet work.

Allergens are listed as dyes, persulphates, nickel, perfumes and rubber (*Latex Gloves*). Other items may include, formaldehyde, glycerol Thioglycolate, Kathon DG, resorcinol and pyrogallol. More specifically, paraphenylenediamine (PPD) is an agent found in permanent hair dyes. If contact with this chemical cannot be avoided, it is necessary to ensure that employees wear gloves when working with these chemical and be careful to wash and change all clothing that comes into contact with them.

“The number of cases of irritant contact dermatitis in Canada at this time is not known. According to some US Statistics, skin disorders comprise more than 45 percent of all occupationally related diseases. Irritant Contact Dermatitis accounts for 80% of all occupational dermatitis’s alone.” Taken from CCOHS—1998

Paraphenylenediamine is a black dye used in permanent oxidative hair dyes and is used with cross-linkers to produce all hair dye colors. It is a major cause of allergic Contact Dermatitis in hairdressers.

irritants: permanent wave solutions, shampoos, bleaching agents, wet work

Allergens: dyes, persulphates, nickel, perfumes, rubber

PREVENTION MEASURES FOR SAFE AND HEALTHY SKIN

Where feasible replace allergenic components such as GTG (*Acid perm fluid*), PPD and APS (*dye and blonding agent*) as soon as possible. If this is not feasible, change the application form of the product such as; blonding creams or tablets / granules versus powder products, to control employee exposures. Gloves should be worn when working with irritating or sensitizing substances. Gloves should be of the disposable type. If latex gloves are used, ensure that the gloves chosen do not cause an allergic reaction itself. Cotton gloves under rubber gloves for all wet work is also recommended.

Barrier Creams are also suitable for protection against chemicals that come in contact with the skin. Gloves coated with corn starch or lubricating oils are known to be

a contributor to dermatitis. Skin care creams should be utilized before and after work and in between breaks, to retain the skins moisture balance, that is stripped away by the various products and by frequent wet work. Hand washing is essential in preventing Contact Dermatitis.

However, excess exposure to water promotes dryness of the skin as the water and other substances that this skin comes in contact with strip the skin of its natural oils. This effect is further enhanced by harsh soaps or detergents or after exposure to solvents. Cleansing products should include mild soaps or other solvent-free hand cleaners. Employees should refrain from wearing jewelry on hands or wrists during work as they may also contribute to irritation when in contact with the various substances.

In terms of administrative controls, it is recommended to implement a rotation of tasks for wet work. This way employees are not burdened with constant wet work.

CAN THIS HAPPEN TO ME? WHAT SHOULD I DO?

How quickly a skin reaction develops depends on the strength or potency of the substances and how long and how often it touches the skin. Different employees will react differently to each substance, and some employees will have no reaction at all. Skin conditions usually improve when the employee is away from work such as holidays or weekends. Detergents, soaps, cleaners, waxes and chemicals are substances that can irritate the skin. These substances can wear down the oily, protective layer on skin’s surface, hence breaking down the skin’s natural defense barriers. Within the hairdressing profession, there are a wide range of activities and tools that the employees are in contact with such as: scissors, styling rods and rollers, rubber caps, hair dryers, curling tongs, chemical solutions and treatments and cleaning equipment and products.⁶ Some of these tools may also contribute to dermatitis through their use (*for example, nickel exposure through the use of scissors*).

If you have a skin rash that won’t go away, visit your Doctor and make him (her) aware of the chemicals that

you are exposed to at work. Common treatments include: cortisone-type creams, antihistamines, lotions and creams or oatmeal baths (*to relieve the itching*). Sensitization to allergens may occur within days of exposure or even months or years. Employees may develop an allergy to a substance after they have worked with it for many years. Once sensitization occurs, it is life long and any exposure to the chemical or allergen should be avoided.

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OHCOW OFFICES

If you need further assistance, call the Occupational Health Clinic for Ontario Workers Inc. Closest to you.

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