



Keeping Working Skin Healthy

According to the National Institute for Occupational Safety & Health (NIOSH), one of every four workers is exposed to some form of skin irritant in the workplace. Whether it's a maintenance worker, a manufacturing worker, mechanic or food service worker, there is a good chance that they are dealing with some type of skin hazard. Those hazards can cause numerous skin problems, from simple dry skin to more advanced, painful and costly problems such as dermatitis.

Employees often think having cracked or dry skin is simply part of the job. It doesn't have to be and in many cases, it certainly should not. Cracked skin can be a serious workplace safety concern, leading to severe problems when harmful substances are able to easily penetrate the skin's outer layer.

In order to prevent skin damage it is vital to educate workers about the importance of maintaining healthy skin and to inform them that proper skin care can prevent doctor visits and lost work time. Workers should know about the potential hazards of the substances they work with and how those substances can affect their skin. Education on the safe and effective removal of potentially harmful substances from the hands, both during and after the workday, is also critical.

A complete three-step program is an effective way to help prevent skin irritation. This program should include a protective before-work product, a skin compatible cleaner and an after-work conditioner, all of which are specific to the substances being handled. When gloves are not an option due to the hazard of getting caught in machinery or

because they don't allow sufficient dexterity, a before-work cream can be used to help maintain the integrity of the outer skin layer. Proper selection of the before-work cream is extremely important. It should be matched to the specific work environment. A hazard-specific product, backed by efficacy studies that confirm its beneficial results, is the key to an effective program. All-purpose creams do not usually provide sufficient protection.

Encouraging employees to apply a cream prior to work can be a challenge. The idea is to help maintain the integrity of the outer skin layer, called the stratum corneum. This important protective layer is only 3 red blood cells thick and without proper protection, the everyday use of common workplace chemicals, degreasers, solvents, water, and just plain abrasion will take their toll. Again, education is key. Identifying potential skin irritants and sensitizers is important. Employees need training to better recognize these and understand the proper precautions. Once identified, the appropriate before-work creams should be dispensed from a location that can be easily accessed. Small, portable sample-size dispensers tend to get misplaced. A wall-mounted dispenser near the wash up area or locker room is preferable.

Training in the correct use of before-work creams is very important in ensuring proper application. The back of the hand is often missed when applying creams. However, the skin in that area is thinner than the skin of the palm, making it that much more important to cover well. Also instruct employees to apply cream between the fingers, in the nail beds, and on the wrists and forearms. Forearm skin is particularly sensitive; for complete protection, before-work creams must be applied to this area.

Training posters, pamphlets, and videos offer excellent support for your efforts to educate employees on the proper use of before-work skin creams. Periodic safety meetings on skin health will also reinforce this vital area of employee safety.

The type of hand cleaner chosen is critically important to skin health. Common cleaners such as paint thinner, abrasive powders, and solvent or d'limonene based hand cleaners

should be avoided. The NIOSH Criteria Document on Organic Solvents finds that certain chemicals such as xylene, found in common paint thinner, appear in the bloodstream within 15 minutes of skin contact. Borax and pumice- based abrasive hand cleaners strip away the skin's natural barrier – the stratum corneum – increasing susceptibility to rashes and dermatitis. Petroleum-based solvents may cause a defatting action on the skin, while hand cleaners that contain d-limonene may cause allergic reactions and dry skin conditions.

Frequent skin contact with hazardous substances requires an effective after-work cream in order to help the skin heal and regenerate. Most people are familiar with the benefits of using a good skin moisturizer to replace lost moisture and oil, especially during the winter months when the combination of lower outdoor humidity and heated indoor air results in additional moisture loss. As warm air is capable of holding more moisture than cold air, heated indoor air acts like a sponge, absorbing moisture from everything it touches, including human skin. In these conditions, the use of a harsh hand cleaner can severely aggravate skin irritation and frequent use of even the most skin-friendly hand cleaner can leave the skin dry.

Be sure to choose a moisturizing and conditioning product formulated for workplace conditions. Most conditioning products sold at the retail level contain about 90% water. A product containing 15% to 30% fats or oils, dependant on degree of skin dryness, is preferable for working skin.

The average human body is covered by 3,000 square inches of skin, making it the largest of our organs. As it performs many functions that preserve our health and wellbeing, proper care of this large and important organ is vital. The need increases when the body is exposed to chemicals, physical irritants, mechanical stress and natural environmental hazards.

In pursuing its mission to improve worker health and workplace safety by providing information such as this report; training materials; appropriate dispensing systems; and

hazard-specific before-work skin defense, skin cleaners and after-work conditioners, Stoko Skin Care has found that proper skin care delivers benefits we can all see and feel. Addressing this critical aspect of workplace safety can result in fewer injuries and less lost time while contributing to a healthier, more productive workforce. By using skin-compatible products in the correct manner, workers who suffer from skin irritation problems can see immediate results. And in lowering cases of dermatitis in your facility, an effective skin care program goes a long way toward reducing your risk and improving your company's performance.

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