

CAUSATIVE AGENT: WET WORK

SKIN IRRITANT

DEFINITION

Activities where a worker's hands are: in liquids more than 2 hours per shift, washed more than 20 times per shift, or in water-resistant gloves (e.g. rubber or plastic) more than 2 hours per shift.

SECTORS: Construction, electrical and utilities, transportation.

JOBS

Construction

Bricklayer, cleaner/custodian, concrete finisher, derrick operator, general labourer, glazier, hardwood floor installer/finisher, mason, painter, plasterer, plumber, refrigeration/air conditioning worker, sprinkler fitter, steamfitter/pipefitter, stone cutter, structural steel worker, tile installer, welder

Electrical

Cleaner/custodian, electrician, electrical technician

Transportation

Aircraft cleaner, cleaner/custodian, engineer (i.e. machinist), flight attendant, mechanic, passenger car cleaners, pump house worker, seaman, ship cook, transport driver

HEALTH EFFECTS

Irritant contact dermatitis: a skin rash triggered by over-exposure to water, solvents, friction, or contact with irritating substances (e.g. soaps, detergents)

HOW COMMON ARE THE HEALTH EFFECTS?

The prevalence of hand dermatitis amongst manual workers in the electrical sector ranges from 13.4-22.2%

Wet-work accounts for approximately 20% of irritant contact dermatitis

KEY PREVENTION STRATEGIES

Substitution

- Use mild skin care products (i.e. mild soap for cleansing, mild detergent for industrial cleaning, waterless hand cleanser for oil and grease removal)

Engineering Controls

- Use tools to prevent direct contact with irritants

Administrative Controls

- Provide training on proper glove use (i.e. use cotton liners with nitrile gloves)
- Provide training on skin care (i.e. apply moisturizing cream after washing hands, at the end of a shift, and before bed; apply cream to the spaces between the fingers)
- Provide training on hand hygiene (i.e. use lukewarm water, avoid hot; use alcohol-based hand rubs when the hands are not visibly soiled; avoid industrial hand cleaners containing pumice)
- Job/task rotation (i.e. distribute wet work exposure among workers so no one is burdened with constant wet work)

Personal Protective Equipment

- Avoid gloves made from natural rubber latex (consult manufacturer; if necessary, use low-protein and powder-free)

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OTHER CONSIDERATIONS

- Frequent hand washing as well as repeated physical abrasion (rubbing) of the skin can cause workers to develop contact dermatitis
- Trace amounts of irritants (e.g. detergent, soap, water) can collect under jewelry or inside gloves (if donned incorrectly) and affect the skin's condition
 - Avoid wearing rings at work
 - Wash and dry your hands well before you put on gloves as well as after removing them
 - Check for holes or wear and tear before wearing gloves
 - When removing gloves, avoid touching the outside portions that may be contaminated or dirty

SOURCES

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