

HANDWASHING VS ANTISEPTIC HAND GELS

With the increase in popularity of antiseptic hand gels over the past 6 years, we have seen a significant decrease of compliance with hand washing. However, hand gels were never intended as a replacement for hand washing, but to be used only in cases where hand washing was not feasible.

Per Federal law, hand washing is the primary method for cleansing hands. OSHA standards make it very clear that antiseptic hand gels do not replace the act of washing hands. In plain English, it clearly states that antiseptic hand cleansers can only be used when it is not feasible to provide hand washing facilities with running water. In our industries, running water should always be available for hand washing. Also note, per OSHA standard cited below, after the use of antiseptic hand gel, hands must still be washed with soap and water as soon as feasible.

1910.1030(d) (2) (iii)

Employers shall provide hand washing facilities which are readily accessible to employees.

1910.1030(d) (2) (IV)

When provision of hand washing facilities is not feasible, the employer shall provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as feasible.

1910.1030(d) (2) (v)

Employers shall ensure that employees wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.

1910.1030(d) (2) (VI)

Employers shall ensure that employees wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

In the CDC Guideline for Hand Washing for Health Care Professionals, the use of hand gels was addressed and protocols were written strictly for health care workers. This was in response to a long history of non compliance and nosocomial infections due to lack of appropriate hand washing in the health care profession. It was not intended for all industries.

Another issue is the proper application of hand gels. Antiseptic hand gels must be used per the manufacturer's instructions. The gel must be applied interdigitally (between the fingers), and manually agitated for at least fifteen seconds, as in hand washing, or it is not effective. It must then be allowed to thorough air dry. If antiseptic hand gels are used regularly, hands must be washed after every 4 to 6 applications.

For the modification artist, this does not make sense. A quote on hand washing from the CDC's website (<http://www.cdc.gov/od/oc/media/pressrel/fs021025.htm>) states: "Hand washing with soap and water remains a sensible strategy for hand hygiene in non-health care settings and is recommended by CDC and other experts." Let us revisit good old fashioned hand washing protocols below.

Hand washing should be performed:

- Upon arriving to work
- Before gloving
- After the removal of gloves
- After contact with any potentially contaminated surface or item
- After working in “common areas” or performing housekeeping duties
- Between direct contact with different clientele
- Before and after eating, drinking, or handling food
- After personal use of toilet facilities
- When hands are visibly soiled, including after sneezing, coughing, or blowing your nose
- Before leaving work
- Whenever necessary (use sensible judgment)

Hand washing with plain soaps for 10 to 15 seconds is effective in removing most transient microorganisms. Plain soaps may not remove resident microorganisms which are located within the deep epidermal layers of the skin. However, resident microorganisms can usually be killed or inhibited with antimicrobial products.

An antiseptic is an agent that inhibits the growth of some microorganisms on skin and/or tissue. Examples include para-chloro-meta-xyleneol (PCMX) and Triclosan.

- These products should be used no more than four times per eight hour shift, or per the manufacturer’s instructions.
- Most antiseptics used within the body modification industry are antimicrobial soaps (e.g. Provon© and Satin©), 1% Gentian Violet (used as a marking dye in piercing procedures), and surgical skin prepping products used in both piercing and tattooing procedures (e.g. Technicare©).

Though alcohol-based antiseptic solutions (e.g., Purell©) have gained popularity within the medical community, they are not acceptable as a substitute to hand washing within the body modification industry. **HAND WASHING REMAINS THE SINGLE MOST IMPORTANT MEANS TO PREVENT THE SPREAD OF INFECTION.**

REMEMBER:

- Antiseptic solutions should never replace hand washing.
- Antiseptic solutions are not to be used when hands are visibly soiled. Organic matter (blood, proteins, etc.) will inactivate their antimicrobial properties.
- Antiseptic solutions are acceptable for use at the front counter after casual contact with clientele.
- Antiseptic solutions are acceptable for use in a convention setting. A bottle of Purell© located at each tattoo booth for the practitioner to use immediately after glove removal would be ideal. Hands should then be washed as soon as possible.
- Always use antiseptic products according to the manufacturer’s instructions.

Antimicrobial soaps have been used within the body modification industry with great success. However, improper or excessive use of the antimicrobial agents can cause the destruction of the resident flora that lives on our skin. In addition, a breakdown in skin integrity can increase the risk of acquiring allergic contact dermatitis (ACD). ***It is suggested that hand washing with antimicrobial soaps not exceed 4 times a day.***

Non-antimicrobial soaps (plain soaps) can be used in conjunction with antimicrobial products between hand washings. Plain soaps do not kill or inhibit the resident microorganisms of the skin. Alternating the use of plain and antimicrobial soaps helps preserve skin integrity and aid in the decrease of ACD occurrences.

Friction is the most important part of handwashing. **ROUTINE HAND WASHING SHOULD TAKE 10 TO 15 SECONDS** and should be accomplished as follows:

- 1) First, all jewelry must be removed from hands and wrists prior to hand washing.
- 2) Wet your hands with warm running water.
- 3) Apply a small, yet sufficient, amount of soap (either antimicrobial or plain) and thoroughly distribute over hands.
- 4) Vigorously rub together all surfaces of lathered hands for 10 to 15 seconds
 - a) Interdigitally (between the fingers).
 - b) Don't forget those thumbs!
 - c) Wrists
 - d) Nail Beds
 - e) Beneath fingernails
 - f) Palms of hands
- 5) Thoroughly rinse your hands (from the top of the wrist down to the fingertips) under warm running water to remove residual soap.
- 6) Dry hands with a disposable paper towel. Take the time to pat your hands dry. Do *not* vigorously rub hands together. This can cause micro-abrasions which compromise the skin's integrity.
- 7) If the hand washing sink does not have foot controls or an automatic shutoff, use a clean paper towel to turn off faucets to avoid re-contaminating your hands.

ALWAYS USE WARM WATER. Hot water is much harder on the skin. It will strip the essential oils that protect the skin, thus causing excessive dryness and irritation. Also, washing hands in hot water for the recommended amount of time will likely be uncomfortable. Cold water can cause pores in the skin to constrict, thus trapping microorganisms in the superficial layers of the skin. Cold water also inhibits the proper lathering of soap.

PROPER RINSING to remove residual soap and taking the time to thoroughly pat your hands dry will help prevent chapping and cracking of the skin.

ALWAYS PAT HANDS DRY gently with a disposable paper towel. Roughly drying them (vigorous rubbing) can cause micro-abrasions and remove the top layer of your protective skin.

USE HAND LOTION THROUGHOUT THE DAY. However, keep in mind that many lotions contain products which may compromise glove integrity. Check with your glove manufacturer or distributor to find a product that will not affect glove integrity.

FINGERNAILS ARE A GOOD SOURCE OF INFECTIOUS BACTERIA. Keep fingernails short and unpolished. Microorganisms can "hide" in the cracks of the polish and under long or false nails. Having long nails increases the risk of tearing gloves. *Natural or artificial nails should be no more than ¼ of an inch long.*

In conclusion, although hand sanitizing gels have their place in our industry, at front counter where money is handled but they are never to be used as a substitute for good old fashioned hand washing with soap and water.

Written by David A Vidra and Laurna Marika, Health educators Inc, references available on request