

HAND WASHING 101



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IT'S IN YOUR HANDS

Take into account the many things you do in a day including blowing your nose, playing with the dog, talking on the telephone, typing on the computer, touching the doorknobs; bring your hands into contact with germs.

For this reason, frequent hand washing is the single most important thing you can do to prevent yourself from getting sick as well as from spreading germs to other surfaces and to other people.

Consider the following facts and figures:

- 2 million people become ill each year as a result of a hospital-acquired infection. Proper hand hygiene is critical to the prevention of these infections - which contribute to the death of nearly 90,000 hospital patients per year and \$4.5 billion in medical expenses.
- Infectious diseases commonly spread through hand-to-hand contact include the common cold, the flu, and gastrointestinal disorders.
- Proper hand washing is also the most effective way of preventing the spread of many serious illnesses such as meningitis, bronchitis, hepatitis A and SARS.
- Many outbreaks of foodborne illness such as salmonella and E.coli, can be traced to unwashed or poorly washed hands.
- 91% of adults say they always wash their hands after using public restrooms. However only 83% were observed doing so.
- Most people report washing their hands after using the bathroom in their home (83%) and before handling or eating foods (77%). However, smaller percentages wash their hands after petting a dog or cat (42%), after coughing or sneezing (32%), or after handling money (21%).
- 68% of respondents of the Soap and Detergent Association's (SDA) 2006 National Cleaning Survey do not wash their hands long enough to effectively remove germs and dislodge dirt.

(Source: <http://www.foodsafety.gov/~dms/fsehandw.html>)

Good hand hygiene is proven to benefit health. Properly cleaning your hands is simple and extremely effective yet many people do not maintain this practice as often, or as well, as they should.

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HAND HYGIENE IN THE WORKPLACE

Infectious diseases, such as colds and the flu, are the leading causes of employee absenteeism due to illness. Lost productivity in the workplace from the flu alone costs employers an estimated \$15 billion. Yet, the first line of defense against infectious diseases – good hand hygiene - is often overlooked by employers. Most companies do not proactively encourage hand washing in the workplace.

The SDA recommends that employees wash their hands approximately five or more times a day. What's more, there seems to be a direct correlation between encouragement by employees and compliance: in businesses that post hand-washing reminders 72% of employees wash their hands five or more times a day and 38% wash their hands more than 10 times a day. Employers should therefore post reminder signs in bathrooms, kitchens and other communal areas. By doing this, companies are not only being responsible but can also help improve their bottom line.

IMPROVING HAND HYGIENE

Hand hygiene is refers to the removal or destruction of microorganisms on hands, such as hand washing with soap and water or the use of a waterless alcohol-based rub. The amount of time spent on hand hygiene is as important as the method used. In addition, wet hands have been shown to transfer germs much more readily than dry hands or hands not washed at all. Therefore, careful hand drying is critical.

ALLERGENS IN CONVENTIONAL SOAPS

Unfortunately, frequent hand washing can expose you to an extraordinary amount of contact with water, as well as soap/cleansing agents that can cause allergic reactions, redness, dryness and/or itchiness. The frequency of washing time, the exposure to water, cleansing agents, and the temperature of water are factors that contribute to these reactions.



Other chemicals found in conventional soaps, such as Volatile Organic Compounds (VOCs), may have short and long-term adverse environmental and/or health effects. Such potential health effects can include eye, nose, and throat irritation, headaches, loss of coordination, nausea, damage to liver, kidney, and central nervous system.

Below is a list of 26 substances found on the Council Directive 76/768/EEC, due to their allergenic potential. The presence of these substances must be indicated in the list of ingredients of finished product when concentration exceeds:

- 0,001% in leave-on products
- 0,01% in rinse-off products

For the complete document, please go to:

<http://eur-lex.europa.eu/LexUriServ/site/en/consleg/1976/L/01976L0768-20060809-en.pdf>

1. Amyl cinnamal (CAS No 122-40-7)
2. Benzyl alcohol (CAS No 100-51-6)
3. Cinnamyl alcohol (CAS No 104-54-1)
4. Citral (CAS No 5392-40-5)
5. Eugenol (CAS No 97-53-0)
6. Hydroxy-citronellal (CAS No 107-75-5)
7. Isoeugenol (CAS No 97-54-1)
8. Amyleïn naml alcohol (CAS No 101-85-9)
9. Benzyl salicylate (CAS No 118-58-1)
10. Cinnamal (CAS No 104-55-2)
11. Coumarin (CAS No 91-64-5)
12. Geraniol (CAS No 106-24-1)
13. Hydroxy-methylpentylcyclohexenecarboxaldehyde (CAS No 31906-04-4)
14. Anisyl alcohol (CAS No 105-13-5)
15. Benzyl cinnamate (CAS No 103-41-3)
16. Famesol (CAS No 4602-84-0)
17. 2-(4-tert-Butylbenzyl) propionaldehyde (CAS No 78-70-6)
18. Linalool (CAS No 78-70-6)
19. Benzyl benzoate (CAS No 120-51-4)
20. Citronellol (CAS No 106-22-9)
21. Hexyl cinnam-aldehyde (CAS No 101-86-0)
22. d-Limonene (CAS No 5989-27-5)
23. Methyl heptin carbonate (CAS No 111-12-6)
24. 3-Methyl-4-(2,6,6-tri-methyl-2-cyclohexen-1-yl)-3-buten-2-one (CAS No 127-51-5)
25. Oak moss extract (CAS No 90028-68-5)
26. Treemoss extract (CAS No 90028-67-4)

“Foam soap can offer your company an economical and environmentally friendly way to ensure that employees are washing hands effectively. Firstly, it is more affordable because it uses less soap per volume: the foam generated is approximately 20 times the actual volume of the soap. Secondly, using foam soap can reduce waste and water use by as much as 50%.”

FOAM SOAP: NOT JUST ANOTHER SOAP

Foam soap is diluted liquid soap that is processed with special equipment. Once bottled, soap is dispensed through a pump and foam is created by mixing air with the liquid. This relatively new technology results in a large volume of foam being created from a small amount of product.

This type of soap is more effective than traditional types of soap and it goes on more smoothly. The foaming properties are great for quick and thorough cleaning of hard to reach places often missed by other soaps, such as under fingernails. Also, foam soap is less messy to use and produces less waste than a liquid or gel soap, which often ends up in the sink or on the countertop. Foam soap also minimizes water waste because it is easier to rinse. A smaller quantity is needed for effective hand washing and it is fast acting. Whereas some traditional bar soaps can harbour pathogenic, or disease causing, organisms during and after use, foam soap allows for a thorough and hygienic hand wash.

Foam soap can offer your company an economical and environmentally friendly way to ensure that employees are washing hands effectively. Firstly, it is more affordable because it uses less soap per volume: the foam generated is approximately 20 times the actual volume of the soap. Secondly, using foam soap can reduce waste and water use by as much as 50%. Using foam soap can also mean less time has to be spent cleaning washrooms. For these reasons, foam soaps are already fast gaining in popularity and are the germ-fighting hygienic choice for restrooms in schools, malls, restaurants, lodging facilities (hotels, motels), manufacturing plants, service stations, offices and public buildings.



To ensure the sustainability of your company's choice of soap, look for a foam soap that is green certified, contains no allergens, and contains natural essential oils.

SOAP DISPENSERS: CHOOSE THEM WISELY

The choice of a soap dispenser will also have a significant impact on the hygiene of the users. A carefully chosen dispenser will help ensure optimal hygiene and protect the health and safety of employees and customers.

A captive system that does not allow for cross contamination presents important benefits over a bulk fill system. This type of system can only be packaged in sealed containers which are specifically designed to fit the dispenser. Since the soap never makes direct contact with the dispenser, the growth of a broad spectrum of microorganisms, including moulds, is inhibited. The potential for cross contamination is drastically reduced thereby ensuring a hygienic system. This type system is very user-friendly because soap cartridges can be replaced quickly. They eliminate the mess that can be caused by the bulk fill method and soap wastage.

A hands free system offers additional benefits because it minimizes direct contact with the dispenser and further reduces the spread of germs. It is also economical as the amount of soap dispensed is pre-measured, thereby reducing the amount of soap used.

HERE ARE SOME HAND WASHING TIPS:

1. When to wash hands:

- After using the restroom
- Before and after staff meetings if food is served
- After scanning newspapers or magazines in the break room
- Before and after lunch
- After using someone else's keyboard or tools
- Before and after a meet and greet activity
- When using shared office equipment such faxes, phones, photocopiers

2. How to wash your hands:

1. Wet hands with warm running water prior to reaching for soap, either in bar or liquid form.
2. Rub hands together to make a lather. Do this away from running water, so the lather isn't washed away.
3. Wash the front and back of hands, between fingers and under nails. Continue washing for 15 seconds or more.
4. Rinse hands well under warm running water.
5. Dry hands thoroughly with a clean towel or air dryer.

**Alcohol-based hand sanitizers or gels or antibacterial wipes are useful alternatives if soap and water are not available (for example, when traveling in the car or taxi on the way to a business meeting or before eating an in-flight meal or snack).*

Taking the extra few minutes to wash your hands, encouraging your employees to do the same, and ensuring that your company is providing the most hygienic environment to do so, have become essential for any business. These simple actions will go a long way in protecting the health and safety of your employees and customers.

For more information, contact Avmor at info@avmor.com or call 1 800 387.8074 or visit the website at www.ecopure.ca or www.avmor.com. Avmor Ltd. is Canada's leading manufacturer of professional cleaning solutions for the Jan/San and Foodservice markets. Its Biomor and Ecopure products have received one or more of the following certifications: *Environmental Choice Program, Green Seal, Design for the Environment U.S. EPA, Avmor Green Approved Standard, Drug Identification Number, and Canadian Food Inspection Agency.*



- Areas most frequently missed during hand washing
- Less frequently missed
- Not missed

(Adapted from Taylor L (1978). An evaluation of hand washing techniques - I, Nursing Times, 12 January, pp 54-55)

