

A Guide to Proper Handwashing



how to
fight germs
simply and
effectively

Kimberly-Clark
**SKIN
WELLNESS**
INSTITUTE





Most of us think of handwashing as a common sense part of personal cleanliness. But it's a lot more than that.

According to the U.S. Centers for Disease Control (CDC), "handwashing is the single most important procedure for preventing the spread of infection." The Association for Professionals in Infection Control and Epidemiology (APIC) agrees. Handwashing, APIC says, reduces the "carriage of potential pathogens on the hands," which, in health care settings, can make a critical difference in reducing the incidence of nosocomial, or hospital-acquired, infections.

In short, handwashing not only gets your hands clean, it helps protect your health — and even your life.

What Is Handwashing?

Handwashing is what we commonly do to get our hands clean. This process of vigorous, brief rubbing together of all surfaces of lathered hands, followed by rinsing under a stream of water removes soil and transient microorganisms from the hands. Antisepsis is a handwashing technique using antiseptic cleansers such as anti-microbial soaps or alcohol-based hand rubs.

It is important
to distinguish
between
transient
microorganisms
and resident
microorganisms.

Transient microorganisms are not consistently present on most hands, being easily removed with ordinary handwashing. But another kind of microorganism, called resident microorganisms or colonizing flora, are considered permanent residents of the skin and are not easily removed by ordinary handwashing.

When to Wash Hands

Common sense tells us that our hands need washing when they're visibly dirty. But the need for handwashing varies from one setting to another. In health care and foodservice environments, handwashing must be more frequent. That is, surgeons and chefs probably need to wash their hands more often than bricklayers and stock brokers.

APIC Recommendations for Health Care Workers: When to Wash

In **health care settings**, handwashing is critically important. Health care workers' hands can carry bacteria, viruses, and fungi that may be infectious to themselves and others. Not surprisingly, a recent article in *Healthcare Purchasing News* reported that more and more health care facilities now include handwashing compliance in employee performance reviews.

healthcare

APIC guidelines suggest that, in health care environments, workers should judge when to wash their hands based on:

- ❖ **Intensity of contact with patients.**
- ❖ **Degree of contamination that is likely to occur with that contact.**
- ❖ **Susceptibility of patients to infection.**
- ❖ **Procedure to be performed.**

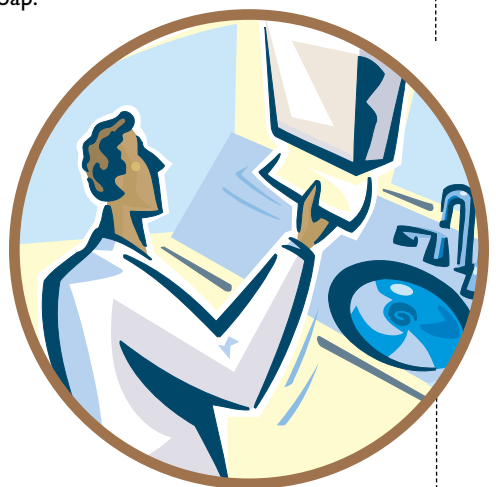
APIC recommends that workers in health care settings cleanse hands thoroughly with soap and water, or through hand antiseptics, under the following conditions:

- ❖ **Before and after patient contact, especially when hands have had contact with mucous membranes, secretions, excretions, blood and/or body fluids.**
- ❖ **After contact with a source of microorganisms.**
- ❖ **After removing gloves.**

APIC guidelines also recommend hand antiseptics using antimicrobial soaps or alcohol-based hand rubs in the following circumstances:

- ❖ **Before performing invasive procedures.**
- ❖ **When persistent antimicrobial activity on the hands is desired.**
- ❖ **When it is important to reduce numbers of resident skin flora in addition to transient microorganisms.**

For general patient care, APIC guidelines recommend the use of plain, non-antimicrobial soap.



*APIC Guidelines for Health Care Workers:
Handwashing Techniques*

For **health care workers**, APIC recommends the following handwashing techniques:

- ❖ **Wet hands with warm running water.**
- ❖ **Apply handwashing agent and thoroughly distribute over hands.**
- ❖ **Vigorously rub hands together for 10 to 15 seconds, generating friction on all surfaces of the hands and fingers, including thumbs, backs of the fingers, backs of the hands, and beneath the fingernails. Use a nail brush if necessary.**
- ❖ **Rinse hands thoroughly to remove soap. When drying hands with paper towels, the towels should be dispensed from holders that require the user to remove them one at a time. (Leaving soap on the skin and incomplete drying contribute to dermatitis.)**
- ❖ **If the sink does not have foot controls or an automatic shutoff, avoid recontaminating the hands by using a paper towel to shut off the faucet.**
- ❖ **When using an alcohol gel antiseptic cleanser, APIC recommends a vigorous, one-minute rubbing with enough alcohol to wet the hands completely.**



*FDA Guidelines for Foodservice Workers:
When to Wash*

For **foodservice settings**, the Food and Drug Administration calls for employees to clean their hands and exposed portions of their arms immediately before any food preparation, including working with exposed food, clean equipment and utensils, unwrapped single-service and single-use articles, as well as:

- ❖ **After touching bare human body parts other than clean hands and clean, exposed portions of arms.**
- ❖ **After using the restroom.**
- ❖ **After caring for or handling support animals (such as seeing eye or guide dogs) or aquatic animals.**
- ❖ **After coughing or sneezing; after using a handkerchief or disposable tissue; after eating, drinking or using tobacco.**
- ❖ **After handling soiled equipment or utensils.**
- ❖ **During food preparation, as often as necessary to remove soil and contamination and to prevent cross-contamination when changing tasks.**
- ❖ **When switching between working with raw food and working with ready-to-eat food.**
- ❖ **After engaging in any other activities that contaminate the hands.**

*FDA Guidelines for Foodservice Workers:
Handwashing Techniques*

Foodservice workers should wash their hands and exposed portions of their arms with a cleaning compound by:

- ❖ **Vigorously rubbing together lathered hands and arms for at least 20 seconds**
- ❖ **Pay particular attention to areas underneath the fingernails and between the fingers.**
- ❖ **Rinse thoroughly with clean water. Using fresh paper towels individually dispensed, dry hands. (Soap residue on the skin and incomplete drying contribute to dermatitis.)**

A caution: Hands should not be cleaned in a sink used for food preparation, in a service sink, or in a curbed cleaning facility used for the disposal of mop water and similar liquid waste.

When and
how to
wash hands
will vary
from setting
to setting.

food service

gloves

Gloves and Handwashing

Gloves provide a safety barrier that protects patients or food from skin-borne microorganisms. However, contamination is still possible even when gloves are worn. For example, the use of petroleum-based creams and lotions may cause deterioration and increased permeability. So it is essential that gloves be used in combination with, not instead of, handwashing. In addition, it is extremely important to wash hands after gloves are removed, or whenever the integrity of the gloves is in doubt.

Gloves should be used as an adjunct to, not a substitute for, handwashing.

Choosing the Right Skin Cleanser

A variety of skin cleansers are available for handwashing: plain or non-antimicrobial soap, antimicrobial soap, special health care handwashes, alcohol gel waterless antiseptics, and foodservice hand sanitizers, or dips. Different soaps work differently and offer various kinds and levels of cleansing.

Plain soaps are detergent-based cleansers in bar, liquid, leaflet or powder form. They are used primarily to remove dirt and microorganisms. Plain soaps remove transient bacteria from the skin, but they do not kill the bacteria released by shedding of skin cells. CDC guidelines state that plain soap should be used for handwashing unless otherwise indicated.



Antimicrobial soaps contain an ingredient that kills or inhibits microorganisms on the skin. These products should be selected to suit the applications for which they will be used. For example, antimicrobial soaps with lasting effectiveness are desirable in environments where gloves are worn, or when it is not possible to wash the hands during procedures. Choose a soap with acceptable safety and effectiveness in reducing microbial counts, and one which will meet budget requirements as well as personnel preferences.

Alcohol gel waterless hand antiseptics use high concentrations of alcohol (60-65 percent ethyl alcohol) to clean hands. They do not require water or towel drying. These waterless cleansers provide a quick, convenient and portable way to achieve hand antisepsis. Use these gel antiseptics as a complement to soap and water, not a replacement. These cleansers are not recommended when hands are soiled with dirt and/or organic material.

“Hand dips” is the term used by the FDA to refer to hand sanitizers and chemical hand sanitizing solutions used in foodservice settings. Antimicrobial ingredients in these cleansers must be listed as safe and effective on human skin, and safe for use in contact with food. If not, their use as a hand dip should be followed by either wearing of gloves or thorough hand rinsing in clean water before hand contact with food. A chemical hand sanitizing solution used as a hand dip should be maintained clean and at a strength equivalent to at least 100 mg/L chlorine.

Lotions are often recommended to ease the dryness resulting from frequent handwashing, and, in some cases, dermatitis caused by frequent handwashing or glove use. Caution should be exercised, however: lotion can be contaminated, and certain types of lotion may affect the integrity of latex gloves or interfere with the residual activity of CHG cleansers. Lotions should be applied liberally to all areas of the hands, particularly around nails. Hands should then be massaged until lotion is thoroughly absorbed and hands no longer feel damp.

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Dispensing and Storage of Skin Cleansers

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The CDC recommends that bar soaps be placed on racks with good drainage. Since liquid soap containers can become contaminated, reusable liquid containers should be cleaned carefully when empty. Most antimicrobial handwashing products are available as liquids, but antimicrobial gels, foams and rinses are also available for use in areas without easy access to sinks.

Dispensing systems should be the right size to be mounted in convenient areas to encourage use. They also should provide controlled dispensing for cost effectiveness. A variety of low-touch and no-touch soap dispensers are available today. Low-touch dispensers allow users to dispense soap using only one hand, or a forearm, so as not to contaminate the dispenser itself. No-touch soap dispensers work via infrared detection without buttons or levers, minimizing the spread of contamination from dirty hands. Paper towels also should be dispensed from no-touch or low-touch dispensers or those that require the user to remove only one paper towel at a time.

The Institute focuses on improving skin health through laboratory and clinical research as well as professional and consumer education of skin wellness practices.

The Kimberly-Clark Skin Wellness Institute

The Kimberly-Clark Skin Wellness Institute was created in 1998 to address issues surrounding skin health in away-from-home settings - at the office or the factory, at school or in the hospital, when traveling or eating out, and even at play. Comprising a group of independent professionals from a broad range of disciplines, the Institute focuses on improving skin health through laboratory and clinical research as well as professional and consumer education on skin wellness practices.

Sources:

Kronemyer, Bob. "Clean hands being added to performance review," *Healthcare Purchasing News*, August 1998.

Larson, Elaine L. "APIC Guideline for Handwashing and Hand Antisepsis in Health care Settings," *American Journal of Infection Control*, Association for Professionals in Infection Control and Epidemiology, Inc. 1995, 23: 251-269.

U.S. Department of Health and Human Services, Public Health Service, Food and Drug Administration: *Food Code*, 1997.

White, Patrick. "It's a Wash," *School Foodservice & Nutrition*, August 1998.

sources

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