

PRESENTER'S SCRIPT

Module 2 Hand Hygiene

SLIDE 1

This slide series was created to complement the Centers for Disease Control and Prevention's (CDC's) publication titled *Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care*. This publication was developed to help increase adherence with established infection prevention practices.

This slide series provides an overview of the basic principles of infection prevention and control that form the basis for CDC recommendations for dental health care settings. It can be used to educate and train infection prevention coordinators, educators, consultants, and other dental health care personnel (DHCP).

The *Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care* can be found at www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care2.pdf.

SLIDE 2

This slide series is divided into 10 modules. The first module provides an introduction to infection prevention for dental settings. It is followed by 9 additional slide modules—one for each element of standard precautions, as well as for dental unit water quality and program evaluation. Module 2 provides information on hand hygiene.

SLIDE 3

Hand hygiene is a critical practice for preventing the spread of infections among patients and dental health care personnel. Hand hygiene reduces harmful microorganisms on the hands. adherence with hand hygiene practices is routinely used as a clinical performance indicator in hospital settings. Patients expect dental health care personnel to perform hand hygiene.

SLIDE 4

Why is hand hygiene so important? First, hands are the most common mode of pathogen transmission. Hand hygiene can reduce the spread of antimicrobial resistance in health care settings and the likelihood of health care-associated infections.

SLIDE 5

The term "hand hygiene" includes both handwashing with either plain soap or antimicrobial soap and use of alcohol-based hand rubs that do not require the use of water.

SLIDE 6

CDC recommends that dental health care personnel perform hand hygiene:

- When hands are visibly soiled.
- After barehanded touching of instruments, equipment, materials, and other objects likely to be contaminated by blood, saliva, or respiratory secretions.
- Before and after treating each patient, even if gloves are worn.
- Immediately after removing gloves.

If hands are visibly soiled, for example, with blood or body fluids, use soap and water. Otherwise, an alcohol-based hand rub may be used.

SLIDE 7

The preferred method for hand hygiene depends on the type of procedure to be performed, the anticipated degree of contamination, and the desired persistence of antimicrobial action on the skin. For routine dental procedures, such as examinations and nonsurgical procedures, use alcohol-based hand rub or either plain or antimicrobial soap and water. Alcohol-based hand rubs do not work effectively if hands are visibly soiled. If hands are visibly soiled, either plain or antimicrobial soap and water should be used.

SLIDE 8

The purpose of surgical hand hygiene is to eliminate transient flora and reduce resident flora for the duration of a procedure, in order to prevent the introduction of organisms into the operative wound should gloves become punctured or torn. Because skin bacteria can rapidly multiply under surgical gloves if hands are washed with soap that is not antimicrobial, antimicrobial soap with persistent activity should be used before surgical procedures.

Alternatively, if an alcohol-based hand rub with persistent activity is used for surgical hand hygiene, first wash hands with soap and water to remove any soil before applying the alcohol-based hand rub.

SLIDE 9

When washing hands with soap and water, wet hands first with water, apply the amount of soap recommended by the manufacturer, and rub hands together for at least 15 seconds—covering all surfaces of the hands and fingers. Rinse hands with water, dry thoroughly with a disposable towel, and use the towel to turn off the faucet.

SLIDE 10

When performing hand hygiene with an alcohol-based hand rub, apply product to palm of one hand and rub hands together, covering all surfaces of hands and fingers, until hands are dry. If hands feel dry after rubbing together for 10–15 seconds, it is likely that the person did not apply a sufficient amount of the product. These products should not be used if the hands are visibly soiled.

SLIDE 11

Surgical hand hygiene can be performed by using either an antimicrobial soap OR an alcohol-based hand rub with persistent activity. When an antimicrobial soap is used, the hands and forearms should be scrubbed for the length of time recommended by the product's manufacturer.

When an alcohol-based hand rub with persistent activity is used, follow the manufacturer's instructions on the amount of product to use. Prewash hands and forearms with a nonantimicrobial soap and allow them to dry completely. After applying the alcohol-based product as recommended, allow hands and forearms to dry thoroughly before putting on sterile gloves.

SLIDE 12

Plain soap is good for reducing bacterial counts, but antimicrobial soap is better. Alcohol-based hand rubs are the best, because they provide activity that prevents or inhibits survival of microorganisms after the product is applied.

SLIDE 13

This slide lists the benefits and limitations of alcohol-based preparations.

Alcohol-based hand rubs have a rapid and effective antimicrobial action when applied to the skin, but must contain other ingredients—such as chlorhexidine or triclosan—to achieve persistent (long-lasting) activity. Emollients or skin softeners are often added to reduce the drying effect of alcohol. Alcohol-based products containing emollients can cause less skin irritation and dryness than soaps or antimicrobial detergents. In hospital settings, they are often more accessible than sinks.

However, alcohol is not a good cleaning agent, so these products cannot be used if hands are visibly soiled. Because an alcohol-based product is flammable, these products must be stored away from high temperatures or flames. In addition, there is some concern that after repeated use, hand softeners and glove powders might build up on the hands. Hands should also be washed occasionally with soap and water.

SLIDE 14

Hand lotions can prevent skin dryness associated with frequent handwashing. However, when selecting and using gloves, it's important to consider the compatibility of lotion and antiseptic products and the effect of petroleum or other oil emollients on the integrity of gloves. Short nails allow thorough cleaning of nails and may reduce the chance of premature glove tearing. Artificial nails can harbor pathogens—thus, their use should be avoided. In general, hand or arm jewelry can harbor microorganisms and affect the placement, fit, and durability of gloves.

SLIDE 15

Tools such as reminders can be used to prompt DHCP about the importance of hand hygiene. Reminders can also inform patients of the standard of care they should expect. CDC's Clean Hands Count campaign offers posters, fact sheets, and brochures for health care providers and patients. Visit the website for more information.

SLIDE 16

For more information on hand hygiene, see:

- CDC. *Guideline for Hand Hygiene in Health-Care Settings* at www.cdc.gov/mmwr/PDF/rr/rr5116.pdf.
- CDC. *Guidelines for Infection Control in Dental Health-Care Settings—2003* at www.cdc.gov/mmwr/PDF/rr/rr5217.pdf.
- CDC. Hand Hygiene in Healthcare Settings website at www.cdc.gov/handhygiene/. Hand Hygiene Training Course. Clean Hands Count Campaign.
- CDC. *Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care* at www.cdc.gov/oralhealth/infectioncontrol/pdf/safe-care2.pdf.