Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care

MODULE 2 — Hand Hygiene
Modules in the Slide Series

1. Introduction
2. Hand Hygiene (this module)
3. Personal Protective Equipment
4. Respiratory Hygiene/Cough Etiquette
5. Sharps Safety
6. Safe Injection Practices
7. Sterilization and Disinfection of Patient-Care Items and Devices
8. Environmental Infection Prevention and Control
9. Dental Unit Water Quality
10. Program Evaluation
Hand Hygiene Is Key for Prevention

Hand Hygiene

• Is a critical practice for preventing the transmission of pathogens in health care settings.
• Reduces harmful microorganisms on the hands.
• Compliance with hand hygiene practices is routinely used as a clinical performance indicator in hospital settings.
• Is expected by patients to be performed by all dental health care personnel (DHCP).
Why Is Hand Hygiene Important?

Hand Hygiene

- Hands are the most common mode of pathogen transmission.
  - Reduce spread of antimicrobial resistance.
  - Prevent health care-associated infections.
Hand Hygiene

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.
Key Recommendations for Hand Hygiene

• 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.

• Use soap and water when hands are visibly soiled (e.g., blood, body fluids). Otherwise, an alcohol-based hand rub may be used.
# Hand Hygiene for Routine Dental Procedures

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Soap and Water</th>
<th>Antimicrobial Soap and Water</th>
<th>Alcohol-Based Hand Rub</th>
</tr>
</thead>
<tbody>
<tr>
<td>If hands are visibly soiled (e.g., dirt, blood, body fluids).</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>If hands are not visibly soiled.</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>
### Hand Hygiene for Surgical Procedures

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Soap and Water Alone</th>
<th>Antimicrobial Soap and Water</th>
<th>Soap and Water Followed by Alcohol-Based Hand Rub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical hand antisepsis before gloving</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
</tbody>
</table>

Note: soap and alcohol-based hand rubs should have a persistent effect and broad spectrum of activity.
Hand Washing Technique

• Wet hands with water, apply soap, and rub hands together for at least 15 seconds.
• Rinse hands and dry with a disposable towel.
• Use towel to turn off faucet.
Using an Alcohol-Based Hand Rub

- Apply to palm of one hand and rub hands together covering all surfaces until dry.
- Use amount recommended by manufacturer’s instructions.
- Do not use if hands are visibly soiled.
Surgical Hand Hygiene

• Antimicrobial soap—scrub hands and forearms for length of time recommended by manufacturer.

  OR

• Alcohol-based hand rub—follow manufacturer’s recommendations.
  – Before applying, prewash hands and forearms with nonantimicrobial soap.
Efficacy of Hand Hygiene Preparations in Reducing Bacteria

Alcohol-Based Hand Rubs Are More Effective in Killing Bacteria Than Soap and Water

GOOD
REGULAR SOAP

BETTER
ANTIMICROBIAL SOAP

BEST
ALCOHOL-BASED HAND RUB (FOAM OR GEL)

Source: CDC Hand Hygiene Interactive Education
Alcohol-Based Preparations

Benefits

• Rapid and effective antimicrobial action.
• Improved skin condition.
• More accessible than sinks.

Limitations

• Cannot be used if hands are visibly soiled.
• Must be stored away from high temperatures or flames.
• Hand softeners and glove powders may build up on hands.
Special Hand Hygiene Considerations

- Use hand lotions to prevent skin dryness.
- Consider compatibility of hand care products with gloves (e.g., mineral oils and petroleum bases may cause early glove failure).
- Keep fingernails short.
- Avoid artificial nails.
- Avoid hand jewelry that may tear gloves.
Reminders in the Workplace

• Reminders can be used to prompt DHCP about the importance of hand hygiene.

• Reminders also inform patients about the standard of care they should expect.

Source: Clean Hands Count Promotional Materials
Hand Hygiene Resources

- CDC. *Guideline for Hand Hygiene in Health-Care Settings*
- CDC. *Guidelines for Infection Control in Dental Health-Care Settings—2003*
- CDC. *Hand Hygiene in Healthcare Settings website*
  - Hand Hygiene Training Course
  - Clean Hands Count Campaign
- CDC. *Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care*
End of Module 2

For more information, contact Centers for Disease Control and Prevention (CDC).
1-800-CDC-INFO (232-4636)
TTY:1-888-232-6348  •  Centers for Disease Control and Prevention (CDC)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the CDC.