SURFACE/EQUIPMENT ASEPSIS & FCDH UNIT PROCESS FOR SETUP/CLEANUP (INCLUDING HANDWASHING & PPE)

BY: NIKKI, ALYSHA, & ASHLY
SURFACE/EQUIPMENT ASEPSIS & FCDH UNIT PROCESS FOR SETUP/CLEANUP (INCLUDING HANDWASHING & PPE)

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Infection control

- What is infection control?
- What is asepsis?
- Why do we disinfect?
  - Who can explain the difference between asepsis and disinfection?

# Handwashing

- **Why do we wash our hands?**
  - We wash our hands because it is the most effective way to prevent the spreading of disease
  - Gloves are not enough protection to prevent transmission of disease

- **When do we wash our hands?**

- **What do we wash our hands with?**
  - Non antimicrobial soap, antimicrobial soap, antiseptic hand rub

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<table>
<thead>
<tr>
<th>Methods</th>
<th>Agent</th>
<th>Purpose</th>
<th>Area</th>
<th>Duration (minimum)</th>
</tr>
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<tbody>
<tr>
<td>Routine Handwash</td>
<td>Water and non-antimicrobial soap (i.e., plain soap)</td>
<td>Remove soil and transient microorganisms</td>
<td>All surfaces of the hands and fingers</td>
<td>15 seconds</td>
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<td>Antiseptic handwash</td>
<td>Water and antimicrobial soap (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan)</td>
<td>Remove or destroy transient microorganisms and reduce resident flora (persistent activity)</td>
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<td>All surfaces of the hands and fingers</td>
<td>Until the hands are dry</td>
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<td>Surgical Antiseptic</td>
<td>Water and antimicrobial soap (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan)</td>
<td>Remove or destroy transient microorganisms and reduce resident flora (persistent activity)</td>
<td>Hands and forearms</td>
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Follow manufacturer instructions for surgical hand scrub product with persistent activity.

http://www.cdc.gov/oralhealth/infectioncontrol/faq/hand.htm
Efficacy of handrubbing with alcohol based solution versus standard handwashing with antiseptic soap: randomized clinical trial


Methods:
- 23 healthcare workers
- 12 = hand sanitizer
- 11 = hand washing

Results:
- Using an alcohol based hand solution is more effective in reducing bacterial contamination of healthcare workers’ hands than handwashing with an antiseptics soap.
DISINFECTIONS

- DISINFECT CLINICAL AND HOUSEHOLD SURFACES
- REDUCE CROSS CONTAMINATION
- DISINFECTANTS MUST BE EPA CERTIFIED
- MANY TYPES OF DISINFECTANTS
  - Phenols [Birex Disinfectant Wipes (water) and Discide wipes (Alcohol)]
  - Quaternary ammonium [CaviWipes (alcohol) and Sani-Cloth AF3 (non-alcohol)]
  - Sodium hypochlorites (Clorox Germicidal Wipes).
Evaluation of disinfectant wipe intervention on fomite to finger microbial transfer

Lopez, G., Kitajima, M., Havas, A., Gerba, C., Reynolds, K.

Methods:
- 3 different nonporous fomites
- QAC disinfectant wipes used
- Divided into 10 swatches

Results
- Microbial load reduced
Personal protective equipment (PPE) and barriers

PPE

● Why Apply?
  ○ Protects
  ○ Eliminates

● What does PPE include:
  ○ Gowns, Mask, Eyewear, & Gloves

Barriers

● What do we use?
● Where do we use barriers?
● Why do we use barriers?
Facemask for the prevention of infection in healthcare and community settings

C Raina MacIntyre, Abrar Ahmad Chughtai

Method: searching databases, examining guidelines and policies of organizations

RESULTS:

Degree of Protection: Respirator, Medical Mask, Cloth Mask

Respirators used: if any chance of airborne transmission or aerosol transmission

Medical used: not sufficient in preventing airborne transmission & is theoretically prevents droplet infection
LEGAL AND ETHICAL ISSUES

● Legal Regulations
  ○ OSHA - requires employer to provide PPE and laundering service unless disposable PPE
  ○ Dental Practice Act - all dental office employees must follow standard precautions

● Ethical Responsibilities
  ○ Beneficence
  ○ Nonmaleficence
  ○ Civil suit for Negligence
“INFECTION CONTROL IS MOST APPLICABLE TO PROTECTION FROM HEALTH RISKS” - Darby


PPE Factsheet [Internet]. Occupation Safety and Health Administration. Available from: https://www.osha.gov/OshDoc/data_BloodborneFacts/bbfact03.html

Regulation [Internet]. Dental Board of California. Available from: http://www.leginfo.ca.gov/cgi-bin/displaycode?section=bpc&group=01001-02000&file=1670-1687


Spragge P. Foothill College Dental Hygiene Program Assessment Procedures in Dental Hygiene. 2015; 1.10-1.13, 1.19-1.22, 10.13.
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  ○ 11 - HAND WASHING

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Disinfectants

- **Disinfect clinical and household surfaces**
- **Reduce cross contamination**
- **Disinfectants must be EPA certified**
- **Many types of disinfectants**
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