ELGIN COMMUNITY COLLEGE DENTAL ASSISTING PROGRAM

ASEPSIS, INFECTION, AND CONTROL POLICY

By Marilyn Westerhoff

Credit given to:
Debra Daniels, Illinois Central College
Pat Pearson, Illinois Valley Community College
CDC, Recommended Infection-Control Practices for Dentistry, 1996

Original 1993
Revision 2003
Revision 2005
Revision 2007KP
Revision 2009KP, 2010KP
Revision 2014LF&KP

PROCEDURE FOR IMPLEMENTATION OF THIS POLICY

FACULTY: All faculty, clinical staff, and lab assistants will receive a reference copy, and instruction on the policy intent and content.

STUDENTS: All dental assisting students will be given a reference copy of the policy, and will receive instruction on each procedural step at the appropriate curricular phase. Students will be expected to sign a confirmation form that appropriate instruction was given.

COPIES will be filed in the office of the program director.

INFECTION CONTROL POLICY

IMMUNIZATIONS
All employees and students who function in OSHA category I or II classifications are required to receive immunization from Hepatitis B or sign a declination statement. Students are also required to file evidence of a tuberculin test, MMR Titer or Screen, Chicken pox and Flu vaccines, and Tetanus Toxoid.

MEDICAL HISTORY
Students must file a thorough medical history with the program coordinator, prior to contact with off-site clinical patients. For full-time students this date shall be October 1st of the year the student initiates the program. For part-time students this date shall be 15 days prior to participation in clinical externship.

BARRIER PROTECTION
1. For protection of patients, dental staff and students, gloves must be worn for all procedures involving exposure to blood, saliva, or mucous membranes. This includes all phases of cleanup involving contaminated areas and instruments.
   GLOVING PROTOCOL
   A. Perform proper handwash procedure prior to each gloving.
   B. Perform proper handwash after removing gloves or between changing gloves.
   C. Change gloves after each patient.
   D. Remove gloves if leaving treatment area.
E. Change gloves if torn or punctured.
F. Change gloves if excessively soiled.
G. No exam/surgical glove is to be washed, disinfected, or sterilized.
H. No oil based hand lotion is to be used prior to gloving.
I. Heavy duty gloves will be used for handling contaminated instruments, using disinfection chemicals, and during clean up procedures.

Note: "DH CWs who have exudative lesions or weeping dermatitis, particularly on the hands, should refrain from all direct patient care and from handling dental patient-care equipment until the condition resolves" (CDC, p.5).

2. Chin-length plastic face shields or surgical masks and protective eyewear should be worn when splashing or spattering of blood or other body fluids is likely, as is common in dentistry.

SURGICAL MASK PROTOCOL
A. Choose appropriate mask size to conform to face comfortably.
B. Place mask on face prior to gloving.
C. Change mask after each patient.
D. Change mask if it becomes wet or moist.
E. Face masks will be worn for all chairside and clean-up procedures.

PROTECTIVE EYEWEAR PROTOCOL
A. Protective eyewear must fit without slippage when leaning over patient to eliminate the need to push up the glasses.
B. Eyewear must have side shields.
C. Chin length plastic face shields may be used instead of eyewear.
D. Eyewear or face shields are to be "washed with an appropriate cleaning agent and, when visibly soiled, disinfected between patients" (CDC, 1993).
E. Protective eyewear must be worn when working with disinfection solutions.
F. Protective eyewear must be worn when working in the dental materials laboratory.

3. Protective clothing such as reusable or disposable gowns, laboratory coats, or uniforms should be worn when clothing is likely to be soiled with blood or other body fluids. The protective lab jacket shall be worn over ECC student scrubs.

Protective clothing for dental assisting students shall consist of:
Clinical Use Protocol:
For GEFCC Dental Clinic--
  Long sleeved disposable lab jacket with a high collar.
For General Practice--
  Long sleeved lab coat with a high collar which protects any clothing worn outside of the dental office. Some offices provide appropriate clothing for students.
For Surgical Offices--Disposable gowns or scrubs provided by the dental office.
For Human Radiography at ECC: ECC student scrubs

Preclinical Use Protocol:
  Chairside with manikins-- ECC student scrubs
  Dental Materials-- ECC student scrubs
Dental Radiography-- ECC student scrubs
Chairside with humans-- Disposable gowns over ECC student scrubs

PROTECTIVE CLOTHING PROTOCOL
A. Protective lab coats are to be donned prior to any laboratory/preclinical session.
B. Lab coats are to be removed prior to leaving the laboratory or preclinical area.
C. Lab coats are to be carried to the clinical externship and not worn out of the office.
D. Protective clothing should be changed at least daily or as soon as it becomes visibly soiled (CDC, p. 5).
E. Uniforms and lab coats should be washed, using a normal laundry cycle, according to the instructions of detergent and machine manufacturers (CDC p. 5).
a. It is recommended that hot water with sodium hypochlorite (household bleach) be used.
b. Uniforms should be machine dried (100C or more).
c. Uniform t-shirts and pants shall be kept separate from other laundry until out of the dryer.

4. Hair is clean and secured back and away from the face. Hair must not fall in auxiliary's eye or face OR patient's face. Long braids or ponytails must be secured so they do not fall in the treatment tray. It is recommended that hair be washed after each clinical experience.

5. Hands and nails must be kept clean and free from injuries (see note above pertaining to exudative lesions). For patient protection, nails can extend no longer than 1/8 inch beyond the fingertips. Long nails also cause glove puncturing, as do large rings. Faux nails and polish are not allowed as per OSHA ruling 2005.

6. Procedures should be performed in a way that will minimize the formation of droplets, spatter, and aerosol. Proper patient position, use of high-speed evacuation, and the rubber dam is recommended whenever possible. Dental personnel should limit the field contamination by avoiding contact with objects such as charts, telephones and cabinets during patient treatment procedures. A pair of over-gloves may be utilized when necessary to prevent contamination of these objects.

HANDWASHING PROTOCOL
1. Soap and water will remove transient microorganisms acquired directly or indirectly from patient contact; therefore, for many routine dental procedures, such as examinations and nonsurgical techniques, handwashing with plain soap is adequate. For surgical procedures, an antimicrobial surgical handscrub should be used.

2. Hands should be dried with a clean paper towel.

3. Use the paper towel to turn off water control if foot or elbow control is not available.
4. Hands should be washed before and after removing gloves for any reason.

5. A hand sanitizer may be used as they are as effective as washing when hands are not visibly soiled.

CLEANING AND DISINFECTION OF DENTAL UNIT AND ENVIRONMENTAL SURFACES
After treatment of each patient and at the completion of daily work activities, countertops and dental unit surfaces that may have become contaminated with patient material should be cleaned with an intermediate level disinfectant registered by EPA according to manufacturers instructions (CDC p. 7). See the CDC guidelines provided for chemical specifications.

UNIT DISINFECTION PROTOCOL
A. Proper handwashing and use of utility gloves.
B. Remove all protective barriers placed prior to patient treatment.
C. Using approved EPA registered intermediate level disinfectant: spray or wipe all surfaces contacted during the procedure. The disinfectant should be applied according to the manufacturer’s instructions.

DENTAL UNIT WATERLINE PROTOCOL
A. Water bottles should be filled with water and antimicrobial tablet before each use.
B. At the end of clinic or patient care water bottles are to be removed and all water expressed from the lines and left to dry.

PROTOCOL FOR PROTECTING SURFACES WITH BARRIERS
Surfaces that may be contaminated by blood or saliva must be wrapped or covered with FDA approved barriers. Items that are to be covered in the department's preclinical area may include but are not limited to:
- Light handles
- Patient chair back/controls
- Operator stool restraints,
- Aspirator hose
- Three-way syringe
- Saliva ejector hose
- All handpieces
- Work surfaces
- Patient treatment tray
- X-ray tubeheads
- X-ray control buttons

Drawer handles that must be opened during procedure.

END OF PROCEDURE PROTOCOL
A. Wear utility gloves.
B. Place all disposable supplies in appropriate waste receptacle. Regulated Waste receptacle is marked with a biohazard sign.
C. Remove handpieces, air-water syringe tip, and instruments; place in sterilization area.
D. Remove and discard saliva ejector.
E. Flush appropriate disinfections solution through oral evacuation system following manufacturer’s instructions.
F. Follow disinfection procedure.
G. Remove gloves.
H. Wash hands

SHARP INSTRUMENT/NEEDLE PROTOCOL
Sharp items (e.g., needles, scalpel blades, wires) contaminated with patient blood and saliva should be considered as potentially infective and handled with care to prevent injuries.
A. Wear protective gloves and eyewear at all times.
B. When needles are to be recapped, use the recapping device or the one-handed scoop technique.
   A hemostat may also be used.
C. Disposable needles must not be bent or broken.
D. Hemostats or pliers should be used to handle sharp items.
E. Disposable syringes, needles, scalpel blades, burs, carpules, and other sharp items must be discarded into puncture-resistant containers. When full, these containers are placed into the biohazard box for pick-up.

WASTE DISPOSAL PROTOCOL
Blood, suctioned fluids, or other liquid waste may be poured carefully into a drain connected to a sanitary sewer system. Solid waste contaminated with blood or other body fluids is placed in the red biohazard bag (sturdy impervious bags to prevent leakage). All contained solid waste will then be disposed of by MedPro according to requirements established by federal environmental regulatory agencies and published recommendations. The biohazard box is picked up bimonthly.

A. Wear protective gloves and eyewear at all times.
B. All contaminated solids are to be disposed in the hazard material bags.
C. College personnel arrange for disposal of contaminated solids (MedPro).

STERILIZATION AND DISINFECTION PROTOCOL

CLEANING AND PACKAGING:
A. Wear protective utility gloves, eyewear and mask at all times.
B. Place instruments into ultrasonic cleaner.
C. Remove debris from instruments and surfaces by placing in ultrasonic cleaner if possible (10 minutes).
D. Instruments are removed from ultrasonic cleaning, rinsed thoroughly, and inspected for remaining debris. Instruments are replaced in ultrasonic cleaner if necessary, re-rinsed, lubricated, and drip-dried.
E. Handpieces are scrubbed with disinfecting wipe and oiled according to manufacturer's guidelines. They CANNOT go through the ultrasonic cleaner.
F. Burs are either discarded in sharp container or ultrasonically cleaned and bagged/wrapped for autoclave.
H. Bag, wrap, or package instruments according to chosen method of heat sterilization. Label each according to content and date.
I. Place package in holding container for sterilization load.
J. Wash utility gloves and remove. Spray with disinfectant and autoclave.

INSTRUMENTS:
A. Instruments may be sterilized by using the dry heat oven, autoclave or Chemiclave. Manufacturer's instructions for operating the sterilizers should be followed.
B. Place heat indicator strip in chemiclave and use indicator bags in the autoclave.
C. Spore tests will be run weekly and results will be posted in the Sterilization Monitor Handbook.
D. After opening sterilizer allow packs to cool and dry.
E. Inspect bags after removal from sterilizer for proper closure. Rebag/resterilize if necessary.
F. Place sterile packs in appropriate storage area.

HANDPIECES:
A. Handpieces are to be heat sterilized between patients.
B. Handpieces should be scrubbed, lubricated, run, and bagged prior to sterilization.
C. Handpiece water lines must be flushed after each use for 30-45 seconds, and for 2 minutes at the beginning of each day.
D. Handpiece hoses are to be surface disinfected between patients.

AIR/WATER SYRINGES:
A. Air/water syringe water lines should be flushed at the beginning of each day for 2 minutes.
B. Air/water syringe water lines should be flushed between patients for 30-45 seconds.
C. Disposable tips are to be used when possible with a/w syringes.
D. Air/water syringe hoses are to be surface disinfected between patients.

X-RAY EQUIPMENT AND FILM:
A. Disposable protective coverings are to be used on the tubehead, control switches and exposure buttons. These barriers are to be replaced after each patient.
B. Covered instrument trays are to be used to arrange films in order of exposure.
C. Exposed film is to be placed in a paper cup after removal from the patient's mouth.
D. Barrier envelopes may be used to protect film if desired.
E. Gloves are worn when handling contaminated films.

IMPRESSIONS/REMOVABLE PROSTHESIS OR APPLIANCES:
A. Impressions include: alginates, AND bite registrations.
B. Removable prosthesis include: partial dentures and full dentures
C. Appliances include: orthodontic retainers, etc.
D. Impressions must be rinsed and disinfected before leaving the operatory and taken to the laboratory.
E. Impressions are then wrapped in wet toweling in preparation of pouring.
F. Rinse impression to remove any disinfectant prior to pouring.
G. Removable prosthesis and appliances should be cleaned and disinfected before being replaced in the patient's mouth. Appliances and removable prosthesis are placed in a baggie with appropriate cleaning solution and then placed in glass beaker to be run in the ultrasonic cleaner.
H. Wear gloves at all times.

DISPOSABLES:
It is the policy of this department to utilize as many disposable patient treatment devices as possible. Currently this includes, air/water tips, saliva ejector tips, protective barriers, prophy angles, cups and brushes, and evacuator tips.

MONITORING OF DISINFECTION AND STERILIZATION PROCEDURES
1. Disposable products are used as often as necessary, when teaching objectives are not compromised.
2. Sterilization pouches with heat indicators are utilized in each sterilization load and checked for color change at the end of each cycle. If color change is not achieved, the cycle is rerun and checked again. This procedure monitors the heat function of the sterilizer only, and is not an indication that sterilization has occurred.
3. Biological monitoring (spore testing) is the chosen method for evaluating the correct operation of the autoclave. This is performed at the end of each week and cultured in the facility. The results are posted in the Sterilization Monitor Handbook.