



**DENTAL ASSISTING  
PROGRAM  
INFECTION CONTROL  
MANUAL**

Revised September 2018

## **INTRODUCTION**

This manual contains information which outlines protocols used in the Montgomery Community College Dental Lab to ensure compliance with the Centers for Disease Control Recommended Infection Control Practices, and has been developed to supplement information contained in the Bloodborne Pathogen Manual.

The protocols outline in this manual should reduce the risk of disease transmission in the dental environment, from patient to dental health care worker (DHCW), from DHCW to patient and patient to patient.

Based on principles of infection control, the document delineates specific recommendations related to vaccination of DHCWs; protective attire and barrier techniques; hand hygiene, the use and care of sharp instruments and needles; sterilization of instruments, disinfection of non-critical items; cleaning and disinfection of the dental unit and environmental surfaces; disinfection of the dental laboratory, use and care of handpieces, and other intraoral dental devices attached to air and water lines of dental units; single-use disposables; use of extracted teeth in dental educational setting; disposal of waste materials; and implementation of recommendations.

## **VACCINATION FOR DENTAL HEALTH-CARE WORKERS**

Hepatitis B vaccine is required for faculty, and students attending the Dental Assisting Program that work directly with patient care. When a faculty member or student refuses the vaccine a declination form must be completed, including signature. Students that decline may not be allowed to complete clinical requirements, unless the refusal is based on the opinion of a health care physician. Should a student not be vaccinated for HB it will be at the discretion of the clinical site if that student can safely attend the site. Any student that has not been vaccinated before enrolling into the Dental Assisting Program will be required to begin the series in the fall of each year in order to ensure adequate protection during clinical assignments which begins in March of each year. Immunization records of DTP, measles, mumps, rubella and varicella are required at the time a student enrolls. A TB skin test is also required at the time of enrollment.

## **PROTECTIVE ATTIRE AND BARRIER TECHNIQUES**

At any time there is potential for contacting blood, blood-contaminated saliva or mucous membranes, clinical faculty, staff and students are required to wear gloves, masks, and protective eyewear. Gloves are located in each treatment room for faculty use; students must provide their own mask and gloves; which must be available at all times. Students are instructed to wash hands thoroughly with soap and water before donning gloves and again after removal. All faculty, staff and students must wash their hands and re-glove between patients. Face shields and /or safety glasses are also to be washed when visibly soiled, and disinfected between patients.

Scrubs including clinical jackets are to be worn in the laboratory by all personnel when treating patients. Clinical jackets are worn only in the clinical facility, and should be removed during breaks, lunch and at the end of the clinical day. Disposable gowns are available.

Surfaces which are not easily disinfected must be covered with barriers and include:

patient chair, operating light, curing light, dental unit, x-ray tube head and exposure control boxes, air/water syringe, HVE and saliva ejector attachments/hoses, handpiece attachments/motors/hoses

All protective barriers must be changed between patients

## **HAND WASHING AND HAND HYGIENE**

All clinical faculty, staff and students must wash their hands before and after treating each patient, and after bare-handed touching of any object which might be contaminated with blood, saliva or respiratory secretions. Antimicrobial soap is used at all hand washing stations in the laboratory facility.

If gloves are torn, cut or punctured, they should be removed as soon as safety permits, hands should be washed thoroughly and re-gloving should be accomplished before completing the procedure. Faculty, staff or students who have weeping dermatitis or exudative lesions on their hands must refrain from all direct patient care and from handling instruments until the condition is resolved.

## **USE AND CARE OF INSTRUMENTS AND NEEDLES**

Items contaminated with patient blood and saliva is considered as potentially infectious and are handled with care to prevent injuries. Used needles are re-capped using a one-handed “scoop” technique along with a stick shield device in-place on the needle cover.

Used disposable syringes, needles, scalpel blades, endodontic files and anesthetic carpules are placed in appropriate puncture resistant sharps containers located in each operatory.

## **STERILIZATION AND DISINFECTION OF INSTRUMENTS**

Instruments in the dental lab are classified as critical, semi-critical and non-critical, and are sterilized or disinfected accordingly.

### **Critical and Semi-Critical**

For practical purposes, instruments which fall into the semi-critical category are handled and sterilized in the same manner as those classified as critical. All non-disposable instruments which are used intraorally are pre-soaked, cleaned by ultrasonic methods, packaged and sterilized.

Individual instruments which are not included in standardized, pre-packaged tray set ups are processed and packaged individually or in groups ( such as the basic set up) and are stored in their respective packages, until ready for use. Instruments which are included in standardized tray set ups for amalgam and composite are processed using disposable bags or cassette tray system. These system is used in order to minimize student contact with contaminated instruments. Specific instructions for processing instruments are included in the following section of this manual.

### **Non-Critical**

Instruments which come into contact only with intact skin are classified as non-critical and are cleaned and disinfected with an intermediate-level disinfectant. The manufacturer’s instructions are followed in order to assure proper disinfection of these items.

Students, faculty and staff must wear heavy duty utility gloves while processing all category of instruments in order to minimize accidental exposure.

## **BIOLOGICAL MONITORING**

Sterilization cycles are verified weekly by the use of biological indicators during laboratory sessions; results are recorded and maintained in the sterilization area.

Sterilization monitoring strips are exposure during each cycle of sterilization. Strips are dated and maintained in the sterilization area.

## **Instrument Processing**

Clinical procedures for amalgam and composite include instruments and related accessories. Students should follow these steps in preparing trays for sterilization.

- 1 Wear utility gloves while handling contaminated instruments
- 2 Remove all disposable items from the tray or cassette
- 3 Arrange instruments in order of use, if using cassette
- 4 Secure cassette lid
- 5 Place in ultrasonic instrument cages
- 6 Place in ultrasonic unit allowing the ultrasonic
- 7 to run 10 minutes for loose instruments (caged) 15 minutes for cassettes
- 8 Remove instrument cage or cassette from ultrasonic by lifting the basket out of the ultrasonic and transporting to the sink \*\*\*never reach into the ultrasonic bath to retrieve items\*\*
- 9 Rinse cage or cassette under hot water and place on mat to dry
- 10 Bag instruments, include a sterilization strip in bag, or place strip in cassette and wrap cassette, sterilize
- 11 Store sterilized instruments in appropriate area

## **CLEANING AND DISINFECTION OF DENTAL UNIT AND ENVIRONMENTAL SURFACES**

After treatment of each patient and at the completion of each day, countertops and dental unit surfaces which were not covered with a barrier during procedures are cleaned and disinfected with an intermediate level disinfectant. Disinfecting solutions are available in each operatory and are utilized according to the manufacturer's directions in order to ensure proper disinfection. Utility gloves, mask and eyewear are to be worn by students and clinic personnel when treatment rooms and related equipment and surfaces are being cleaned and disinfected.

## **DISINFECTION OF DENTAL & LAB MATERIALS**

Laboratory materials such as impressions bite registrations, removable prostheses and orthodontic appliances are cleaned and disinfected before being manipulated in the laboratory. "Single use" amounts of pumice and a foil liner is used as a barrier protection for the lathe tray. If at any time, rag wheels become contaminated they must be rinsed under hot water, placed in a sterilizing bag and autoclaved.

## **USE AND CARE OF DENTAL DEVICES ATTACHED TO AIR AND WATER LINES**

All highspeed handpieces should be cared for using the following steps

- 1 Flush handpieces after use on each patient... while attached to the dental unit for 1 minute
- 2 Detach the handpiece from the dental unit
- 3 Wipe the head and fiberoptics with disinfecting gauze removing all blood and debri
- 4 Attach the handpiece to the Assistina Lubricating Device and allow the Assistina to compete the cleaning and lubrication of the handpiece
- 5 Remove the handpiece from the Assistina, bag and sterilize
- 6 Place sterile handpieces in enclosed cabinet

All lowspeed handpieces should be cared for using the following steps

1. Detach the handpiece from the handpiece motor
2. Wipe the head with disinfecting gauze, removing all blood and debris
3. Place one drop of oil in the appropriate hole
4. Bag handpiece attachment and sterilize
5. Place sterile handpiece attachment in enclosed cabinet
6. All prophylaxis angles/cups/brushes used in routine polishing procedures are disposable
7. All HVE tips/saliva ejectors/A&W tips are used in all treatment rooms and are disposable.
8. Burs should be disposed of or sterilized
9. Self-contained water bottles must be emptied and lines purged at the end of each day, unless a disinfecting protocol is being used that provides continual disinfecting solution.

## **USE OF EXTRACTED TEETH IN DENTAL EDUCATIONAL SETTING**

Extracted teeth used for educational purposes are considered infectious and must be sterilized prior to handling. Teeth are scrubbed with antimicrobial soap and immersed in a 1:10 solution of sodium hypochlorite, bagged and sterilized in the autoclave. Teeth containing amalgam must not be sterilized in a heat sterilizer.

## **Disposal of Waste Materials**

Contaminated gloves and mask must be placed in the biohazard trash receptacle in the area in which it is generated. All contaminated patient items are to be placed in the biohazard receptacle in the operatory in which the patient is treated. The trash will be gathered each day in the appropriate bag, tied and disposed of in the trash dumpster.