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## POLICY STATEMENT

- A. The policies of infection control comply with the current guidelines and/or standards published by the:
- U.S. Public Health Service Centers for Disease Control (CDC)
  - American Dental Association (ADA)
  - U.S. Occupational Safety and Health Administration (OSHA)
  - Environmental Protection Agency (EPA)
  - Massachusetts Department of Public Health (DPH)
  - Massachusetts Department of Environmental Protection (DEP)
  - Bristol Community College institutional policy and regulations.
- B. Bristol Community College Dental Hygiene Clinic will comply with the CDC definition of **Standard Precautions**. “**Standard Precautions**” integrate and expand the elements of universal precautions into a standard of care designed to protect DHCP and patients from pathogens that can be spread by blood or any other body fluids, excretions, secretions or any other potentially infective materials (OPIM). Standard Precautions apply to contact with 1) blood; 2) all body fluids, secretions, and excretions (except sweat), regardless of whether they contain blood; 3) nonintact skin; and 4) mucous membranes.
- C. The infection control program is designed to prevent or at least reduce the spread of disease agents from the following:
- Patient to dental team
  - Dental team to the patient
  - Patient to patient
  - Dental Hygiene Clinic to community, including dental team’s families
  - From community to patient

The Exposure Control Program will include:

- Blood-borne Infectious Disease Policy
- Tuberculosis Policy
- Exposure Determination
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Infection control procedures are not based on the patient's serological status for any particular infection; therefore, the patient's serological status is irrelevant to the formulation of these policies. However, the patient's immune status and general medical condition will be considered within the treatment planning process.

**Rationale**

Given the limitations of routine health history information, it is not possible for dental health care professionals (DHCP) to know the infectious disease status of patients since:

- Many infected patients are unaware that they are infected and that their blood or saliva may be capable of transmitting certain infectious diseases.
- Some patients will not reveal known infectious diseases to health care providers.
- Health care providers cannot interpret negative findings to mean that the patient is presently "infectious-disease-free" or will remain so upon subsequent clinical visits.

## **PATIENT CONFIDENTIALY POLICIES AND PROCEDURES**

Patient confidentiality means that the patient's records and information are secure. The Program adheres to the U.S. Department of Health and Human Services Privacy Rule: Health Insurance Portability and Accountability Act of 1996 ("HIPPA") and Chapter 111 section 70E of the General Laws of the Commonwealth of Massachusetts. The following policies are in the BCC Dental Hygiene Clinic Manual:

- Notice of Patient's Rights (Chapter 4)
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# **BLOOD-BORNE INFECTIOUS DISEASE**



**BRISTOL COMMUNITY COLLEGE**

# **TUBERCULOSIS POLICY**



**Assessment:**

- Each patient is assessed for a past history of TB.
- Past history as well as signs and symptoms indicative of TB is documented on the Medical History Form.

**A patient suspected of having Tuberculosis:**

- Patient will wear a face mask.
- The patient will be isolated from other patients, 113.5195 BB(1)Tf [(o0.2 (ol) 0.2 (t)y0.2 (k.) ]TJ I

## **EXPOSURE DETERMINATION**

Category I

Category II

Category III

## **Exposure Determination**

OSHA guidelines states tasks in the dental office/facility are evaluated and classified by

# **COMMUNICATION OF HAZARDS TO STUDENTS AND FACULTY**

Hazard Communication Program

Information and Training

Use of Signs and Labels

## **Hazard Communication Program**

### **Bristol Community College Dental Hygiene Program Policy**

To ensure that information about the dangers of all hazardous chemicals used by Bristol Community College is known by all students and faculty, the following hazardous information program has been established. Under this program, you will be informed of the contents of the OSHA Hazard Communications standard, the hazardous properties of chemicals with which you work, safe handling procedures, and measures to take to protect yourself from these chemicals.

Exposures to hazardous chemicals can be avoided by close adherence to the standard



A container labeled properly by the manufacturer will not require any additional information.

## **List of Hazardous Chemicals**

A list of all known hazardous chemicals used by Bristol Community College Dental Hygiene Clinic is located in the Dental Materials Lab. This list includes the name of the chemical, the category of brand/trade name, the work area in which the chemical is used and the SDS reference number. When new chemicals are received, this list is updated within 30 days.

The hazardous chemical inventory is compiled and maintained by the Infection Control Coordinator.

## **Bristol Community College-Hazardous Materials Spill Procedures**

### **Preparedness:**

Review your classroom or work area to identify any chemical stored or used. Review the hazards of these chemical by reading warning labels, follow all instructions for safe use, and identify procedures to follow if there is a spill. Request a Safety Data Sheet (SDS) from the clinical faculty member, building custodian or facilities personnel.

**DO NOT ATTEMPT TO RESCUE ANYONE OVERCOME BY CHEMICAL VAPORS OR GASSES IN AN ENCLOSED ROOM OR AREA. ONLY TRAINED RESCUSERS SHOULD ENTER THE AREA PROTECTED WITH SELF-**

## **PERSONAL HEALTH ELEMENTS**

Personal Hygiene

Immunization

Work Restrictions

## **Personal Hygiene**

The following policy guidelines apply to all clinical and laboratory personnel including faculty, staff and students who may come in contact with blood, body fluids, tissue or OPIM..

### **Appearance**

- Hair must be cleared away from the face.
- Long hair must be pulled back and pinned up in a bun.
- Hair must not touch the collar.
- A face mask must cover facial hair.
- Jewelry will not be worn in the clinical setting.
- Fingernails will be clean and short (not to extend beyond the pad of the fingertip).

### **Rationale**

Hair and nails are known to harbor higher levels of bacteria than skin. Long artificial or natural nails are more difficult to clean and may potentially penetrate gloves. Jewelry must be removed for the same reasons. DHCP with injured and cracked skin, erosions, or eczema on hands or arms must exercise additional caution until the lesions are healed. See the Bristol Community College Dental Hygiene Clinic Manual for specific attire guidelines.

## **Immunization**

### **BRISTOL COMMUNITY COLLEGE IMMUNIZATION POLICY**

HBV immunization is required for all students involved in clinical and laboratory activities which may expose them to contaminated or potentially contaminated blood, tissue or other potentially infectious fluids. In accordance with Bristol Community College policy, which is in compliance with the Massachusetts Bureau of Communicable Disease Control regulations, all students must have a physical examination and be immunized against Measles, Mumps, Rubella, Hepatitis B, Varicella (chicken pox) or Titres ( blood test to prove immunity) and Tetanus immunization. TB test is required each year. The influenza vaccine is also recommended.

Health Insurance is required.

Each student is to complete; **Immunization, Insurance, and Medical Consent Form** and the **Report of Physical Examination Form**.

The Health Services Department completes the **Health Services Student Placement Health Clearance for Clinical Placement Form** when all the required vaccinations, proof of immunity and physical examination have been completed.







**Reflex**

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Stimulus (input)	Response (output)	Effect (output)
Light	Retina	Optic nerve
Sound	Ears	Acoustic nerve
Touch	Skin	Somatosensory nerve
Temperature	Thermoreceptors	Somatosensory nerve
Chemical	Chemoreceptors	Somatosensory nerve
Pressure	Baroreceptors	Somatosensory nerve
Balance	Vestibular system	Vestibular nerve
Smell	Olfactory bulbs	Olfactory nerve
Taste	Gustatory system	Gustatory nerve
Visual	Optic chiasm	Optic nerve
Motor	Muscles	Motoneurons

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## **HAND HYGIENE**

Hand Care

Hand Washing Protocol

Latex Allergy and Contact Dermatitis

## Hand Hygiene

### **Hand Care (hand washing, hand antisepsis or surgical hand antisepsis)**

Hand washing is **mandatory** (1) before treatment, (2) between patients, (3) after glove removal, (4) during treatment if an object is touched that might be contaminated by another patient's blood or saliva, and (5) before leaving the operatory.

### **Hand Washing Protocol**

The following **two minute** is the procedure for hand washing in the clinic and routine lab work at the beginning of the clinic session:

1. Remove all jewelry.
2. Remove visible debris from hands and arms with appropriate cleaner. Do not abrade skin by using a brush or sharp instrument
3. Wet hands and wrists under cool running water.
4. Dispense sufficient antimicrobial hand washing agent to cover hands and wrists.
5. Rub the soap gently onto all areas of the hands, with particular emphasis on the areas around the nails and between the fingers for a full two minutes before rinsing under cool water.
6. Rinse under cool water with finger tip up. Dry thoroughly by gently patting the hands and wrists with paper towels.

## **Latex Allergy and Contact Dermatitis**

Bristol Community College Dental Hygiene Clinic is a **latex free clinic**.

Dental Hygiene care providers who have exudative lesions or weeping dermatitis will refrain from all direct patient contact and from handling patient care equipment until the condition is resolved.



## **ENVIRONMENTAL SURFACE AND EQUIPMENT ASEPSIS**

### **Cleaning and Disinfection of Clinical Contact Surfaces**

**All designated surfaces and equipment will be pre-cleaned and disinfected prior to patient treatment and immediately after the patient is dismissed. Those pieces of**

- Any surfaces (horizontal or vertical) within **3 feet** of the patient's mouth must be considered contaminated after providing treatment that produces splatter. Therefore, cabinet doors and drawers must be closed during treatment. However, only surfaces that are

## **STANDARD OPERATING PROCEDURE**

Standard Operating Procedures: Infection Control in the Clinical Setting

Chairside Infection Control: Patient Treatment

Instrument Recirculation





**Sanitize/Clean and Disinfect Surfaces and Equipment** - (See Bristol Community College Dental Hygiene Clinic Manual for detailed procedure.)

1. Flush air and water lines for **two minutes** each at the beginning of the clinic day and for 30 seconds between patient sessions. Flush the air/water syringe into the sink to remove debris and stagnant water from the lines. Between patients run a cup of warm water through suction lines.
2. Clean and disinfect all smooth and hard surfaces which may become contaminated by touching, aerosols and/or splatter.
- 3.

## **Barriers**

1. Barriers protect those surfaces and equipment at risk for contamination via touching, aerosols or splatter that cannot be appropriately cleaned and disinfected.
2. Obtain the following barriers from the supply cart and barrier the designated items or surfaces:

### **Barrier:**

## **Chairside Infection Control: Patient Treatment**

**Seat the patient**

**Treat the Patient Appropriately Avoiding Cross-Contamination and Maintaining an Aseptic Chain.**

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## **Instrument Recirculation**

### **POST TREATMENT OPERATORY CLEAN-UP AND INSTRUMENT PREPARATION FOR STERILIZATION**

Any surface that becomes visibly contaminated with blood must be cleaned immediately and disinfected using Birex.

#### **Wear All Appropriate Barriers**

- Disposable gown must be worn for all procedures. Put on



# **ENGINEERING CONTROLS**

Handling of Sharps

Sharps Disposal



## **Engineering Controls**

Engineering controls are procedures and materials that help prevent employee exposure to hazardous chemicals.

### **Handling of Sharps**

- All sharps must be handled carefully. This includes the safe use of instruments, needles and other sharp items.
- The DHCP will wipe debris on two cotton rolls. One wet cotton roll and one dry cotton roll. The cotton rolls are tucked underneath

### **Needle Recapping and Sharps Disposal**

To prevent needle stick injuries, needles **are not** to be recapped by moving the needle towards a body part, especially a hand and will be recapped by using a recapping device. “Needles shall not be recapped, purposely bent or broken by hand, removed from disposable syringes, or otherwise manipulated by hand”. Recapping devices will be used in the Bristol Community College Dental Hygiene Clinic.

Used needles and other used/contaminated sharps (anesthesia cartridges, broken instruments, etc.) will be disposed of in the designated puncture-resistant container to be at the site of sharps use.

**NEEDLES MUST NOT BE PURPOSEFULLY MANIPULATED, BENT OR BROKEN BY HAND BEFORE, DURING OR AFTER USE OR AT THE TIME OF DISPOSAL.**

### **Aseptic Technique for Parenteral Medications**

- Do not administer medication from a syringe to multiple patients even if the needle on the syringe is changed.

## **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Gloves

Mask

Protective eyewear

Protective clothing

## PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE are those barriers that protect the DHCP from infectious or potentially infectious materials (OPIM). The most important concept is that PPE provide barrier protection. PPE is designed to protect the skin and the mucous membranes of the eyes, nose and mouth of the DHCP from exposure to blood or other potentially infectious materials. Routine use of barrier devices such as gloves, masks, protective eyewear, face shields, and protective clothing significantly reduce the potential/risk for blood and salivary cross-contamination between patients and DHCP. **Blood, saliva, and gingival fluids from all dental patients must be considered infectious.**

All DHCP in direct patient contact **will** wear the appropriate personal protective equipment (PPE) appropriate for the tasks performed:

- gloves
- face masks
- protective eyewear
- Disposable gowns
- preclinical/clinic attire

## **Gloves**

All DHCP having patient contact will wear disposable gloves whenever there is contact with blood, saliva, mucous membranes or other potentially infectious materials to reduce the likelihood that microorganisms present on the hands of DHCP will be transmitted to patients during patient-care procedures. **Gloves are single use items that is used for only 1 patient, and then discarded.** Gloves will be changed between patients. Gloves will also be changed if they are torn or punctured. Appropriate hand washing must precede gloving and immediately following glove removal before leaving the clinical area.

## **Rationale**

Gloves act as a barrier between the skin of the hand and mucous membranes, skin and body fluids of the patient, as well as all infectious material. Gloves are task specific so glove selection must be based upon the task to be performed as follows:

- **Examination/Treatment Gloves**
  - Gloves will be worn for clinical treatment. (Synthetic powder-free gloves.)
  - Treatment gloves must be worn for all cleaning and disinfection of dental units and environmental surfaces
- **Utility Gloves**
  - Utility Gloves will be worn over clean treatment gloves for safe handling and transport of all contaminated instruments and sharps for sterilization. Utility gloves have an increased resistance to instrument punctures and can be autoclaved.
- **Overgloves**
  - Plastic or foodhandlers' gloves may be worn over contaminated treatment gloves (overgloving) to prevent contamination of clean objects handled during treatment. These gloves may also be worn when performing procedures with contaminated items outside the patient's oral cavity (e.g. developing radiographs, etc.)

Examination/treatment gloves **will not** be washed with soap and water because of eventual deterioration of the gloves.

Treatment/examination gloves **will** be changed between patients. Gloves will also be removed before leaving the treatment area and after patient treatment.



## **Protective Clothing**

**All DHCP must routinely wear appropriate clinic attire to prevent skin and mucous membrane exposure when contact with blood or other body fluids is anticipated.**

### **Clinic attire:**

- Must be worn in the clinical facility.
- Disposable gown must be removed before leaving the facility.
- Soiled attire should be transported from the clinical site in a plastic bag.
- Attire must be laundered daily in hot water with detergent and bleach (when possible), and dried in an automatic heat dryer.
- It may be professionally dry cleaned.
- Reusable attire must be changed daily or more often if visibly soiled.
- Disposable attire is designed as single use only PPE, and must be disposed at the end of the clinical day.

## **EXPOSURE AND POSTEXPOSURE MANGEMENT**

Blood/Body Fluid Exposure Protocol

Report Accident Form

CDC Recommended Postexposure prophylaxis (PEP) for exposure to Hepatitis B virus

CDC Recommended HIV Postexposure prophylaxis (PEP) for Percutaneous Injuries

CDC Recommended HIV Postexposure prophylaxis (PEP) for mucous membrane exposure and nonintact skin exposures

CDC Situations for which expert\* consultation for HIV Postexposure prophylaxis (PEP) is advised



**BRISTOL COMMUNITY COLLEGE**  
**HEALTH SCIENCES DIVISION**  
**Blood/Body Fluid Exposure Protocol**

*All blood or body fluids should be considered potentially infectious. Should a student be exposed to blood or body fluids from a needlestick or to the eyes or mucous membranes, first aid measures should start immediately.*

1. **If percutaneous injury** - allow the site to bleed for at least 30 seconds and wash wound with betadine or soap and water. **If mucous membrane or eye is exposed** - thoroughly irrigate for 5 minutes. Current CDC guidelines apply.
2. Student immediately informs clinical instructor.
3. ***Instructor strongly advises student to proceed immediately to nearest emergency room for evaluation, blood test and possible medication. Only Emergency Room personnel have the expertise to evaluate the severity of the wound and to counsel the student as to best course of treatment. Emergency Room staff may refer student to local agencies for follow-up (see agency information below)***
4. **Student and instructor**

Bristol Community College

**Report of Accident**

<b>Student's name:</b>	<b>Age:</b>	<b>Sex</b>
<b>Date of accident:</b>	<b>Time:</b>	<b>a.m.</b> <b>p.m.</b>
<b>BCC program:</b>	<b>Course name:</b>	
<b>Accident location: BCC room#:</b>	<b>Affiliating agency:</b>	

**Nature on injury:**

**Recommended Postexposure prophylaxis (PEP) for exposure to Hepatitis B virus.  
 CDC  
 MMWR 2003**

**Table 3**

**TABLE 3. Recommended postexposure prophylaxis for exposure to hepatitis B virus**

Vaccination	Treatment	
	Source	and antibody
Not vaccinated	HBIG	HBIG and 1 dose of HBV vaccine
Previously vaccinated	None	None

**Recommended HIV Postexposure prophylaxis (PEP) for percutaneous injuries**  
**CDC**  
**MMWR 2003**  
**Table 4**

**TABLE 4. Recommended HIV postexposure prophylaxis for percutaneous injuries**

Exposure Category	Recommended PEP Regimen	Duration of PEP	Notes
Category 1: Percutaneous injury from a hollow-bore needle, syringe, or sharp instrument that was contaminated with blood or other potentially infectious material (e.g., semen, vaginal fluids, or CSF) and that was used on a patient with HIV infection	Zidovudine (AZT), Zalcitabine (ddC), and Zalcitabine (ddC)	4 weeks	
Category 2: Percutaneous injury from a hollow-bore needle, syringe, or sharp instrument that was contaminated with blood or other potentially infectious material and that was used on a patient with HIV infection	Zidovudine (AZT), Zalcitabine (ddC), and Zalcitabine (ddC)	4 weeks	
Category 3: Percutaneous injury from a hollow-bore needle, syringe, or sharp instrument that was contaminated with blood or other potentially infectious material and that was used on a patient with HIV infection	Zidovudine (AZT), Zalcitabine (ddC), and Zalcitabine (ddC)	4 weeks	

**Recommended HIV Postexposure prophylaxis (PEP) for mucous membrane exposure and nonintact skin exposures**  
**CDC**  
**MMWR 2003**  
**Table 5**

**TABLE 5. Recommended HIV postexposure prophylaxis for mucous membrane exposures and nonintact skin\* exposures**

Exposure type	Class	Drug	Class	Drug	HIV status	Unknown	Known	HIV Neg.
Mucous membrane	NRTI	Zidovudine	NRTI	Didanosine	Unknown	Unknown	Unknown	Unknown
					Unknown	Unknown	Unknown	Unknown
Nonintact skin	NRTI	Zidovudine	NRTI	Didanosine	Unknown	Unknown	Unknown	Unknown
					Unknown	Unknown	Unknown	Unknown



# **INSTRUMENT PROCESSING AND STERILIZATION**

## **INSTRUMENT STERILIZATION**

All contaminated instruments, including handpieces that can be sterilized in verifiable heat-sterilizing devices will be thoroughly cleaned and heat sterilized before use in the treatment of another patient. Weekly biological monitoring will be performed.



**Procedural Policy for Manual Cleaning and Packaging of Instruments for Sterilization**

- Personal protective equipment including utility gloves must be worn.
-

## **Procedural Policy for Ultrasonic Cleaning and Packaging the IMS Cassette System for Sterilization**

### **Ultrasonic Cleaning**

Ultrasonic methods of cleaning instruments have proven to be more effective, efficient and safer than hand scrubbing and will be implemented if at all possible.

Always use the ultrasonic cleaner with the lid in place. Use a cleaning solution that is appropriate for dental instruments and never add a disinfectant to the cleaning solution.

- Place lid on cassette and latch shut.
- Place cassette on stainless steel rack in ultrasonic unit.
- Place lid on ultrasonic unit and set timer for 16 minutes or follow manufacturer's directions.

## **Procedural Policy for Washer Disinfector and Packaging the IMS Cassette System for Sterilization**

### **Washer disinfector**

Prepare Miele washer disinfector according to manufacturer's instructions.

- Load the machine according to manufacturer's instructions.
- Select program.
- After cycle is completed the door will open.
- Wait 10 to 15 minutes for the instruments to cool.

### **Inspection/Preparation**

- Open cassette and inspect instruments visually. Add disposable cotton goods and indicator strip.
- Close cassette and latch shut.
- Wrap cassette with autoclave wrap. Autoclave wrap maintains sterility of contents following sterilization cycle, during storage and transportation.
- Seal with tape.
- Place indicator tape on wrapped cassette.
- Label wrapped cassette. Mark tape with student's name, number, date of sterilization, autoclave number.
- Place wrapped cassette on the stainless steel autoclave tray, on edge, approx. 1/2" apart.
- Follow sterilization guidelines as outlined in the Bristol Community College Dental Hygiene Clinic Manual.
- Remove cassette.
- Confirm that the monitor tape on the outside of the wrap has changed color.
- Place cassettes on drying rack.
- After cassettes are dried, store sterilized items.

## **Procedural Policy for Handpiece Cleaning, Maintenance and Packaging for Sterilization**

All non-disposable handpieces used in patient treatment will be sterilized between each patient use.

After patient use, the handpiece must be:

- Cleaned off (attachment and motor) with a damp paper towel.
- Clean and lubricate using the Assistina unit.
- Inspect for debris.
- Place handpiece inside the pouch and press out as much air as possible. Insert indicator strip. Seal open end.
- Place indicator tape on pouch.
- Label pouch and date.
- Place pouch paper side up in autoclave (if necessary).
- Follow sterilization guidelines as outlined in the Bristol Community College Dental Hygiene Clinic Manual.
- After handpiece is sterilized let the pouch dry for 5-10 minutes.
- Store sterilized item.

## **Procedural Policy for Packaging of Disposable Supplies**

These items include: gauze, cotton rolls, cotton swabs, etc...

- Place supplies inside the pouch and press out as much air as possible. Insert

### **Procedural Policy for Cleaning and Packaging the Scrub Brush for Sterilization**

- Rinse the brush of any debris or residue.
- Remove excess water with paper toweling.
- Wrap the brush in a paper towel and secure the wrap with tape.
- Place indicator tape on wrap.
- Label wrap and date.
- Follow sterilization guidelines as outlined in the Bristol Community College Dental Hygiene Clinic Manual.
- After scrub brush is sterilized, let dry for 5-10 minutes.
- Store sterilized scrub brush.

### **Procedural Policy for Cleaning and Packaging the Utility gloves for Sterilization**

- Rinse the gloves of any debris or residue.
- Remove excess water with paper toweling.
- Wrap the gloves in a small piece of blue wrap and secure the wrap with tape.
- Place indicator tape on wrap.
- Follow sterilization guidelines as outlined in the Bristol Community College Dental Hygiene Clinic Manual.
- After utility gloves are sterilized, let dry for 5-10 minutes.
- Store sterilized utility gloves.

### **Procedural Policy for Storage of Sterilized Items**

Sterilization packages containing sterile supplies and instruments will be dated and inspected before use to verify barrier integrity and dryness.

If packaging is compromised, the instruments will be re-cleaned, packaged in new wrap

**Clean and Disinfect Items to be Returned to Interior of Cabinet**

- Clean, disinfect all items removed for treatment preparation (patient mirror, petroleum jelly, etc.)

## **ENVIROMENTAL INFECTION CONTROL**

Nonregulated Waste

Regulated Waste

Hazardous Waste

Disposable Items

Recordkeeping for Regulated Waste

## STANDARD OPERATING PROCEDURES: WASTE MANAGEMENT

All waste generated during examination and treatment procedures are considered medical waste. This medical waste must be segregated at chairside as either nonregulated waste or regulated waste.

**Unregulated waste** is not considered infectious. **Unregulated waste** in the dental hygiene clinic is no more infective than residential waste. The majority of soiled items is unregulated waste and thus can be disposed of with ordinary waste (gloves, masks, disposable gowns, slightly soiled gauze or cotton rolls).

**Regulated waste** is infectious medical waste that requires special handling, neutralization and disposal. Examples of **regulated waste** found in the dental setting are solid waste soaked or saturated with blood or saliva, extracted teeth, and contaminated sharp items.

All **regulated waste** generated during clinical and laboratory activities (medical, infectious, contaminated, hazardous and toxic) will be handled in accordance with the EPA, Massachusetts DEP (hazardous waste: Massachusetts General laws, 310 CMR 30.000), Massachusetts DPH (medical infectious waste: Massachusetts General Laws, 105 CMR, 8/7/89) and OSHA (hazardous and medical waste 29 CFR part 1910 Part III and the Hazard Communications Final rule).



## **Nonregulated waste**

Nonregulated waste is all single-use disposable items that are not blood soaked and dripping nor contain body tissue.

- Gloves
- Face masks
-



## **Hazardous Waste**

Hazardous waste will be segregated and placed in leak proof containers labeled with the biohazard symbol and other information that is required.

According to the EPA and Massachusetts General Laws, 310 CMR 30.000), hazardous waste (waste posing a risk or peril to humans or the environment) of concern in the

## **Sharps Disposal**

The container will be used for disposal of all sharps

The container will be:

- Puncture resistant
- Labeled or color coded exhibiting the appropriate biohazard symbol
- Leak proof on sides and bottom
- Sterilized and disposed when it is 3/4 full.
- Closed and wrapped with sterilization tape.
- In an upright position within the sterilizer chamber.
- Sterilized.
- Removed after processing and allowed to cool
- Discarded as regulated waste.
- Disposed of by the Director of Public Safety and Campus Police.

## **Disposable items**

# **DENTAL UNIT WATERLINES, BIOFILM, AND WATER QUALITY**

### **Flush and Clean Low and High Suction System**

- Flush at least 1 quart of water of operatory hose cleaner through the lines at the end of each clinic day.

### **Dental Unit Water Lines for Adec Performer II Units**

#### Tuesday Procedure:

- Always remove all handpieces and air/water syringe tips
- Fill large capacity plastic container with 2 oz. of hot water per dental unit.
- Mix together and add 2 oz of the disinfectant mixture to each dental unit water container.
- Run disinfection solution through handpieces line and air/water syringe until color of solution is noted.
- Let solution remain in lines **overnight**.

#### Wednesday Procedure:

- Empty dental unit water containers, rinse and fill with **hot water**.
- Run **hot water** through air/water syringe and handpiece lines until all lines are free of the colored solution.
- Fill water containers with fresh cool water and flush lines for one minute.
- Units are now ready to accept air/water syringe tips and handpieces.

#### Daily:

Flush air, water and suction lines for **two minutes** each at the beginning of the clinic day and for **15 to 30 seconds** between patient sessions. Flush the air/water syringe into the

# **BOIL WATER ADVISORY**

**Boil water advisory** is a notice to the public to boil tap water before drinking it.

**Protocol:**

- The dental hygiene clinic will be closed until the boil water advisory is cancelled.
- The dental water lines and faucets will be flushed for 1-5 minutes.
- The dental water lines will be disinfected as outlined in this manual.



# **RADIOGRAPHY ASPEIS AND MANAGEMENT**

## **EXPOSURE AND PROCESSING OF RADIOGRAPHS**

### **Standard infection control precautions must be followed for the exposure and processing of radiographs.**

Personal protective equipment (mask, gloves, protective eyewear, and clinic attire) must be worn when taking radiographs and handling contaminated film packets.

Exposure and processing areas must be appropriately cleaned and disinfected/barrier protected according to specific standard operating procedures. Care should be taken to avoid contamination of the developing equipment. All reusable critical and semi-critical items must be heat sterilized.

Intraoral film packets should be handled in a manner that prevents transmission of infection.

The lead foil from the x-ray film packets, the spent fixer, and spent developer will be disposed as hazardous waste.

## STANDARD OPERATING PROCEDURE: THE EXPOSURE AND PROCESSING OF RADIOGRAPHS

### Utilize all principles and policies of infection control and standard precautions for the exposure and processing of radiographs.

At the beginning of each session the radiography rooms and darkroom will be cleaned and disinfected.

Exhaust fan is used in the darkroom to reduce the likelihood of radiography chemicals.

1. Follow appropriate hand washing and disinfecting technique guidelines as outlined in the **Bristol Community College Oral Radiography Clinic Manual including the use of PPE equipment.** Clean and disinfect the following items with appropriate disinfectant:

- Door knobs.
- PID tube head, extension arm.
- Plastic jacket containing exposure guidelines.
- Arm rest and handle of head rest.
- Patient apron.
- Dental chair.
- Dental operatories counters, door knobs and all surfaces which may encounter cross contamination.
- Darkroom: counters, door knobs and all surfaces which may encounter cross contamination.
- AT-2000 automatic processor.
- Peri-Pro automatic processors.
- Radiography stations

2. Wash Hands.

3. Barrier the following items with plastic:

- All selector dials or switches on control panel including plunger switch (**do not disinfect**).
- Buttons for chair movement.
- Chair headrest.
- Timer (manual processing if needed).
- Door knobs (Operatories and Darkroom)
- Computer keyboards

7. Disinfect and barrier the Panoramic machine.
  - Wipe entire unit
  - Place barrier (head rest cover) on control panel, baggie on the bite block, and baggie on exposure switch.

### **Infection Control Considerations During the Exposure of Radiographs**

#### **Film**

1. Un-wrap XCP-Rinn equipment and place on a bracket tray cover.
2. Wash hands, don glasses, mask, and gloves.
3. Position the patient in accordance with radiographic technique. The headrest must support the head comfortably at the occipital region.
4. Student exposes film.
5. Student will track which films they have taken by placing a FMX Tracking Form on the large bracket tray cover and placing unexposed films on this. As films are exposed, they are then placed in a cup.

#### **Sensors**

1. Barrier sens

## **Infection Control Considerations During Film Processing**

### General Developing Procedure for Intraoral Film

The darkroom is cleaned, disinfected, and set up (prior to patient's appointment time). The set up includes 2 large bracket trays. One cover is placed next to the AT 2000 automatic processor and the other is placed between the AT 2000 and Peri Pro automatic developer.

The student will only develop 4 films at a time. **Size 2** films will be developed first followed by **Size 1** films.

#### **The student will:**

- With clean hands, take cup (with exposed/contaminated film) to the darkroom.
- Place cup (with exposed/contaminated film) on large bracket tray cover between the two automatic processors.
- Put on new gloves. Student will handle contaminated films with gloves on. The students will need at least 6 pairs of gloves during the processing of films.
- **Turn on safe-light, make sure door is closed, and turn off overhead light.**
- The student will process only **4 films** at a time starting with the size 2 film.
- Take one contaminated film out of cup.
- Open film packet tab and slide out black paper and lead foil.
- Allow film to drop onto large bracket tray cover. Discard film packet onto second bracket tray cover next to AT2000. **Repeat 4 times.**
- Do not touch films with gloved hands.
- Remove gloves and place on second bracket tray cover.
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### **General Developing Procedure for Sensors**

- Sensors will be barrier with plastic a sleeve for each patient.
- Sensors will be wiped with a sanitation cloth after barrier is removed.
- Keyboard will have a plastic barrier.
- Mouse will have a blue barrier.

## **Infection control at the end of the Radiography Session**

### **Radiography Rooms**

1. Clean and disinfection procedure for both radiography rooms at the completion of each patient.

### **Radiography Area**

1. Radiography stations and view boxes are to be cleaned and disinfected.

### **Darkroom**

1. Clean and disinfect all working areas, shelves and surrounding and automatic processors.
2. Empty the wastebasket and replace liner.





**FDA and ADA Revised Recommendations for Prescribing Dental Radiographs 2012**

These recommendations are subject to clinical

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TYPE OF ENCOUNTER  
(continued)

PATIENT AGE AND DENTAL DEVELOPMENTAL STAGE

## B. Positive Clinical Signs/Symptoms

1. Clinical evidence of periodontal disease
2. Large or deep restorations
3. Deep carious lesions
4. Malposed or clinically impacted teeth
5. Swelling
6. Evidence of dental/facial trauma
7. Mobility of teeth
8. Sinus tract (“fistula”)
9. Clinically suspected sinus pathology
10. Growth abnormalities
11. Oral involvement in known or suspected systemic disease
12. Positive neurologic findings in the head and neck
13. Evidence of foreign objects
14. Pain and/or dysfunction of the temporomandibular joint
15. Facial asymmetry
16. Abutment teeth for fixed or removable partial prosthesis
17. Unexplained bleeding
18. Unexplained sensitivity of teeth
19. Unusual eruption, spacing or migration of teeth
20. Unusual tooth morphology, calcification or color
21. Unexplained absence of teeth
22. Clinical erosion

### **Use of Radiographs**

- All new patients will be asked when their last dental radiographs were taken.
- The radiographs which are received from a dental office are duplicated and returned.
- Radiographs are used by the student in the dental hygiene diagnosis, treatment planning and treatment phases of patient care.
- The clinical dentist will diagnose the patient's radiographs. The clinic dentist will also recommend and document any necessary referrals.
- For intraoral films, double packet films are utilized for all patient exposures. One set is mailed to the patient's dentist of record and the second set is kept with our records.
- A DVD is mailed to the patient's dentist of record for all digital surveys .

## **Radiographic Series**

- Full mouth series will normally include 20 projections.
- Bristol Community College Dental Hygiene Department will recommend and provide a full mouth series and/or a panoramic radiograph for edentulous patients.
- Pediatric radiographic series includes:
  - Panoramic radiograph
  - Bitewing projections
  - Periapical projections if needed
- Horizontal and vertical bitewings are used to assess for caries and periodontal status.
- Radiographs will be taken only when a medical history, dental history, and a thorough oral examination determine a need or unless a prescription is received from a referring dentist. This will be based on professional judgment, not frequency that determines exposure.

## Policy for Control and Use of Ionizing Radiation

Ionizing radiation (x-ray) exposure has a potential for harmful biological effects. To reduce the potential danger, the Dental Hygiene Program maintains radiation exposure to *As Low As Reasonably Achievable (ALARA)* to minimize ionizing radiation exposure to all individuals in the clinical area. The following policy has been developed in the interest of establishing a consistent standard concerning the use of ionizing radiation. The primary goal of this policy is to assure the safe effective use of ionizing radiation and to minimize as much as possible any potential risk from adverse biological effects to patients, students, faculty, and staff.

- Deliberate exposure of an individual to dental diagnostic radiographic procedures for training or demonstration purposes will not be permitted unless there is a documented diagnostic need for the exposure.
- The student shall not hold the film in place for the patient during the exposure. The use of film holding devices, bite tabs, or other methods are appropriate to position the film during exposure.
- The operator must stand outside the closed door of each radiography room in the dental clinic at Bristol Community College and directly observe the patient during each exposure.
- The tube housing, the cone or PID must never be hand held during the exposure.
- Shielded open-end cones or PID's will be used in order to minimize scattered radiation.
- When a cylindrically collimated x-ray machine is being used, circular beam striking the face should not be more than 2.75 inches in diameter.
- Only film with ANSI (ASA) speed group ratings of "F" shall be used.
- Computer digital imaging systems use x-rays to record images of the teeth and surrounding structures and transmit those images to a computer monitor screen. Placement of sensor during image acquisition

- Lead aprons with or without thyroid collars will be used on all radiography patients at Bristol Community College as an additional precaution to prevent unnecessary scatter radiation exposure to the body of the patient.
- Prescribed exposure techniques will be followed; appropriate exposure procedures are mounted on the wall near each x-ray control panel. Complete development techniques (Time-Temperature Processing) will be employed when using manual processing or automatic film processing equipment. If the films are too dark or too light in density, the exposure technique and/or processing procedure for that particular machine will be evaluated and corrected immediately by the faculty.
- Monitoring of Operator Exposure. Two area dosimeter monitors will be placed in the radiography area. One control monitor will be placed in the Dental Materials Lab. Records of quarterly, yearly and total cumulative exposure received by these monitors are recorded and kept on file.
- All patients receiving radiation will have documentation of the radiographs taken noted on their treatment chart.

**Dental hygiene students will not be radiography patients unless they have written permission from their personal dentists.**



## **Retake Policy and Guidelines**

- Retakes in a laboratory setting:
  - Are permitted on manikins to allow for supplemental instruction.
  - Achieved the minimum competency.
  - The student has direct supervision of a clinical instructor.
  
- Retakes in a clinical setting:
  - Retakes are required if there is a diagnostic need of a projected area.
  - Retakes must be the result of consultation between the student and the radiograph



# **PATIENT MOUTH RINSING**

## **PATIENT MOUTH RINSING**

A preprocedural mouth rinse should be used to reduce the number of microorganisms the patient might release in the form of aerosols or splatter that subsequently can contaminate the DHCP or equipment surfaces. In addition, preprocedural rinsing can decrease the number of microorganisms introduced into the patient's bloodstream during invasive procedures. The mouth rinse should have residual antimicrobial activity to help maintain reduced microbial levels throughout the appointment; however, this is not always possible. Any of the following may be used as is appropriate for each patient:

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# **DENTAL MATERIALS, PROSTHESIS AND LABORATORY**

## **DENTAL MATERIALS, PROSTHESIS AND LABORATORY**

Materials, impressions and intraoral appliances must be considered as potential sources of cross-contamination and will be handled in a manner that prevents exposure to DHCP, patients or the clinic/laboratory environment. These items must be rinsed or scrubbed as the item permits and disinfected with an EPA-registered disinfectant before being handled, adjusted or if applicable sent to a laboratory. When these items are returned from the laboratory to the clinic setting they must again be disinfected prior to placement in the patient's mouth. Manufacturers of specific materials must be consulted as to the stability of the material relative to disinfection agents and procedures.

Equipment, surfaces, and attachments that become contaminated with blood or saliva from oral appliances and prostheses will be thoroughly cleaned and then sterilized/disinfected (depending upon the item contaminated) before use on another patient/case. The best time to clean and disinfect impressions, prostheses, or appliances is



### **Other Dental Materials in the Clinic**

1. Bite registrations, impressions, models and prostheses can become contaminated.  
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# **FIRE PLAN**



# **MEDICAL RECORD KEEPING**

## **Medical Record Keeping**

Medical record keeping is managed by the Bristol Community College administration.

### **Health Services**

Bristol Community College Health Services maintains the student medical records.