

**BRISTOL COMMUNITY COLLEGE**  
**Fall River, Massachusetts**  
**Dental Hygiene Program**



**Exposure Control Plan Manual**  
**2016-2017**

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# **POLICY**

## **Introduction**

An effective infection-control policy in a health-care educational setting requires the cooperation of faculty, staff and students. This must be achieved through education, demonstration, monitoring and evaluation. Faculty has the primary responsibility for infection-control in the clinic. Since students are the primary providers of care, their actions determine whether or not control of infection has been effective. It is the responsibility of all personnel to practice approved infection-control procedures and to assure that students and clinic personnel are conforming to these guidelines.

## **Purpose**

Bristol Community College Dental Hygiene Program is committed to providing a safe and healthful work environment for faculty and students. In pursuit of this goal, the following exposure control plan is provided to eliminate or minimize occupational exposure from pathogens that can be spread by blood or any other body fluids, excretion or secretion.

The purpose of infection-control policies and procedures is to prevent or reduce potential for disease transmission from patient to dental health-care personnel (DHCP), from DHCP to patient, and from patient to patient in the dental care environment.

This goal will be achieved by:

1. Requiring current immunization against Hepatitis B virus and other appropriate diseases for all students.
2. Education and training in the principles and practice of infection control in dentistry.
3. Preventing parenteral, mucous membrane or non-intact skin exposure of patients and DHCP to blood, and other body fluids containing visible blood. Saliva in a dental setting is predictably bloody.
4. Controlling contamination of items and personnel in clinical environments by consistent use of optimal aseptic techniques, including the use of barrier techniques.
5. Using to the fullest extent feasible, intrinsically safe substances, procedures, or devices (engineering controls) as primary methods to reduce health-care personnel exposures to harmful substances.

## 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
  1. Category I
  2. Category II
  3. Category III
- Communication of Hazards to Students and Faculty
  1. Hazard Communication Program
  2. Information and Training
  3. Use of Signs and Labels
  4. Material Safety Data Sheets
  5. Hazardous Chemical List
  6. BCC Hazardous Material Spill Procedures

- Personal Health Elements
  1. Personal Hygiene
  2. Immunization
  3. Work Restrictions
- Hand Hygiene
  1. Hand Care
  2. Hand Washing Protocol
  3. Latex Allergy and Contact Dermatitis
- Environmental Surface and Equipment Asepsis
  1. Cleaning and Disinfection
  2. Chemical Exposure/Emergency and clean-up
- Standard Operating Procedures
- Engineering Controls
  1. Handlings of Sharps
  2. Sharps Disposal
- Personal Protective Equipment
  1. Gloves
  2. Masks
  3. Protective Eyewear
  4. Protective Clothing
- Exposure and Post-exposure Management
- Instrument Processing and Sterilization
- Environmental Infection control
  1. Nonregulated Waste
  2. Regulated Waste
  3. Hazardous Waste
  4. Disposable Items
  5. Recordkeeping for Regulated Waste
- Dental Unit Waterlines, Biofilm, and Water Quality
- Boil Water Advisory
- Dental Radiography
- Preprocedural Mouthrinses
- Dental Laboratory
- Fire Plan
- Medical Record Keeping

This protocol is necessary and sufficient for routine outpatient treatment and for treatment of Hepatitis B carriers, HIV antibody positive patients, diagnosed AIDS patients and patients with other known infectious diseases.

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)
- Bristol Community College-Dental Hygiene Consent and Agreement (Chapter 4)
- Notice of Patients' Rights (Chapter 4)
- Acknowledgment of Receipt of Notice of Privacy Practices (Chapter 4)

Measures taken to ensure patient confidentiality is maintained and patient electronic health records are secure are:

- The health record is protected by securing two passwords before having access to the software program and patient records.
- No identifying information is located on the outside of the patient's file.
- A clinical instructor and students are assigned to close the clinic that confirms patient's files have been secure at the end of a clinical day.
- Laptops are locked in carts to protect the electronic health records and PC computers are turned off.
- At the completion of each clinic session, patient records are returned to a designated area in the clinic for filing.
- Patient records cannot leave the clinic.
- The name of the patient is not used in seminar discussions or student assignments.
- The clinic door is locked whenever the clinic is not in session.

# **BLOOD-BORNE INFECTIOUS DISEASE**

**BRISTOL COMMUNITY COLLEGE**  
**Dental Hygiene Program**  
**Fall River, MA**

**Bristol Community College Dental Hygiene Program Policy Related To Individuals Who Have Blood-borne Infectious Diseases**

Bristol Community College Dental Hygiene Program conforms to the policies, guidelines, and recommendations of the Centers for Disease Control and Prevention (CDC), Occupational Safety and Health Administration (OSHA), and the Commonwealth of Massachusetts Department of Public Health. The Dental Hygiene Program has the responsibility to ensure a safe environment for all involved. Any prospective applicant, student, faculty member, staff member, or patient who chooses to self identifies his/her infectious health status will not be denied an education, employment, or treatment.

Patients will receive treatment, as long as treatment is not contraindicated at the time of the appointment and would not be harmful to their health. All decisions will be made on a case-by-case basis with the patient's consent in consultation with the patient's physician. When an applicant, student, faculty member, or staff member discloses his/her infectious health status certain modifications may be made to patient treatment, clinical assignments, reassignments, and retraining. A decision will be made on a case-by-case basis rather than an application of a strict approach.

# **TUBERCULOSIS POLICY**

Standard Precautions is not effective against the transmission of Tuberculosis (TB). A patient who has active TB needs special considerations for infection control protocol.

**TB infection:** this condition, sometimes called latent TB, causes no symptoms and is not contagious.

**Active TB:** this condition makes the patient sick and can spread to others. However, the infection may be asymptomatic for years, even though it's active and causing damage.

### **Transmission of *Mycobacterium tuberculosis*:**

- Spread by droplet nuclei via the respiratory system.
- Bacteria can remain alive in the lungs for years.

### **Signs and Symptoms of Tuberculosis:**

TB mainly affects the patient's lungs (pulmonary tuberculosis), and coughing is often the only indication of infection initially. Signs and symptoms of active pulmonary TB include:

- A cough lasting three or more weeks that may produce discolored or bloody sputum
- Unintended weight loss
- Fatigue
- Slight fever
- Night sweats
- Chills
- Loss of appetite
- Pain with breathing or coughing (pleurisy)

TB also can target almost any part of your body, including your joints, bones, urinary tract, central nervous system, muscles, bone marrow and lymphatic system.

When TB occurs outside the patient's lungs, signs and symptoms vary, depending on the organs involved. For example, TB of the spine may result in back pain, and TB that affects your kidneys might cause blood in your urine. TB can also spread through your entire body, simultaneously attacking many organ systems.

**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, students, staff and faculty.
- Defer treatment until the patient is noninfectious.
- Refer patient requiring urgent dental treatment to a previously identified facility with TB engineering controls and a respiratory protection program.

## **EXPOSURE DETERMINATION**

Category I

Category II

Category III

## **Exposure Determination**

OSHA guidelines states tasks in the dental office/facility are evaluated and classified by the categories of task, work area and personnel. The following categories are:

### **Category I:**

Tasks that involve exposure to blood, body fluids or tissues.

“All procedures or other job-related tasks that involve an inherent potential for mucous membrane or skin contact with blood, body fluids or tissues, or a potential for spills or splashes of them. Use of appropriate protective measures are required of every employee in these tasks.”

Category I in the Bristol Community College Dental Hygiene Clinic are:

- Students
- Clinic faculty

### **Category II:**

Tasks that involve no exposure to blood, body fluids or tissues, but employment may require performing unplanned Category I tasks.

“The normal work routine involves no exposure to blood, body fluids or tissues, but exposure or potential exposure may be required as a condition of employment. Appropriate protective measures should be readily available.”

Category II in the Bristol Community College Dental Hygiene Clinic is:

- Clinic secretary
- Clinic manager

### **Category III:**

Tasks that involve no exposure to blood, body fluids or tissues.

“Persons who perform those duties are not called upon as part of their employment to perform or assist in emergency medical care or first aid or to be potentially exposed in some other way.”

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

Hazard Communication Program

Information and Training

Use of Signs and Labels

Safety Data Sheets

Hazardous Chemical List

BCC-Hazardous Material Spill Procedures

## **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 operating procedures (SOP) for personal protective equipment (PPE) and the safe use of chemical agents. Safety Data Sheets (SDS) are on file with in the Dental Materials Lab. All chemical containers are labeled. All lids and tops must be securely attached. In the event of a hazardous chemical exposure, the SDS will be followed. Eyewash stations are labeled and accessible on the clinic floor.

The Infection Control Coordinator will have the overall responsibility for the program, including reviewing and updating this plan as necessary.

### **Information and Training**

The students are informed, trained and evaluated on the Exposure Control Plan in DHG 113: Orientation to Clinical Dental Hygiene and DHG 120: Dental Hygiene Theory 2.

Students and faculty are given the Exposure Control Plan Manual at the beginning of each academic year.

### **Use of Signs and Labels**

Signs and labels are those symbols used to identify and warn of immediate and potential hazards.

**Each DHCP must be familiar with the location and content of all signs and labels currently used in the clinical and laboratory facility.**

Biohazard labels are posted on all equipment including laboratory and radiography equipment and designated areas, chemicals, infectious waste, and hazardous waste receptacles, sharps containers, clinic supply areas, etc. The hazard must be clearly labeled on the biohazard sign. This will serve as an immediate warning or alert to danger.

In house containers of hazardous chemicals will be labeled with the identity of the material and appropriate hazard warnings.

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

### **Safety Data Sheets (SDS)**

Safety Data Sheets (SDS) serves as an alert to the potential harmful effects of chemical agents used in the workplace. SDS contains emergency information in the event of chemical exposure.

The Infection Control Coordinator is responsible for establishing and monitoring Bristol Community College Dental Hygiene Clinic SDS program. The Infection Control Coordinator will ensure that procedures are developed to obtain the necessary SDS and will review incoming SDS for new or significant health and safety information. The Infection Control Coordinator will see that any new information is communicated to students and faculty. The procedure below will be followed when an SDS is received at the time of initial shipment:

Inventory Coordinator will give the Infection Control Coordinator the SDS of all products that are ordered in the Bristol Community College Dental Hygiene Clinic.

The Infection Control Coordinator will review each SDS and make necessary updates.

Copies of SDS for the hazardous chemical list to which students and faculty are exposed or are potentially exposed are kept in Dental Materials Lab in a designated notebook and place.

### **Container Labeling**

The Infection Control Coordinator will verify that all containers received for use will be clearly labeled as to the contents and have the appropriate hazard warning.

## **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 these 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-CONTAINED BREATHING APPARATUS.**

**IF EXPOSED TO A CHEMICAL ON CLOTHING, SKIN OR BY INHALATION, REMOVE THE CLOTHING AND SEEK MEDICAL TREATMENT IMMEDIATELY.**

If the spill is dangerous to life or health, evacuate the area immediately.

Notify Campus police at ext. "3911" from a safe location.

### **Provide the following information:**

- **Location of the spill?**
- **Type of chemical spilled?**
- **Known hazard of the spilled chemical?**
- **Quantity spilled?**
- **Number and extent of injuries?**
- **Has the spill or vapors spread into the drain or ventilation system?**

### **Types of Hazardous Spills:**

- Evaluate the area and surrounding areas that may be in danger.
- Provide first aid assistance if you have been trained.
- Establish a safe perimeter around the spill and do not allow anyone other than trained and equipped responders to enter the spill area.
- Help direct responders to the area and victim locations.
- Clean up the spill ONLY if the spill is small, you are aware of the hazards of the chemical, you have been properly trained to clean up the spill, and no special protective equipment is required.

## **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.

## Immunizations Strongly Recommended for Health-Care Personnel (HCP)

CDC MMWR Morbidity and Mortality Weekly Report, Recommendations and Reports,  
December 19, 2003: Guidelines for Infection Control in the Dental Health-Care Setting,  
2003

Vaccine	Dose schedule	Indications	Major precautions and contraindications	Special considerations
Hepatitis B recombinant vaccine*	Three-dose schedule administered intramuscularly (IM) in the deltoid; 0, 1, 6 - second dose administered 1 month after first dose; third dose administered 4 months after second. Booster doses are not necessary for persons who have developed adequate antibodies to hepatitis B surface antigen (anti-HBs).	Health-care personnel (HCP) at risk for exposure to blood and body fluids.	History of anaphylactic reaction to common baker's yeast. Pregnancy is not a contraindication.	No therapeutic or adverse effects on hepatitis B virus (HBV)-infected persons; cost-effectiveness of prevaccination screening for susceptibility to HBV depends on costs of vaccination and antibody testing and prevalence of immunity in the group of potential vaccinees; health-care personnel who have ongoing contact with patients or blood should be tested 1–2 months after completing the vaccination series to determine serologic response. If vaccination does not induce adequate anti-HBs (>10 mIU/mL), a second vaccine series should be administered.
Influenza vaccine (inactivated) <sup>†</sup>	Annual single-dose vaccination IM with current vaccine.	HCP who have contact with patients at high risk or who work in chronic-care facilities; HCP aged ≥50 years or who have high-risk medical conditions.	History of anaphylactic hypersensitivity to eggs or to other components of the vaccine.	Recommended for women who will be in the second or third trimesters of pregnancy during the influenza season and women in any stage of pregnancy who have chronic medical conditions that are associated with an increased risk of influenza. <sup>§</sup>
Measles live-virus vaccine	One dose administered subcutaneously (SC); second dose ≥4 weeks later.	HCP who were born during or after 1957 without documentation of 1) receipt of 2 doses of live vaccine on or after their first birthday, 2) physician-diagnosed measles, or 3) laboratory evidence of immunity. Vaccine should also be considered for all HCP who have no proof of immunity, including those born before 1957.	Pregnancy; immunocompromised <sup>†</sup> state (including human immunodeficiency virus [HIV]-infected persons with severe immunosuppression); history of anaphylactic reactions after gelatin ingestion or receipt of neomycin; or recent receipt of antibody-containing blood products.	Measles, mumps, rubella (MMR) is the recommended vaccine, if recipients are also likely to be susceptible to rubella or mumps; persons vaccinated during 1963–1967 with 1) measles killed-virus vaccine alone, 2) killed-virus vaccine followed by live-virus vaccine, or 3) a vaccine of unknown type, should be revaccinated with two doses of live-virus measles vaccine.
Mumps live-virus vaccine	One dose SC; no booster.	HCP believed susceptible can be vaccinated; adults born before 1957 can be considered immune.	Pregnancy; immunocompromised <sup>†</sup> state; history of anaphylactic reaction after gelatin ingestion or receipt of neomycin.	MMR is the recommended vaccine.
Rubella live-virus vaccine	One dose SC; no booster.	HCP, both male and female, who lack documentation of receipt of live vaccine on or after their first birthday, or lack of laboratory evidence of immunity can be vaccinated. Adults born before 1957 can be considered immune, except women of childbearing age.	Pregnancy; immunocompromised <sup>†</sup> state; history of anaphylactic reaction after receipt of neomycin.	Women pregnant when vaccinated or who become pregnant within 4 weeks of vaccination should be counseled regarding theoretic risks to the fetus; however, the risk of rubella vaccine-associated malformations among these women is negligible. MMR is the recommended vaccine.
Varicella-zoster live-virus vaccine	Two 0.5 mL doses SC 4–8 weeks apart if aged ≥13 years.	HCP without reliable history of varicella or laboratory evidence of varicella immunity.	Pregnancy; immunocompromised <sup>†</sup> state; history of anaphylactic reaction after receipt of neomycin or gelatin; recent receipt of antibody-containing blood products; salicylate use should be avoided for 6 weeks after vaccination.	Because 71%–93% of U.S.-born persons without a history of varicella are immune, serologic testing before vaccination might be cost-effective.

Sources: Adapted from Bolyard EA, Hospital Infection Control Practices Advisory Committee. Guidelines for infection control in health care personnel, 1998. *Am J Infect Control* 1998;26:289–354.

CDC. Immunization of health-care workers: recommendations of the Advisory Committee on Immunization Practices (ACIP) and the Hospital Infection Control Practices Advisory Committee (HICPAC). *MMWR* 1997;46(No. RR-18).

CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2003;52:1-34.

CDC. Using live, attenuated influenza vaccine for prevention and control of influenza: supplemental recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR* 2003;52(No. RR-13).

\* A federal standard issued in December 1991 under the Occupational Safety and Health Act mandates that hepatitis B vaccine be made available at the employer's expense to all HCP occupationally exposed to blood or other potentially infectious materials. The Occupational Safety and Health Administration requires that employers make available hepatitis B vaccinations, evaluations, and follow-up procedures in accordance with current CDC recommendations.

<sup>†</sup> Persons immunocompromised because of immune deficiencies, HIV infection, leukemia, lymphoma, generalized malignancy, or persons receiving immunosuppressive therapy with corticosteroids, alkylating drugs, antimetabolites; or persons receiving radiation.

<sup>§</sup> Vaccination of pregnant women after the first trimester might be preferred to avoid coincidental association with spontaneous abortions, which are most common during the first trimester. However, no adverse fetal effects have been associated with influenza vaccination.

<sup>†</sup> A live attenuated influenza vaccine (LAIV) is FDA-approved for healthy persons aged 5–49 years. Because of the possibility of transmission of vaccine viruses from recipients of LAIV to other persons and in the absence of data on the risk of illness and among immunocompromised persons infected with LAIV viruses, the inactivated influenza vaccine is preferred for HCP who have close contact with immunocompromised persons.

## Work Restrictions

CDC MMWR Morbidity and Mortality Weekly Report, Recommendations and Reports,  
December 19, 2003: Guidelines for Infection Control in the Dental Health-Care Setting, 2003

**TABLE 1. Suggested work restrictions for health-care personnel infected with or exposed to major infectious diseases in health-care settings, in the absence of state and local regulations\***

Disease/problem	Work restriction	Duration
Conjunctivitis	Restrict from patient contact and contact with patient's environment.	Until discharge ceases
Cytomegalovirus infection	No restriction	
Diarrheal disease		
Acute stage (diarrhea with other symptoms)	Restrict from patient contact, contact with patient's environment, and food-handling.	Until symptoms resolve
Convalescent stage, <i>Salmonella</i> species	Restrict from care of patients at high risk.	Until symptoms resolve; consult with local and state health authorities regarding need for negative stool cultures
Enteroviral infection	Restrict from care of infants, neonates, and immunocompromised patients and their environments.	Until symptoms resolve
Hepatitis A	Restrict from patient contact, contact with patient's environment, and food-handling.	Until 7 days after onset of jaundice
Hepatitis B		
Personnel with acute or chronic hepatitis B surface antigenemia who do not perform exposure-prone procedures	No restriction <sup>†</sup> ; refer to state regulations. Standard precautions should always be followed.	
Personnel with acute or chronic hepatitis B e antigenemia who perform exposure-prone procedures	Do not perform exposure-prone invasive procedures until counsel from a review panel has been sought; panel should review and recommend procedures that personnel can perform, taking into account specific procedures as well as skill and technique. Standard precautions should always be observed. Refer to state and local regulations or recommendations.	Until hepatitis B e antigen is negative
Hepatitis C	No restrictions on professional activity. <sup>†</sup> HCV-positive health-care personnel should follow aseptic technique and standard precautions.	
Herpes simplex		
Genital	No restriction	
Hands (herpetic whitlow)	Restrict from patient contact and contact with patient's environment.	Until lesions heal
Orofacial	Evaluate need to restrict from care of patients at high risk.	
Human immunodeficiency virus; personnel who perform exposure-prone procedures	Do not perform exposure-prone invasive procedures until counsel from an expert review panel has been sought; panel should review and recommend procedures that personnel can perform, taking into account specific procedures as well as skill and technique. Standard precautions should always be observed. Refer to state and local regulations or recommendations.	
Measles		
Active	Exclude from duty	Until 7 days after the rash appears
Postexposure (susceptible personnel)	Exclude from duty	From fifth day after first exposure through twenty-first day after last exposure, or 4 days after rash appears
Meningococcal infection	Exclude from duty	Until 24 hours after start of effective therapy
Mumps		
Active	Exclude from duty	Until 9 days after onset of parotitis
Postexposure (susceptible personnel)	Exclude from duty	From twelfth day after first exposure through twenty-sixth day after last exposure, or until 9 days after onset of parotitis

Source: Adapted from Bolyard EA, Hospital Infection Control Practices Advisory Committee. Guidelines for infection control in health care personnel, 1998. *Am J Infect Control* 1998;26:289-354.

\* Modified from recommendations of the Advisory Committee on Immunization Practices (ACIP).

<sup>†</sup> Unless epidemiologically linked to transmission of infection.

<sup>‡</sup> Those susceptible to varicella and who are at increased risk of complications of varicella (e.g., neonates and immunocompromised persons of any age).

<sup>§</sup> Patients at high risk as defined by ACIP for complications of influenza.

**TABLE 1. (Continued) Suggested work restrictions for health-care personnel infected with or exposed to major infectious diseases in health-care settings, in the absence of state and local regulations\***

Disease/problem	Work restriction	Duration
Pediculosis	Restrict from patient contact	Until treated and observed to be free of adult and immature lice
Pertussis		
Active	Exclude from duty	From beginning of catarrhal stage through third week after onset of paroxysms, or until 5 days after start of effective antibiotic therapy
Postexposure (asymptomatic personnel)	No restriction, prophylaxis recommended	
Postexposure (symptomatic personnel)	Exclude from duty	Until 5 days after start of effective antibiotic therapy
Rubella		
Active	Exclude from duty	Until 5 days after rash appears
Postexposure (susceptible personnel)	Exclude from duty	From seventh day after first exposure through twenty-first day after last exposure
<i>Staphylococcus aureus</i> infection		
Active, draining skin lesions	Restrict from contact with patients and patient's environment or food handling.	Until lesions have resolved
Carrier state	No restriction unless personnel are epidemiologically linked to transmission of the organism	
Streptococcal infection, group A	Restrict from patient care, contact with patient's environment, and food-handling.	Until 24 hours after adequate treatment started
Tuberculosis		
Active disease	Exclude from duty	Until proved noninfectious
PPD converter	No restriction	
Varicella (chicken pox)		
Active	Exclude from duty	Until all lesions dry and crust
Postexposure (susceptible personnel)	Exclude from duty	From tenth day after first exposure through twenty-first day (twenty-eighth day if varicella-zoster immune globulin [VZIG] administered) after last exposure.
Zoster (shingles)		
Localized, in healthy person	Cover lesions, restrict from care of patients <sup>§</sup> at high risk	Until all lesions dry and crust
Generalized or localized in immunosuppressed person	Restrict from patient contact	Until all lesions dry and crust
Postexposure (susceptible personnel)	Restrict from patient contact	From tenth day after first exposure through twenty-first day (twenty-eighth day if VZIG administered) after last exposure; or, if varicella occurs, when lesions crust and dry
Viral respiratory infection, acute febrile	Consider excluding from the care of patients at high risk <sup>¶</sup> or contact with such patients' environments during community outbreak of respiratory syncytial virus and influenza	Until acute symptoms resolve

Source: Adapted from Bolyard EA, Hospital Infection Control Practices Advisory Committee. Guidelines for infection control in health care personnel, 1998. *Am J Infect Control* 1998;26:289-354.

\* Modified from recommendations of the Advisory Committee on Immunization Practices (ACIP).

† Unless epidemiologically linked to transmission of infection.

§ Those susceptible to varicella and who are at increased risk of complications of varicella (e.g., neonates and immunocompromised persons of any age).

¶ Patients at high risk as defined by ACIP for complications of influenza.

## **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.

Hands will be washed 20-30 seconds after removing gloves and prior to donning new gloves.

After the two minute hand washing procedure, an alcohol rub solution may be used instead of hand soap if hands are not visibly soiled for 20-30 seconds.

Note: Lotions are often recommended to ease the dryness resulting from frequent handwashing and to prevent dermatitis from glove use.

### **Rationale**

Hand washing is an extremely effective procedure for the prevention of many infections that are acquired from the transmission of microorganisms on the hands. Cool water closes the skin pores and minimizes the shedding of microorganisms from the subsurface layers of skin. "Residual" antiseptic hand wash has a long-lasting antimicrobial effect on the skin, which improves with more frequent use throughout the day. Hands should be dried thoroughly before donning gloves because bacteria can multiply rapidly in the moist environments underneath gloves.

## **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

Chemical Exposure/Emergency and Clean-up

## 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 equipment and surfaces that cannot be disinfected will be barrier protected.**

Environmental surfaces are those surfaces or equipment that do not contact patients directly but can become contaminated during patient care. Cleaning is the necessary **first step** of any disinfection process. Cleaning is a form of decontamination that renders the environmental surface safe by removing organic matter, salts and visible soils, all of which interfere with microbial inactivation. The disinfection process can be compromised if a surface has not been cleaned first.

- Many blood and/or saliva borne disease-causing microorganisms such as hepatitis B virus and *Mycobacterium tuberculosis* can remain in an infectious state for many hours to several days when transferred from an infected person to environmental surfaces within dental operatories and other clinical areas. Since subsequent contact with these contaminated surfaces can expose others to such microbes, and may result in disease transmission, adequate measures must be used in each clinical area to control possible cross-contamination from contaminated surfaces.
- A practical and effective method for routinely managing operatory surface contamination between patients is to use disposable blood/saliva impermeable barriers to shield surfaces from direct and indirect exposure. Removal of blood, saliva, and microbes is accomplished by routinely changing surface covers between patients. Time-consuming cleaning and disinfecting procedures between patients can be minimized.
- Only those chemical disinfectants that are EPA-registered hospital level mycobactericidal agents capable of killing both lipophilic and hydrophilic viruses.
- The surface disinfectant solution is to be applied with a “**squirt, scrub, squirt**” technique.
  - **Squirt** the solution onto two 4” x 4” gauze sponges and disinfect all areas.
  - **Wipe** clean the surface using one 4” x 4” gauze sponge and **discard**.
  - **Squirt** the second 4” x 4” gauze sponge to wipe the surfaces, and allow the surfaces to remain wet for the recommended time interval.
- Personal Protective Equipment (PPE) must be worn during these procedures to prevent chemical exposure and possible eye, skin, or respiratory injury.

- 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 touched must be cleaned and disinfected or have disposable covers changed between patients.

### **Chemical Exposure or Emergency**

If a chemical exposure/emergency does occur, the emergency procedures, clean-up, and disposal procedures described on the safety data sheet (SDS) for the specific chemical will be followed. SDS are accessible for all chemicals used in the clinic and laboratory settings. Copies of the SDS are located in the Dental Materials Lab. Personal Protective Equipment (PPE) must be worn. The **Spill Kit** is located in the Dental Materials Lab to assist clean-up and disposal procedures.

### **Cleaning of Housekeeping Surfaces**

Housekeeping surfaces are the surfaces that do not come into contact with hands or devices used in dental procedures (e.g. floors, walls, and sinks).

- Housekeeping surfaces will be cleaned with a detergent and water or an EPA-registered hospital disinfectant/detergent on a routine basis, depending on the degree of contamination and when visibly soiled.
- Mops will be clean after use and allow to dry before reuse. Single-use cloths will be used.
- EPA-registered disinfecting solutions will be prepared daily and as instructed by the manufacturer.

## **STANDARD OPERATING PROCEDURE**

Standard Operating Procedures: Infection Control in the Clinical Setting

Chairside Infection Control: Patient Treatment

Instrument Recirculation

## **Standard Operating Procedure: Infection Control in the Clinical Setting**

**Standard infection control precautions must be followed and the chain of asepsis maintained.**

### **Pre-treatment Infection Control Preparations**

#### **Unit/Operatory Preparation**

1. Enter the clinic in appropriate clinic/preclinic attire (disposable gown). Proceed to the assigned unit/operatory. Place personal supplies on roll around cabinet. Remove several 4" x 4" gauze sponges from bottom of cabinet and place on sink area. Place masks, gloves, and eyewear on the sink counter. Prepare to sanitize/clean the area.
2. DHCP personal protective equipment (PPE) for cleaning and disinfecting the unit/operatory area:
  - Remove all jewelry and store in a safe place.
  - Wash eyewear with antimicrobial soap and water. Pat dry with paper towel. Put on eyewear.
  - Put on the face mask appropriately to achieve a light seal around the nose and mouth.
3. Handwashing protocol:
  - Remove all visible debris from the hands and arms with appropriate cleaner & rinse
  - Wet hands and wrists under cool running water.
  - Dispense sufficient soap or antimicrobial hand wash onto all areas of the hands and wrists.
  - Rub the soap gently onto all areas of the hands, with particular emphasis around the fingernails and between the fingers for a full **two minutes** before rinsing under cool water.
  - Rinse under cool water with finger tips up.
  - Dry the fingers and wrists with paper towel by blotting gently.
4. Put on utility gloves for the cleaning process.

**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. Use the designated disinfectant to clean and disinfect appropriate equipment and surfaces.
  - **Squirt** the disinfectant directly onto two 4" x 4" gauze sponges.
  - **Scrub** the surface clean with one 4" x 4" gauze sponge.
  - Use another disinfected saturated 4" x 4" sponge to wipe the pre-Cleaned surfaces and allow the surface to remain wet for ten minutes.
4. Repeat the above procedure (#3) until all necessary surfaces and equipment are cleaned and disinfected. Dispose of the gauze sponges when soiled in the waste receptacle at the sink area.
5. Use the sequence as outlined in the Bristol Community College Dental Hygiene Clinic Manual for cleaning and disinfecting the unit/operator and set-up of supplies.

## **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:**

1 headrest cover over the chair headrest

1 paper autoclave bag is to be taped to side of bracket tray for potentially infectious waste.

Plastic sleeve to be placed on:

- opening to handpiece hoses and onto the hoses themselves
- air/water syringe from the connection between the disposable tip onto the hose
- saliva ejector holder
- other items as necessary
- Paper tray cover to be put on bracket tray if not using IMS system
- (2) 4" x 6" sticky barrier tape to be placed on the side of roll-around cabinet with masking tape to hold over-gloves.
- Plastic barrier over computer

## **Special Notes**

- The bracket tray is for sterile items only, except the clean tray cover.
- The cabinet top is for clean/disinfected items only.
- Sterile instruments must remain packaged until the patient is seated unless they need to be sharpened. If they are sharpened before the patient's arrival, the wrap covers the cassette until the patient is seated. If the patient does not arrive for his/her appointment, the instruments must be repackaged and resterilize.

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

### **Seat the patient**

- Address the patient formally (Ms., Mr., Mrs., or Dr.) unless they indicate otherwise or are a child.
- Seat the patient with the chair in an upright position.
- Drape the patient appropriately.
- Review the medical and dental history with the patient and record all necessary documentation.
- Take vital signs, blood pressure reading and record. Bring medical history form, dental treatment plan to instructor to be reviewed.
- Follow dental hygiene appointment procedure as outlined in the Bristol Community College Dental Hygiene Clinic Manual.
- With clean hands open the wrapping of sterile instruments.

### **Put on Personal Protective Equipment**

- Put on protective eyewear if not already on.
- Put on the face mask creating a light seal around the nose and mouth.
- Wash and dry hands.
- Put on examination gloves.
- Perform an extraoral exam.
- Have the patient put on protective eyewear
- Have the patient rinse with mouthwash.
- Open cassette

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

- Avoid touching anything not directly involved in patient treatment. Use an elbow to adjust operator eyewear or mask.
- Avoid leaving chairside. Gloves must be removed and discarded when leaving the operatory area. Hands must be washed before leaving and upon return prior to re-gloving and resuming patient treatment.
- Change gloves if they become damaged or compromised in any manner.
- The patient wears a disposable bib along with a patient bib when ultrasonically scaling.
- Handle and dispose of needles and other sharps carefully.
- Use tray set ups for local anesthesia administration and follow all precautions to prevent needle sticks and sharps injuries.
- Use a recapping device to recap needles. Never manipulate or bend the needle by hand. The person administering the anesthesia is responsible for the recapping and disposal of the needle and glass cartridge.
- All sharps must be disposed in the sharps container.
- Segregate all waste as infectious or potentially infectious and dispose in the appropriate waste containers at chairside.

### **Dismiss the Patient**

- Remove mask and gloves.
- Wash and dry hands.
- Escort the patient to the reception area.
- Return to unit/operatory. Put on mask. Wash and dry hands and put on clean treatment gloves.

## **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 new gown if the original gown is wet, soiled, or damaged.
- Face mask must be worn for all procedures. Put on a new mask if the original mask is wet, soiled, or damaged.
- Treatment gloves must be worn for cleaning.
- Utility gloves must be worn when handling, transporting, and packaging instruments and other sharps.
- Regulated clinic shoes
- **Protective eyewear must be worn for all clean-up procedures.**

#### **Discard all Used/Contaminated Disposable Items and Barriers**

- Place all disposable items and barriers in the potentially infectious waste bag as well as the patient headrest cover unless it is/are blood soaked, dripping or contains tissue, in which case it must be discarded in the infectious waste container.
- Close the infectious waste bag with autoclave tape and bring to appropriate container to be autoclaved prior to disposal.

### **Prepare to Leave the Clinic Area**

- Remove the face mask by grasping ties or elastic band and slip off. Do not grasp the mask itself. Place in waste container near unit.
- Go to sink, remove protective eyewear and wash with water and antimicrobial handwash. Pat eyewear dry with paper towel. Put eyewear on the sink counter. If not already done, wash and dry the patient reusable eyewear as well.
- Remove gloves and discard.
- Wash and dry hands.
- Position all equipment in the unit operatory as outlined in the clinic manual.
- Return the completed patient record to appropriate area for filing.
- Close plastic waste bag and deposit in the container near lab.
- Gather all personal belongings.
- At the end of clinic the disposable gown **is turned inside out and** disposed of in the large trash bin.

# **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 the IMS cassette.
- Instruments must not be passed between health care workers in line with the body of the patient where potential for injury is greatest.
- Utility gloves must be worn for cleaning.
- Utility gloves will be worn when transporting, handling, scrubbing, or otherwise manipulating contaminated instruments or sharps outside of direct patient care.
- Tongs, forceps, brush and dust pan are available for picking up broken glass, needles, scalpel blades and other sharps.
- Sharps container:
  - Closable
  - Puncture resistant
  - Labeled or color coded in accordance with this standard
  - Leak proof on sides and bottom
  - Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found.
  - When moving containers of contaminated sharps from the area of use, the containers shall be:
    - Closed immediately prior to removal or replacement to prevent spillage or profusion of contents during handling, storage, transport or shipping.

### **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.

## Face Masks

Disposable masks that cover both the nose and mouth will be worn by the DHCP during procedures and patient-care activities likely to generate splashes of blood or body fluids. A new disposable face mask must be worn for each patient treatment session.

In addition, masks must be changed during patient treatment when wet from exhaled moist air, leaving the operatory area, or when otherwise compromised by aerosols, splatter.

The mask must fit appropriately and provide a light seal over the nose and mouth to prevent the inhalation of potentially infectious materials. The correct fit is contingent upon the operator wearing it appropriately. The mask should never be worn around the neck or on top of the head, but rather, only on the face with all straps or ties in the correct position according to the manufacturer's directions. **A face shield does not substitute for a surgical mask.**

## Protective Eyewear

**Protective eyewear with solid eye shields and side shields must be worn for all clinical and laboratory activities. Utility gloves, protective eyewear, and masks must be worn when mixing and/or using sterilants or disinfectants.**

Protective eyewear must be made of high impact plastic lenses with peripheral protection including side shields (OSHA 29CRF part 1910 Vol.54 No. 102). The lens/frame must cover the eye from the eyebrow to the cheekbone, and beyond the temple area with appropriate solid plastic side shields. The eyewear will be cleaned with antimicrobial soap and rinsed with water between patient treatment. Chemical disinfectants will not be used for cleaning due to the potential for irritation to skin and eyes.

Although not required by OSHA, it is for reasons of safety and Bristol Community College Dental Hygiene Clinic policy that patients also wear protective eyewear to shield their eyes from splatter or debris generated during procedures. The patient eyewear must also be appropriately cleaned between uses, **being certain not to handle them with ungloved hands until they have been decontaminated.** For vision reasons, the patient may choose to wear his/her own eyewear rather than the reusable clinic eyewear.

## Rationale

Protective eyewear is a barrier for the eyes from aerosols, splatters and provides protection to the eyes from traumatic injury.

## **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.

Specific attire requirements for Bristol Community College Dental Hygiene students are found in the current Bristol Community College Dental Hygiene Clinic Manual.

## **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** complete accident report - **Blood and Body Fluid Accident Report** - available in the Division Office - C109. ***If incident occurs at clinical affiliate, student should notify the clinical supervisor and the program director.***
5. Clinical supervisor or program director must notify BCC Health nurse (ext.2232 or 2227) and refer student to BCC Health Services in person or by telephone within 24 hours of injury.  
At Health Services the **nurse** will:
  - Verify/confirm immunization record.
  - Verify/confirm student health insurance coverage.
  - Refer student to *Stanley St. Treatment and Resources in Fall River (508-324-7766)* or *Greater New Bedford Community Health Center (508-992-6553)* for reevaluation, counseling and follow up. (Follow up must occur within 72 hours so referral needs to be done as soon as possible.)
  - If student refuses referral to SSTAR or GNBCHC or chooses to go to own physician, nurse will document in record that student was counseled regarding the need for post-exposure follow-up and chose not to be referred but will arrange his/her own follow-up. Student signature will be obtained.
6. **BCC Telephone Directory – main number 508-678-2811**
  - Campus Nurse - Ext. 2232
  - Health Sciences office - Ext. 2141 Fax # 508-730-3281
7. **Health Sciences Program Directors:**
  - ***Clinical Lab Science & Phlebotomy – Debra St. George, ext. 2148***
  - ***Dental Hygiene – Lynne Byers, ext. 2143***
  - ***Health Information Management & Medical Coding – Jill Flanagan, ext. 2369***
  - ***Medical Assisting – Lisa Wright, ext. 2629***
  - ***Nursing – Donna Ayala, ext. 2967***
  - ***Occupational Therapy Assistant – Johanna Duponte-Williams, ext. 2325***
  - ***Pharmacy Tech., Central Supply, Surgical Tech.-Pat Dent, ext. 2141***
  - ***Therapeutic Massage/Complementary Healthcare – Kimberly Griffith, ext. 2262***



**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 and antibody response status of exposed workers*	Treatment		
	Source HBsAg <sup>†</sup> positive	Source HBsAg <sup>†</sup> negative	Source unknown or not available for testing
<b>Unvaccinated</b>	HBIG <sup>‡</sup> x 1 and initiate HB vaccine series <sup>§</sup>	Initiate HB vaccine series	Initiate HB vaccine series
<b>Previously vaccinated</b>			
Known responder**	No treatment	No treatment	No treatment
Known nonresponder <sup>¶</sup>	HBIG x 1 and initiate revaccination or HBIG x 2 <sup>§</sup>	No treatment	If known high risk source, treat as if source were HBsAg positive
Antibody response unknown	Test exposed person for anti-HBs <sup>¶</sup> 1. If adequate,** no treatment is necessary 2. If inadequate, <sup>¶</sup> administer HBIG x 1 and vaccine booster	No treatment	Test exposed person for anti-HBs 1. If adequate, <sup>¶</sup> no treatment is necessary 2. If inadequate, <sup>¶</sup> administer vaccine booster and recheck titer in 1–2 months

\* Persons who have previously been infected with HBV are immune to reinfection and do not require postexposure prophylaxis.

<sup>†</sup> Hepatitis B surface antigen.

<sup>‡</sup> Hepatitis B immune globulin; dose is 0.06 mL/kg intramuscularly.

<sup>§</sup> Hepatitis B vaccine.

\*\* A responder is a person with adequate levels of serum antibody to HBsAg (i.e., anti-HBs  $\geq 10$  mIU/mL).

<sup>¶</sup> A nonresponder is a person with inadequate response to vaccination (i.e., serum anti-HBs  $< 10$  mIU/mL).

<sup>§</sup> The option of giving one dose of HBIG and reinitiating the vaccine series is preferred for nonresponders who have not completed a second 3-dose vaccine series. For persons who previously completed a second vaccine series but failed to respond, two doses of HBIG are preferred.

<sup>¶</sup> Antibody to HBsAg.

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

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

Exposure type	Infection status of source				
	HIV-Positive Class 1*	HIV-Positive Class 2*	Source of unknown HIV status <sup>†</sup>	Unknown source <sup>‡</sup>	HIV-Negative
Less severe <sup>§</sup>	Recommend basic 2-drug PEP	Recommend expanded 3-drug PEP	Generally, no PEP warranted; however, consider basic 2-drug PEP** for source with HIV risk factors <sup>¶</sup>	Generally, no PEP warranted; however, consider basic 2-drug PEP** in settings where exposure to HIV-infected persons is likely	No PEP warranted
More severe <sup>  </sup>	Recommend expanded 3-drug PEP	Recommend expanded 3-drug PEP	Generally, no PEP warranted; however, consider basic 2-drug PEP** for source with HIV risk factors <sup>¶</sup>	Generally, no PEP warranted; however, consider basic 2-drug PEP** in settings where exposure to HIV-infected persons is likely	No PEP warranted

\* HIV-Positive, Class 1 — asymptomatic HIV infection or known low viral load (e.g., <1,500 RNA copies/mL). HIV-Positive, Class 2 — symptomatic HIV infection, AIDS, acute seroconversion, or known high viral load. If drug resistance is a concern, obtain expert consultation. Initiation of postexposure prophylaxis (PEP) should not be delayed pending expert consultation, and, because expert consultation alone cannot substitute for face-to-face counseling, resources should be available to provide immediate evaluation and follow-up care for all exposures.

<sup>†</sup> Source of unknown HIV status (e.g., deceased source person with no samples available for HIV testing).

<sup>‡</sup> Unknown source (e.g., a needle from a sharps disposal container).

<sup>§</sup> Less severe (e.g., solid needle and superficial injury).

\*\* The designation "consider PEP" indicates that PEP is optional and should be based on an individualized decision between the exposed person and the treating clinician.

<sup>¶</sup> If PEP is offered and taken and the source is later determined to be HIV-negative, PEP should be discontinued.

<sup>||</sup> More severe (e.g., large-bore hollow needle, deep puncture, visible blood on device, or needle used in patient's artery or vein).

**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	Infection status of source				
	HIV-Positive Class 1 <sup>†</sup>	HIV-Positive Class 2 <sup>‡</sup>	Source of unknown HIV status <sup>§</sup>	Unknown source <sup>¶</sup>	HIV-Negative
Small volume**	Consider basic 2-drug PEP <sup>  </sup>	Recommend basic 2-drug PEP	Generally, no PEP warranted; however, consider basic 2-drug PEP <sup>  </sup> for source with HIV risk factors <sup>  </sup>	Generally, no PEP warranted; however, consider basic 2-drug PEP <sup>  </sup> in settings where exposure to HIV-infected persons is likely	No PEP warranted
Large volume <sup>¶¶</sup>	Recommend basic 2-drug PEP	Recommend expanded 3-drug PEP	Generally, no PEP warranted; however, consider basic 2-drug PEP <sup>  </sup> for source with HIV risk factors <sup>  </sup>	Generally, no PEP warranted; however, consider basic 2-drug PEP <sup>  </sup> in settings where exposure to HIV-infected persons is likely	No PEP warranted

\* For skin exposures, follow-up is indicated only if there is evidence of compromised skin integrity (e.g., dermatitis, abrasion, or open wound).

<sup>†</sup> HIV-Positive, Class 1 — asymptomatic HIV infection or known low viral load (e.g., <1,500 RNA copies/mL). HIV-Positive, Class 2 — symptomatic HIV infection, AIDS, acute seroconversion, or known high viral load. If drug resistance is a concern, obtain expert consultation. Initiation of postexposure prophylaxis (PEP) should not be delayed pending expert consultation, and, because expert consultation alone cannot substitute for face-to-face counseling, resources should be available to provide immediate evaluation and follow-up care for all exposures.

<sup>§</sup> Source of unknown HIV status (e.g., deceased source person with no samples available for HIV testing).

<sup>¶</sup> Unknown source (e.g., splash from inappropriately disposed blood).

\*\* Small volume (i.e., a few drops).

<sup>||</sup> The designation, "consider PEP," indicates that PEP is optional and should be based on an individualized decision between the exposed person and the treating clinician.

<sup>¶¶</sup> If PEP is offered and taken and the source is later determined to be HIV-negative, PEP should be discontinued.

<sup>¶¶¶</sup> Large volume (i.e., major blood splash).

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

**CDC  
MMWR-2003**

**BOX 4. Situations for which expert\* consultation for HIV postexposure prophylaxis is advised**

- Delayed (i.e., later than 24–36 hours) exposure report
  - the interval after which there is no benefit from postexposure prophylaxis (PEP) is undefined
- Unknown source (e.g., needle in sharps disposal container or laundry)
  - decide use of PEP on a case-by-case basis
  - consider the severity of the exposure and the epidemiologic likelihood of HIV exposure
  - do not test needles or other sharp instruments for HIV
- Known or suspected pregnancy in the exposed person
  - does not preclude the use of optimal PEP regimens
  - do not deny PEP solely on the basis of pregnancy
- Resistance of the source virus to antiretroviral agents
  - influence of drug resistance on transmission risk is unknown
  - selection of drugs to which the source person's virus is unlikely to be resistant is recommended, if the source person's virus is known or suspected to be resistant to  $\geq 1$  of the drugs considered for the PEP regimen
  - resistance testing of the source person's virus at the time of the exposure is not recommended
- Toxicity of the initial PEP regimen
  - adverse symptoms, such as nausea and diarrhea are common with PEP
  - symptoms often can be managed without changing the PEP regimen by prescribing antimotility and/or antiemetic agents
  - modification of dose intervals (i.e., administering a lower dose of drug more frequently throughout the day, as recommended by the manufacturer), in other situations, might help alleviate symptoms

\*Local experts and/or the National Clinicians' Post-Exposure Prophylaxis Hotline (PEPline [1-888-448-4911]).

# **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.

All items to be sterilized must be properly cleaned prior to disinfection and sterilization, (hand scrubbing or washer disinfectant) then appropriately packaged and labeled to protect the item from environmental contamination.

- Automated Cleaning of Instruments – Washer disinfectant will be used to clean instruments rather than manual cleaning 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 dentistry and never add a disinfectant to the cleaning solution. After cleaning, instruments will be rinsed with water to remove chemical or detergent residue.
- Manual Cleaning of Instruments - If an ultrasonic cleaner is not available, instruments may be cleaned by rinsing them under a stream of water and scrubbing them thoroughly with detergent and water using a long-handled brush. Rinse and dry clean items completely.
- To avoid injury from sharp instruments wear puncture-resistant, utility gloves when handling or manually cleaning contaminated instruments and devices.

### **Bristol Community College Sterilization Policy**

- The method of sterilization is the autoclave (steam heat under pressure).
- All reusable critical and semi-critical items will be heat sterilized.
- The autoclaves will be maintained and operated under the direction of the clinic coordinators.
- The autoclaves will be cleaned and biologically monitored according to a specific schedule and verified with all appropriate documentation.
- All items to be sterilized must be safely and thoroughly pre-cleaned, packaged and labeled. Once sterilized, items must remain safely packaged and stored until use.

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

- Personal protective equipment including utility gloves must be worn.
- Clean only 1 or 2 instruments at a time to reduce the risk of injury.
- Carefully pick up the contaminated instruments from the bracket tray and scrub items low in the sink under running water with a detergent (soap) using a long handled brush to minimize splatter production.
- Rinse the instruments under running water, and let drain on paper towel while preparing the autoclave pouch.
- Inspect for debris.
- Place instruments inside the pouch so that the tips can be seen and press out as much air as possible. Insert indicator strip. Seal open end.
- Place indicator tape on pouch.
- Label pouch: name, date of sterilization, autoclave number.
- Place pouch paper side up in autoclave.
- Follow sterilization guidelines as outlined in the Bristol Community College Dental Hygiene Clinic Manual.
- After instruments are sterilized let the pouches dry for 5-10 minutes.
- Store sterilized items.

### **Procedural Policy for Ultrasonic Cleaning and Packaging of Instruments for Sterilization**

- Personal protective equipment including utility gloves must be worn.
- Agitate for 12 minutes.
- Rinse the instruments under running water, and let drain on paper towel while preparing the autoclave pouch.
- Inspect for debris.
- Place instruments inside the pouch so that the tips can be seen and press out as much air as possible. Insert indicator strip. Seal open end.
- Place indicator tape on pouch.
- Label pouch: name, date of sterilization, autoclave number.
- Place pouch paper side up in autoclave.
- Follow sterilization guidelines as outlined in the Bristol Community College Dental Hygiene Clinic Manual.
- After instruments are sterilized let the pouches dry for 5-10 minutes.
- Store sterilized items.

## **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.
- Remove cassettes (while wearing Utility gloves), and thoroughly rinse under running warm tap water for a full minute. Shake cassette to remove excess water; do not pat dry. Let stand on the drain board to dry.

### **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 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 agar.
- 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 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 supplies are sterilized let the pouches dry for 5-10 minutes.
- Store sterilized supplies.

### **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 or pouch and sterilized again. The supplies will be repackaged and sterilized again.

Place wrapped cassette in designated storage area. The cassette can be stored indefinitely, assuming integrity of the wrap is not compromised. If the wrap is compromised, repack in new wrap and resterilize.

Instruments and supplies sterilized in sterilization pouches should remain sterile indefinitely unless an event occurs which causes them to become contaminated.

Sterilized instruments and supplies will be stored in close or covered cabinets.

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

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

### **Chairside Use of IMS Cassette**

- Place wrapped cassette on disinfected bracket tray.
- Open wrap with clean hands and retain as work surface cover.
- Open cassette.
- Inspect indicator strip. Stripes should equal or exceed color standard in the middle of the strip.

### **Sterilization Monitoring**

The use and function of sterilizers will be biologically monitored weekly with spore tests, or more often when appropriate.

Chemical/heat indicators will be used on the outside of every package and on the inside of a single package during every sterilizer load. Accurate records of sterilization monitoring will be maintained. Such records are a component of an overall dental infection-control program.

External and internal indicators applied to the outside and inside of the cassette and pouch change color rapidly when a specific parameter is reached which verifies that the cassette and pouch package has been exposed to the sterilization process.

## **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
- Disposable gowns
- Disposable barriers
- Saliva ejectors
- Disposable prophylaxis angle, polishing cup/brush
- Gauze, cotton rolls, cotton tip applicators
- Paper towel
- Fluoride trays
- Stabe holders and bitewing tabs

Segregate **nonregulated** from **regulated waste** at chair side.

Discard **regulated waste** into the autoclave bag taped to the bracket tray.

When post treatment procedures are complete, discard the **nonregulated waste** into the receptacle located at unit.

The “clean-up” students will tie closed the plastic bags in each receptacle and will transport the waste to the designated waste container. This must be done at the end of each clinic day.

## **Regulated Waste**

At Bristol Community College Dental Hygiene Clinic, **regulated waste** is divided into infectious waste and hazardous waste.

### **Infectious Waste**

Infectious or physically dangerous medical or biological waste is defined in Massachusetts to be pathological waste (extracted teeth, gingival tissue, biopsies), blood and materials saturated/dripping with blood (gauze, cotton rolls, etc.) and sharps and is pertinent to the Bristol Community College Dental Hygiene Clinic (Massachusetts General Laws, 105 CMR 480.010).

These wastes will be handled and disposed in accordance with state and local laws.

Infectious waste includes the following:

- Blood
- Blood saturated and dripping items
- Tissue, both hard and soft (extracted teeth, gingival tissue, biopsies, tissue tags, etc.)
- Needles and sharps, including anesthesia cartridges, disposable irrigating syringes and tips, etc.

At chair side infectious waste is segregated from nonregulated waste and discarded into the designated autoclavable bag. During operatory clean-up, the infectious waste container is taped closed and is placed in the appropriate container to be autoclaved prior to disposal. This waste will then be rendered non-infectious by heat sterilization in the autoclave under direct supervision of the clinic coordinator. This waste will then be discarded as **nonregulated waste**.

## **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 Bristol Community College Dental Hygiene Clinic and laboratory settings are:

- Spent fixer solution
- EPA designated hazardous chemicals used in the clinic and laboratory setting
- Lead foil from the x-ray film packets
- Amalgam and amalgam scrap which contains mercury (including extracted teeth containing amalgam)

**Always wear appropriate personal protective equipment (masks, gloves, eyewear and protective attire) to handle, transport and discard medical and hazardous waste.**

Segregate solid hazardous waste and discard in the appropriate containers. Keep all chemical/liquid hazardous waste in tightly sealed and labeled leak proof containers. Store all hazardous waste in safe and clearly labeled container and area. It will be discarded as regulated waste. Call the Director of Public Safety and Campus Police for the disposal of container.

The US EPA considers a substance hazardous if it can catch fire, if it can react or explode when mixed with other substances, if it is corrosive, or it is toxic. When handled safely, such substances are minimally hazardous.

## **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**

Disposable items will be unit dosed for patient use. These items include: saliva ejectors, prophylaxis angles/cups/brushes and other single use items. All treatment disposables will be disposed as infectious or potentially infectious medical waste. Used disposable items should be discarded immediately to avoid contamination of other items.

## **Recordkeeping for Regulated Waste**

The Director of Public Safety and Campus Police for Bristol Community College keeps all necessary records and manifests of hazardous waste generated and transported from the Dental Hygiene Clinic and Dental Materials Laboratory. Regulated waste is transported from site and properly disposed of by a licensed hazardous waste hauler according to state and local regulations.

# **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 sink to remove debris and stagnant water from the lines.

### Dental Units Water Lines for Adec Cascade Units

The clinic water line filter (located in the Dental Materials Lab) is changed on an annual basis.

# **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.

All malfunctioning, damaged, or missing equipment must be reported to the radiography coordinator.

See the Bristol Community College Dental Hygiene Oral Radiography Clinic Manual for more specific information.

## 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

4. Dispense one patient cup to hold the exposed/contaminated films.

5. Collect appropriate radiographic instruments (i.e., XCP-Rinn, Stabe).

6. Receive coin envelope (films inside) and place on tracking form.

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 sensor and attached bite block 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 using the software template.

### **Infection Control Consideration during Dismissal of Patient**

1. Retract the unit extension arm to wall.
2. Return patient's denture/partial.
3. Remove gloves, mask and glasses. Wash hands.
4. Remove the bib and lead apron from the patient.
5. Return patient's eye glasses.
6. Dismiss the patient, requesting they remain in the reception area for approximately 15 minutes until the need for retakes can be determined.
7. Room is cleaned and disinfected for next patient.
8. Place used radiographic instrument in the ultrasonic cleaner.
10. Student takes films in cup to darkroom to be processed.

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

The darkroom is disinfected and set up (prior to patient's appointment time).

The set up includes a large bracket tray cover next to the automatic processor and 1 clean cup.

1. After processing films, complete **Radiography Patient and Diagnostic Log** located outside darkroom.
2. With clean hands, take cup (with exposed/contaminated film) to the darkroom.
3. Place cup (with exposed/contaminated film) on large bracket tray cover next to the automatic processor.
4. Put on new gloves.
5. Turn on safe-light, make sure door is closed, and turn off overhead light.

### 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.
- Using clean hands, separate films into two sets.
- Process one set into the AT 2000 and the second set into Peri Pro.
- Don gloves to open another **4 films**. Repeat this process until all films have been processed.
- After films have been fed into machine (see individual processing procedure for each processing machine) can turn on overhead light.
- After all films have been processed, dispose of contaminated wrappings and gloves in trash receptacle.

### **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.

## **Radiation Management: Criteria for Patient Selection**

### **General Guidelines:**

Patients will be selected on the basis of their need for radiographic survey.

- The need will be determined by taking a medical history, dental history, and a complete oral assessment.
- A consult by the student with the clinical instructor and/or clinic dentist. The clinical instructor will recommend radiographs and sign the Radiography Prescription form. The clinic dentist will evaluate the need and prescribe the radiographs on the routing form.
- As part of the initial medical history, the student will contact the patient's dentist for the most recent date and type of radiographs taken. This is documented in the patient's record.
- If prior radiographs are available, they are obtained and evaluated prior to taking new radiographs.
- Radiographs are taken only on patients who are capable of complying with the procedure.
- All patients' under 18 years of age must have parental or legal guardian written consent.
- If not a patient of Bristol Community College Dental Hygiene Clinic, the patient will need a written prescription from their dentist.
- Patients who are pregnant or have had radiation therapy within the last 12 months will need a written authorization from their physician before radiographs are taken.

### **Specific Criteria:**

Specific criteria for dental radiographic exposure(s) will be in accordance with the ADA and FDA selection guidelines revised in 2012.

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

These recommendations are subject to clinical judgment and may not apply to every patient. They are to be used by the dentist only after reviewing the patient's health history and completing a clinical examination. Even though radiation exposure from dental radiographs is low, once a decision to obtain radiographs is made it is the dentist's responsibility to follow the ALARA principle (As Low As Reasonably Achievable) to minimize the patient's exposure.

TYPE OF ENCOUNTER	PATIENT AGE AND DENTAL DEVELOPMENTAL STAGE				
	Child with Primary Dentition (prior to eruption of first permanent tooth)	Child with Transitional Dentition (after eruption of first permanent tooth)	Adolescent with Permanent Dentition (prior to eruption of third molars)	Adult, Dentate or Partially Edentulous	Adult, Edentulous
New patient* being evaluated for oral diseases	Individualized radiographic exam consisting of selected periapical/occlusal views and/or posterior bitewings if proximal surfaces cannot be visualized or probed. Patients without evidence of disease and with open proximal contacts may not require a radiographic exam at this time.	Individualized radiographic exam consisting of posterior bitewings with panoramic exam or posterior bitewings and selected periapical images.	Individualized radiographic exam consisting of posterior bitewings with panoramic exam or posterior bitewings and selected periapical images. A full mouth intraoral radiographic exam is preferred when the patient has clinical evidence of generalized dental disease or a history of extensive dental treatment.		Individualized radiographic exam, based on clinical signs and symptoms.
Recall patient* with clinical caries or at increased risk for caries**	Posterior bitewing exam at 6-12 month intervals if proximal surfaces cannot be examined visually or with a probe			Posterior bitewing exam at 6-18 month intervals	Not applicable
Recall patient* with no clinical caries and not at increased risk for caries**	Posterior bitewing exam at 12-24 month intervals if proximal surfaces cannot be examined visually or with a probe		Posterior bitewing exam at 18-36 month intervals	Posterior bitewing exam at 24-36 month intervals	Not applicable

TYPE OF ENCOUNTER (continued)	PATIENT AGE AND DENTAL DEVELOPMENTAL STAGE				
	Child with Primary Dentition (prior to eruption of first permanent tooth)	Child with Transitional Dentition (after eruption of first permanent tooth)	Adolescent with Permanent Dentition (prior to eruption of third molars)	Adult Dentate and Partially Edentulous	Adult Edentulous
Recall patient* with periodontal disease	Clinical judgment as to the need for and type of radiographic images for the evaluation of periodontal disease. Imaging may consist of, but is not limited to, selected bitewing and/or periapical images of areas where periodontal disease (other than nonspecific gingivitis) can be identified clinically.				Not applicable
Patient for monitoring of growth and development	Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of dentofacial growth and development		Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring of dentofacial growth and development. Panoramic or periapical exam to assess developing third molars	Usually not indicated for monitoring of growth and development. Clinical judgment as to the need for and type of radiographic image for evaluation of dental and skeletal relationships.	
Patient with other circumstances including, but not limited to, proposed or existing implants, pathology, restorative/endodontic needs, treated periodontal disease and caries remineralization	Clinical judgment as to need for and type of radiographic images for evaluation and/or monitoring in these circumstances.				

\*Clinical situations for which radiographs may be indicated include but are not limited to:

A. Positive Historical Findings

1. Previous periodontal or endodontic treatment
2. History of pain or trauma
3. Familial history of dental anomalies
4. Postoperative evaluation of healing
5. Remineralization monitoring
6. Presence of implants or evaluation for implant placement

## 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

\*\*Factors increasing risk for caries may include but are not limited to:

1. High level of caries experience or demineralization
2. History of recurrent caries
3. High titers of cariogenic bacteria
4. Existing restoration(s) of poor quality
5. Poor oral hygiene
6. Inadequate fluoride exposure
7. Prolonged nursing (bottle or breast)
8. Frequent high sucrose content in diet
9. Poor family dental health
10. Developmental or acquired enamel defects
11. Developmental or acquired disability
12. Xerostomia
13. Genetic abnormality of teeth
14. Many multisurface restorations
15. Chemo/radiation therapy
16. Eating disorders
17. Drug/alcohol abuse
18. Irregular dental care

\*\*Factors increasing risk for caries may be assessed using the ADA Caries Risk Assessment Forms (0-6 years of age and over 6 years of age).

### **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 is identical to x-ray placement with film techniques using a paralleling method.
- Each dental x-ray machine should contain filtration of 2 mm of aluminum equivalent if operating at less than 70 kilovolt peak (kVp), and 2.5 mm of aluminum equivalent if operating at 70 kVp or above.

- 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 radiography instructor and must conform to the **ALARA** principles.
  - The retakes will take place at the original radiography patient appointment.
  - The radiography instructor must be present during film retake placement.
  - The student will be allowed no more than four (4) retakes on a full mouth series (consists of 20 films) and two (2) retakes for bitewing series (consists of 4 films).
  - The student records every retake film in the patient treatment record with a separate entry. All original films will be replaced by retake films. The original films are placed in a coin envelope and stored in the patient's record.
  - **THE STUDENT IS GRADED ON THE ORIGINAL FILM**, not on the retake. The retake film is then mounted in original's place.
  - If malfunction of the equipment is suspected, no retakes will be taken until the equipment has been evaluated and repaired.

### **Radiation Protection and Monitoring the Pregnant Student**

- Pregnant students will be given a personal dosimeter to wear at waist level to more closely monitor radiation exposure to the fetus.
- No pregnant student should receive a radiation dose of more than 0.1 rem/year (0.001 Sv/year) during the ninth month gestation period.
- The Program Director shall periodically review the student's radiation reports to assure compliance with the dose limit used above.

# **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:

- Chlorhexidine digluconate (second generation antimicrobial with residual action)
- Commercial mouthwash (first generation antimicrobial)
- Water (mechanical removal of microbes)

Instruct the patient to rinse with mouthwash for 1 minute.

### **Rationale**

All mouth rinses will reduce the number of oral microbes in the patient's mouth when used, however, only a mouthrinse with substantivity will statistically keep the number of oral microbes reduced through long appointments due to this extended residual activity.

# **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 as soon as possible after removal from the patient's mouth before drying of blood or other bioburden can occur.

### **Laboratory policy**

In the laboratory, appropriate personal protective equipment (masks, gloves, protective eyewear and lab attire) will be worn for the tasks to be performed.

Hand washing protocol will be followed for all laboratory procedures.

Laboratory work surfaces and equipment will be cleaned and disinfected with an EPA approved, ADA accepted disinfectant.

Disposable items will be appropriately discarded after a single use.

Autoclavable items (impression trays, etc.) will be cleaned, packaged and sterilized.

Non-autoclavable items (mixing bowls, utility knives, etc.) will be cleaned and disinfected.

Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited on countertops or bench tops where blood or other potentially infectious materials are present.

Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets, on countertops, or benchtops where blood or other potentially infectious materials are present.

## **STANDARD OPERATING PROCEDURES: DENTAL MATERIALS, PROSTHESIS AND LABORATORY**

**The principles and policies of infection control and standard precautions will be followed in all laboratory activities when handling contaminated and potentially contaminated dental materials and prosthetics.**

### **Dental Impressions and Study Models**

1. PPE will be worn by the clinician.
2. Equipment needed:
  - Clean and disinfected mixing bowl and sterilized spatula
  - Water measuring cup
  - Appropriate sized sterile impression trays
  - Bite registration wax
  - Impression material
3. Position the patient appropriately and have him/her remove all intraoral removable prostheses and devices.
4. Have the patient rinse with a mouthwash unless inappropriate for that individual.
5. Remove all visible debris from the patient's mouth.
6. Mix the impression material to the proper consistency taking care not to contaminate the material.
7. Load the sterile impression tray.
8. Seat the impression tray and stay with the patient while the material sets.
9. Remove the impression tray and rinse it under running water for 1 minute to remove excess saliva.
10. Place the impression tray on a wet paper towel on the cabinet top and squirt it with a disinfectant. Wrap impression.
11. Place the wrapped impression in a plastic zip lock baggie for 10 minutes (or manufacturer's directions).
12. After 10 minutes, put on your over gloves and remove the alginate impression from zip lock baggie.
13. Rinse under cold water for ~ 30 seconds to 1 minute to remove residue from the disinfectant.
14. Tap out water and gently dry with air syringe
15. With a dry paper towel, wrap impression, and place in a zip lock baggie.
16. The impression is considered disinfected. The impression will be placed in a plastic bag for transport to the dental materials lab.
17. All appropriate infection control measures will be followed during the handling/manipulating and pouring of the study model from the impression.
18. The impression trays and spatula must be cleaned, packaged, and labeled for sterilization immediately upon completion of the study model.
19. The study model will also be disinfected upon separation from the impression.

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

1. Bite registrations, impressions, models and prostheses can become contaminated. These items will be cleaned and disinfected prior to removal from clinical areas and prior to their return to the clinical area from the laboratory.
2. Sealant materials will be carefully handled to avoid cross-contamination. All non-autoclavable syringes will be cleaned and disinfected. Disposable items (syringe tips) will be appropriately discarded in the sharps container after a single use.

### **SPECIAL NOTES:**

1. **DO NOT** touch chart/records with contaminated gloves. If an entry has to be made on the record during treatment, an appropriate barrier **must** be used on the pen/pencil and over the portion of the record that the contaminated glove touched.
2. The three-way syringe is hazardous because it produces splatter. Therefore, caution must be used when spraying teeth and the oral cavity. When used, a potential for splatter must always be considered and appropriate precautions taken, i.e. use barrier protection. The use of water before air is recommended.
3. Do not enter drawers and cabinets once gloved.
4. All procedures involving blood or potentially infectious materials must be performed in such a manner as to minimize splashing, spraying, splattering, and the generation of droplets of these substances.

# **FIRE PLAN**

### **Fire Extinguishers**

Fire extinguishers are managed by the Bristol Community College Police and Public Safety Department. They are inspected according to state and local regulations.

### **Fire Drills**

Fire drills are conducted by the Bristol Community College Police and Public Safety Department according to state and local regulations.

### **Emergency Evacuation Routes**

Emergency evacuation routes are posted in the building.

# **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.