

**EAST CAROLINA UNIVERSITY**

**INFECTION CONTROL PLAN**

---

ECU School of Dental Medicine - Ross Hall

---

Date Originated: 5/2012  
Date Approved: 6/2012  
Page 1 of 55

---

Date Reviewed: 9/12/2017

Approved by:

---

Dean, ECU SoDM

---

Director, Prospective Health

---

Chairman, Infection Control Committee

---

ECU Infection Control Nurse

<b>Table of Contents</b>		<b>Page</b>
1.0	ECU School of Dental Medicine Infection Control Program Purpose, Procedure, Introduction and Compliance	4
2.0	ECU Office of Prospective Health Infection Control Policy	6
	ECU School of Dental Medicine Immunization Requirements	
	Immunization Requirements	7
	Health Record Management	9
	Hepatitis B Requirements	9
	Respiratory Fit Testing	9
	Training Requirements: Employee and Students	10
	Initial/Orientation	10
	Annual Training Requirements	10
	Training Record Management	11
3.0	Bloodborne Pathogen Exposure Control Plan	11
3.1	Responsibilities	12
3.2	Exposure Risk by Job Title	12
3.3	Standard/Universal Precautions	14
3.4	Hand Washing/ Hand Hygiene (antibacterial soaps, and gels)	14
3.5	Personal Protective Equipment	15
3.6	Gloves and Glove Selection (vinyl, nitrile, surgical)	16
3.6.1	Latex Sensitivity and Contact Dermatitis	17
3.7	Bloodborne Pathogen Post Exposure Protocol (also see Appendix C)	18
4.0	Blood Spills	19
5.0	Clinic Inspection	20
6.0	Dental Asepsis	20
7.0	Engineering Controls	21
7.1	Work Practices	22
8.0	Standard Operating Procedures	24
9.0	Service Dogs in the Clinic	25
10.0	Appendices	
	Appendix A Definitions and Abbreviations	26
	Important Resources:	
	-American Dental Association	
	-Centers for Disease Control	
	-OSHA Regulatory Documents: US Department of Labor, Occupational Safety and Health Administration	
	-ECU Office of Prospective Health	
	-ECU School Of Dental Medicine Office of Clinical Affairs	
	Appendix B Dental Procedures and Required PPE	29
	Appendix C Bloodborne Pathogen Post Exposure Quick Guide	30
	Appendix D Contact Dermatitis	40
	Appendix E Clinic Inspection Form	41
	Appendix F Clinic Infection Control Training Requirements	42
	Infection Control Training Log	43
	Autoclave Competency	44
	Appendix G Clinic Logs: Autoclave, Refrigerator, Drain	45

	Log, and Waterline Testing	46
Appendix H	Autoclave Use and Monitoring Policy	50
Appendix I	Forms	52
	School of Dental Medicine Event Report	
	ECU Non-Patient Incident Report	
	Supervisor's Accident Investigation Report	
	North Carolina Industrial Commission Form-19	

---

**Issued by:** The Office of Clinical Affairs  
**Approved:** 6/2012

**Effective Date:** 5/2012  
**Last Revised:** 1/2017

---

**Title: Infection Control Manual**

**Purpose:** To establish the East Carolina University School of Dental Medicine's (SoDM) Infection Control Standard Operating Procedures to protect the health and safety of patients, employees, students and visitors.

**Procedures:**

1.0 Introduction

A. The goals of the Infection Control Program are to protect the health of all patients and employees and to comply with applicable federal, state, and local regulations governing infection control, job safety, and management of regulated medical waste. These guidelines are designed to comply with current federal regulations including those issued by the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA), and the Environmental Protection Agency (EPA).

B. Guidelines and recommendations issued by non-regulatory agencies including the American Dental Association (ADA), the Centers for Disease Control and Prevention (CDC) and other institutions may be used as references in the development of dental service infection control and employee protection programs. The most current federal, state, and local ECU requirements take precedence over these guidelines when more stringent. This document provides guidance for ECU School of Dental Medicine (SODM) dental clinics to develop and implement an infection control program. It also provides guidance that the dental clinic can adopt or modify to ensure that reasonable precautions are being taken to prevent, control, and contain infections in patients, staff, students and visitors. Background information and supporting references for specific recommendations are provided in the Centers for Disease Control and Prevention Guidelines for Infection Control in Dental Health Care Settings - 2003, available on the CDC website at [www.cdc.gov/oralhealth/infectioncontrol](http://www.cdc.gov/oralhealth/infectioncontrol). The American Dental Association is an additional resource.

C. Dental health care personnel (DHCP) refers to all personnel in the dental setting who may be exposed to infectious materials, including body substances and contaminated supplies, equipment, environment surfaces, water, or air. DHCP includes dentists, dental hygienist, dental assistants, dental laboratory technicians, students and trainees, contractual personnel, and other persons not directly involved in patient care but potentially exposed to infectious agents (e.g. administrative, clerical).

#### D. Responsibilities

The ECU SoDM Department of Clinical Affairs, Infection Control Sub Committee:

- Advises ECU SoDM on current issues relevant to dental infection control and occupational health and safety.
- Acts as a liaison with ECU Office of Prospective Health and local Health Departments.
- Maintains lines of communication with federal regulatory and advisory agencies including OSHA, FDA, EPA and CDC as well as with other recognized authorities in the fields of dental infection control and occupational safety and health.
- Develops and distributes ECU SoDM approved guidelines/standard operating procedures for the Dental Infection Control Program. The Infection Control Committee will review and update the program based on changes in federal regulations, recommendations from advisory agencies, and current ECU Infection Control Policy.
- Disseminates information via periodic infection control updates and by direct and written communication.

The ECU SoDM Clinic Business Manager (or Infection Control designee):

- Completes the mandatory North Carolina online training for dental infection control NC Infection Control Law 10A NCAC 41A.0206 at the following link:  
[https://www.mahec.net/AboutUs/re\\_dental.aspx](https://www.mahec.net/AboutUs/re_dental.aspx).
- Assumes responsibility for oversight of the infection control and occupational health/safety programs within the clinic. He or she will appoint a Clinic Dental Infection Control Assistant who will provide clinical support as required. Appropriate education and training is required prior to assuming these duties. Responsibilities include, but are not limited to the following:
  - Implements and directs an infection control program including measures to comply with current ECU SoDM policy, guidelines, and OSHA requirements for protection of Dental Healthcare Personnel (DHCP) from exposure to bloodborne pathogens.
  - Coordinates the dental infection control operating instructions within the clinic Bloodborne Pathogen Exposure.
  - Represents the clinic in all matters concerning dental infection control to the SoDM Infection Control Committee, its Chairperson, and the Director of Community Service Learning Centers.
  - Ensures initial, annual, and periodic training for DHCP on dental infection control and occupational exposure

control to prevent bloodborne pathogen exposure in accordance with OSHA regulations, CDC standards and ECU SoDM requirements.

- Conducts ongoing surveillance in accordance with guidance from the ECU SoDM Dental Infection Control Committee and the Office of Prospective Health.
- Oversees the management of regulated waste within the dental clinic in accordance with federal, state, and local regulations.
- Maintains a copy of this manual and the Bloodborne Pathogen Exposure Control Plan and Clinic Inspection sheets. Updates manuals and informs DHCP as changes occur, e.g., when new chemicals are available in the clinic.

## 1.2 Compliance

The School of Dental Medicine complies with the ECU Office of Prospective Health's Infection Control Policy as outlined below. The Community Service Learning Centers will contract with a local medical partner in the form of a Memorandum of Understanding to provide services consistent with the ECU Office of Prospective Health's Infection Control policy. The SoDM Community Service Learning Centers will comply with the Infection Control Policy, but will modify certain practice elements to meet local clinic needs, e.g., by establishing a medical partner to provide local employee health or exposure management services, record management, orientation and training.

## 2.0 ECU Office of Prospective Health Infection Control Policy

I. Purpose: The Infection Control policy is established to help safeguard patients and personnel from the transmission of infection between patient and personnel during patient care. All ECU School of Dental Medicine personnel, students, and other healthcare workers are to comply with all ECU infection control policies.

### II. Personnel:

A. All new and current employees, students and residents will comply with employment screening as outlined in the Prospective Health Policy. Employee Health records will be maintained by the Office of Prospective Health.

B. Employees who have potential for blood or other potentially infectious material exposure will be offered hepatitis B vaccine at no charge to the employee. Dental faculty, residents, students and employees who have potential for exposure to *Mycobacterium Tuberculosis* (MTB) will be given TB surveillance by PPD skin testing with follow-up per Prospective Health protocol.

Other health care students with clinical rotations through ECU clinics, other non-employee healthcare workers, and any others who may have patient contact will have documentation of Infection Control training, required vaccines administered, and PPD skin testing results according to BSOM policy for students/visitors.

C. Any ECU staff (including physicians and dentists) or student who has an exposure to a communicable disease through a needle stick or other means will report that exposure to the appropriate supervisor or instructor and follow-up will be done per Bloodborne Pathogen Exposure Control Plan, Tuberculosis Exposure Plan or Prospective Health Policy depending on exposure. Residents and Faculty Dentists who have a potential exposure to a communicable disease in ECU clinics are to notify ECU Prospective Health for testing of the patient and will follow-up with ECU Prospective Health for monitoring/treatment. Non-ECU students will follow their institutional policy.

D. Clinical employees will receive education on infection control, standard precautions, OSHA, TB and Bloodborne pathogen, and radiation safety standards upon employment and yearly thereafter. Clinical employees will complete an Employee Health Update annually.

E. The School of Dental Medicine Immunization Requirements, as part of credentialing and recredentialing are noted below. As ECU Office of Prospective Health or Vidant Medical Center Updates their respective policy, SoDM will respond accordingly. See Immunization Requirements: Faculty, Residents, Students and Staff ECU Office of Prospective Health and Vidant Medical Center Standard Operating Procedure in the Standard Operating Procedure Manual located in Central Sterilization.

### ECU School of Dental Medicine Initial and Annual Immunization Requirements

Disease	ECU Office of Prospective Health as of 3/2011	Vidant Medical Center as of 10/2011
<b>Initial Requirements</b>		
<b>Measles</b>	If born in 1957 or later, 2 does of live attenuated measles after 1 <sup>st</sup> birthday; or	If born in 1957 or later, 2 does of live attenuated measles vaccine after 1 <sup>st</sup> birthday; or
	If born in 1956 or earlier, 1 dose of live attenuated measles vaccine after 1 <sup>st</sup> birthday; or	If born in 1956 or earlier, 1 dose of live attenuated measles vaccine after 1 <sup>st</sup> birthday; or
	Positive measles antibody titer; or	Positive measles antibody titer; or
	If measles antibody tests negative for immunity, vaccine is needed	If measles antibody tests negative for immunity, vaccine is needed
<b>Mumps</b>	If born in 1957 or later, mumps vaccine received on or after 1 <sup>st</sup> birthday; or	If born in 1957 or later, mumps vaccine received on or after 1 <sup>st</sup> birthday; or
	Physician documentation of mumps disease; or	If born in 1957 or later, two doses of live mumps vaccine on or after 1 <sup>st</sup> birthday; or

	Positive mumps antibody titer; or	Positive mumps antibody titer; or
	If mumps antibody titer tests negative for immunity, vaccine is needed	
<b>Rubella</b>	Rubella vaccine received on or after 1 <sup>st</sup> birthday; or	Rubella vaccine received on or after 1 <sup>st</sup> birthday; or
	Positive rubella antibody titer; or	Positive rubella antibody titer; or
	If rubella antibody tests negative for immunity, vaccine is needed	Physician documentation of having the disease is not acceptable for rubella
<b>Varicella</b>	2 doses of varicella vaccine; or	History of primary varicella (chicken pox); or
	History of chicken pox; or	Positive varicella titer; or
	Positive varicella (VZV) antibody titer; or	Varicella vaccination x2 on appropriate schedule
	If VZV tests negative for immunity, 2 doses of varicella vaccine is required	If above not met, varicella vaccination is required unless medical contraindicated. Active cases of primary varicella temporarily restrict from hospital until cleared by physician
<b>Hepatitis B</b>	3 does of Hepatitis B vaccine; or	Vaccination - 3 on appropriate schedule; or
	Serologic evidence of immunity; or	Positive Hepatitis B Surface Antibody titer (highly recommended); or
	If documentation is not provided of 3 doses of Hepatitis vaccine and/or serologic evidence of immunity and the provider declines the vaccine, the provider must sign a waiver stating that they have been informed of, acknowledge, understand, and appreciate any risks associated with not having this vaccine, including the risk of acquiring the disease	Must sign Statement of Declination if vaccine is declined.  Active disease or carrier, see Medical Staff Bloodborne Pathogen Policy
<b>Diphtheria, Tetanus, Pertussis</b>	One dose of Tdap is strongly recommended	Tdap vaccination x1 required (currently, no future booster of Tdap recommended)
<b>Tuberculosis</b>	Current negative PPD test within the past 12 months; or	Documentation is required at initial credentialing and annually thereafter
	Negative Quantiferon test within the past 12 months	Initial credentialing requirements: For those without history of positive TB testing or disease: a 2 step TB Skin Test (TST) or Interferon-Gama Release Assays (i.e. Quantiferon) test result is required at initial credentialing
	If provider has documentation of positive PPD or Quantiferon test, a normal chest x-ray, i.e., no signs of active pulmonary tuberculosis infection within the last 2 years, along with a current negative symptom screen, verified by Office of Clinical Affairs will be required. If the provider has TB symptoms, a chest x-ray will be required	For those with a history of positive TST or a positive Quantiferon test, documentation of a negative chest X-ray less than 2 years and negative symptom survey.  For those that had a past positive TST or positive Quantiferon test at time of initial credentialing; and met requirements above, a symptom survey is required annually. A chest x-ray is repeated only if symptomatic of TB.  For TST or Quantiferon converters: chest x-ray at time of conversion, and evaluation for chemoprophylaxis if no active disease. Signs and symptoms survey is required annually there after. A chest x-ray is repeated only if symptomatic of TB



<b>Active Pulmonary TB</b>	Restrict from hospital and clinic until cleared by physician	Restrict from hospital and clinic until cleared by physician
<b>Annual Requirements</b>	Annual TB test is required of all providers, questionnaire if unable to be tested. If TB symptoms develop, a chest x-ray will be required	Annual TB test is required of all providers, questionnaire if unable to be tested. If TB symptoms develop, a chest x-ray will be required
		Negative TST or Quantiferon test
<b>Influenza</b>	Influenza vaccine, yearly (required)	Influenza vaccine, yearly (required)

## 2.1 Health Record Management

An accurate employee health record for each employee subject to medical surveillance under this document will be maintained by Prospective Health and/or contracted medical provider and will include:

- The name and banner access number of the employee.
- Employee Hepatitis B status including the dates of all Hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination.
- All results of examinations, medical testing, follow-up, and written opinions as they relate to the employee's ability to wear protective clothing and equipment or receive vaccination or to post-exposure evaluation following an occupational exposure incident is completed within 15 days.
- A copy of the information provided to the provider and provider's written opinions.
- Employee Medical Records are retained for duration of employment plus 30 years.

### Hepatitis B Immunization Requirements

- Employees in positions having occupational contact with blood or other potentially infectious materials will be offered the Hepatitis B vaccine within ten (10) working days of initial assignment.
- If an employee for whom the Hepatitis B Vaccine is indicated declines HBV vaccine, a declination form will be signed and retained in the Employee Health Record. An employee may subsequently request vaccination, and it shall be provided at that time.
- Currently booster doses are not recommended. Should booster doses become recommended in the future, such booster doses shall also be provided. After receiving the 3 doses of Hepatitis B Vaccine, a post vaccination titer shall be drawn to document immunity or the need for booster vaccinations.

### Mandatory Respiratory Fit Testing

**THIS TESTING WILL BE CONDUCTED DURING THE INITIAL HEALTH ASSESSMENT FOR NEW CLINICAL STAFF, PREDOCTORAL STUDENTS**

**AND RESIDENTS.** SoDM will comply with the Office of Prospective Health standards for periodic testing.

#### Training Requirements for Employees and Students

Employees will participate in General Orientation which includes an overview of Infection Control principles, the Bloodborne Pathogen Exposure Control Plan and Protocol, Standard Precautions, Hand Hygiene, Chemical Hazard Communication, Laboratory Safety, Radiation Safety and other relevant OSHA topics related to patient safety and prevention of employee injury or exposure to bloodborne pathogens or other potentially infectious material.

Failure to comply with training and health screening deadlines will result in removal from the clinic until compliance is achieved.

Annual training for employees is available online through the Office of Prospective Health via Blackboard Training at <https://blackboard.ecu.edu/>. The Community Service Learning Centers will provide access to specific dental asepsis and infection control training (online) that meets the annual training requirements.

The training program shall contain the following:

- A copy of the OSHA Standard on Occupational Exposure to Bloodborne Pathogens (29CR part 1910.1030) and general explanation of its contents is available online.
- A general explanation of the epidemiology and symptoms of bloodborne diseases.
- The modes of transmission of bloodborne pathogens.
- The Bloodborne Pathogen Exposure Control Plan and how the employee can obtain the written and online plan.
- The Bloodborne Pathogen Post Exposure Algorithm.
- The appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
- The use and limitations of practices that will prevent and reduce exposure including appropriate engineering controls, work practices, and personal protective equipment.
- Information on the types, proper use, location, removal, handling, and decontamination or disposal of personal protective equipment.
- The basis for selection of personal protective equipment.
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated.
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.

- The procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- An opportunity for incentive questions and answers.
- Review of standard operating procedures, safe equipment use/ disinfection specific to designated equipment.

Employee Training Records: Training records shall include the following information:

- The dates of the training sessions.
- The contents or title of the training sessions.
- The name and qualifications of persons conducting the training.
- The name and job titles of all persons attending the training sessions.
- The Office of Prospective Health shall maintain training records for a minimum of 5 years. Training records are also maintained on the ECU One Stop database for employees who register by that route.
- Employee health records may be maintained by the Community Service Learning Center's medical partner.
- The Office of Prospective Health will maintain initial training records per policy.
- A copy of annual training records will be provided to the Office of Clinical Affairs.

### 3.0 Bloodborne Pathogen Exposure Control Plan

ECU SoDM is committed to providing a safe and healthful work environment for employees and students. This Bloodborne Pathogen Exposure Control Plan is used as a means to eliminate or minimize occupational exposure to human blood and other potentially infectious materials or fluids. It is designed to comply with the OSHA Standard 29 CFR 1910, 1030 Occupational Exposure to Bloodborne Pathogens. East Carolina University's compliance program for the OSHA Bloodborne Pathogen Standard is administered by Prospective Health Infection Control Practices for clinical and biological research employees and students. The School of Dental Medicine complies with the Office of Prospective Health standards.

A copy of this plan and the Bloodborne Pathogen Post Exposure Algorithm will be accessible to each department through the Infection Control Manual located in Central Sterilization at the CSLC's, and in the Office of Clinical Affairs. The Algorithm is located in the Standard Operating Procedure Manual and the Forms Manual. An electronic version is available at the Office of Clinical Affairs intranet SharePoint website. The Office of Prospective health Infection Control website is at the following link: [www.ecu.edu/cs-dhs/prospectivehealth/infection.cfm](http://www.ecu.edu/cs-dhs/prospectivehealth/infection.cfm) .

This plan will be reviewed and updated annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational

exposures, and to reflect new or revised employee positions with occupational exposure. The plan will also:

- Reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens.
- Document consideration and implementation of appropriate commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure, in conjunction with the ECU Product Standardization Committee.

This plan applies to all SoDM clinics (CSLCs, Hospital Dentistry, and Ross Hall).

### 3.1 Responsibilities

Each clinical area shall evaluate its routine practices and reasonably anticipated tasks and procedures to determine where there is actual or potential exposure to blood or other potentially infectious materials. The employees who perform these tasks or procedures will receive the training and immunizations described below as described in the Exposure Control Plan.

The SoDM staff Nurse must ensure that:

- This plan is accessible to all affected employees.
- Education is provided within 10 scheduled working days for new employees and annually thereafter.
- Staff compliance is monitored.
- Personal protective equipment is available and maintained.
- Equipment and environment surface are cleaned and decontaminated.

The Division Chair or Section Chief of each department, faculty dentist, principal investigator of each lab, or other responsible administrators, managers, or supervisors will be responsible for implementing this plan by ensuring that healthcare workers/students in their department, lab or facility are educated, adhere to this policy and procedures to minimize, eliminate, and are protected from bloodborne pathogen exposure.

Departmental supervisors/managers/principal investigators will notify ECU Infection Control or Biological Safety when changes occur in personnel assignments, equipment, or responsibilities that increase employee exposure to bloodborne pathogens.

### 3.2 Exposure Risk by Job Title

The SoDM positions listed below have **direct contact** with patient secretions including saliva or mucous, which may contain blood from the mouth, including spatter and spray affecting Personal Protective Equipment (PPE), dental instruments and work surfaces:

- Director of Clinics (dental faculty-direct contact during patient treatment or oversight)
- Dental Faculty (direct contact during patient treatment)

- Dental Assistant (direct contact while assisting during patient treatment, handling sharps, relocating sharps containers, relocating biohazard waste bags to collection site)
- **Dental Assistant Supervisor** (direct contact while assisting during patient treatment, handling sharps, relocating sharps containers, relocating biohazard waste bags to collection site)
- Dental Hygienist (direct contact during patient treatment, handling sharps)
- **Dental Hygiene Supervisor** (direct contact during patient treatment, handling sharps)
- Housekeeper (housekeeping tasks in the patient-care areas where blood and other potentially infectious materials may be present)
- Instrument Management Supply Technician (direct contact with contaminated dental instruments)
- Instrument Management Supply Technician Supervisor (direct contact with contaminated dental instruments)
- Predoctoral Dental Student (direct contact during patient treatment, handling sharps)
- Laboratory Technician (direct contact with potentially contaminated items-impersions, removable prosthodontics-bridges, partial and complete dentures)
- Laboratory Technical Supervisor (direct contact with potentially contaminated items-impersions, removable prosthodontic-bridges, partial and complete dentures)
- Radiologic Technologist (direct contact during patient treatment)
- Registered Nurse (direct contact during medication administration, starting/removing IVs, changing bloody gauze or assisting with sedation during dental treatment)
- Research Faculty, Student, Assistant (handling patient blood, saliva, tissue samples)
- Dental Resident (direct contact during patient treatment, handling sharps)

The following positions have **potentially minimal contact** with contaminated dental equipment during repairs, such as suction trams and dental units.

- **Director of Facilities**
- **General Repair Technician**
- **Dental Repair Technician**

The administrative positions listed below work near the patient care area in which occupational exposure may occur via **indirect patient contact** (spills of blood and other potentially infectious materials, patient coughing, sneezing)

- Administrative Support Associate
- Administrative Support specialist (Front Desk Staff)

- Cashier
- Clinic Manager
- Patient Care Coordinator (administrative duties)
- Receptionist
- Quality Assurance Coordinator/Director Misti does not consider this position to have "indirect patient contact"

NOTE: The individual's need for coverage for bloodborne pathogen purposes is determined using the Initial Health History and the actual risk in the individual's particular assignment, not on the job class.

Definitions of blood, body fluid or other potentially infectious materials in the dental clinic (see Appendix A for additional definitions)

- Human blood
- Body Fluid
- Unfixed human tissue

### 3.3 Standard/Universal Precautions

Standard Precautions should be consistently used for work with human blood and other potentially infectious materials. To prevent contact with blood or other potentially infectious materials faculty, staff, students, residents and other healthcare workers shall observe Standard/Universal Precautions. All blood/body fluids should be considered potentially infectious materials. Standard/Universal Precautions include the routine use of appropriate barrier precautions to prevent skin and mucous membrane exposure with blood or other potentially infectious materials of any patient or specimen. Compliance with Standard (Universal) Precautions and Work Practice Controls will be monitored through periodic clinic inspections and direct observation by designated employees.

**Hands must be free of open, draining wounds, and gloved during patient assessment and dental treatment. Non-intact skin must be covered.**

### 3.4 Hand Washing

Strict hand washing technique is to be used in all instances of contact with any patient's blood or other potentially infectious fluids, by following the "Hand Washing Protocol". This protocol is designed to provide consistency in the technique and application of hand washing as an infection control measure to help safeguard patients and personnel from transmission of infection.

Hand washing is the MOST important means of preventing the spread of infection. Soap, running water, and friction are the three important components of hand washing. If hand washing facilities are not immediately available, (e.g., volunteer dental activities not on campus or at clinics) antiseptic hand cleaners in conjunction with clean cloth/paper towels or

antiseptic hand wipes or antibacterial gels will be available. Hand washing is the preferred method, and is required when hands are visibly soiled.

Wash your hands:

- Before and after work or clinic session
- Between each patient contact
- Before and after each procedure on a patient
- Immediately after contact with blood or other potentially infectious materials, especially a needle stick
- After removing any gloves and personal protective equipment
- Before and after using the restroom
- Before and after eating
- Before and after entering a laboratory
- Before putting on gloves
- After removing gloves

Steps to Effective Hand Washing:

- Wet hands
- Apply soap
- Scrub hands 20-30 seconds - pay close attention to the area between fingers, back of hands, underneath finger nails and wrists
- Rinse hands well
- Dry hands working up from hands to wrist (clean to dirty)
- Turn off faucet (if needed) using a towel - the faucet handles are considered to be contaminated
- Dispose of towel in appropriate receptacle

Alcohol Based hand Rubs:

- Unless hands are visibly soiled or contaminated with blood or body fluids, alcohol based hand rubs may be used to clean hands. Apply product to palm of hand according to manufacturer's directions for amount.
- Rub hands together, covering all surfaces of hands and fingers until hands are dry.
- Alcohol based hand rubs are not effective against spore-forming bacteria such as *C. difficile*. For *C. Difficile* related infections, hands should be washed with soap and water to physically remove spores from the surface of contaminated hands.

### 3.5 Personal Protective Equipment (PPE)

- PPE is provided to employees at no cost, and is located in each clinical and research area. **The clinic manager or infection control coordinator is required to provide training** in the use of appropriate PPE for the tasks or procedures employees will perform. See **Appendix B** for a listing of routine dental procedures and required PPE.

- The Clinic Manager is responsible for ensuring that appropriate PPE is available to every employee, and that it is used when needed. Required PPE shall be worn when the employee has potential for exposure to blood and other potentially infectious materials on their clothes or body.
- Personal protective equipment is considered appropriate if it prevents blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth or other mucous membranes under normal conditions of use and for the duration of time during which it is used.
- Personal protective equipment such as gloves, gowns, laboratory coats, face shields or masks and eye protection, mouth pieces, resuscitation bags, picket masks, and other related devices are kept available in appropriate sizes, and easily accessible to the employee.
- Scrubs will be worn with PPE during dental exams and treatment appointments.
- Face Masks or chin-length face shields and eye protection (safety glasses with side shields and loops), are worn when the employee is engaged in activities that have the potential for splashes, spray, spatters, droplets or aerosols of blood or other potentially infectious material or fluid to the eye or mouth. Masks must cover the nose and mouth and fit securely. Employees must not share goggles that have not been disinfected and will not wear masks dangling from neck. The patient will wear disinfected protective eyewear during the indicated dental treatment. Employees will be respiratory fit tested and retested as indicated in the Prospective Health Infection Control Policy.
- Fluid resistant protection will be worn if there is potential for splashing or spraying of blood or other potentially infectious material. Surgical caps shall be worn if there is potential for splash to the head. Fluid proof shoe covers shall be worn if there is potential for shoes to become contaminated or splashed.
- If any garment is penetrated by potentially infectious material, the garment shall be removed immediately or as soon as feasible, and laundered separately
- Appropriate protective barriers will be used to prevent exposure to the plume generated by an electrosurgery or laser unit.
- PPE shall be removed prior to leaving the clinic or research work area and placed in appropriately designated container for disposal or washing and decontamination.
- PPE **will not** be worn outside the clinic or research area.
- Reusable personal protective equipment must be repaired or replaced when needed to maintain effectiveness, and will be cleaned, laundered or disposed of at no cost to the employee.

### 3.6 Gloves and Glove Selection



Gloves are worn when the worker has a potential for direct skin contact with blood, other potentially infectious materials, mucous membranes or non-intact skin of patients, or when handling items or surfaces contaminated with blood or other potentially infectious materials, and when performing vascular access procedures.

**USED GLOVES ARE ASSUMED TO BE CONTAMINATED OR DIRTY**, and must be removed before reaching for clean items and replaced with a fresh pair of gloves.

- Nitrile gloves will be used during routine dental treatment. Double gloving may be used during surgical procedures when copious blood flow is anticipated. Sterile gloves should be used for procedures involving contact during surgical procedures such as oral, periodontal, or endodontic surgery. (Says not necessary, sterile)
- Non-sterile examination gloves may be used for procedures involving contact with mucous membranes, and for other patient care or diagnostic procedures.
- Single-use surgical or examination gloves are not to be washed or disinfected for reuse. They should be removed and replaced when visibly soiled, torn, punctured, or when their ability to function as a barrier is compromised. They should NOT be worn to handle items in the environment after the procedure has been completed.
- Utility gloves (e.g. rubber or vinyl household gloves) for housekeeping chores involving potential blood contact or for instrument cleaning and decontamination procedures can be reused. Utility gloves may be disinfected and reused, but should be discarded if they are peeling, cracked, or discolored, or if they have punctures, tear, or other evidence of deterioration or other ability to function as a barrier is compromised.
- Latex-free or hypoallergenic gloves, glove liners, powder-less gloves, or other similar alternatives, shall be readily accessible for those employees who are allergic to the gloves normally provided. Use of non-latex gloves for cleaning or other tasks not requiring tactile sensitivity is strongly encouraged. Latex-free gloves, vinyl gloves, and nitrile gloves are available in the clinics and research laboratories.

### 3.6.1 Latex Sensitivity and Contact Dermatitis

Occupationally related contact dermatitis can develop from frequent and repeated use of hand hygiene products, exposure to chemicals, and glove use. Contact dermatitis is classified as either irritant or allergic. Irritant contact dermatitis is common, non-allergic, and develops as dry, itchy, irritated areas on the skin around the area of contact. By comparison, allergic contact dermatitis (type IV hypersensitivity) can result from exposure to accelerators and other chemicals used in the manufacture of rubber gloves (e.g., natural rubber latex, nitrile, and neoprene), as well as from other chemicals found in the dental practice setting (e.g., methacrylates). Allergic

contact dermatitis often manifests as a rash beginning hours after contact and, similar to irritant dermatitis, is usually confined to the area of contact.

Latex allergy (type I hypersensitivity to latex proteins) can be a more serious systemic allergic reaction, usually beginning within minutes of exposure but sometimes occurring hours later and producing varied symptoms. More common reactions include runny nose, sneezing, itchy eyes, scratchy throat, hives, and itchy burning skin sensations. More severe symptoms include asthma marked by difficult breathing, coughing spells, and wheezing; cardiovascular and gastrointestinal ailments; and in rare cases, anaphylaxis and death.

ECU SoDM is committed to a latex-reduced environment, including the exclusion of latex gloves in the clinic and laboratories. Patient latex sensitivity will be assessed at the initial appointment. See **Appendix D** for further information.

### 3.7 Bloodborne Pathogen **Post Exposure Protocol**, also **Appendix C**

- In the event of a bloodborne pathogen exposure, immediate attention is required.
- Discontinue dental treatment, but **DO NOT DISCHARGE THE SOURCE PATIENT** (the source of the blood or other potentially infectious material) until advised.
- Carefully removed contaminated PPE.
- Immediately wash the affected area with an antimicrobial soap or rinse exposed eye(s) or mucous membranes for 15 minutes with cool water or rinse eyes at the Eye Wash Station.
- Discuss the exposure with **your supervisor**, review source patient's health history and contact the appropriate Medical Provider to determine risk of transmission from source patient.
- Arrange for medical testing and subsequent follow up with the appropriate Medical Provider when indicated.
- Arrange for source patient testing when an exposure is determined.
- All students, staff, and faculty involved in the exposure will need to complete an SoDM Event Report.
- Notify the Staff Nurse at 252-737-7098, maintaining confidentiality.
- Employees and Predoctoral Students in **Community Service Learning Centers** - Contact the designated medical provider partner for risk evaluation of the injured employee/student and source patient, and indicated blood work.
- Employees in **Ross Hall**, Greenville - contact the Office of Prospective Health (252-744-2070) for further instructions.
- After hours and when the Office of Prospective Health or identified medical partner for the CSLCs is closed, use the OraQuick Rapid HIV test. If the results are **positive**, the source patient and exposed party need to report to Vidant Medical Center's emergency room for immediate testing. If the result is **negative**, the source patient and

exposed party can report to the Office of Prospective Health or the designated medical partner the next business day for testing.

- Community Service Learning Centers without access to a 24 hour pharmacy will maintain a minimum of a 3 day supply of the post exposure treatment medication in the office safe. This medication is to be distributed by the CSLC director with the approval of Dr. Paul Barry, Director of the Office of Prospective Health.
- General Practice Residents in the **Hospital Dentistry Clinic** will follow Vidant Medical Center's policy and procedures. Vidant Medical Center employees will report the incident to Vidant Occupational Health (252-847-4386 Monday -Friday 7am-7pm) and complete the Vidant Facility Incident Report. Vidant Occupational Health will investigate the source patient and the exposure.
- Employees and students are required to comply with ECU's policy and North Carolina's requirement for work restrictions for infected healthcare workers.
- ECU SoDM is committed to a latex-reduced environment, including the exclusion of latex gloves in the clinic and laboratories. Patient latex sensitivity will be assessed at the initial appointment. See **Appendix D** for further information.

#### 4.0 Cleaning Blood Spills

Use protective gloves and other personal protective equipment (PPE), gown, mask, and protective eyewear appropriate for the cleaning up a blood spill. As a general guideline, spills larger than 100 mL (approximately ½ cup) are considered large. Those less than 20mL (approximately 4 tablespoons) are considered small. For others, the pattern of the spill determines the cleaning approach.

- To clean a small spill (<20mL)
  1. Don gloves.
  2. Use mechanical means such as forceps to pick up any contaminated sharps or broken glass and place in biohazard sharps container.
  3. Carefully remove visible blood or other potentially infectious material with paper towels or other absorbent paper and dispose in biohazard waste container.
  4. Swab the area with a cloth or paper towel moderately wetted with a disinfectant (an EPA-registered sodium hypochlorite product such as Dispatch). Allow disinfectant to sit for 10 minutes. May use Cavi-wipes to clean small blood spills.
  5. Wipe with a clean paper towel or air dry.
  6. Dispose of gloves and all contaminated items in a biohazard waste container.
  7. Wash hands using soap and water for 20-30 seconds.
- To clean large amounts of blood (>100mL) or more than can be absorbed by paper towels:

1. Secure the area to prevent employees or visitors from exposure.
2. Report spill to supervisor. Utilize Biohazard spill kit. Contact housekeeping if assistance is needed.
3. Community Service Learning Centers will contact the local phone number for Stericycle (located in the business manager's office) for extensive cleanup, e.g., exceeding 4x4 ft in area, trauma site, or crime scene (after police have investigated the crime).
4. Don PPE (gloves, gown, mask and eye protection).
5. Use mechanical means such as forceps to pick up any contaminated sharps or broken glass and place in biohazard sharps containers.
6. Remove visible blood or other organic material.
7. Sprinkle the fluid control solidifier (designated absorbent powder) on the spill. Allow the absorbent powder to sit for 10-15 minutes as needed to absorb all liquid.
8. While using PPE, sweep contents and dispose in biohazard waste container.
9. Discard all cleaning materials in a biohazard waste container.
10. Apply disinfectant (an EPA-registered sodium hypochlorite product such as Dispatch) to the spill area, keeping the area wet for 10 minutes.
11. Wipe clean or air dry.
12. Remove personal protective equipment and place in the biohazard waste container.
13. Wash hands using soap and water for 20-30 seconds.
14. The supervisor will replace contents of the spill kit.

For advice about spills that cannot be contained by using the Biohazard Spill Kit or which exceeds the cleaning capability of Housekeeping, contact Infection Control (252-744-2070) or Biological Safety (252-744-3437). The Community Service Learning Center will also call Stericycle if needed.

#### 5.0 Clinic Inspection

The Office of Prospective Health Infection Control Nurse will inspect dental clinics at least annually, using the inspection form in **Appendix E**, which may be periodically modified to better reflect the conditions prevailing in the dental clinic. Deficiencies discovered during clinic inspections will be reported to the clinic manager and infection control designee for immediate attention and at least quarterly to the Director of Clinics. The Office of Prospective Health will report aggregate inspection results to the ECU Infection Control Committee. The clinic manager will perform Periodic inspections with the Director of Clinics.

#### 6.0 Dental Asepsis

It is the responsibility of all clinic staff and dental providers to maintain a clean treatment area to prevent the transmission of disease to/from patients before, during and after dental treatment. The basic principle of "dirty to dirty and clean to clean" is relevant when setting up the operatory, treating the patient, cleaning the operatory between patients, terminal cleaning, and transporting items for sterilization. Strict hand hygiene will be followed. The Central Sterilization and Instrument Management Supply areas have clearly delineated areas for receiving, cleaning, packaging, sterilizing and storing dental instruments. Engineering controls, work practices and standard operating procedures address required activities that serve to protect the patient, staff and dental providers from transmission of disease.

## 7.0 Engineering Controls

- Engineering controls will be used to eliminate or minimize worker exposure to chemicals and bloodborne pathogens. Changes in Engineering Controls or work practices will be made, as needed through review of exposure reports, inspections, employee input, and committee activities.
- Hand washing facilities are located in areas that are readily accessible.
- Eyewash stations - in every clinic and research laboratory.
- Use of waterless hand cleaners to supplement hand washing of nonvisibly soiled hands will be available. Soap and antibacterial gel dispensers will not be "topped off", instead inserts will be replaced as needed.
- Needles/sharps: All employees should take precautions to prevent injuries caused by needles, scalpels, and other sharp dental instruments or devices and when handling used sharp instruments after before, during and after dental procedures.
- Contaminated needles and other contaminated sharps shall not be bent, recapped, removed, or otherwise manipulated by hand except when there is no alternative feasible or that such action is required by a specific dental procedure. If recapping or removing contaminated needles or sharps must be done, it is only to be done by use of a mechanical device (recapping cuff) or by using a one-handed scoop technique.
- Contaminated sharps and disposable syringes and needles, scalpel blades, and other sharp items should be placed in impermeable sharps containers as close as practical to the use area. Reusable sharps are placed into appropriate containers (cassettes and/or impermeable transport bins) for safe transport to the dirty entrance of Central Sterilization or Instrument Supply Management.
- Containers for sharps are puncture resistant, labeled or color-coded, leak-proof on the sides and bottom and are not stored or processed in a manner that requires employees to reach by hand into the containers.
- Containers for disposable sharps are located in each dental operatory, treatment rooms, clinical and research laboratories and any other

area where sharps are used. Staff will check these containers routinely and when fill line is reached they are to be sealed and relocated for pick up by the Biohazardous Waste Collection Technician for incineration.

- The ECU Standardization Committee, Safety Devices Subcommittee, chaired by the Office of Prospective Health's Infection Control Nurse, evaluates new safety devices at least annually. Safer medical devices for vascular access, devices for intra muscular access, subcutaneous injections and other safety devices for specialty clinic situations are evaluated by the subcommittee and recommended for purchase through the Product Standardization Committee. The School of Dental Medicine will advise the Standardization Committee when new dental needles and other relevant safety devices become available for evaluation.

## 7.1 Work Practices

- All procedures involving blood or other potentially infectious materials are performed in such a manner as to minimize splashing, spraying, aerosolization, or plume formation (e.g., use of electrosurgery) of the substances. Examples may include using dental dams and placing barrier film on dental units, lights, chairs and patient chair controls.
- Personal Hygiene: Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in clinic and research or work areas where blood or other potentially infectious materials are likely to be present. Food of any kind is not allowed in any clinical area.
- Food and drink are not stored in refrigerators, freezers, or cabinets where blood or other potentially infectious materials or medications are stored or in other areas of possible contamination such as clinic or laboratory counter tops.
- Medications/dental products that require refrigeration will be stored separately. The refrigerator will be clearly labeled accordingly. The temperature range will be established and maintained based on product manufacturer recommendations. Temperatures will be measured and recorded at least daily and recorded on a designated log.
- Refrigerators will be disinfected at least monthly and as needed for spills with an approved disinfectant, and the cleaning log updated.
- Employees who have exudative lesions or weeping open wounds or sores on their hands, which preclude effective hand washing, may require removal from patient contact. Other lesions or skin breaks may be covered with a protective dressing if they do not preclude adequate hand washing. (Refer to the Work Restrictions Personnel policy found at the following link: <https://www.ecu.edu/cs-dhs/prospectivehealth/upload/01WORKRestriction-2-3.doc>.) Additional information is available in **Appendix D**.

- Employees infected with a bloodborne infectious illness are required to disclose this information to the Office of Prospective Health, which will determine risk and advise the employee what restrictions may be imposed on work practice. Prospective Health will follow the state of North Carolina's procedures for reporting communicable diseases.
- Vacutainer vc holders (for drawing blood) are disposed of after a single use, without removing the needle.
- Broken glassware that may be contaminated will not be picked up directly by the hands. It shall be cleaned up using mechanical means, such as a brush and a dustpan, tongs, or forceps.
- Labels and Warnings: Warning labels are affixed to containers of infectious waste, refrigerators and freezers containing blood or other potentially infectious material or other containers used to store or transport blood or other potentially infectious materials. The labels are fluorescent orange or orange-red, using the accepted biohazard label and affixed as closely and safely as possible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal. Red bags or red containers may be substituted for labels on containers of infectious waste.
- Waste: Place non-contaminated trash in a plastic bag for pick-up by Housekeeping. Biohazardous (contaminated trash that is completely blood soaked, e.g., gauze) is placed into a covered receptacle lined with a red or orange bag with biohazard label to be placed in the Biohazardous area by clinical staff and pick up by Prospective Health or designated vendor. Designated staff may move the red bags to a central pick-up site. If outside contamination of the primary container occurs, the primary container shall be placed into a second container that prevents leakage during handling, processing, storage, transport, or shipping, and is labeled or color-coded appropriately. Waste materials known to be infectious should be rendered non-infectious by processes such as autoclaving or immersion in liquid disinfectant. ECU utilizes Prospective Health for biohazard materials pick up.
- Specimens: if the specimen could puncture the primary container, the primary container will be placed within a secondary puncture-resistant container in addition to the above characteristics.
- Specimens of blood or other potentially infectious materials shall be placed in a closeable leak-proof container and labeled or color-coded prior to being stored or transported. If outside contamination of the primary container is likely, then a second leak-proof container that is labeled or color coded shall be placed over the outside of the first one and closed to prevent leakage during handling, storage, or transport. If a puncture in the container is likely, it shall be placed in a leak-proof, puncture-resistant secondary container.
- All laboratory specimens will be placed in a container marked with the biohazard label. All specimens will be placed in a secondary container marked with the biohazard label. These containers will be

located in each patient clinical area, clinical laboratory or research area for use.

- All dental instruments will be cleaned to remove visible blood or tissue particles prior to sterilization following sterilization protocols and manufacturer recommendation. Autoclaves will be spore-tested at least weekly. Results will be recorded. If a result is unfavorable, the manufacturer's recommendations will be followed to ensure adequate sterilization.
- Electrosurgery and Laser Plume (smoke) inhalation exposure will be minimized by the use of high filtration face masks/shields along with placing the dental unit suction in close proximity to the source. At the end of the procedure the dental assistant will seal the suction tubing to provide negative pressure for at least 5 seconds before the electrosurgery unit is turned off. This will prevent flow of the plume out of the suction tubing.
- The patient and employees will wear protective eyewear of the appropriate wavelength during laser treatment. A warning notice of "laser in use" will be posted just outside of the treatment area.
- Equipment: equipment which may become contaminated with blood or other potentially infectious materials shall be cleaned and disinfected as necessary prior to servicing, shipping or being moved, stored or sent to surplus. If disinfection of such equipment or portions of such equipment is not feasible, a readily observable label shall be attached to the equipment stating which portions remain contaminated. This information is conveyed to all affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so the appropriate precautions will be taken. Examples may include centrifuges, chemistry/hematology machinery, refrigerators, laser machinery, etc.
- Saliva Ejectors: backflow from low-volume saliva ejectors occurs when the pressure in the patients mouth is less than that in the evacuator. When patients close their lips and form a seal around the tip of the ejector, a partial vacuum is created. Research suggests that in these situations previously suctioned fluids might be retracted into the patient's mouth. Furthermore, studies have shown that gravity pulls fluid back toward the patient's mouth whenever a length of the suction tubing holding the tip is positioned above the patient's mouth or when a saliva injector is used at the same time as other evacuation (high volume) equipment. Although no adverse health effects associated with the saliva ejector have been reported, dental health care personnel should be aware that backflow could occur when they use a saliva ejector. **Do not advise patients to close their lips tightly around the tip of the saliva ejector to evacuate oral fluids.** Suction lines should be disinfected daily.

## 8.0 Standard Operating Procedures



ECU SoDM has developed Standard Operating Procedures specifically for the CSLCs and Ross Hall. The manual is located in Central Sterilization and at the Office of Clinical Affairs Intranet SharePoint site.

## 9.0 Service Dog in the Clinic

The American with Disabilities Act mandates that persons who require the use of a service dog (which is NOT a pet) shall have access to patient care and will be treated without discrimination. North Carolina General Statute follows:

- a) *Every person with a disability has the right to be accompanied by a service animal trained to assist the person with his or her specific disability in any of the places listed in G.S. 168?3, and has the right to keep the service animal on any premises the person leases, rents, or uses. The person qualifies for these rights upon the showing of a tag, issued by the Department of Health and Human Services, under G.S. 168?4.3, stamped "NORTH CAROLINA SERVICE ANIMAL PERMANENT REGISTRATION" and stamped with a registration number, or upon a showing that the animal is being trained or has been trained as a service animal. The service animal may accompany a person in any of the places listed in G.S. 1683.*
- b) *An animal in training to become a service animal may be taken into any of the places listed in G.S. 168?3 for the purpose of training when the animal is accompanied by a person who is training the service animal and the animal wears a color and leash, harness, or cape that identifies the animal as a service animal in training. The trainer shall be liable for any damage caused by the animal while using a public conveyance or on the premises of a public facility or other place listed in G.S. 1683 (1985.c.514,s.1:1987.c.401.s.1:1995.c.276.s.1:1997443.s.11A.118(a):2004203.s.62(a):2005450.s.1.)*

The patient is responsible for the service dog at all times; the service dog may not disrupt the patient's treatment. If deemed necessary, the patient appointment will be rescheduled when the patient is able to provide an adult to supervise the service dog during the dental appointment.

If at anytime the service dog is perceived as a threat at any location in the clinic, the patient's appointment will be rescheduled without the service dog. **FOR QUESTIONS ABOUT SERVICE ANIMALS OR OTHER REQUIREMENTS OF THE ADA, CALL THE U.S. DEPARTMENT OF JUSTICE'S TOLL-FREE ADA INFORMATION LINE AT 800-514-0301 (VOICE) OR 800-514-0383 (TDD).**

## **Appendix A: Definitions and Abbreviations used in the ECU Bloodborne Pathogen Exposure Control Plan**

Blood: human blood, human blood components, and products made from human blood.

Bloodborne Pathogens: refers to pathogenic microorganisms that are present in human blood or other potentially infectious materials (OPIM). These pathogens include, but are not limited to, hepatitis B virus (HBV), and human immunodeficiency virus (HIV). Pathogenic microorganisms can also cause diseases such as hepatitis C (HCV), malaria, syphilis, babesiosis, brucellosis, leptospirosis, arboviral infections, relapsing fever, Creutzfeldt-Jakob disease, adult T-cell leukemia/Lymphoma (caused by HTLV-I), HTLV-I associated myelopathy, diseases associated with HTLV-II, and viral hemorrhagic fever.

Clinical Laboratory: a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

Contaminated: the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Contaminated Laundry: laundry that has been soiled with blood or other potentially infectious materials or may contain sharps. (At ECU all laundry is handled as though contaminated and is placed in leak proof clear bags.)

Contaminated Sharps: any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

Decontamination: the use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

Engineering Controls: controls that isolate or remove the bloodborne pathogens hazards from the workplace. (E.g. controls relating to sharps disposal containers and safer medical devices, such as sharps with engineered sharps injury protection and needless systems.)

Exposure Incident: a specific eye, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of any employee, student or resident's duties.

Hand Washing Facilities: a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

HBV: hepatitis B virus

HCV: hepatitis C virus

HIV: human immunodeficiency virus

Needleless System: a device that does not use needles for the 1) collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established, 2) the administration of medication or fluids, or 3) any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

Note: The SoDM dental providers will place the anesthetic needle into a needle cuff to secure the needle and syringe during dental treatment. If a dental needle is to be recapped (for use later in the procedure) a single-handed scoop technique will be used.

Occupational Exposure: reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Other Potentially Infectious Materials (OPIM): Saliva, mucous, and any body fluid that is visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids. Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and HIV-containing cell or tissue cultures, organ cultures, and HIV or HBV containing culture medium or other solutions; and blood organs or other tissues from experimental animals infected with HIV or HBV.

Parenteral: piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.

Personal Protective Equipment (PPE): specialized clothing or equipment worn by faculty, employee, student or resident for protection against a hazard. General work clothes (e.g. uniforms, scrubs, pants, shirt, or blouses) are not intended to function as protection against a hazard and are not considered personal protective equipment.

Regulated Waste: liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other infectious materials.

Standardization Committee: an ECU committee in which products used at ECU are evaluated. A subgroup of this committee (Needle Safety Subcommittee) will solicit input from non-managerial employees in direct patient care (who are potentially exposed to injuries from contaminated sharps) to identify, evaluate, and select effective safety devices and will document the results. Members of Nursing Leadership will appoint one or more staff-level representatives from each division and to evaluate devices.

Sharps: with engineered sharps injury protection - a non needle "sharp" or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a build-in feature or mechanism that effectively reduces the risk of an exposure incident.

Source Individual: any individual whose blood or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include, but not limited to, hospital and clinic patients, clients in institutions for the developmentally disabled; clients of drug and alcohol treatment facilities, residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

Sterilization: the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

**Standard (Universal) Precautions:** is an approach to infection control. All blood and all fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens. Wherein it involves the use of personal protective equipment to prevent any contact with human blood and other potential infectious materials.

**Work Practice Controls:** controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g. prohibiting recapping of needles by a two-handed technique).

### **Abbreviations:**

ADA:	American Dental Association
ADA:	American with Disabilities Act
CDC:	Centers for Disease Control and Prevention
CSLC:	Community Service Learning Center
DHCP:	Dental Health Care Personnel
ECU SoDM:	East Carolina University School of Dental Medicine
EPA:	U.S. Environmental Protection Agency
FDA:	U.S. Food and Drug Administration
HAI:	Health-Care Associated Infection
HBV:	Hepatitis B Virus
HCV:	Hepatitis C Virus
HIV:	Human Immunodeficiency Virus
ICO:	Infection Control Officer
ICRF:	Infection Control Review Function
MSDS:	Material Safety Data Sheet
OPIM:	Other Potentially Infectious Material
OSHA:	Occupational Safety and Health Administration
PPE:	Personal Protective Equipment
PH:	Prospective Health
PHS:	Public Health Service
TB:	Tuberculosis

### **Important Resources**

CDC Guidelines for Infection Control in Dental Health Care Settings

<http://www.cdc.gov/oralhealth/infectioncontrol/index/htm>

Current OSHA Regulatory Documents: US Department of Labor, Occupational Safety and Health Administration: 29 CFR Park 1910.1030. Occupational exposure to bloodborne pathogens; needle sticks and other sharps injuries; final rule. Federal Register 2001;66:55317-25. Available at

[www.osha.gov/SLTC/dentistry/index.html](http://www.osha.gov/SLTC/dentistry/index.html) or

[http://www.oshamanual.com/dental\\_OSHA.htm](http://www.oshamanual.com/dental_OSHA.htm)

ECU Office of Prospective Health: [http://www.ecu.edu/cs-](http://www.ecu.edu/cs-dhs/prospectivehealth/index.cfm)

[dhs/prospectivehealth/index.cfm](http://www.ecu.edu/cs-dhs/prospectivehealth/index.cfm) (Biologic Safety and Waste Management, Employee Health, Infection Control)

ECU School of Dental Medicine Office of Clinical Affairs Quality Assurance (252-737-7008)

MSDS search <https://www.msdsonline.com/msds-search>

## Appendix B Common Dental Procedures and Required Personal Protective Equipment

Employees and students will follow the dress code policy and the following requirements:

Scrubs will be worn for all dental procedures

Long hair will be tied back

Jewelry will be removed (dangling earrings, necklaces, , bracelets, etc.)

Disposable Headwear will be used during surgical procedures

Oral examinations, x-rays: disposable gown, gloves, mask

Impressions: disposable gowns, gloves, mask, face shields or eye glasses with side shields

Cleaning of Teeth: disposable gloves, masks, face shields or eye glasses with side shields

Fillings: disposable gloves, masks, face shields or eye glasses with side shields

Extractions: disposable gown, gloves, masks, face shields or eye glasses with side shields

Root Canals: disposable gown, gloves, masks, face shields or eye glasses with side shields

Crown & Bridge:  
partials/dentures disposable gowns, gloves, mask, face shields or eye glasses with side shields

Periodontal therapy:  
surgery and cleaning disposable gown, gloves, masks, face shields or eyeglasses with side shields

Emergency procedures: disposable gown, gloves, mask, face shields or eye glasses with side shields

Oral Surgery:  
extractions and surgery disposable gown, gloves, mask, face shields or eye glasses with side shields

Note: Don PPE after completing the medical history and after washing hands. Place barrier film on keyboard, dental unit controls, dental unit instruments, and dental chair controls prior to dental treatment, following asepsis protocol.

**ECU PROSPECTIVE HEALTH**

**NON-PATIENT INCIDENT REPORT**

NAME \_\_\_\_\_ SS# \_\_\_\_\_ DOB \_\_\_\_\_  
HOME ADDRESS \_\_\_\_\_  
HOME PHONE \_\_\_\_\_ WORK PHONE \_\_\_\_\_ DEPT/WK STATION \_\_\_\_\_  
JOB TITLE \_\_\_\_\_ SUPERVISOR'S NAME \_\_\_\_\_  
DATE OF INCIDENT \_\_\_\_\_ TIME OF INCIDENT \_\_\_\_\_  
LOCATION OF INCIDENT \_\_\_\_\_

**NATURE OF INCIDENT**

Blood or Body Fluid Exposure

stick  
splash  
spray  
cut  
bite  
scratch  
scrape/abrasion  
other \_\_\_\_\_  
Source pt. \_\_\_\_\_  
MR# \_\_\_\_\_

Infectious Respiratory Exposure

inhalation  
other \_\_\_\_\_

Radiation Exposure

internal  
external

Chemical Exposure

Inhalation  
skin absorption

Body Accident

sprain  
strain  
hit  
struck  
puncture  
fall  
other \_\_\_\_\_  
Electrical Injury

BRIEF NARRATIVE OF INCIDENT \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Was protective equipment used? Yes \_\_\_ No \_\_\_ Were appropriate work practices followed? Yes \_\_\_ No \_\_\_

Employee Signature \_\_\_\_\_ Title \_\_\_\_\_ Date \_\_\_\_\_

Supervisor Signature \_\_\_\_\_ Date \_\_\_\_\_

Seen By: \_\_\_ Employee Health Nurse \_\_\_ Physician \_\_\_ Physician Extender

**Nature of Injury**

\_\_\_ laceration  
\_\_\_ chemical burn  
\_\_\_ dermatitis  
\_\_\_ contusion  
\_\_\_ puncture/needlestick  
\_\_\_ other \_\_\_\_\_  
\_\_\_ abrasion  
\_\_\_ thermal burn  
\_\_\_ fracture  
\_\_\_ strain/sprain  
\_\_\_ blood/body fluid exposure

Medical Evaluation \_\_\_\_\_  
\_\_\_\_\_

**RESULTS**

\_\_\_ first aid Hepatitis B vaccine \_\_\_\_\_ indicated \_\_\_\_\_ given

\_\_\_ blood/body fluid exposure protocol

\_\_\_ return to work \_\_\_ work restriction \_\_\_\_\_

\_\_\_ followup \_\_\_ no \_\_\_ yes 6 wk \_\_\_ 3 mo \_\_\_ 6 mo \_\_\_ 12 mo \_\_\_ other \_\_\_\_\_

Provider \_\_\_\_\_ Date \_\_\_\_\_

**Blood/body fluid exposure:**

\_\_\_ The results of this evaluation have been discussed with the employee. The employee has been informed regarding medical conditions which may result from exposure to blood or other potentially infectious materials, educated regarding risk reduction practices and had the surveillance program explained in detail.



**ECU School of Dental Medicine**  
**Refusal of Emergency Medical Assessment, Treatment or Medical Transportation after**  
**Serious Illness or Injury**

The following applies to me (or my child or my legal ward). Please check all that apply:

- I am refusing medical assessment.
- I am refusing medical treatment.
- I am refusing medical transportation to an emergency room.
- I have received medical assessment and treatment, but decline medical transportation.
- The injured is not a patient of record at ECU SoDM.*

I understand that the ECU School of Dental Medicine ("ECU SoDM") students, residents, faculty and staff and 9-1-1 personnel are not physicians and may not be qualified or authorized to make a diagnosis, and that emergency care or first aid provided is not a substitute for that of a physician. I recognize that I may have a serious injury or illness which could get worse without medical attention even though I (or the patient for whom I am legally responsible) may feel fine at the present time.

I understand that I may change my mind and call 9-1-1 if treatment or assistance is needed later. I also understand that treatment is available at an emergency room 24-hours a day or from my physician.

If I insist on being transported to a destination other than that recommended by the 9-1-1 personnel, I understand that I have been informed that there may be a significant delay in receiving care at the emergency room, that the emergency room may lack the staff, equipment, beds or resources to care for me promptly, and/or that I might not be able to be admitted to that hospital.

I acknowledge this advice has been explained to me by ECU SoDM affiliates and/or 9-1-1 personnel and that I have read this form completely and understand its provisions. I agree, on my own behalf (and for the patient for whom I am legally responsible) to release, indemnify and hold harmless all ECU SoDM affiliates, officers or other agents, from any and all claims, actions, causes of action, damages, or legal liabilities of any kind arising out of my decision, or from any act or omission of the ECU SoDM affiliates and 9-1-1 providers.

Patient has refused to complete this form.

Date \_\_\_\_\_ Time \_\_\_\_\_

Patient's or Legal Guardian's Signature \_\_\_\_\_ Date \_\_\_\_\_

Dental Student Signature \_\_\_\_\_ Date \_\_\_\_\_

Dental Resident Signature \_\_\_\_\_ Date \_\_\_\_\_

Dental Faculty Signature \_\_\_\_\_ Date \_\_\_\_\_

Witness' Signature \_\_\_\_\_ Date \_\_\_\_\_



## OraQuick Rapid HIV Test Instructions

AFTER HOURS testing instructions for Ross Hall and CSLCs.

AFTER HOURS - If the results are **positive**, the source patient and exposed party will go to the emergency room for testing and follow up.

AFTER HOURS – If the results are **negative**, the source patient and exposed party go to the Office of Prospective Health or identified medical partner the next business day.

### STEP 1

GATHER OraQuick test, source patient information sheet, watch or clock.

TELL source patient about exposure and requirement to test.

GIVE source patient the information sheet.

- Test kit should include: vial, flat pad, vial holder, and absorbent packet.
- Ask source patient any food, water, or gum within the last 15 minutes prior to testing. If answer is yes, wait 15 minute for testing.
- Test should be delayed 30 minutes if oral health care products (toothpaste, mouth rinse, etc.) used just prior to testing time.

### STEP 2

- Have source patient remove the OraQuick device from pouch. **DO NOT** touch flat pad. If no absorbent packet is included with the device, discard and obtain new test.
- Open vial and place upright in the holder/stand.
- **DO NOT SWAB ROOF OF MOUTH, CHEEKS, or TONGUE.**
- Direct source patient to place the flat pad **above the teeth against the outer gum**, and gently swab completely around the outer gums, both both upper and lower one time around. (Both side of pad may be used)
- While wearing gloves, insert flat pad in vial completely touching the bottom of vial. Result window should be facing you.
- Start timing the test. **DO NOT REMOVE** test from vial while in progress. Pink/purple fluid will travel up to the result window. Read results after 20 minutes but not more than 40 in a fully lighted area.

### STEP 3

- **Negative:** A test is nonreactive (negative) if a reddish/purple line appears next to triangle labeled "C", and no line appears next to triangle labeled "T." A non-reactive test results means that HIV-1 and/or HIV-2 antibodies were NOT detected in the specimen.
- **Preliminary Positive:** A test is reactive (positive) if a reddish purple line appears next to both the triangles labeled "C" & "T." One of the lines may appear darker than the other. A reactive test means HIV-1 and/or HIV-2 antibodies have been detected in the specimen.
- **INVALID:** If after 20 minutes no line appears in window "C" or a red background appears in result window, or if any other lines are visible outside of the "C" or "T."

### STEP 4

- Complete Event Report and submit to clinical affairs

### STEP 5

- Reorder OraQuick from Central Supply in Ross Hall.

## Procedure for BBP Exposure Event

- Stop dental treatment
  - Flush area with soap/water for 10-15 minutes
  - Make patient aware of exposure & need for blood testing  
**Service is free of charge for patient**
  - Notify office of clinical affairs/Nurse
  - Complete SoDM Event Report form-Attached
  - Obtain student/staff/faculty & patient name, Axium number, & DOB
  - Call Office of Prospective Health 744-2073 & notify exposure has occurred
  - Prospective Health will send lab order for patient
  - After dental treatment is complete escort patient to Brody Building for lab work. Lab is located on the 1<sup>st</sup> floor. Upon entry to Brody go past reception area take hallway on right, go to end of hallway & turn left, lab is located a few doors down on the right.
  - Notify lab reception you are escorting patient from dental school & lab order sent over from Prospective Health.
  - Student/Staff/Faculty member will have lab draws at the Office of Prospective Health unless directed otherwise.
- AFTER 4:30, perform Oraquick rapid HIV and go to Emergency Room for blood draws.**

**File a copy of Event Report with School Nurse & Clinical Affairs**



East Carolina University  
SCHOOL OF DENTAL MEDICINE

1851 Macgregor Downs Rd.  
Greenville, NC 27834  
Phone:252-737-7834  
Fax:252-737-7198

Radiology Order Form

Date: \_\_\_\_\_

Patient Name: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Axium Number: \_\_\_\_\_

Ordering Provider: \_\_\_\_Joseph Parkinson\_\_\_\_

Exam Requested : Chest X-ray PA/LAT

Abdomen

Stat

Diagnosis: \_\_\_\_\_

Provider Signature & Date: \_\_\_\_\_

**CALL REPORT 816-547-1063/252-737-7110**

## **Procedure for BBP Exposure Event**

- Stop dental treatment
  - Flush area with soap/water for 10-15 minutes
  - Make patient aware of exposure & need for blood testing  
**Service is free of charge for patient**
  - Notify office of clinical affairs/Nurse
  - Complete SoDM Event Report form-Attached
  - Obtain student/staff/faculty & patient name, Axium number, & DOB
  - Call Office of Prospective Health 744-2073 & notify exposure has occurred
  - Prospective Health will send lab order for patient
  - After dental treatment is complete escort patient to Brody Building for lab work. Lab is located on the 1<sup>st</sup> floor. Upon entry to Brody go past reception area take hallway on right, go to end of hallway & turn left, lab is located a few doors down on the right.
  - Notify lab reception you are escorting patient from dental school & lab order sent over from Prospective Health.
  - Student/Staff/Faculty member will have lab draws at the Office of Prospective Health unless directed otherwise.
- AFTER 4:30, perform Oraquick rapid HIV and go to Emergency Room for blood draws.**

**File a copy of Event Report with School Nurse & Clinical Affairs**

Dear ECU School of Dental Medicine “After Clinic Hours” Health Partner:

An ECU employee, resident, dental student or clinic patient may have been exposed to a source patient's blood or other potentially infectious materials. We are requesting and authorizing you to perform the following blood tests and prescribe post-exposure prophylaxis, (based on current CDC guidelines) if post-exposure medications are indicated.

If your geographic location does not offer a 24-hour pharmacy, please provide a 3-day quantity and a prescription for 10 days, with 2 renewals.

**Source patient testing:**

- Rapid HIV, HIV Viral Load if source patient is HIV positive
- Hepatitis B surface Antibody
- Hepatitis B Core Antibody
- Hepatitis B Surface Antigen
- Hepatitis C Antibody

The exposed party will be baseline tested at our primary health partner the next business day.

Please fax lab results and any treatment records with your contact information to:

Dr. Paul Barry, MD, MPH, Director  
ECU Office of Prospective Health  
Phone: (252) 744-2070 Fax (252) 744-2417

**NOTE: DO NOT BILL THE SOURCE PATIENT**  
ECU School of Dental Medicine is the guarantor.

Invoices with a claim statement should be sent to  
ECU School of Dental Medicine Office of Clinical Affairs  
1851 MacGregor Downs Rd, Mail Stop 701  
Greenville, NC 27834-4354  
Phone: (252) 737-7136  
Fax: (252) 737-7198

ECU School of Dental Medicine Accounts Payable Phone: (252) 737-7088

Sincerely,

Dr. Joseph W. Parkinson  
Interim Associate Dean for Clinical Affairs  
Director of Clinics

**Appendix D Hand (contact) Dermatitis**

All cases of hand dermatitis should be evaluated for treatment and follow-up.  
 If open sores or weeping dermatitis exists, refrain from direct patient contact  
 And handling of dental instruments and equipment until the condition is resolved.

**Table 1: Hand-Hygiene Methods and Indications**

Methods	Agent	Technique	Duration (minimum)	Indications
Routine handwash	Water and non-antimicrobial detergent (e.g., plain soap*)	- Wet hands and wrists under cool running water - Dispense handwashing agent sufficient to cover hands and wrists	15 seconds	- When visibly soiled† - After barehanded touching of inanimate objects likely to be contaminated by blood or saliva
Antiseptic handwash	Water and antimicrobial agent/detergent (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan)	- Rub the agent into all areas, with particular emphasis around nails and between fingers, before rinsing with cool water - Dry hands completely with disposable towels before donning gloves - Use a towel to turn off the faucet if automatic controls are not available		- Before and after treating each patient (e.g., before glove placement and after glove removal) - Before leaving patient-care, laboratory, or instrument processing areas - Before regloving after removing gloves that are torn, cut, or punctured
Antiseptic hand rub	Alcohol-based hand rub†	- Apply the product to palm of one hand - Rub hands together, covering all surfaces of hands and fingers, until hands are dry† - Follow manufacturer's recommendations regarding volume of product to use	Rub hands until the agent is dry†	
Surgical antiseptics	Water and antimicrobial agent/detergent (e.g., chlorhexidine, iodine and iodophors, chloroxylenol [PCMX], triclosan)	- Remove rings, watches, and bracelets - Remove debris from underneath fingernails using a nail cleaner under running water - Wet hands and wrists under cool running water - Using an antimicrobial agent, scrub hands and forearms for the length of time recommended by the manufacturer's instructions before rinsing with cool water - Dry hands completely (using a sterile towel is ideal) before donning sterile surgeon's gloves	2–6 minutes	- Before donning sterile, surgeon's gloves for oral surgical procedures
	Water and non-antimicrobial detergent (e.g., plain soap*) followed by an alcohol-based surgical hand-scrub product with persistent activity	Follow manufacturer instructions for surgical hand-scrub product with persistent activity	Follow manufacturer instructions for surgical hand-scrub product with persistent activity	

\* Pathogenic organisms have been found on or around bar soap during and after use. Use of liquid soap with hands-free dispensing controls is preferable.

† 60%–85% ethanol or isopropanol. Alcohol-based hand rubs should not be used in the presence of visible soil or organic material. If using an alcohol-based hand rub, apply adequate amount to palm of one hand and rub hands together, covering all surfaces of the hands and fingers, until hands are dry. Follow manufacturer's recommendations regarding the volume of product to use. If hands feel dry after rubbing hands together for 10–15 seconds, an insufficient volume of product likely was applied. The drying effect of alcohol can be reduced or eliminated by adding 1%–3% glycerol or other skin-conditioning agents.

Chair # \_\_\_\_\_ Clinic Name \_\_\_\_\_

**Operator Inspection and Checklist**

<b>Points</b>	<b>Description</b>
	Counter space clean of debris
	All dental materials and supplies stored in drawers and cabinets or returned to Dispensary.
	Dental chair upholstery clean and free of dust and dirt
	Base of chair clean and free of dust and dirt
	Saliva ejector (LVE) adaptor removed and checked for cleanliness.
	HVE line adaptors removed and checked for cleanliness.
	Check dental unit for signs of cleanliness (splatter of blood or other dental materials)
	Check suction trap. Remove trap and change if dirty. Should be checked weekly.
	Check supply inventory. Replace items that are low.
	Sharps Container- check fill line and replace if needed.
	Check date on water bottle – change if needed
	Check water bottle for build-up or debris
	Check light cover for splatter; clean if needed.
	Dental chair should be raised, unit and light placed parallel over chair.
	Rheostat placed on base of chair for easy cleaning by housekeeping.
	All barriers removed from dental unit, light, x-ray equipment.
<b>0% Grade</b>	

## Appendix F Clinic Employee Infection Control Training Requirements:

### Initial Orientation and Annual Review

#### Infection Control Training Checklist:

- Biological Waste Management/Packaging (Stericycle protocol)
- Bloodborne Pathogen Exposure Protocol and Post Exposure Protocol
- Chemical Hygiene Plan & SDS
- Dental Asepsis and PPE Selection
- Engineering Controls and Work Practices
- Hand Hygiene
- Hand Washing Sink
- Handling Contaminated Waste
- Handling Sharps
- Laboratory Safety Procedures
- Radiation Safety and Infection Control
- Routine Environmental Cleaning
- Refrigerator Temperature Monitoring
- Standard Operating Procedures
- TB Surveillance



ECU School of Dental Medicine Infection Control Orientation and Annual Training Checklist

Name \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_ Initial Orientation

Supervisor: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

*I have read the Infection Control Manual, understand and will comply with all items within this manual, including the following topics. I agree to follow the Standard Operating Procedures as they apply to my job responsibilities. I am able to locate all relevant Clinic Manuals (hard copy and online versions).*

- Biological Waste Management/Packaging (Stericycle protocol)
- Bloodborne Pathogen Exposure Control
- Bloodborne Pathogen Post Exposure Protocol (location and procedure)
- Chemical Hygiene Plan & SDS (location of manual and SDS)
- Dental Asepsis
- Engineering Controls and Work Practices
- General Cleaning, Disinfecting Dental Surfaces
- Hand Hygiene
- Hand Washing Sink
- Handling Contaminated Waste
- Handling Sharps
- Radiation Safety and Infection Control
- Routine Environmental Surface Cleaning
- Refrigerator Temperature Monitoring and Cleaning
- Standard Operating Procedures
- TB Surveillance

Other: \_\_\_\_\_

**Autoclave Competency Checklist**

**Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Title:** \_\_\_\_\_ **Clinic:** \_\_\_\_\_

**Competency Criteria: Must meet all elements Circle Grade: Pass Fail**

Met	Not Met	Criteria
		Verifies knowledge and performance of routine maintenance per manufacturer's recommendations
		Assures items are appropriately cleaned and dried prior to packaging for sterilization
		Places a chemical indicator inside each package to verify steam penetration
		Places all instruments in the open position and/or disassembles to their smallest parts; protects sharp points with gauze
		Labels package with date of sterilization; load number; initials of person preparing package
		Follows manufacturer's directions for the loading and operation of autoclave ensuring that packs are loaded in manner that allows for free steam and air circulation
		Knows biological monitoring is done on a weekly basis or with each load if run less than weekly Knows how to process outside vendor testing
		Knows how to interpret the chemical and biological indicator results, and appropriate follow up
		Describes the recall procedure for a positive results Removes items from that load number Repackages items from that load number Runs a test load without instruments Notifies supervisor of positive test result Requests Manufacturer Service Labels Autoclave as "not in service"
		Assures all results are recorded in autoclave log and stored in an organized manner
		Checks processed packages for tears, puncture, moisture or broken seal

I certify that this individual has met all competencies for sterilization.

**Supervisor:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## Appendix G Clinic Logs

- I. Autoclave Sterilization Testing Log
- II. Chemical Drain Log for Designated Laboratory Sinks
- III. Refrigerator Temperature and Cleaning Log
- IV. Waterline Testing Schedule and Testing Log

ECU School of Dental Medicine

Autoclave Sterilization Log

Clinic Location \_\_\_\_\_

Month \_\_\_\_\_ Year \_\_\_\_\_ Number (if more than one per location) \_\_\_\_\_

Date	Load Number	Contents	Result		Supervisor	Facilities	Action taken
			Pass	Fail	Notified	Notified	
					yes/no	yes/no	
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							

Annual Maintenance Date of Service \_\_\_\_\_



### ProEdge Waterline Testing Service Instructions:

- Place refrigerant pack in the Styrofoam lid and place in the freezer overnight.
- Flush waterlines for a minimum of 2 minutes before taking samples. Samples should always be collected just prior to any scheduled waterline maintenance or treatment.
- Samples should be shipped on Monday, Tuesday, or Wednesday ONLY. Do not ship samples any day preceding holiday or weekend.
- Collect DUWL samples using provided sterile collection vials. Fill vials to approximately  $\frac{3}{4}$  full. Do not touch the outlet of the waterline or the interior of the collection vial.
- Label each DUWL sample. Use a permanent marker. Indicate the sample water source. This will be utilized on the final report to identify your samples.
- Complete sample submission form and return with samples.
- Place the frozen refrigerant pack and ALL water samples in the Styrofoam shipper. Place the Styrofoam shipper in the mailer box. Complete the USPS Express Mail shipping label and affix to box.
- Waterline kit must be picked up or delivered the same day the samples are taken, and sent overnight. If you have questions, please call customer service at 888-843-3343. Results are emailed after your samples are processed. (3 to 5 days to process)
- Testing results are emailed to the CSLC Director, Business Manager, and Tammy Stephenson, RDH.
- Waterline Testing Results should be maintained in the Waterline Maintenance Log Book.

If a waterline tests greater than 200 CFU's, the dental unit must be treated with a **waterline shock (Citrisil Shock)** following instructions, and retested. The unit is removed from use until passing test is received.

ECU School of Dental Medicine

Refrigerator/Freezer Log

Clinic Location \_\_\_\_\_

Month \_\_\_\_\_ Year \_\_\_\_\_

Type of Refrigerator	Temperature Requirements	
Nutrition	1° - 5° C	34° - 41° F
Medication	2° - 8° C	36° - 46° F
Freezer	-20° - -10° C	-4° - 14° F
Pathology Specimen	2° - 8° C	36° - 46° F

D A Y	Refrigerator Temperature	Initials	Temp Adjustment Result	Freezer Temperature	Initials	Comments
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						

## Appendix H Autoclave Use and Monitoring

Purpose: Successful sterilization of any item depends not only on proper cleaning but also on proper preparation, packaging, and positioning in the load. These elements are as critical as choosing the correct exposure time and temperature. It is important that each item be prepared in a manner that will facilitate air removal, steam penetration, and steam contact with all surfaces of the device that are intended to be sterilized. In addition, efficient steam removal is necessary for proper drying and the prevention of wet packages at the end of the sterilization cycle.

### A. Acceptable wrapping materials

- Since use peel packages
- Specifically designed metal or plastic container
- Medical grade steam sterilization wrap following the AAMI double wrap method
- Only sterilization indicator tape should be used to secure packages.

### B. Quality Control

#### External chemical indicators

- Denote that the package has been exposed to physical conditions (i.e. steam and temperature) present in the steam sterilizer.
- It should be placed on the outside of packaging material. This may be used as a form of closure for the package, such as indicator tape. Peel packs are pre-printed with the chemical indicator.
- External indicator does not guarantee sterility.

#### Internal Chemical Indicators

- An internal indicator must be used in each package to be sterilized.
- The internal indicator should be placed in that area of the package considered least accessible to steam penetration; this may or may not be the center of the pack.
- Internal indicator shows that steam and heat penetrated the package interior, but does not guarantee sterility.

#### Biological indicators

- Only Biological spore indicators, consisting of spores of *Bacillus stearothermophilus* that comply with the American National Standard for saturated steam sterilization processes in health care facilities should be used.
- Frequency of use:
  - During initial installation testing
  - After any major repairs of the sterilizer
  - At least weekly or with each load if run less than weekly. The Biological Indicator shows that the steam and elevated temperature is sufficient to kill spores and verifies the effectiveness of sterilization process.

### C. Labeling

- The package must be labeled with a description of contents, if not visible (example: suture set).



- Date of run/cycle
- Identification of sterilizer if more than one sterilizer used
- Cycle/run number if used more than once per day
- Initials of packer
- Use a felt tip indelible ink marker to record on the tape or plastic side of a peel pack. Do not write on wrapper material or paper side of peel packs. This will prevent the ink from running, fading, or bleeding through the package and contaminating the contents.

D. Documentation

The following information should be recorded and maintained

- Date and time of the cycle
- General description of the contents of the load
- Exposure time and temperature
- Name and initial of the operator
- Results of biological indicators, whenever used
- Chemical-indicator results maintenance record

E. Package Configurations and Regulations

- Instruments should be carefully inspected for cleanliness and flaws or damage and then dried before packaging.
- Instrument sets should be sterilized with all instruments held open and unlocked. Items that can be easily disassembled into component parts should be disassembled prior to sterilization.
- Surgical supplies, such as syringes, needles and similar items, must be packaged individually. Syringes should be packaged so that the barrel lies next to the plunger. Stylets should be removed from syringes or trocars.
- Tip protectors should be steam-permeable, fit loosely, and be used according to manufacture's instructions.
- Follow manufacture's recommendations for size, weight, and density of textile packs. Folding textiles in alternating directions will enhance steam penetration, air removal and drying. Packs should not touch chamber walls.
- Nested basins should differ in diameter and be processed with absorbent towels or other absorbent material between nested basins of similar size.
- Devices with stylets or plugs should disassembled prior to steam sterilization. Devices with lumens (e.g., catheters, needles, and tubing) should be flushed with distilled, demineralized, or deionized water (as recommended by the manufacturer for use with the sterilizer) immediately before sterilization. If sterilization is delayed more than 24 hours, the devices should be unwrapped, the lumens flushed, and the devices repackaged. Devices with lumens should be placed on the shelf in the chamber so that the lumen is horizontal to the shelf.

- I. ECU School of Dental Medicine Event Report – complete and send confidentially to the Office of Clinical Affairs.
- II. ECU Prospective Health Non-Patient Incident Report – complete and send confidentially to the Office of Prospective Health.
- III. ECU Supervisor’s Report – complete and send confidentially to the Office of Clinical Affairs.
- IV. North Carolina Industrial Commission form 19 – complete and send confidentially to the Office of Prospective Health.

**EMPLOYER'S REPORT OF EMPLOYEE'S INJURY OR OCCUPATIONAL DISEASE TO THE INDUSTRIAL COMMISSION**

**To the Employer:**

A copy of this Form 19 accompanied by a blank Form 18 must be given to the employee. It does not satisfy the employee's obligation to file a claim. The filing of this report is required by law. This form MUST be transmitted to the Industrial Commission through your Insurance Carrier.

**To the Employee:**

This Form 19 is not your claim for workers' compensation benefits. To make a claim, you must complete and sign the enclosed Form 18 and mail it to Claims Administration, N.C. Industrial Commission, 4335 Mail Service Center, Raleigh, NC 27699-4335 within two years of the date of your injury or last payment of medical compensation. For occupational diseases, the claim must be filed within two years of the date of disability or the date your doctor told you that you have a work-related disease, whichever is later.

IC File # \_\_\_\_\_

\*Emp. Code # \_\_\_\_\_

\*Carrier Code # \_\_\_\_\_

Employer FEIN \_\_\_\_\_

Carrier File # \_\_\_\_\_

**\*Required Information.**

The IC File # is the unique identifier for this injury. It will be provided by return letter and is to be referenced in all future correspondence.

The use of this form is required under the provisions of the Workers' Compensation Act

Employee's Name _____		Employer's Name _____		Telephone Number _____	
Address _____		Employer's Address _____		City _____	State _____ Zip _____
City _____	State _____	Zip _____	Insurance Carrier _____	Policy Number _____	
Home Telephone _____		Work Telephone _____		Carrier's Address _____	
Sex <input type="checkbox"/> M <input type="checkbox"/> F		Date of Birth _____	Carrier's Telephone Number _____	City _____	State _____ Zip _____
Social Security Number _____		Carrier's Telephone Number _____		Fax Number _____	

<b>Employer</b>	1. Give nature of employer's business _____
	2. Location of plant where injury occurred _____
	County _____ Department _____ State if employer's premises _____
	3. Date of injury / / 4. Day of week _____ Hour of day <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.
	5. Was employee paid for entire day _____ 6. Date disability began / / <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.
	7. Date you or the supervisor first knew of injury / / 8. Name of supervisor _____
	9. Occupation when injured _____
<b>Person Injured</b>	10. (a) Time employed by you _____ (b) Wages per hour \$ _____
	11. (a) No. hours worked per day _____ (b) Wages per day \$ _____ (c) No. of days worked per week _____
	(d) Avg. weekly wages w/ overtime \$ _____ (e) If board, lodging, fuel or other advantages were furnished in addition to wages, estimated value per day, week or month \$ _____ per _____
	12. Describe fully how injury occurred and what employee was doing when injured: _____  (Statement made without prejudice and without vouching for correctness of information)
<b>Cause And Nature Of Injury</b>	13. List all injuries and specify body part involved (e.g. right hand or left hand): _____
	14. Date & hour returned to work / / at _____ M 15. If so, at what wages \$ _____ per _____
	16. At what occupation _____ 17. Employee's salary continued in full? _____
	18. Was employee treated by a physician _____
	<b>Fatal Cases</b> 19. Has injured employee died _____ 20. If so, give date of death (Submit Form 29) / / _____
Employer name _____	Date Completed / / _____
Signed by _____	Official Title _____

**OSHA 301 Information:**

Case Number from Log _____	Date Hired / / _____	Time Employee began work on date of incident _____ ; <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.	If off-site medical treatment provided, answer entire next line
Name of facility _____	Address Street/City/Zip/Telephone _____		ER visit? <input type="checkbox"/> Yes <input type="checkbox"/> No
			Overnight stay? <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Attention:</b> This form contains information relating to employee health and must be used in a manner that protects the confidentiality of employees to the extent possible while the information is being used for occupational safety and health purposes			

**SELF-INSURED EMPLOYER OR CARRIER MAIL TO:**

NCIC - CLAIMS ADMINISTRATION  
4335 MAIL SERVICE CENTER  
RALEIGH, NORTH CAROLINA 27699-4335  
MAIN TELEPHONE: (919) 807-2500  
HELPLINE: (800) 688-8349  
WEBSITE: HTTP://WWW.IC.NC.GOV/

FORM 19  
8/1/08  
PAGE 1 OF 2

FOR IC USE ONLY	
RESEARCHER _____	
CC _____	
EC _____	
DATA ENTRY _____	

**FORM 19**

### Supervisor's Accident Investigation Form

Employee Name:		Supervisor Name:	
Date and Time of Incident:		Witnesses:	
Reported to:			
Date Reported:			
<b>Type of Accident / Incident</b>	<b>Exposure</b> <input type="checkbox"/> Chemicals (e.g. picked up battery - got acid on hands) <input type="checkbox"/> Trashed hot pan <input type="checkbox"/> Temperature Extremes <input type="checkbox"/> Fire or Flame <input type="checkbox"/> Boiling water splashed on skin <input type="checkbox"/> Dust, Gases, Fumes, or Vapors <input type="checkbox"/> Welding flash - injury to eyes <input type="checkbox"/> Radiation <input type="checkbox"/> Contact with NOC <input type="checkbox"/> Cold Object or Substances <input type="checkbox"/> Abnormal Air Pressure <input type="checkbox"/> Electrical Current <b>Caught In, Under or Between</b> <input type="checkbox"/> Machine or Machinery <input type="checkbox"/> Object Handled <input type="checkbox"/> Other object <input type="checkbox"/> Collapsing Materials (earth slides) <b>Cut, Duncture, Scrape</b> <input type="checkbox"/> Broken Glass <input type="checkbox"/> Hand Tool, Utensil or equipment (e.g. screw driver in eye) <input type="checkbox"/> Object Being Lifted or Handled <input type="checkbox"/> Powered Hand Tool, Appliance (e.g. drill slipped and hit hand) <input type="checkbox"/> Other object <b>Fall, Slip or Trip</b> <input type="checkbox"/> Fall From Different Level (e.g. from second story building off wall) <input type="checkbox"/> Fall From Ladder or Scaffolding <input type="checkbox"/> Fall From Liquid or Grease Spills <input type="checkbox"/> Fall Into Opening (shaft, excavation, floor opening)	<input type="checkbox"/> Fall On Same Level (tripped and stumbled) <input type="checkbox"/> Slipped, did not fall (e.g. slipped, pulled leg muscle) <input type="checkbox"/> Tripped, did not fall <input type="checkbox"/> Ice or Snow <input type="checkbox"/> Stairs <b>Strain</b> <input type="checkbox"/> Coraminal Noise <input type="checkbox"/> Twisting <input type="checkbox"/> Jumping <input type="checkbox"/> Holding or Carrying <input type="checkbox"/> Lifting (including, lifting patient) <input type="checkbox"/> Pushing or Pulling (pushing a cart) <input type="checkbox"/> Reaching (reaching for a box over head) <input type="checkbox"/> Using Tool or Machine <input type="checkbox"/> Other Cause <input type="checkbox"/> Throwing or Welding <input type="checkbox"/> Repetitive Motion (Carpal Tunnel Syndrome) <b>Motor Vehicle</b> <input type="checkbox"/> Crash of Water Vehicle <input type="checkbox"/> Collision or Sideswipe with Another Vehicle (e.g. car) <input type="checkbox"/> Collision with Fixed Object (e.g. hit telephone pole) <input type="checkbox"/> Crash of Airplane <input type="checkbox"/> Vehicle Upset (e.g. overturned truck, car, etc.) <input type="checkbox"/> Motor Vehicle, NOC	<b>Struck or Injured By</b> <input type="checkbox"/> Fellow Worker, Patient (not an act of crime) <input type="checkbox"/> Falling or Flying Object <input type="checkbox"/> Hand Tool or Machine In Use <input type="checkbox"/> Motor Vehicle <input type="checkbox"/> Moving Parts of Machines <input type="checkbox"/> Object Being Lifted or Handled <input type="checkbox"/> Object Handled By Others <input type="checkbox"/> Struck or Injured (kicked, stabbed, bit) <input type="checkbox"/> Animal or Insect (bee sting) <input type="checkbox"/> Explosion or Fire Back <input type="checkbox"/> Sanding, Scraping, Cleaning Operations <input type="checkbox"/> Stationary Object (e.g. walked into a wall) <input type="checkbox"/> Stepping on Sharp Object (e.g. nails) <b>Rubbed or Abraded By</b> <input type="checkbox"/> Repetitive Motion (callous blister, etc.) <input type="checkbox"/> Rubbed or Abraded NOC <input type="checkbox"/> Sanding, Scraping, Cleaning Operations <b>Non-Infectious Injury</b> <input type="checkbox"/> Absorption, Injection or Inhalation <input type="checkbox"/> Foreign Matter in Eye <input type="checkbox"/> Person in Act of Crime (robbers, assault) <input type="checkbox"/> Other than Physical Cause of Injury <input type="checkbox"/> Cumulative Injury, NOC <input type="checkbox"/> Other, Misc., NOC (IB) <input type="checkbox"/> Describe
<b>Part of Body (Check One)</b>	<input type="checkbox"/> Abdomen (excluding internal organs) <input type="checkbox"/> Ankle <input type="checkbox"/> Artificial Appliance (braces, etc.) <input type="checkbox"/> Back <input type="checkbox"/> B&S System (poisoning, inflammation, nerves) <input type="checkbox"/> Brain <input type="checkbox"/> Backs <input type="checkbox"/> Chest (rib, sternum, soft tissue) <input type="checkbox"/> Dose (neck, spinal column) <input type="checkbox"/> Ear (eardrum) <input type="checkbox"/> Elbow (radial head) <input type="checkbox"/> Eyeball <input type="checkbox"/> Facial Bones <input type="checkbox"/> Facial Soft Tissue <input type="checkbox"/> Fingert (excluding thumb) <input type="checkbox"/> Foot <input type="checkbox"/> Great Toe <input type="checkbox"/> Hand (excluding wrist, fingers)	<input type="checkbox"/> Head (multiple injuries, combination of parts) <input type="checkbox"/> Heart <input type="checkbox"/> Hip <input type="checkbox"/> Insufficient info to properly identify <input type="checkbox"/> Internal Organ (other than heart, lungs) <input type="checkbox"/> Knee <input type="checkbox"/> Larynx (vocal cord) <input type="checkbox"/> Low Back (lumbar, lumbosacral) <input type="checkbox"/> Lower Arm (forearm) <input type="checkbox"/> Lower Extremities (e.g. whole lower extremity or part) <input type="checkbox"/> Lower Leg <input type="checkbox"/> Lungs <input type="checkbox"/> Mouth (lips, tongue, throat, taste) <input type="checkbox"/> Multiple Body Parts (e.g. arm and leg, wrist and elbow) <input type="checkbox"/> Neck (multiple injuries, combination parts) <input type="checkbox"/> No Physical Injury (mental disorder) <input type="checkbox"/> Nose (includes nasal passage, sense of smell)	<input type="checkbox"/> Pelvis <input type="checkbox"/> Shoulder (acromioclavicular, glenohumeral, clavicle) <input type="checkbox"/> Skull <input type="checkbox"/> Soft tissue (track) <input type="checkbox"/> Spinal Cord <input type="checkbox"/> Spinal Cord (nerve tissue, other than cervical, sacral) <input type="checkbox"/> Teeth <input type="checkbox"/> Thigh, upper leg <input type="checkbox"/> Thumb <input type="checkbox"/> Toes <input type="checkbox"/> Trachea <input type="checkbox"/> Trunk (multiple injuries, combination parts) <input type="checkbox"/> Upper Arm (humerus) <input type="checkbox"/> Upper Back (thoracic area) <input type="checkbox"/> Upper Extremities (e.g. whole upper extremity or part) <input type="checkbox"/> Wrist/Hand
Indicate any discrepancies between your investigation and the Employee Statement of Injury (Use additional paper if necessary)			
Summarize witness statements and indicate discrepancies with the Employee Statement of Injury (Use additional paper if necessary)			
Describe conditions that contributed to accident in terms of equipment and its use and condition, environmental conditions, personnel and/or management			
What applicable safety equipment (i.e. PPE, engineering controls, etc.) was being used?			
What safety equipment should have been used?			
Describe actions taken to prevent recurrence. Indicate date action was taken and by whom. (Use additional paper if necessary)			

*I have investigated this incident and identified the cause and actions necessary to prevent recurrence. I have confirmed that the necessary actions have been taken and I have reviewed this incident with the injured employee and other members of my staff that may be exposed to a similar hazard.*

Supervisor's Signature \_\_\_\_\_ Date \_\_\_\_\_

*Transfer to EHS Safety Manager*

*No further investigation*

*Investigation Completed*

