



Title: Dental Safety Program	
Page 1 of 21	Implementing Procedure for Policy 8.05
Date Approved: 04/18/05	Division: Instructional Affairs

DENTAL SAFETY

1.1 Introduction:

An effective Infection and Hazardous Control Policy is mandatory for the safety of patients, students, faculty and staff in any health care environment. The CF Infection and Hazard Control Policy parallel the policy of the Marion County Health Department because of the close relationship between the two institutions. These policies have been reviewed and approved by the dental assisting program facilitator and the administrative dentist at the Marion County Health Department.

1.2 Purpose:

The purpose of infection control policies and procedures is to:

- Minimize the risk of transmission of blood born pathogens to patients and dental health care workers in the dental clinic setting.
- Assure that all biomedical waste is properly handled to eliminate exposure of the public to possible disease causing agent, which may be present in this type of waste.
- Minimize the human contact with potentially infectious materials, wastes, devices and disposal of biomedical materials/ waste generated within the County Health Department.
- Ensure minimal risk to client, staff, public and the environment for any biomedical material/waste.
- Ensure that all biomedical waste is disposed of in accordance with all applicable laws.

1.2.1 Definitions:

Biomedical waste:

- Any solid waste or liquid waste, which may present a threat of infection to humans. The term includes, but is not limited to, non-liquid human tissue and body part, laboratory and veterinary waste, which contain human disease-causing agents, discarded sharps, human blood products and body fluids.
- Used, absorbent materials saturated with blood, body fluids, saliva in dental procedures or excretions or secretions contaminated with blood. Absorbent materials include items such as bandages, gauzes, sponges, cotton rolls or cotton balls, and paper barriers.
- Disposable devices, which retain visible blood adhering to the inner surfaces after use and thorough rinsing, such as intravenous tubing, disposable speculums, and dir-angles.

- Body fluids which have the potential to harbor pathogens such as Human Immunodeficiency Virus and Hepatitis B Virus and include lymph, semen, vaginal secretion, cerebrospinal, synovial, pleural, peritoneal, pericardial and amniotic fluids.
- Body excretions such as feces and secretions such as nasal discharges, saliva, sputum, sweat, tears, urine and vomit shall not be treated as biomedical waste unless visibly contaminate with blood.

Leak Resistant- the prevention of liquid from escaping to the environment in the upright position.

Onsite- an area that is part of or contiguous to the facility, where the biomedical is generated.

Point of Origin- the room or area where the biomedical waste is generated.

Puncture Resistant- able to withstand punctures from contained sharps during normal usage and handling.

Physical Hazard- any combustible liquid, compressed gas, explosive, flammable, organic peroxide, oxidizer, phosphoric unstable or water reactive.

Health Hazard- means a chemical that causes acute or chronic health effects in exposed students/employees such as carcinogens, toxic agents, irritants, corrosives, sensitizers, or target specific organs.

Environmental Hazard- is considered any material, which will damage, significantly damage, or destroy human, plant or animal life or any naturally occurring thing.

1.2.2 Don'ts for Hazardous Wastes:

- Don't pour into a sink
- Don't pour into a public or private sewer system
- Don't pour into a septic tank
- Don't pour into the ground
- Don't bury on public or private land
- Don't place in dumpster, compactor, or other type of refuse system
- Don't transport by a private or college vehicle to a public or private dump or landfill

1.2.3 Identification/Classification of Biomedical Wastes for Dental

Human Blood and Blood Products	Waste blood, serum, plasma, and other blood products
Pathological Waste	Tissues, organs, body parts, blood and body fluid removed during biopsy.
Sharps	Contaminated hypodermic needles, syringes, scalpel blades, Pasteur pipettes, glass slides and broken glass

Surgery	Dressing, sponges, drapes, gloves, etc. which are saturated with blood and/or other body fluids
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1.2.4 Segregation

- All biomedical wastes will be segregated at the point of origin
- All sharps will be segregated from the other biomedical waste
- Any other waste which is co-mingled with biomedical waste shall be managed as biomedical waste
- All biomedical waste shall be placed in a clearly marked container or plastic bags specifically used for the purpose of biomedical waste

1.2.5 Disposal

- Biomedical waste shall be identified and segregated from other solid waste at the point of origin.
- Absorbent material (i.e. used cotton balls, gauze saturated with blood, body fluids or excretion or secretions contaminated with blood) shall be packaged in red bags that meet the specification.
- Human tissues and body parts (i.e. tissues, tissue cultures, teeth and nail with attached root) must be placed in a red bag.
- Sharps (i.e. needles, scalpels) are to be placed directly into the nearest sharps container (rigid, leak proof, one-way puncture-resistant container) without recapping, clipping or breaking.

1.2.6 On-site disposal of biomedical waste

Biomedical waste (not hazardous waste) may be disposed of into a sewer system if the following requirements are met.

- Waste is in a liquid or semi-liquid form.
- Aerosol formation from the waste materials is minimal.
- Protective equipment and apparel are used or worn by the person discharging material to the sewer system.

1.2.7 Personal Protective Equipment Appropriate

- Personal protective equipment must be worn when packaging biomedical waste for transport, and cleaning up spills/leakage and any time biomedical waste is handled.
- Personal protective equipment may consist of the following:

Protective Eyewear/Splash-proof goggles:

- Eye protection must be worn whenever splashes, spray, droplets or aerosols of blood or other potentially infectious materials may be generated and contamination can be reasonably anticipated.
- Prescription eyeglasses must be equipped with protective side shields if used for eye protection.

- Protective eyewear must be worn by persons wearing contact lenses when there is a potential for eye contamination.

Face Mask:

- Masks in combination with eye protection devices must be worn whenever splashes spray, droplets or aerosols of blood or other potentially infectious materials may be generated and there is potential for nose or mouth contamination.
- Disposable apron or fluid resistant lab coat.
- Fluid resistant clothing must be worn if there is potential for splashing or spraying of blood or other potentially infectious materials.
- When blood or other designated potentially infectious material has penetrated a garment; the garment shall be removed immediately (Or as soon as feasible) and the body surface washed with antiseptic soap and running water.

Gloves:

- Gloves must be worn when the student has the potential to have direct skin contact with blood, other potentially infectious body fluids or materials, mucous membrane, non-intact skin and when handling items or surfaces soiled with blood or other potentially infectious body fluids or materials.
- Disposable single use gloves must be changed as soon as possible when visibly soiled, torn and punctured or when their ability to function as a barrier is compromised.
- Gloves must be changed after contact with each patient and/or after contamination.

Resuscitator Devices:

- In the case that a student performs CPR, it is required that the student use mouthpieces, resuscitation bags, pocket masks, or other ventilation devices.
- Students using these devices must be able to follow manufacturer's instructions for appropriately using resuscitative equipment within the accepted medical practice.
- Direct mouth-to-mouth resuscitation without the use of a barrier as described by OSHA is not acceptable when the risk of exposure to the employee is "reasonably anticipated."
- All PPE shall be removed prior to leaving the work area.
- PPE Non-Compliance-students in PPE non-compliance shall be dismissed from the clinical or laboratory site and given a zero "O" grade for the day, which will adversely affect the final grade.

1.2.8 Documentation and Labeling:

- Red bags- must have the biomedical waste symbol imprinted on them.
- Sharps Boxes

- Must be labeled with the biomedical symbol, facility name, address and point of origin.
- Must be closed, dated, and taken to the biomedical waste room when full and then disposed of within 30 days. Sharps container is considered full when materials placed into it reach the designated fill line or if fill line is not indicated when additional material cannot be placed into the container without cramming.
- If an absorbent material is placed into a Sharps container, it must be dated at that time and then disposed of within 30 days.
- Sharps disposal containers shall be clearly labeled with the biomedical waste label. This labeling may be accomplished by applying a computer-generated stick on label.
- Each staff member that delivers a box or bag to the biomedical waste closet will sign in on the biomedical waste log. The biomedical waste closet is located in the sterilization lab.
- A biomedical waste log will be maintained at the main site.
- The Marion County Health Department will be responsible for removing the biomedical waste from the Hampton Center.
- Red bags and Sharps boxes are dedicated bio-hazardous waste containers and may not be used for any other purpose.

1.2.9 Packaging for Transport

- The biomedical waste storage room/area will be identified by the international biological symbol and the phrase biomedical waste.
- At the end of the clinic session all small red bags are to be securely closed by lapping the gathered open end and binding together with tape or other device in such a manner that no liquid contained within the bag may leak.
- Small red bags will then be brought to the designated area and placed in the box being used for transport. Each large transport box will be lined with a red bag.
- Sharps container will be sealed at the point of origin and placed in a separate transport box.
- When full, the red bag used to line the transport box will be sealed by securely closing and taping the gathered open end and binding together with tape or other device in such a manner that no liquid contained within the bag may leak.
- The transport box should then be sealed with box sealing tape by the Health Support Aid Supervisor or other designated staff who have completed training in handling and proper management of bio-hazardous waste. Tape all box seams. Box weight should not exceed 40 pounds.
- The label shall be securely attached or permanently printed and clearly legible on the outer layer of the packaging in indelible ink. The following information shall be included on the label:
 - a. Transporter's name and address
 - b. Date the waste was packaged
 - c. International biohazard symbol
 - d. "Bio-hazardous" waste or "biohazard" or "infectious"
 - e. Transporter's registration number
 - f. Transporter's 24 hour telephone number

1.3 Biomedical Waste Storage Room

- The international biological symbol and the phrase biomedical waste will identify the biomedical waste storage room/area.
- The biomedical waste storage/area will have restricted access to prevent entry by unauthorized persons.
- The storage room/area will be maintained in such a manner as to prevent vermin, insects and objectionable odors.
- Trained personnel with the proper protective equipment for disposal will only remove biomedical waste from the storage room.

1.4 Spill Leakage/Cleanup

All spills or biomedical waste will be considered hazardous and handled appropriately.

- Block off the immediate areas.
- Wear appropriate personal protective clothing in relation to the spill.
- Have a dustpan and broom (used solely for this purpose) to clean up spillage.
- Carry an empty sharps container to place spillage.
- Contaminated surfaces shall be cleaned with a solution of one of the following agents:
 - A. OSHA approved cleanup kit
 - B. Bleach and water in a 1/10 solution
 - C. Chemical germicides that are registered by the EPA as hospital disinfectants and are tuberculocidal or virucidal for Human immunodeficiency Virus (HIV) or Hepatitis B Virus (HBV) when used at recommended dilutions.
 - D. In the event of any hazardous material spill, immediately notify both the campus Public Safety Department and the Ocala Fire Department at the numbers listed in the CF Safety Manual page 36.

1.5 Transportation

All transportation of bio-hazardous waste is handled by Marion County Health Department.

1.6 Emergency Procedures

1.6.1 Clinic Emergency

- Stay with the patient
- Have someone else get an instructor. Be ready to advise as the history of the situation, drug given, and patient's vital signs. The instructor will determine the need to call paramedics. Try to reassure patients by acting in an assured confident manner.
- Check patients for:
 - A. Open airway
 - B. Breathing
 - C. Heart beat

- Adjust chair position so that the patient is horizontal with feet even with head
- Give oxygen as indicated
- Give stimulants: Ammonia inhalant (white)—located on top of unit light are of each unit, and cold wet towel on forehead and back of neck
- Recheck vital signs
- Student's responsibility is to notify an instructor of an emergency or potential emergency. Instructors will coordinate basic life support and notify paramedics.

1.6.2 Laboratory Emergency

- Stay with patient
- Have someone else get an instructor. Be ready to advise, as the history of the situation.
- The instructor will determine the need to call paramedics
- Administer first aid as indicated or stay with the student until arrival of paramedics, if needed.
- Have student, or other authorized individual, fill out an incident report as soon as possible after first aid or other treatment has been accomplished. This report must be completed and return to the dean within three working days.

NOTE: Eye stations are located in the back lab area of the clinic, in the instrumentation lab at the first sink on the left of the room doorway and in the sterilization room.

1.6.3 Bloodborne Pathogens Exposure Control Plan

General Information

To comply with Federal Blood borne Pathogens Exposure Control Plan Standard (29CFR 1910,1030) as required by the Occupational Safety and Health Administration, the following Exposure Control Plan has been established. This policy statement serves to express administrations' commitment of involvement in the protection of Employees/Students safety and health. This safety program is the standard of practice of the College of Central Florida. Compliance with the Blood borne Pathogens Exposure Control Plan is required for all effected Employees/Students as a condition of employment. The Blood borne Pathogens Exposure Control Plan will be reviewed by CF on an annual basis.

Blood borne Pathogens (What are they?)

The two most dangerous blood borne pathogens are human immunodeficiency virus. (HIV), the virus that causes AIDS, and Hepatitis B (HBV), a virus that attacks the liver. A virus is a very primitive, very small microorganism that is invisible to the eye. It can enter the body through a cut in the skin, through your eye, nose or mouth. It can also be transmitted sexually and through breast milk.

The purpose of this exposure control plan is to:

Eliminate or minimize Employees/Students occupational Exposure to blood or certain other body fluids that is potentially infectious. Comply with the OSHA Blood borne Pathogens Standard, 29 CFR 1910, 1030.

Exposure Determination

OSHA requires employers to perform an exposure determination concerning which Employees/Students may incur occupational exposure to blood or other potentially infectious materials. Exposure may occur even when the use of personal protection equipment (PPE) is worn. Job classifications in which all Employees/Students could incur such occupational exposure at the College of Central Florida are: Dental Assisting Instructors and Dental Assisting Students

Implementation Schedule and Methodology

OSHA also requires that this plan include a schedule and method of implementation for the various requirements of the standard. The following complies with requirements:

Compliance Methods

- Universal precautions will be observed at the College of Central Florida in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious materials will be considered infectious regardless of the perceived status of the source individual.
- Anyone witnessing an incident/accident shall call the Public Safety Department and a college incident report shall be completed. This report shall include a description of the incident involving exposure to blood or body fluids. The report will be forwarded to the Human Resources Office, as soon as possible.
- Engineering and work practice controls will be utilized to eliminate or minimize exposure to Employees/Students at our campuses. Where occupational exposure remains after institution of these controls, personal protection equipment shall also be utilized.
- Contaminated needles and other contaminated sharps will not be bent, recapped, removed, sheared or purposely broken. All needles or sharps will be placed in a sharps container.
- The above controls will be examined and maintained on a regular schedule. The schedule for reviewing the effectiveness of the controls is as follows: The department supervisor will check controls on a once a month schedule.
- Hand washing facilities are also available to Employees/Students who incur exposure to blood or other potentially infectious materials. OSHA requires that these facilities be readily accessible after exposure. At the College of Central Florida, hand-washing facilities are located in all buildings.
- After removal of personal protective gloves. Employees/Students shall wash hands and any other potentially contaminated skin area immediately or as soon as feasibly possible with soap and water. If Employees/Students incur exposure to their skin or mucous membranes including the eyes, then those areas shall be washed or flushed with water as appropriate as soon as feasibly possible following contact.

Work Area Restrictions

- In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials. Employees/Students are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be consumed or kept in refrigerators, freezers, shelves,

cabinets, counter tops or bench tops where blood or other potentially infectious materials are present.

- Mouth pipe ting/ suctioning of blood or other potentially infectious materials are prohibited.
- All procedures will be conducted in a manner that will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials.

Personal Protection Equipment (PPE)

- All personal protection equipment used at the College of Central Florida will be provided without cost to Employees/Students. Personal protection equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The personal protection equipment will be considered appropriate only if it does not permit blood or other potential materials to pass through or reach the Employees/Student's clothing, skin, eyes, mouth or other mucous membrane under normal conditions or use and for the duration of time, which the protective equipment will be used.
- Personal protection equipment will be provided to Employees/Students by their department. The department will keep a list of how the personal protection equipment will be provided to the Employees/Students who has responsibility or distribution, and which procedures require protective equipment and the type of protection required. Each department shall be responsible for determining safety procedures for each task that requires the use of PPE.
- All personal protection equipment will be cleaned, laundered, and disposed. All garments that are penetrated by blood shall be removed immediately or as soon as possible. All PPE will be removed prior to leaving the work area.
- Gloves shall be worn where it is reasonably anticipated that Employees/Students will have hand contact with blood or other potentially infectious materials. Gloves will be available from the department supervisor. Disposable gloves used at the College of Central Florida are not to be washed or decontaminated for re-use and are to be replaced as soon as feasibly possible if they are torn, punctured, or when their ability to function as a barrier is compromised.
- Masks in combination with eye protection devices, such as goggles or glasses with solid-state shields, or chin length face shields, are required to be worn whenever splashes, sprays, splatters or droplets of blood or other potentially infectious materials may be generated and eye, nose or mouth contamination can reasonably be anticipated.
- The OSHA standard also requires appropriate clothing to be used, such as coats, aprons or similar outer garments.
- College of Central Florida will clean and decontaminate anytime a spill or exposure occurs. Decontamination will be accomplished by utilization of the following materials: Bleach solutions or EPA registered germicides.
- All contaminated work surfaces will be decontaminated after completion of procedures and immediately or soon as feasibly possible after a spillage of blood or other infectious materials, as well as the end of the work shift if the surface may have been contaminated since the last cleaning. All bins, pails, cans and similar receptacles shall be inspected and decontaminated on a regular basis by a person assigned by the Director of Maintenance.
- Any broken glassware that may be contaminated will not be picked up directly by hand. Use a dustpan and brush, cardboard or tongs. Do not use a vacuum

cleaner. Broken glass must be put in a sharps container. Do not put in plastic bag.

Regulated Waste Disposal

- All contaminated or possibly contaminated sharps shall be discarded as soon as feasibly possible in appropriate sharps containers. Regulated waste other than sharps shall be placed in appropriate containers that are labeled or color-coded for disposal.
- All bins, pails, cans, or similar receptacles intended for re-use which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and contaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visual contamination.
- When moving containers of contaminated material from the area of use, the containers shall be closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport or disposal; or placed in a secondary container if leakage is possible. The secondary container shall be closable; constructed to contain all contents and prevent leakage during handling, storage, transport, or disposal; and labeled or color-coded.
- Disposal of all regulated waste shall be in accordance with applicable regulations of the United States and State of Florida, and political subdivisions of the State of Florida.

Hepatitis B Vaccine

- All students are counseled on the importance of the Hepatitis B vaccine. The first dose of the vaccine will be offered prior to their initial assignment of work involving the potential for occupational exposure to blood or other potentially infectious materials unless the Employees/Students has previously had the vaccine or who wish to submit to antibody testing which shows the Employees/Students to have sufficient immunity. Subsequent doses will be available at the appropriate time intervals.
- Employees/Students who decline the Hepatitis B Vaccine will sign a waiver that uses the workings in Appendix A of the OSHA standard. Employees/Students who initially decline the vaccine but who later wish to have it may then have the vaccine provided at no cost.

Post-Exposure Evaluation and Follow-up

- When a student incurs an exposure incident, it shall be reported in writing to their supervising instructor and then the dean of Health Occupations.
- The program facilitator shall contact the individual/student regarding post exposure evaluation and follow-up procedures.
- All students who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with OSHA standard (i.e. confidential medical evaluation and follow-up). This follow-up will include the following.

Documentation of the route of exposure and the circumstances related to the incident.

If possible, the identification of the source individual and if possible, the status of the source individual will be tested (after consent is obtained) for HIV/HBV infectivity.

Results of testing of the source individual will be made available to the exposed student and the exposed students will be informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual.

The student will be offered the option of having their blood collected for testing of the student HIV/HVB serological status. The blood sample will be preserved for up to 90 days to allow the student to decide if the blood should be tested for HIV serological status. However, if the student decides prior to that time, that testing will or will not be conducted then the appropriate action can be taken and the blood sample discarded.

The student will be offered post exposure prophylaxis in accordance with the current recommendations of the Center for Disease Control.

The student will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The student will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.

1.6.4 Interaction with Health Care Professionals

- A written statement shall be obtained from a health care professional and will be obtained in the following instances:
- When the student is sent to obtain a Hepatitis B vaccine series.
- Whenever the student is sent to a health care professional following an exposure incident.
- The student will be informed of the results of the evaluation, and told about any medical conditions resulting from the exposure to blood or other potentially infectious materials. The student keeps one copy and turns in a copy to the program facilitator.
- All dental assisting students with occupational exposure must participate in a training program.

Training shall occur:

- At the time of initial assignment to tasks where occupational exposure may take place.
- Within ninety (90) days after effective date of a major OSHA standard change.
- As modification of tasks or procedures, affect the student's occupational exposure.

The training program shall contain the following minimum requirements:

- A copy of the OSHA regulations regarding occupational exposure to blood borne pathogens 29 CFR part 1910.1030;
- A copy and explanation of CF's exposure plan which will include procedures to follow if an exposure incident occurs, method of reporting

and documentation, universal precautions to follow, and medical follow-up;

- A general explanation of the epidemiology and symptoms of blood borne diseases;
- An explanation of the modes of transmission of blood borne pathogens;
- An explanation of the appropriate methods of recognizing tasks and other activities that may involve exposure to blood or other potentially infectious materials;
- An explanation of the use and limitations of methods that will prevent or reduce exposure including use of personal protection equipment;
- Information on types, proper use, location, handling, decontamination and disposal of personal protection equipment;
- An explanation on the basics for selection of personal protection equipment;
- Information on the Hepatitis B vaccine, including information on its efficacy, safety, methods of administration, the benefits of being vaccinated, and where the vaccination will be offered free of charge.
- An opportunity for questions and answers.
- An explanation of container labeling and proper disposal.

Recordkeeping

- College of Central Florida shall establish and maintain an accurate record for each Employees/Students with occupational exposure in accordance with 29 CFR 1910.20. This record shall include: Employees/Students name, Employees/Students social security number, a copy of the Employees/Students Hepatitis B vaccination status including the dates of all the Hepatitis B vaccinations and any medical records related to the Employees/Students ability to receive required vaccinations, a copy of all results of examinations, medical testing, and follow-up procedures, the college's copy of the health care professionals' written opinion, and dates of when the Employees/Students attended required training/information sessions.
- College of Central Florida shall insure that Employees/Student's medical records are kept confidential and are not disclosed or reported without the Employees/Students' expressed written consent to any person within or outside the workplace except as required by the record keeping section of the standard as required by law.
- College of Central Florida shall maintain a list of qualified educational trainers and dates of training sessions.
- College of Central Florida shall maintain the records required for at least the duration of employment plus thirty (30) years in accordance with 29 CCFR 1910.20.
- All medical records required by the OSHA standard will be maintained by the Human Resources Department.

Revision of Plan

The exposure plan shall be reviewed and updated annually and whenever necessary as due to medical or technological breakthroughs to reflect new or modified tasks and procedures that affect occupational exposure, and to reflect new or revised Employees/Students positions with occupational exposure.

Glossary

Blood - Human Blood, human blood components, and products made from human blood

Blood Borne Pathogens - Microorganisms that are present in human blood that can cause disease in humans. Examples of these pathogens include, but are not limited to, the hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

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

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 blood borne pathogens on the surface of items 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 (1/4 cup of bleach per gallon of tap water).

Disinfectants/ Antiseptics - Disinfectants are agents that inactivate viruses, bacteria and fungi on surfaces. Antiseptics are chemical germicides formulated for use on skin or tissue.

Engineering Controls - Controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the blood borne pathogen hazard from the workplace.

Exposure Incident - Specific eye, mouth, other mucous membrane, non-intact skin, or puncture of skin contact with blood or other potentially infectious materials that result from Employees/Students performing their duties.

Hand-washing facilities - Locations that provide an adequate supply of running potable water, soap, and single-use towels or hot air drying machines.

HBV - Hepatitis B Virus

Occupational Exposure - Reasonably anticipated skin, eye, mucus membrane, or puncture contact with blood or other potentially infectious materials that may result from Employees/Students performing their duties.

Other Potentially Infectious Materials - The following body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures and any body fluid that is visibly contaminated with blood. Any unfixed tissue or organ (other than intact skin) from a human (living or dead).

Personal Protection - Specialized clothing or equipment worn by Employees/Students to protect against hazards (gloves, mask, body gown, etc.).

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 and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

Source Individual - Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the Employees/Students.

Sterilize - To use physical or chemical procedures to destroy all microbial life including highly resistant bacterial endospores.

Standard (Universal) Precautions - An approach to infection control in which all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV and/or other blood borne pathogens.

Work Practice Controls - Mandated procedures or policies that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g. by prohibiting recapping of needles using a two-handed technique).

1.7 Health and Safety Provisions Radiographs

1.7.1 Exposing Radiographs for Diagnostic Purposes

- Student reviews the patient's completed medical history and the student signs their signature. The student will then have a dental faculty review the history and sign off, authorizing the patients as being medically and clinically acceptable for radiographs.
- Student will determine the need for radiographic survey following a completed medical history and oral inspection. The student may only take radiographs according to the radiographic policy or the patient presents a
- prescription for radiographic films from a dentist.
- If acceptable, the student requests faculty to authorize the taking of radiographs by signing the Authorization and Radiation Calculation Form, indicating the date, number and type of film to be taken. Once approved the student makes a radiology appointment for the patient following the protocol set forth by the radiology instructors.

ANY STUDENT TAKING RADIOGRAPHS WITHOUT THE PROPER FORMS COMPLETED PRIOR TO THE APPOINTMENT WILL RECEIVE A GRADE OF AN "F" FOR THE RADIOGRAPHIC SURVEY.

- A protective lead lined apron with thyroid collar must be worn by patients for all radiation exposure.
- Students will expose radiographs authorized for the prescribed patients.

- Students will process radiographs. Be sure the patient's full name, date of exposure and the student's name is on the mounted radiographic survey.
- Students will mount the radiographs immediately and put all patient information on the mount.
- A radiation exposure calculation must be entered in each patient's record of treatment. It must be kept current and will be monitored by faculty.
- Students will complete a self-evaluation form of the mounted radiographs. The student will complete the review indicating the errors in technique, processing, mounting, or labeling and write the recommendation or suggestions to correct the error in the future. This is done for the student to continue improving their techniques in the radiographic process.
- The student will indicate to the instructor if there is a need to retake any radiographs that is necessary for diagnostic purposes only. Radiographs are ONLY approved for retakes if diagnosis is unable to be made from the current film. NO retakes permitted for the improvement of a student's grade. If authorized, the faculty must sign and indicate the number of films which are to be retaken on the Authorization Form. The student must then update the Radiation Dosage Calculation Form with signature. Be sure to monitor the total dosage for every patient at each entry.

IF A STUDENT RETAKES RADIOGRAPHS WITHOUT FACULTY AUTHORIZATION, A GRADE OF "ZERO" WILL BE RECORDED FOR THE RADIOGRAPHIC SURVEY.

- Students will then place the radiographs in the "RADIOGRAPHS TO BE GRADED" box in the instrumentation label for faculty to grade. The following should be included for grading:
 - A. Mounted radiographs
 - B. Student self evaluation and recommendation grade sheet
 - C. Patient's medical history
 - D. The Authorization and Dosage Calculation Form
- The faculty member will grade the radiographs following the criteria outlined in the syllabus. The faculty will use the completed student self-evaluation form for grading using RED ink only. This will allow the faculty and student to decipher between the student's notes and the faculty notes during the post conference. The faculty will also write comments and/or suggestions to review with the student to improve technique in the future. The faculty will also review the dosage calculation.
- If the patients are Marion County Health Department patients, the completed radiographs will be submitted to clinical dentist for review and treatment planning.
- If the radiographs are to be mailed to dentist, proper paperwork will be completed and radiographs will be mailed.

1.7.2 Radiographic Policies

Exposing Radiographs for Diagnostic Purposes

- Patients may be exposed to ionizing radiation ONLY when authorized in writing by faculty or a patients' dentist.
- Radiographs will be authorized ONLY on the basis of a patient's needs for diagnostic purposes.
- No determination shall be made until a complete medical history and screening has been performed.

1.7.3 Selection Criteria for Radiographic Patients

Clinical conditions:

Positive Medical History Findings:

- Previous periodontal or endodontic therapy
- History of pain or trauma
- Family history of dental anomalies
- Post-operative evaluations of healing
- Presence of implants

Positive Clinical Signs/Symptoms:

- Clinical evidence of periodontal disease
- Large or deep restorations
- Deep carious lesions
- Malposed or clinically impacted teeth
- Swelling or evidence of facial trauma
- Mobility of teeth
- Fistula or suspended sinus pathology
- Growth abnormalities
- Oral involvement in known/suspected systemic disease
- Positive neurologic findings in the head and/or neck
- Evidence of foreign objects
- Pain and/or dysfunction of the TMJ
- Facial asymmetry
- Abutment teeth for fixed or removable prosthodontics
- Unexplained bleeding/sensitivity of teeth
- Unusual eruption, spacing or migration of teeth
- Unusual tooth morphology, classification or color
- Missing teeth with unknown reason

Patients at high risk for caries that may demonstrate any of the following:

- High level of caries experience
- History of recurrent caries
- Existing restoration of poor quality
- Poor oral hygiene
- Inadequate fluoride exposure
- Prolonged nursing (bottle or breast)
- Diet with high sucrose frequency

- Poor family dental health
- Developmental enamel defects
- Developmental disability
- Xerostomia
- Genetic abnormality of teeth
- Many multi-surface restorations
- Chemotherapy
- Radiation therapy

1.7.4 Frequency of Exposure:

- The frequency of exposure shall be determined on the basis of an individual's needs for diagnostic purposes only and not on the basis of a routine.
- Patients that have had bitewing radiographs within one year will not be re-exposed unless there is a diagnostic purpose and a justifiable need.
- Patients that have had a full mouth series within two years may not receive another series unless there is a diagnostic purpose and a justifiable need.
- Patients that have had a panoramic radiograph within two years may receive another unless there is a diagnostic purpose and a justifiable need.
- No patient shall exceed the maximum permissible dose of 5R per calendar year.
- Clinical faculty shall make the final determination of need for all radiographs to be exposed.

1.7.5 Radiographic Policy for Pregnant Operators

- Pregnant students must present a note from their physician prior to being allowed to take radiographs.
- Student will be required to wear a lead apron while exposing radiographs.

1.7.6 Radiographic Procedure

- Student will determine the need for radiographic survey following a completed medical history and oral inspection.
- Students will obtain written approval of supervising instructor prior to exposing radiographs.
- Students will complete all necessary forms before beginning the procedure.

- A radiographic Approval Form must be filled out accurately and completely by the student.
- A protective lead lined apron with thyroid collar must be worn by patients for all radiation exposure.
- Students will expose radiographs authorized for the prescribed patients.
- Students will process radiographs.
- Students will mount the radiographs immediately and put all patient information on the mount.
- Radiographs will be displayed on the unit view box during the entire course of the patient's treatment and be utilized for:
 - A. Adaptations or modification of treatment
 - B. Dental charting
 - C. Patient education
- A radiation exposure calculation must be entered in each patient's record of treatment. It must be kept current and will be monitored by faculty.
- Students will complete a critique and self-evaluation of the mounted radiographs.
- Students will submit entire patient record with radiographs.

1.7.7 Radiographic Retakes

- Retakes must be authorized in writing and shall be indicated only when an instructor determines that a film is not diagnostically acceptable.
- The total number of retakes (if indicated) will be determined by the instructor in consultation with supervising clinical dentist.
- Students must be directly supervised by faculty when retakes are necessary. Unauthorized retakes are grounds for dismissal from the dental assisting program.

1.7.8 Radiographic Evaluation

- No radiographic films are to be kept by the student. This will be strictly enforced.
- Radiographs are not to be taken home and must never leave the dental clinic.
- These are confidential patient records and must be handled as such.
- Students are encouraged to turn in radiographic critiques at the time the radiographs are exposed and mounted. However, radiographs must be turned in for instructor evaluation within one week of exposure.
- All radiographic critiques should be done in the radiographic viewing area at the back of the clinic whenever clinical faculty are available on the floor.
- Faulty radiographic evaluation will be done on All exposed radiographs.

- Radiographs must be turned in to instructor authorizing and/or supervising the student. The patient's radiographic chart must accompany the radiographs to be evaluated.
- Radiographic evaluation sheets will be returned to student for review upon completion.

1.7.9 Radiographs to be sent to a Dentist:

- Patients requesting radiographs to be sent to dentist office must have a verbal or written request by a dentist. Notations must be made on the patient records of the dental office receiving radiographs. All radiographs being sent to private dentists will be approved by an instructor.
- All radiographs being sent to dental office must be approved by an instructor prior to mailing.
- Radiographs being sent to a dental office will be duplications of original radiographs. The original radiographs are placed in the patients' file and will become part of their permanent record.
- All students and faculty will wear name badges and/or display their name on their clinical gown. In addition, when taking radiographs, radiation monitoring devices will be attached to clinic gown.
- Dental records will reviewed at each visit of the patient by faculty to determine cumulative dose amount of radiation.
- Radiology equipment will be quality assessed semiannually by radiology instructor and/or dental supply maintenance personnel to ensure compliance with established standards.
- Monthly radiation monitoring devices reports on occupational workers (students and faculty) will be evaluated to ensure all personnel are within the required dose limits

Protocol for Pregnant Students

Students in the dental assisting program who are OR suspect that they are pregnant must notify their faculty supervisor immediately. Due to the potential damaging effects of ionizing radiation to the unborn fetus, the dental programs have the following policy:

Dental students:

- Must present a letter from their physician as soon as the pregnancy is confirmed with the following information: due date, special precautions, physical limitation.
- Must wear their film monitoring device in all areas of the office practice setting.
- May no work in an operators or areas adjacent to an unshielded operators during ionizing radiation exposure.
- May not operate panoramic radiographic equipment unless wearing a total led apron (front and back)
- May process radiographic film.
- Must notify dental faculty of any misuse or accidental exposure.

I understand and agree to abide by this policy.

Student Signature: _____

Date: _____

Faculty Signature: _____

1.8 Infection Control Protocol For Radiographic Areas:

Radiographic Operatory:

- Wash hands before proceeding with infection control
- Drape chair with plastic chair drape
- Cover tub head with plastic bag and tie knot to secure
- Cover control panel with plastic bag
- Cover exposure button with plastic bag
- Cover counter work surface with plastic bag and place clean bracket tray cover and plastic cup on surface.

Seat the patient:

- Seat patient
- Before gloving, place lead apron on patient
- Place patient napkin over lead apron

During exposures:

- Gloves must be worn at all times
- Unexposed radiographs will be placed on a clean bracket tray cover on the counter work surface
- Exposed radiographs will be placed in cup on counter work surface

Following Exposure:

- Bag XCP for sterilizations
- Remove gloves
- Remove patient napkin and discard
- Replace lead apron to hangers
- Dismiss patient
- Remove all plastic draping and covers and dispose of in designated container.

Darkroom:

- Put on clean pair of gloves
- Take cup with exposed films, paper towel and clean pair of gloves into darkroom
- Remove film from contaminated wrappers and place on paper towel. Discard contaminated wrappers in waste receptacle.
- When all films are unwrapped and contaminated wrappers discarded, remove gloves and throw away with used cup.
- Re-glove and process film

Mounting:

- Mount exposed radiographs in designated clean area without gloves and proceed with other protocol for evaluating of finished radiographs.

1.9 Recordkeeping:

- Always keep an adequate record of accidents and report it through proper channels.
- An analysis of accidents should be made for the purpose of corrective action.

1.10 Responsibility:

It is the responsibility of each instructor to ensure that a safe working environment is maintained in their area and that this policy is adhered to.

Vice President, Instructional Affairs

Date

Approved By:
President

Date