

# **Exposure Control Plan**

Taft College
Dental Hygiene

2017

## 1. Purpose

Minimizing potential occupational exposures to infectious microorganisms is the primary objective of the Taft College Dental Hygiene Program's Exposure Control Plan. This plan complies with the requirements of the Cal-OSHA Bloodborne Pathogens Standard (CCR 8, GISO 5193). This plan also includes elements of the Dental Board of California's Infection Control regulation (Section 1005, Title 16, California Code of Regulations), which is included in Appendix 1 of this manual.

#### 2. Procedure

The Exposure Control Plan (ECP) is a key document to assist the Taft College Dental Hygiene Program in implementing and ensuring compliance with the regulation, thereby protecting our staff, students, and patients. This ECP includes:

- o Determination of employee exposure
- Schedule and method of implementation of all requirements of the regulation including:
  - Standard precautions
  - Engineering and work practices
  - Hand hygiene
  - Personal protective equipment
  - Housekeeping
  - Laundry
  - Dental-unit waterlines, and water quality
- Hepatitis B vaccination
- Work-prohibited practices
- Post-exposure evaluation and follow-up
- o Procedures for evaluating circumstances surrounding exposure incidents
- Provisions for initial reporting of exposure incident
- Procedures for completing the Sharps injury log
- Procedure for periodically determining the frequency of which sharps, involved in incidents listed on the Sharps Injury Log, are used
- Communication of hazards to employees and training
- Personnel training

- Medical Records
- o Appendix 1: Training document
- o Appendix 2: Dental Board of California Infection Control Regulations
- Appendix 3: Sharps Injury Log
- o Appendix 4: Informed refusal for hepatitis B vaccination-confidential
- Appendix 5: Protocol for triage of suspected active tuberculosis patients

Implementation methods for these elements of the regulation are discussed in the subsequent pages of this ECP.

#### 3. Program Administration

Under the direction of the Taft College Dental Hygiene Program Director, the Infection Control Coordinator is responsible for implementation of the ECP. Those employees who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in this ECP; The plan will be reviewed annually with input sought from all clinical personnel regarding improvements and new technologies to reduce the risk of exposure to infectious agents. The infection control coordinator will be responsible for the following:

- A. Providing and maintaining all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as required by state and federal regulations.
- B. Ensuring that adequate supplies of the equipment above are available in the appropriate sizes.
- C. Ensuring that all medical actions required by regulations are performed and that appropriate employee health and OSHA records are maintained.
- D. Training and documentation of training.
- E. Making the written ECP available to employees, students, and OSHA.

#### 4. Determination of Employee and Student Exposure

The following is a list of all job classifications in our Dental Hygiene Program, in which employees and students have exposure to blood or other potentially infectious material.

- a. Job classification
  - a. Clinical Faculty Dental Hygiene School
  - 1. Dental Prosthetic Laboratory School Faculty

- 2. Dental Assistant
- 3. Dental Radiology Technician
- 4. Central Sterilization Assistant
- 5. Dental Hygiene Students
- b. Tasks and procedures with occupational exposure
  - 1. All clinical dental hygiene procedures Adult and Pediatric
  - 2. Dental hygiene extraoral and intraoral examinations
  - 3. Prophylaxes, scaling and root planing
  - 4. Coronal polishing and tooth sealant applications
  - 5. Interim therapeutic restoration applications
  - 6. Radiographic procedures
  - 7. Packaging and sterilizing dental instruments
  - 8. Transporting contaminated instruments to the central sterilization room
  - 9. Handling or disposing of contaminated waste
- c. Job classifications with no exposure
  - 1.Secretary
  - 2. Administrative Assistant

#### 5. Schedule and methods of Implementation of all requirements of the regulation

A. Standard Precautions and Infection Control Procedures

The Taft College Dental Hygiene Program utilizes "standard precautions" as one approach to infection control. The dental hygiene program also complies with Dental Board of California infection control regulations (see Appendix 3), some of which overlap and are more stringent than Cal/OSHA requirements.

B. Engineering and Work Practice Controls

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens.

a. The **specific** engineering controls used are:

• Heat (steam under pressure) sterilizers, chemical disinfectants, instrument washers, sharps disposal containers, ultrasonic cleaners, high-velocity evacuation systems, and needle recapping devices.

## b. Engineering and work practice control procedures:

- Identify, evaluate, and select devices with engineered safety features at least annually and as they become available on the market.
- Place used disposable syringes and needles, scalpel blades, and other sharp items in appropriate puncture-resistant containers located as close as feasible to the area in which the items are used.
- Do not recap used needles by using both hands or by using any other technique that involves directing the point of a needle toward any part of the body.
- Do not bend, break, or remove needles before disposal.
- Use either a one-handed scoop technique or a mechanical device designed for holding the needle cap when recapping needles.
- Inspect, maintain, and replace sharps disposal containers whenever necessary to prevent overfilling.
- Transport instruments to the central sterilization room in closed containers.
- Wash hands after removing gloves.
- Clean and decontaminate equipment properly.
- Perform all procedures involving blood or OPIM in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.
- Inspect and maintain sharps disposal containers; which will be replaced by the Infection Control Officer whenever necessary to prevent overfilling.

#### c. Evaluation of engineering controls and work practices

- This facility identifies the need for changes in engineering controls and work practices through review of OSHA records, staff and student interviews, and committee activities.
- We evaluate new procedures and new products regularly by attending infection control seminars, reading literature reviews, and reviewing supplier information.
- Faculty, staff, and students are involved in this process.
- Faculty and staff may provide information to the Program Director or Infection Control Officer on an engineering and/or work practice control, and request that it be evaluated.

- Such information can be provided at staff meetings or in writing to the Program Director or Infection Control Officer.
- The work practice controls described above are available upon request for examination to our employees, Cal/OSHA, and the Dental Hygiene Committee of California.

## 6. Hand Hygiene

## A. General Considerations

- a. Perform hand hygiene with either a non-antimicrobial or antimicrobial soap or water when hands are visibly dirty or contaminated with blood or other potentially infectious material. If hands are not visibly soiled, an alcoholbased hand rub may be used. Indications for hand hygiene include:
  - Visibly soiled hands,
  - Hands following barehanded touching of inanimate objects likely to be contaminated by blood, saliva, or respiratory secretions
  - Before and after treating each patient,
  - Before donning gloves and
  - Immediately after removing gloves
  - Store liquid hand-care products in either disposable closed containers or cleanable closed containers. Do not add soap or lotion to (i.e., top off) a partially empty dispenser.

## 7. Personal Protective Equipment

- A. The Taft College Dental Hygiene Program provides training in the use of appropriate PPE for specific tasks or procedures. PPE is located in the Dental Hygiene Clinic and obtainable through the clinic administrator.
- B. All teaching faculty, staff, and students at risk must routinely wear appropriate attire to prevent anticipated skin exposure and soiling of street clothes when contacted with blood or saliva.
- C. Clinical attire must not be worn outside the immediate clinic area. The clinic area includes all dental hygiene treatment spaces, clinic storage areas, central sterilization center, radiographic cubicles, prosthetic laboratory, and the associated service corridors. It does not include the reception area, waiting room, restrooms, offices, classrooms, or dining areas.
- D. PPE is considered appropriate only if it does *not* permit blood or OPIM to pass through to or reach the employee's work or street clothes, undergarments, skin, eyes, mouth, or other mucous membranes. PPE provided to faculty, staff, and students effectively perform this function under normal conditions of use, and for the duration of time used. Appropriate PPE includes (but is not limited to):

- a. **Surgical mask:** covers both mouth and nose and protects against microorganisms generated by the wearer and the dental health care worker (DHCW) from splatter and aerosol. The mask should be changed if wet or visibly soiled and between patients. The Taft College Dental Hygiene Clinic has no facility or NIOSH-certified masks for treating active tuberculosis patients. For suspected TB patient protocol see Appendix 5.
- b. **Protective eyewear with side-shields:** worn by DHCP for all clinical procedures. The patient must also wear protective eyewear to protect their eyes from debris. Eyewear must be cleaned and disinfected between patients.
- c. Long-sleeve disposable gowns: worn for all clinical procedures. Gowns should be changed as soon as possible if torn or visibly soiled and between patients. Gowns should be removed before leaving treatment areas and under no circumstances can be worn into waiting areas, lounges or between buildings.
- d. **Single use, powder free gloves:** worn for all clinical procedures. Hands should be washed before putting on and after removing gloves.
- e. Remove gowns, gloves, and masks before leaving treatment areas, simulation laboratories, and technique laboratories.
- f. Central Sterilization Room (CSR) personnel will use nitrile utility gloves when cleaning and disinfecting contaminated instruments. Personnel will also wear nitrile gloves when cleaning surfaces and items with disinfectant solutions as latex gloves do not adequately protect the user. Remove gowns, gloves, and masks before leaving CSR.
- g. Non-latex gloves (nitrile and vinyl) are available for providers or patients with latex allergy or sensitivity.
- h. During cardiopulmonary resuscitation (CPR), use mouth-pieces, pocket masks, and resuscitation bags or other ventilation devices.
- i. All personnel using PPE must observe the following precautions:
- j. Wash hands immediately, or as soon as feasible, after removing gloves or other PPE.
- k. Remove PPE after it becomes contaminated and before leaving the work area.
- 1. Dispose of used PPE in regular solid waste container or biohazard labeled laundry bin, both with closeable tight-fitting lids
- m. Wear appropriate gloves for protection against hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces.
   Replace gloves if torn, punctured, or contaminated, or if integrity is compromised.
- n. Decontaminate utility gloves for reuse but discard utility gloves if they show signs of cracking, peeling, tearing, puncturing, or deterioration.
- o. Do not wash or decontaminate disposable gloves for reuse.
- p. Wear appropriate face and eye protection when splashes, sprays, splatters, or droplets of blood or OPIM pose a hazard to the eye, nose, or mouth.
- q. Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface.

- r. Change PPE attire at least daily or when visibly soiled. Place soiled gowns in marked laundry bins in the clinic. Laundry personnel handling dirty linen bags must wear moisture resistant gloves and take appropriate precautions.
- s. Decontaminate reusable PPE, such as face shields or eye goggles, before reuse.

## 8. Housekeeping

#### A. Procedures

- a. Place regulated waste in containers, which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color-coded (see the following section "Labels"), and closed prior to removal to prevent spillage or protrusion of contents during handling.
- b. Clean and decontaminate bins and pails (e.g., wash or emesis basins) as soon as feasible after visible contamination.
- c. Pick up broken, possibly contaminated glassware using mechanical means, such as a brush and dustpan.
- d. Follow the subsequent procedures for handling sharps disposal:
  - Discard contaminated sharps immediately, or as soon as possible, in containers that are closable, puncture-resistant, leak-proof on sides and bottoms, and appropriately labeled or color-coded.
  - Use sharps disposal containers that are as close as feasible to the immediate area when using sharps.
- e. Follow the subsequent procedures for handling anesthetic carpule (CDA, 2012):
  - If empty, place in the regular trash bin.
  - If anesthetic still present, place in biohazard pharmaceutical waste bin.
  - If blood present, place in a sharps container.

## B. Laundry

- a. The following contaminated articles will be laundered at the school's laundry facility.
  - Laboratory coats, towels, and scrubs
- b. Trained staff and student workers will perform laundering duties and will adhere to the following requirements:
- c. Handle contaminated laundry as little as possible, with minimal agitation.
- d. Place wet contaminated laundry in leak-proof, labeled or color-coded containers before transport. Use (specify either red bags or bags marked with the biohazard symbol) for this purpose.

e. Wear disposable gowns and gloves when handling and sorting contaminated laundry.

# C. Housekeeping Surfaces

- a. Clean housekeeping surfaces (e.g., floors, walls, and sinks) with a detergent and water or an EPA-registered hospital disinfectant/detergent on a routine basis. Selection of the disinfectant will depend on the nature of the surface and type and degree of contamination, and as appropriate, based on location in the facility, and when visibly soiled.
- b. Clean mops and cloths after use and allow drying before reuse or use single-use, disposable mop heads or cloths.
- c. Prepare fresh cleaning or EPA-registered disinfecting solutions daily and as instructed by the manufacturer.
- d. Clean walls, blinds, and window curtains in patient-care areas when they are visibly dusty or soiled.

## 9. Dental Waterlines, biofilm, and Water Quality

- A. Use water that meets EPA regulatory standards for drinking water (i.e., ≤500 CFU/mL of heterotrophic water bacteria) for routine dental treatment output water.
- B. Consult with the dental unit manufacturer for appropriate methods and equipment to maintain the recommended quality of dental water.
- C. Follow recommendations for monitoring water quality provided by the manufacturer of the unit or waterline treatment product.
- D. Discharge water and air for a minimum of 20--30 seconds after each patient, from any device connected to the dental water system that enters the patient's mouth (e.g., handpieces, ultrasonic scalers, and air/water syringes).
- E. Consult with the dental unit manufacturer on the need for periodic maintenance of antiretraction mechanisms.
- F. Maintain a log of water line test results in the dental clinic.

## 10. Dental Handpieces and Other Devices Attached to Air and Waterlines

- A. Clean and heat-sterilize removable handpieces and other intraoral instruments between patients.
- B. Follow the manufacturer's instructions for cleaning, lubricating, and sterilizing removable handpieces and other intraoral instruments.
- C. Do not surface-disinfect, or use liquid chemical sterilants or ethylene oxide on removable handpieces and other intraoral.

D. Do not advise patients to close their lips tightly around the tip of the saliva ejector to evacuate oral fluids.

## 11. Hepatitis B Vaccinations for Potentially Exposed Personnel

- A. Hepatitis B is a serious transmissible health risk for dental personnel. The HBV vaccine is an effective preventative measure recommended by the CDC and required by CDB and Cal-OSHA regulations. All faculty, staff, and students, likely to be exposed to infectious fluids, are instructed about the hazards of contracting Hepatitis B and are advised to have the Hepatitis B vaccination. The vaccine is not required if the DHCW or student tests positive for HBV immunity, contraindicated by a medical condition, or if the personnel or student has already received it.
- B. A person's refusal to have the vaccine can be reversed at any time. Refusal of the vaccine and records of vaccine administration are kept in accordance with Cal/OSHA regulations. (See Appendix 4 of this manual.)
- C. Cal/OSHA regulations on the administration of the Hepatitis B vaccinations include the following:
  - a. Make the vaccine available at reasonable time and place.
  - b. Ensure a licensed health care professional administer the vaccine according to the current U. S. Public Health Service guidelines.
  - c. Use an accredited laboratory.
  - d. Provide the vaccine within ten working days of initial assignment.
  - e. Pre-screening for immunity cannot be a prerequisite for receiving HBV vaccination.
  - f. Provide post-vaccination screening after the completion of the vaccination series, and after the second vaccination series if necessary.
  - g. If necessary, make a second vaccination series available.
  - h. Provide a booster in the future, if recommended by U.S. Public Health Service.

#### 12. Prohibited Work Practices

- A. The Taft College Dental Hygiene Program prohibits the following actions and practices:
  - a. Storing food and drinks in refrigerators, freezers, cabinets, on shelves, countertops, or benchtops where blood or OPIM are present
  - b. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses in an area where there is a reasonable likelihood of occupational exposure
  - c. Shearing or breaking contaminated needles and other sharps

- d. Bending, recapping, or removing contaminated sharps from devices
- e. Storing or processing sharps contaminated with blood and OPIM in a way that requires employees' hands to reach into contaminated containers
- f. Reusing disposable sharps
- g. Picking up contaminated broken glassware by hand, and
- h. Opening, emptying or cleaning of sharps containers in a manner that would expose personnel to the risk of a sharps injury

## 13. Bloodborne Pathogen Post-Exposure Evaluation and Follow-Up

- A. Post-exposure Evaluation and Follow-Up
  - a. Follow CDC recommendations after percutaneous, mucous membrane, or non-intact skin exposure to blood or other potentially infectious material.
  - b. Should an exposure incident occur, contact supervising faculty who will evaluate and administer initial first aid (clean the wound, flush eyes or other mucous membrane, etc.).
  - c. Perform the following activities:
    - Document the routes of exposure and how the exposure occurred.
    - Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
    - Obtain consent and arrange to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity.
       Document source individual's test results and convey the results to the employee's health care provider.
  - d. The U.S. Public Health Service currently recommends post-exposure prophylaxis for HIV be started within 1 to 24 hours of an exposure incident and notes that use of chemoprophylaxis is a clinical decision dependent on the characteristics of the injury.
  - e. If the source individual is already known to be HIV, HCV and HBV positive, new testing need not be performed.
  - f. Provide the exposed employee with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality).
  - g. After obtaining consent, arrange to collect exposed employee's blood as soon as possible after the exposure incident and test blood for HBV and HIV serological status.
  - h. If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days. If the exposed employee elects to have a baseline sample tested, during the waiting period, perform testing as soon as feasible.

## B. Information Reviewed by the Healthcare Professional

- a. The infection control officer will ensure that health care professional responsible for an employee's hepatitis B vaccination and post-exposure evaluation and follow-up are given a copy of the OSHA's Bloodborne Pathogens standard and ensure that the healthcare professional evaluating an employee after an exposure incident also receives the following:
  - A description of the employee's job duties relevant to the exposure incident route(s) of exposure circumstances of exposure
  - If possible, results of the source individual's blood test relevant employee medical records, including vaccination status
  - The infection control officer will provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days after completion of the evaluation.

## C. Healthcare Professional Written Opinion

- a. The attending physician shall provide the college with the following information, in writing, within 15 days from completion of the evaluation:
  - a. An opinion whether or not a vaccination for Hepatitis B is indicated and the series has been initiated.
  - b. Confirmation that the employee has been informed of the results of the evaluation.
  - c. Confirmation that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.
  - d. All other diagnoses and medical information are confidential.

#### 14. Sharps Injury Log

- A. If a Sharp was involved in the incident, record the incident on a Sharps Injury Log within 14 days of the incident (see Appendix 3 for a blank log).
- B. A "sharp" is any dental instrument or object that may penetrate the skin or any other part of the body, including but not limited to needles, burs, instruments, blades, wires, and broken glass.
- C. Record information that is known or reasonably available. Information on the log must be recorded and maintained in a manner that protects the confidentiality of the injured employee. If applicable, include the log information recorded on the *Employee Accident/Body Fluid Exposure and Follow-up form* and from employee reports and interviews.

- D. The *Sharps Injury Log* is available upon request for viewing and copying to faculty and staff personnel and students, state Department of Health Services and Cal/OSHA.
- E. For each sharp involved in an exposure incident, this dental hygiene clinic periodically determines the frequency of that brand or type of sharps used.

## 15. Program Availability

A copy of this program will be made available, upon request, to personnel and their representatives.

#### 16. Dental Hazard Communication Standard Procedure

- A. The following Hazard Communication Program follows the requirements of the OSHA Hazard Communications Standard of 2012, 29 CFR 1910.1200.
- B. It is the policy of the Taft College Dental Hygiene Program to ensure all affected personnel receives information about the dangers of all hazardous chemicals used in the dental hygiene clinic.
- C. Under this program, affected personnel will be informed of the contents of the OSHA Hazard Communications Standard, the hazardous properties of chemicals in the work area, safe handling procedures, and actions for protective measures.
- D. The Taft College Safety Officer will oversee the program and have responsibility for reviewing and updating this plan as necessary.

## E. Container labeling

- a. The Taft College Safety Officer will verify that all containers received for use are clearly labeled as to the contents with the appropriate hazard warning (including pictograms, hazard statement, signal words, and precautionary statements.
- b. The Safety Officer will ensure that all secondary containers are labeled with an extra copy of the original manufacturer's label or with labels marked with the identity and the appropriate hazard warning.
- c. No original labels are to be removed from any container. Labels will be made for any chemicals that are used out of their original containers (examples: ultrasonic cleaner tanks, cold-sterile containers, fixer/developer that is not automatically replenished, etc.) These labels will be placed on the container whenever possible or will be placed near the container so that the information can be immediately accessed if necessary.
- F. The following labeling methods are used in this facility:
  - a. Contaminated laundry; Red bag; and Biohazard label.

## G. Safety Data Sheets (SDS)

- a. The Safety Officer will be responsible for establishing and monitoring the facility SDS records. The SO will ensure that procedures are developed to obtain the necessary SDSs and will review incoming SDSs for new or significant health and safety information. The SO will see that any new information is communicated to affected employees and for calling the supplier/manufacturer if an SDS is not received at the time of initial shipment:
- b. Copies of SDSs for all hazardous chemicals to which personnel are exposed or are potentially exposed will be kept in the following location: In the SDS binder located in the front office of the dental hygiene clinic. SDSs will be readily available to all personnel during each clinic session. If an SDS is not available, contact the Safety Officer.
- c. When revised SDSs are received, the old MSDS should be removed from the notebook and discarded, and new labels should be made (if the chemical is one of those out of its original container).

#### H. Hazardous Non-Routine Tasks

- a. Personnel may be required to perform non-routine tasks that could expose them to hazardous chemicals.
- b. Before starting work on such projects, each affected personnel will be given information about the hazardous chemicals he or she may encounter during such activity.
- c. This information will include specific chemical hazards, actions for protective and safety measures, and actions the dental hygiene program administration is taking to reduce the hazards, including ventilation, respirators, the presence of another employee (buddy systems), and emergency procedures.

#### I. Hazardous Non-Routine Tasks

- a. Periodically, employees are required to perform non-routine tasks that are hazardous. Examples of non-routine tasks are confined space entry, tank cleaning, and painting. Before starting work on such projects, each affected employee will be given information about the hazardous chemicals he or she may encounter during such activity.
- b. This information will include specific chemical hazards, actions for protective and safety measures, and steps the dental hygiene program administration is taking to reduce the hazards, including ventilation, respirators, the presence of another employee (buddy systems), and emergency procedures.
- c. Other employers and contractors will be provided with SDSs for hazardous chemicals generated by this clinic's operations in the following manner: (IF a contractor's duties potentially expose them to hazardous chemicals, the SO will inform them as to where SDS forms are kept and will show them the labeling system.)

- d. In addition to providing access to copies of an SDS to other employers, other employers will be informed of necessary precautionary measures to protect their employees exposed to operations performed by this clinic.
- e. Also, other employers will be informed of the hazard labels used by the clinic. If symbolic or numerical labeling systems are used, the other employers will be provided with information to understand the labels used for hazardous chemicals for which their employees may have exposure.

## 17. Personnel Training and Information

- A. All personnel who have occupational exposure to bloodborne pathogens receive initial annual training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. The training program covers, at a minimum, the following elements:
  - a. Copy and explanation of the OSHA bloodborne pathogen standard
  - b. An explanation of our ECP and how to obtain a copy
  - c. An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident
  - d. An explanation of the use and limitations of engineering controls, work practices, and PPE
  - e. An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE
  - f. An explanation of the basis for PPE selection
  - g. Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge
  - h. Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM
  - i. An explanation of 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
  - j. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
  - k. An explanation of the signs and labels and/or color coding required by the standard and used at this facility
  - 1. An opportunity for interactive questions and answers with the person conducting the training session.
- B. Training materials for this facility are available in the dental hygiene clinic's office. These documents will be kept for at least three years and include the following:
  - a. The dates of the training sessions
  - b. The contents or a summary of the training sessions

- c. The names and qualifications of persons conducting the training
- d. The names and job titles of all persons attending the training sessions
- e. Personnel training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to (name of the responsible person or department).

#### 18. Medical Records

- A. Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.1020, "Access to Employee Exposure and Medical Records."
- B. These confidential records are kept in a confidential file in the Dental Hygiene Clinic office for at least the duration of employment plus 30 years.
- C. Personnel medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be sent to the Chief Dental Director.
- 19. This exposure control plan is available to Cal/OSHA, the local or State Department of Health Services, and the California Dental Hygiene Committee inspectors upon request.

#### 20. References:

- A. California Dental Association (2012). Regulatory compliance: Dental office Waste Management Options. Available at cda.org
- B. Centers for Disease Control and Prevention (2003). Guidelines for Infection Control in Dental Health-Care Settings 2003. MMWR; 52 (No.RR-17)
- C. Centers for Disease Control and Prevention (October 2016). Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care. Atlanta, GA
- D. Occupational Safety and Health Administration (2003). Model plans and programs for the OSHA bloodborne pathogens and hazard communications standards 3186. Retrieved from https://www.osha.gov/Publications/osha3186.pdf
- E. State of California Department of Industrial Relations (2016). Exposure control plan for bloodborne pathogens. Retrieved from <a href="https://www.dir.ca.gov/dosh/dosh\_publications/expplan2.pdf">https://www.dir.ca.gov/dosh/dosh\_publications/expplan2.pdf</a>
- F. U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post Exposure Prophylaxis. MMWR June 29, 2001; Vol. 50 (No. RR-11).

# **Appendix 1: Individual Training Documentation**

Name o	of Trainer:
,	Training Subject: Exposure Control Plan
Trainin	g Materials Used:
Emplo	yee Training Checklist:
	Trained in proper use of latex, nitrile and vinyl gloves
	Trained in use of safety glasses and face mask or protective shield during procedures where splashing, aerosolization of blood, saliva, or gingival fluids is likely
	Trained in use of protective outer-wear necessary for appropriate dental procedures
	Instructed in the one-handed scoop technique, or use of a mechanical recapping device, for recapping needles
	Instructed on proper use of safety needles and other sharps with engineered sharps injury
	protection
	Instructed on work practice controls to prevent needlesticks and other sharps injuries
	Instructed on procedures to follow if needle stick or exposure to bloodborne pathogens occurs
	Instructed in cleaning and disinfecting environmental surfaces with an EPA-labeled hospital disinfectant
	Instructed in the use of general purpose utility gloves and other personal protective equipment for instrument processing and environmental surface disinfection
	Instructed in the proper use of sterilization equipment for sterilization of instruments
	Instructed in the proper use of ultrasonic machine and dishwasher for cleaning instruments

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	Instructed in the disinfection of impressions and appliances to a laboratory	and from the dental
	Instructed in the proper use of pocket masks, resuscitation bags where the need for resuscitation is likely	s, other ventilation devices
	Informed personnel that standard precautions for infection contall patients	trol are to be adhered to for
	Trained and educated in epidemiology, modes of transmission HCV and HIV	and prevention of HBV,
	All personnel potentially exposed to Hepatitis B virus have been vaccine free of charge and informed of benefits and health protection. Any personnel who refuses vaccination offer has signed a written he/she has been offered the vaccination free of charge and has a	ection of vaccination.
Date of	Hire/Assignment:	
I,	hereby certify that I received t	raining as described above.
I under	stand this training and agree to comply with the safety procedures for	my work area.
	Employee Signature	Date

Copy this blank page for each employee who will be trained. Make additional copies for future employees. Place a completed copy in employee personnel file or other appropriate employee file.

## **Appendix 2: Dental Board of California Infection Control Regulations**

## California Code of Regulations Title 16 Section 1005

California Code of Regulations Title 16 §1005. Minimum Standards for Infection Control

#### a. Definitions of terms used in this section:

- 1. "Standard precautions" are a group of infection prevention practices that apply to all patients, regardless of suspected or confirmed infection status, in any setting in which healthcare is delivered. These include hand hygiene, use of gloves, gown, mask, eye protection, or face shield, depending on the anticipated exposure, and safe handling of sharps. Standard precautions shall be used for care of all patients regardless of their diagnoses or personal infectious status.
- 2. "Critical items" confer a high risk for infection if they are contaminated with any microorganism. These include all instruments, devices, and other items used to penetrate soft tissue or bone.
- 3. "Semi-critical items" are instruments, devices and other items that are not used to penetrate soft tissue or bone, but contact oral mucous membranes, non-intact skin or other potentially infectious materials (OPIM).
- 4. "Non-critical items" are instruments, devices, equipment, and surfaces that come in contact with soil, debris, saliva, blood, OPIM and intact skin, but not oral mucous membranes.
- 5. "Low-level disinfection" is the least effective disinfection process. It kills some bacteria, some viruses and fungi, but does not kill bacterial spores or mycobacterium tuberculosis var bovis, a laboratory test organism used to classify the strength of disinfectant chemicals.
- 6. "Intermediate-level disinfection" kills mycobacterium tuberculosis var bovis indicating that many human pathogens are also killed. This process does not necessarily kill spores.
- 7. "High-level disinfection" kills some, but not necessarily all bacterial spores. This process kills mycobacterium tuberculosis var bovis, bacteria, fungi, and viruses.
- 8. "Germicide" is a chemical agent that can be used to disinfect items and surfaces based on the level of contamination.
- 9. "Sterilization" is a validated process used to render a product free of all forms of viable microorganisms.
- 10. "Cleaning" is the removal of visible soil (e.g., organic and inorganic material) debris and OPIM from objects and surfaces and shall be accomplished manually or mechanically using water with detergents or enzymatic products.
- 11. "Personal Protective Equipment" (PPE) is specialized clothing or equipment worn or used for protection against a hazard. PPE items may include, but are not limited to, gloves, masks, respiratory devices, protective eyewear and protective attire which are intended to prevent exposure to blood, body fluids, and OPIM, and chemicals used for infection control. General work attire such as uniforms, scrubs, pants and shirts, are not considered to be PPE.
- 12. "Other Potentially Infectious Materials" (OPIM) means any one of the following:

  A. Human body fluids such as saliva in dental procedures 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. B. Any unfixed tissue or organ (other than intact skin) from a human (living or dead).

- C. Any of the following, if known or reasonably likely to contain or be infected with HIV, HBV, or HCV:
  - 1. Cell, tissue, or organ cultures from humans or experimental animals; 2. Blood, organs, or other tissues from experimental animals; or 3. Culture medium or other solutions.
  - 13. "Dental Healthcare Personnel" (DHCP) are all paid and non-paid personnel in the dental health-care setting who might be occupationally exposed to infectious materials, including body substances and contaminated supplies, equipment, environmental surfaces, water, or air. DHCP includes dentists, dental hygienists, dental assistants, dental laboratory technicians (inoffice and commercial), students and trainees, contractual personnel, and other persons not directly involved in patient care but potentially exposed to infectious agents (e.g., administrative, clerical, housekeeping, maintenance or volunteer personnel).
- b. All DHCP shall comply with infection control precautions and enforce the following minimum precautions to minimize the transmission of pathogens in health care settings mandated by the California Division of Occupational Safety and Health (Cal/OSHA).
  - 1. Standard precautions shall be practiced in the care of all patients.
  - 2. A written protocol shall be developed, maintained, and periodically updated for proper instrument processing, operatory cleanliness, and management of injuries. The protocol shall be made available to all DHCP at the dental office.
  - 3. A copy of this regulation shall be conspicuously posted in each dental office.

#### Personal Protective Equipment:

- 4. All DHCP shall wear surgical facemasks in combination with either chin length plastic face shields or protective eyewear whenever there is potential for aerosol spray, splashing or spattering of the following: droplet nuclei, blood, chemical or germicidal agents or OPIM. Chemical-resistant utility gloves and appropriate, task specific PPE shall be worn when handling hazardous chemicals. After each patient treatment, masks shall be changed and disposed. After each patient treatment, face shields and protective eyewear shall be cleaned, disinfected, or disposed.
- 5. Protective attire shall be worn for disinfection, sterilization, and housekeeping procedures involving the use of germicides or handling contaminated items. All DHCP shall wear reusable or disposable protective attire whenever there is a potential for aerosol spray, splashing or spattering of blood, OPIM, or chemicals and germicidal agents. Protective attire must be changed daily or between patients if they should become moist or visibly soiled. All PPE used during patient care shall be removed when leaving laboratories or areas of patient care activities. Reusable gowns shall be laundered in accordance with Cal/OSHA Bloodborne Pathogens Standards (Title 8, Cal. Code Regs., section 5193).

## Hand Hygiene:

6. All DHCP shall thoroughly wash their hands with soap and water at the start and end of each workday. DHCP shall wash contaminated or visibly soiled hands with soap and water and put on new gloves before treating each patient. If hands are not visibly soiled or contaminated an alcohol based hand rub may be used as an alternative to soap and water. Hands shall be thoroughly dried before donning gloves in order to prevent promotion of bacterial growth and washed again immediately after glove removal. A DHCP shall refrain from providing direct patient care if hand

- conditions are present that may render DHCP or patients more susceptible to opportunistic infection or exposure.
- 7. All DHCP who have exudative lesions or weeping dermatitis of the hand shall refrain from all direct patient care and from handling patient care equipment until the condition resolves.

#### Gloves:

8. Medical exam gloves shall be worn whenever there is contact with mucous membranes, blood, OPIM, and during all pre-clinical, clinical, post-clinical, and laboratory procedures. When processing contaminated sharp instruments, needles and devices, DHCP shall wear heavy-duty utility gloves to prevent puncture wounds. Gloves must be discarded when torn or punctured, upon completion of treatment, and before leaving laboratories or areas of patient care activities. All DHCP shall perform hand hygiene procedures before donning gloves and after removing and discarding gloves. Gloves shall not be washed before or after use.

## Needle and Sharps Safety:

9. Needles shall be recapped only by using the scoop technique or a protective device. Needles shall not be bent or broken for the purpose of disposal. Disposable needles, syringes, scalpel blades, or other sharp items and instruments shall be placed into sharps containers for disposal as close as possible to the point of use according to all applicable local, state, and federal regulations.

## Sterilization and Disinfection:

- 10. All germicides must be used in accordance with intended use and label instructions.
- 11. Cleaning must precede any disinfection or sterilization process. Products used to clean items or surfaces prior to disinfection procedures shall be used according to all label instructions.
- 12. Critical instruments, items and devices shall be discarded or pre-cleaned, packaged or wrapped and sterilized after each use. Methods of sterilization shall include steam under pressure (autoclaving), chemical vapor, and dry heat. If a critical item is heat-sensitive, it shall, at a minimum, be processed with high-level disinfection and packaged or wrapped upon completion of the disinfection process. These instruments, items, and devices, shall remain sealed and stored in a manner so as to prevent contamination, and shall be labeled with the date of sterilization and the specific sterilizer used if more than one sterilizer is utilized in the facility.
- 13. Semi-critical instruments, items, and devices shall be pre-cleaned, packaged or wrapped and sterilized after each use. Methods of sterilization include steam under pressure (autoclaving), chemical vapor and dry heat. If a semi-critical item is heat sensitive, it shall, at minimum, be processed with high level disinfection and packaged or wrapped upon completion of the disinfection process. These packages or containers shall remain sealed and shall be stored in a manner so as to prevent contamination, and shall be labeled with the date of sterilization and the specific sterilizer used if more than one sterilizer is utilized in the facility.
- 14. Non-critical surfaces and patient care items shall be cleaned and disinfected with a California Environmental
  - Protection Agency (Cal/EPA)-registered hospital disinfectant (low-level disinfectant) labeled effective against HBV and HIV. When the item is visibly contaminated with blood or OPIM, a Cal/EPA-registered hospital intermediate-level disinfectant with a tuberculocidal claim shall be used.

- 15. All high-speed dental hand pieces, low-speed hand pieces, rotary components, and dental unit attachments such as reusable air/water syringe tips and ultrasonic scaler tips, shall be packaged, labeled and heat-sterilized in a manner consistent with the same sterilization practices as a semi-critical item.
- 16. Single use disposable items such as prophylaxis angles, prophylaxis cups and brushes, tips for high-speed evacuators, saliva ejectors, air/water syringe tips, and gloves shall be used for one patient only and discarded.
- 17. Proper functioning of the sterilization cycle of all sterilization devices shall be verified at least weekly through the use of a biological indicator (such as a spore test). Test results shall be documented and maintained for 12 months.

#### Irrigation:

18. Sterile coolants/irrigants shall be used for surgical procedures involving soft tissue or bone. Sterile coolants/irrigants must be delivered using a sterile delivery system.

#### Facilities:

- 19. If non-critical items or surfaces likely to be contaminated are manufactured in a manner preventing cleaning and disinfection, they shall be protected with disposable impervious barriers. Disposable barriers shall be changed when visibly soiled or damaged and between patients.
- 20. Clean and disinfect all clinical contact surfaces that are not protected by impervious barriers using a California Environmental Protection Agency (Cal-EPA) registered, hospital grade low- to intermediate-level germicide after each patient. The low-level disinfectants used shall be labeled effective against HBV and HIV. Use disinfectants in accordance with the manufacturer's instructions. Clean all housekeeping surfaces (e.g. floors, walls, sinks) with a detergent and water or a Cal-EPA registered, hospital grade disinfectant. Products used to clean items or surfaces prior to disinfection procedures shall be clearly labeled and DHCP shall follow all material safety data sheet (MSDS) handling and storage instructions.
- 21. Dental unit water lines shall be anti-retractive. At the beginning of each workday, dental unit lines and devices shall be purged with air or flushed with water for at least two (2) minutes prior to attaching handpieces, scalers, air water syringe tips, or other devices. The dental unit lines and devices shall be flushed between each patient for a minimum of twenty (20) seconds.
- 22. Contaminated solid waste shall be disposed of according to applicable local, state, and federal environmental standards.

#### Lab Areas:

- 23. Splash shields and equipment guards shall be used on dental laboratory lathes. Fresh pumice and a sterilized or new rag-wheel shall be used for each patient. Devices used to polish, trim, or adjust contaminated intraoral devices shall be disinfected or sterilized, properly packaged or wrapped and labeled with the date and the specific sterilizer used if more than one sterilizer is utilized in the facility. If packaging is compromised, the instruments shall be recleaned, packaged in a new wrap, and sterilized again. Sterilized items will be stored in a manner so as to prevent contamination.
- 24. All intraoral items such as impressions, bite registrations, prosthetic and orthodontic appliances shall be cleaned and disinfected with an intermediate-level disinfectant before manipulation in the

laboratory and before placement in the patient's mouth. Such items shall be thoroughly rinsed prior to placement in the patient's mouth.

c. The Dental Board of California and the Dental Hygiene Committee of California shall review this regulation annually and establish a consensus.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Section 1680, Business and Professions Code.

# Appendix 3:

# 21. Sharps Injury Log

Injury: Time of Injury:	Instructions: Complete this form within 14 days of an exposure incident that involves a sharp. An exposure incident is when an employee's eyes, mouth, non-intact skin or mucous membrane is exposed to another individual's blood or saliva. This log must be kept for five (5) years following the date of the exposure incident. Record the following information if known. Identity of the employee must be kept confidential.		
Type of sharp:	□ bur □ syringe needle □ ortho wire □ endo files □ unknown		
Brand of sharp:	□ blades □ explorer □ broken carpule □ broken glass □ scaler tips □ knife □ suture needle □ other/specify: □ unknown		
Description of exposure incident	□ intra orally □ extra orally		
Job classification of injured employee	☐ dentist ☐ hygienist ☐ lab tech ☐ a	ssistant   other	
Department/work area where the incident took place	□ operatory □ unknown □ other	□ laboratory □ instrument processing room	
Procedure performed at time of injury	<ul> <li>□ cleaning sharp</li> <li>□ handling sharp during tray setup</li> <li>□ giving injection</li> <li>□ placing sharp in sharps container</li> </ul>	<ul> <li>□ handling sharp during patient treatment</li> <li>□ assembling/disassembling handpiece</li> <li>□ unknown</li> <li>□ other</li> </ul>	
How did injury occur?	☐ failure of protective device ☐ sharp was not visible ☐ inexperience w/device ☐ inexperience w/procedure ☐ inflicted by a co-worker ☐ other	□ lost control of sharp or mechanism □ inattention/distraction □ in a rush □ position of sharp on tray or cart □ location of tray or cart	
Body part exposed:	☐ finger/thumb ☐ hand ☐ arm ☐ face	□ other	

Did the sharp have a protective device or mechanism?	□ No	□ Yes	☐ Unknown
If yes, was the protective device or mechanism activated?	□ No	□ Yes	□ Unknown
Did injury occur before, during or after protective device or mechanism was activated?	□ Before	□ During	□ After □ Unknown
Injured employee's opinion: If there is no protective device or mechanism, would such a mechanism or device prevent injury?	□ No □ Ye	es □ Don't kr	now
If yes, how would such a device or mechanism have prevented the injury?			
Injured employee's opinion: What could have prevented injury?			

Taft College Dental Hygiene Program Exposure Control Plan,	2017 – 2	018
Appendix 4:		

Informed 1	Refusal for	Hepatitis B	Vaccination -	Confidential
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I,	am employed or a stud	ent as a
hepatitis B vaccine. I under potentially infectious mate	, has provided tr rstand that due to my occupational expos rials, I may be at risk of acquiring hepati tunity to be vaccinated with hepatitis B v	sure to blood or other tis B virus (HBV) infection. I
However, I decline hepatitivaccine	is B vaccination at this time. I understand	d that by declining this
have occupational exposure	acquiring hepatitis B, a serious disease. If we to blood or other potentially infectious B vaccine, I can receive the vaccination as	materials and I want to be
Signature		Date
Name		
Address		
Witness		Date

Maintain this record for duration of employment plus 30 years.

#### Appendix 5:

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## A. Background:

M. tuberculosis is the bacterium that causes tuberculosis. It is an airborne infection. The bacteria are carried by droplet nuclei generated when an infected person coughs, sneezes or talks. These droplet nuclei can stay suspended in the air for hours. Infection occurs when a susceptible person inhales the droplets. 90% of people infected with M. tuberculosis will not develop active disease, 5% will develop active TB in 1-2 years and 5% will develop active TB later in life.

#### B. **Symptoms**:

Symptoms of active TB include productive cough, night sweats, fatigue, malaise, fever and unexplained weight loss. Latent TB is asymptomatic and is diagnosed by tuberculin skin test.

#### C. PPE

Surgical masks do not provide protection for the Dental Health Care Worker against m. tuberculosis.

#### D. CDC recommendation

The CDC recommends patients suspected of active TB be treated in facilities that can provide airborne infection isolation. Taft College Dental Hygiene Program's clinic **does not** have this capability.

#### 2. PROTOCOL FOR TRIAGE AND TREATMENT

- A. A thorough health history and review of symptoms must be performed for every patient. For a patient with medical history or symptoms suggesting possible active TB:
- B. The patient should not remain in the clinic longer than necessary to assess their dental hygiene condition and refer for medical evaluation.
- C. The patient should wear a surgical mask when not being examined and should be instructed to cover their mouth and nose when coughing or sneezing.
- D. If emergency care is needed the patient must be seen in a facility that provides airborne infection isolation.
- E. Elective treatment will not be provided until active TB has been ruled out by medical examination.

# 3. Any DHCP with symptoms suggesting active TB will not be allowed in clinic until infection has been ruled out.