

Bloodborne Pathogens and Exposure Control Plan

In accordance with OSHA Bloodborne Pathogens standard, 29 CFR 1910.1030, the following exposure control plan has been developed for this clinic. See Appendix J for all forms related to this topic.

Exposure Determination

OSHA requires employers to perform an exposure determination concerning which students & employees may incur occupational exposure to blood or other potentially infectious materials. The exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment. This exposure determination is required to list all job classifications in which employees may be expected to incur such occupational exposure, regardless of frequency. OSHA categorizes exposure evaluation as it relates to specific job descriptions. The categories are as follows:

- Category 1: Tasks that involve exposure to blood, body fluids or tissues.
- Category 2: Tasks that do not involve exposure during normal work routine but may perform unplanned Category 1 such as clean-up, instrument processing or helping with dental procedures.
- Category 3: Tasks that involve no exposure to blood, body fluids or tissues.

In addition, OSHA requires a listing of job classifications in which some employees may have occupational exposure. Since not all employees in these categories would be expected to incur exposure to blood or other potentially infectious materials, tasks or procedures that would cause these employees to have occupational exposure are also required to be listed in order to clearly understand which employees in these categories are considered to have occupational exposure. The job classifications and associated tasks for these categories are as follows:

Dental program Faculty, Clinic Staff, Students and Maintenance Staff are considered Category 1. Administrative Staff are considered Category 2. Student workers are considered Category 3. Occupational duties which require the following tasks are considered Category 1 and involve some risk of exposure. Category 1 and 2 personnel are required to follow universal precautions, receive infection control training prior to assuming duties, and receive HBV vaccine.

Examples of Category 1 tasks are:

- Assisting in or performing Dental procedures
- Cleaning and/or sterilizing contaminated equipment
- Disinfecting impressions

Handling potentially contaminated laundry
Exposing and processing radiographs
Emptying trash receptacles for disposal of contaminated materials
Flushing water lines in the dental unit
Scrubbing contaminated counter tops and other environmental surfaces
Performing clinical or laboratory Dental procedures
Performing service, maintenance, or repair of potentially contaminated Dental equipment

Implementation Schedule and Methodology

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

Compliance Method

Standard precautions will be observed in this clinic in order to prevent contact with blood or other potentially infectious materials. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual.

Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees at this facility. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be utilized. At this office, the following engineering controls will be utilized:

- All operatory work surfaces shall be disinfected after each patient.
- Barriers shall be used to isolate work surfaces that cannot be practically disinfected.
- Instruments shall be heat sterilized in an autoclave after each use.
- Instruments which cannot be heat sterilized shall be cold sterilized after each use.
- Single use items (e.g. needles, prophylaxis angles, mixing tips etc) shall be disposed of after use.
- Lab wheels and pumice shall be disinfected after each use and laboratory pumice shall be mixed using disinfectant solution. All potentially infected items (including impressions) from the clinic shall be disinfected prior to transporting them to the lab.
- Used sharps shall be disposed of in the sharps containers.
- After removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water and/or alcohol based hand-rub. Hands shall be washed after seeing each patient with soap and water and/or alcohol based hand-rub.
- The following protective equipment shall be worn during patient treatment, operatory disinfection and sterilization procedures. (Note: additional protective equipment necessary will be used when handling hazardous materials as outlined by the Hazardous Material Communications plan).
 - Eye protection
 - Masks
 - Faceshields shall **not** be considered an adequate alternative for masks.

- Gloves
- Coat
- Puncture proof gloves shall be worn when handling sharp instruments during sterilization procedures.
- Housekeeping plans shall be used as per Appendix C to ensure that proper work practices are being followed.

The above controls will be examined and maintained on a regular schedule as follows:

- Yearly staff training.
- Weekly review of various work practice controls.
- Daily review during clinic operations through use of student daily grade sheets

Employees who incur blood or other potentially infectious materials exposure to their skin or mucous membranes shall wash or flush any exposed areas with water as soon as feasible following exposure. Soap and water are available at the following locations.

- Each operator
- Laboratory
- Sterilizing area
- Lavatories

Needles

Contaminated needles and other contaminated sharps will not be bent, sheared or purposely broken. OSHA allows the exception of recapping and removing contaminated needles since no alternative is feasible and the action is required by the medical procedure. Recapping of needles shall be done by the one hand technique. Removal of needles shall be done only with the protective cap in place and directly over the sharps container.

Sharps Containers

Contaminated sharps are to be placed immediately, or as soon as possible, after use into appropriate sharps containers. Sharps containers are puncture resistant, labeled with the biohazard label, and are leak proof. Sharps containers are located in each operator, the sterilization room and the laboratory for sharps disposal. Sharps shall not be removed from sharps containers.

Work Area Restrictions

In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on the counter tops or bench tops where blood or other potentially infectious materials are present.

Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

All procedures will be conducted in a manner which will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials. Methods which will be employed at this office to accomplish this goal are:

- Preprocedural rinses
- Rubber dam
- High volume evacuation
- Covers on ultrasonics when in use
- Careful operating technique

Specimens

Specimens are not kept at SJC clinic; however, all infectious material is handled with universal precautions.

Contaminated Equipment

Equipment which has become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible.

Personal Protective Equipment

Personal protective equipment will be chosen based on the anticipated exposure to blood or other potentially infectious materials. The protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach the providers' clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

Protective clothing will be provided in the following manner:

- Gloves worn for all patient treatment procedures.
- Lab coat to be used in procedures that will involve splash.
- Mask worn for all patient treatment procedures.
- Clinic Jacket worn for all patient treatment procedures.
- Protective eyewear worn for all patient treatment procedures sterilization procedures and all lab procedures.
- Utility gloves worn when handling instruments during cleaning and sterilization procedures.

All personal protective equipment will be cleaned, laundered, and disposed of by the clinic.

All garments which are penetrated by blood or other potentially infectious liquid shall be removed immediately or as soon as feasible. All personal protective equipment will be removed prior to leaving the work area. The following protocol has been developed to facilitate leaving the equipment at the work area:

- Disposable items such as face masks and gloves shall be disposed of in an appropriate waste receptacle. These receptacles are located in each operatory, the laboratory and the sterilizing room. Clinic jackets will be placed in laundry hamper labeled for

biohazard. Protective eyewear and face shields shall be maintained in the appropriate operatory or laboratory where they are being used.

Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, non-intact skin, and/or mucous membranes. Gloves are available in each operatory and laboratory. Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become torn, punctured, or when their ability to function as a barrier is compromised. Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will be discarded if they are cracked, peeling, torn, punctured, or exhibits other signs of deterioration 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 side shields, or a chin length face shield are required to be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can reasonably be anticipated. Situations at this office which would require such protection are as follows:

- All patient treatment procedures
- Lab procedures such as grinding and polishing
- Sterilizing

Clinic Jackets are to be worn during all patient treatment procedures. Laboratory jackets shall be worn as an overcoat whenever laboratory procedures are performed that would produce spray, splatter or dust.

Facility cleaning and decontamination will be done according to the following schedule:

- Operatories are cleaned and decontaminated by hygiene students following each patient.
- Laboratories are cleaned daily by janitorial staff.

Decontamination will be accomplished utilizing the following materials:

- Pro Spray Disinfectant / Wipes
 - Phenylphenal .28%
 - Benzyl-P-Chlorophenol .03 %

All contaminated work surfaces will be decontaminated after completion of procedures and immediately or as soon as feasible after any spill of blood or other potentially infectious materials, as well as at the end of the work day if the surface may have become contaminated since the last cleaning.

All trash receptacles receiving potentially infectious material shall have plastic liners used.

Any broken glassware which may be contaminated will not be picked up directly with the hands. The following procedures will be utilized:

- Utilizing tools and materials in the spill kit located across from the clinic computer, contaminated glass will be picked up and discarded in a puncture resistant container labeled as biohazard.

Regulated Waste Disposal

Regulated waste shall be disposed of in accordance with all appropriate local, state and federal regulations.

All contaminated sharps shall be discarded as soon as feasible in sharps containers. Sharps containers shall be rendered inaccessible by placement of nonremovable snap on cover prior to discarding.

Regulated waste other than sharps shall be placed in appropriate labeled containers. Such containers are located in each operatory and the sterilizing area.

- Absorbent materials (e.g. 2X2's, sponges and cotton rolls) which have been contaminated with blood or other potentially infectious material (e.g. teeth and soft tissues) shall be disposed of in biohazard receptacle. Biohazard receptacle shall be lined with plastic bags. Sealed plastic biohazardous waste bags shall be collected and disposed of by SJC.

Laundry Procedures

Laundry contaminated with blood or other potentially infectious materials will be handled as little as possible. Such laundry will be placed in appropriately marked hamper. Such laundry will not be sorted or rinsed in the area of use.

All employees who handle contaminated laundry will utilize personal protective equipment to prevent contact with blood or other potentially infectious material.

Laundry at this clinic will be cleaned using the washer and dryer in the laundry room. The hygiene students are responsible for completing the laundry.

Housekeeping Procedures

Operatories

Between each Patient:

- Place all items to be autoclaved in appropriate package
 - Items containing blood or used for Oral surgery procedures should be soaked in Birex or Cavicide cold sterilizing solution prior to autoclaving.
 - Items which may corrode or discolor should be stored in a dry container before autoclaving.
- Dispose of all used disposable items in properly marked biohazard refuse container
- Contaminated surfaces may be disinfected using
 - Pro-Spray C-60
- Disinfect all potentially contaminated work surfaces such as
 - Counter tops

- Patient chair and arms
- Handpiece connectors
- Unit handles and touchpad's
- Light handles
- Suction handles and air/water tips
- Drawer handles
- Curing light
- Triturator
- Cavitron
- Radiograph unit, handles and operating button
- Disinfect all potentially contaminated nondisposable items which will not be autoclaved that were used during the procedure
 - Restorative material containers
 - Equipment containers
 - Pens and pencils
- Wash patient safety glasses in warm soap and water
- Change headrest covers
- Wash hands

End of Day

- Complete all items as per between each patient above
- Disinfect operators chairs
- Place ICX tablets in unit water bottles upon filling
- Place unit in full up position to promote drainage of water and suction lines.

Hepatitis B Vaccine

All faculty and students who have been identified as having exposure to blood or other potentially infectious materials are encouraged to obtain the Hepatitis B vaccine unless they have previously had the vaccine or wish to submit to antibody testing which shows them to have sufficient immunity.

Faculty and staff who decline the Hepatitis B vaccine will sign a waiver Appendix D which uses the wording in Appendix B of the OSHA standard.

Individuals who initially decline the vaccine but who later wish to have it may then obtain the vaccine.

Hepatitis B vaccines shall be administered by the employees' physician.

Post-Exposure Evaluation & Follow-up

When a faculty or student incurs an exposure incident, it should be reported to:
Program Director and Clinic Supervisor.

All faculty and students who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. Although students are not

covered by health insurance through San Juan College, they are STRONGLY encouraged to receive a 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. The blood of the source individual will be tested if consent is obtained for HIV/HBV infectivity.
- Results of testing of the source individual will be made available to the exposed individual with the exposed individual informed about the applicable laws and regulations concerning disclosure of the identity and infectivity of the source individual.
- The exposed individual will be offered the option of having their blood collected for testing of their HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the exposed individual to decide if the blood should be tested for HIV/HBV serological status. However, if the exposed individual 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 exposed individual will be offered post exposure prophylaxis in accordance with the current recommendations of the U.S. Public Health Service. These recommendations may be found in Appendix J.
- The exposed individual will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The exposed individual will also be given information on what potential illnesses to be alert for and to report any related experiences to appropriate personnel.
- All Exposures shall be logged in the Exposure Incident Log. See Appendix J for a copy of the log.
- A Postexposure Packet is provided in Appendix J.

Interaction with Health Care Professionals

A written opinion shall be obtained from the health care professional who evaluates exposed individuals of this clinic. Written opinions will be obtained in the following instances:

- When the faculty or student is sent to obtain the Hepatitis B vaccine
- Whenever a faculty or student is sent to a health care professional following an exposure incident.
- Health care professionals shall be instructed to limit their opinions to:
 - Whether the Hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following an incident.
 - That the employee has been informed of the results of the evaluation
 - That the employee has been told about potentially infectious materials. The written opinion to the employer is not to reference any personal medical information.

Labels and Signs

The OSHA coordinator shall ensure that biohazard labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material, and other containers used to store, transport or ship blood or other potentially infectious materials. The label shall include the universal biohazard symbol and the legend "biohazard. Regulated waste red bags or containers must be labeled. Secondary containers must be labeled with the name of the product and the manufacturer.

Training

Training for all faculty and students will be conducted prior to initial assignment to tasks where occupational exposure may occur. Refresher training for all staff members will occur yearly. Training will be conducted in the following manner, and will include an explanation of:

- The OSHA standard for Bloodborne Pathogens
- Epidemiology and symptomatology of bloodborne diseases
- Modes of transmission of bloodborne pathogens
- This exposure control plan
- Procedures which might cause exposure to blood or other potentially infectious materials at his facility
- Control methods which will be used at the facility to control exposure to blood or other potentially infectious materials their use and limitations.
- Personal protective equipment available at this facility. To include their use, limitations, location, removal and handling, decontamination and/or disposal and the basis for selection.
- Info. on HBV vaccine, including efficacy, safety, method of administration & risk/benefit
- Who should be contacted concerning
 - Post Exposure evaluation and follow-up
 - Signs and labels used at this office
 - Hepatitis B Vaccine program at the office
- Explanation of the procedures to follow if an exposure incident occurs, including the method of reporting and medical follow-up
- Information on the evaluation and follow-up required after an exposure incident
- An explanation of signs, labels, and color coding systems for hazardous materials.

A copy of the signature page acknowledging that an individual has received training on Infection Control procedure and blood borne pathogen exposure will be found in Appendix A. Training records shall be maintained for 3 years.

Record Keeping

All records required by the OSHA standard will be maintained by:

The OSHA Coordinator: Clinic Supervisor, Dr. Julius Manz

These records will be kept in a locked file cabinet in the Director's office. Medical records shall be kept confidential, and not disclosed without written consent.

Each employee whose job involves occupational exposure to blood or other potentially infectious materials will have a medical record which will include:

1. The name and social security number of the student/employee.
2. A copy of the student/employee's HBV vaccination status, including the dates of vaccination and ability to receive vaccination.
3. A copy of all results of examination, medical testing, and follow-up procedures.
4. A copy of the information provided to the healthcare professional, including a description of the student/employee's duties as they relate to the exposure incident, and documentation of the routes of exposure and circumstances of the exposure. This shall be in the form of an Incident Report.
5. A confidential copy of the healthcare professional opinion.
6. OSHA and Infection Control Compliance Records
 - a. All records concerning OSHA compliance must be kept.
 - b. All records monitoring biological indicators for autoclaves, cold sterile records and all applicable records must be kept current.

These records are to be kept for 30 years and are maintained confidential.

Bloodborne Pathogen Exposure Control Plan Forms

The following forms which support the SJC Dental Hygiene Programs Bloodborne Pathogen Exposure Control Plan can be found in Appendix 17 of this Policy and Procedures manual;

- Exposure Incident Log
- Postexposure Packet Contents
 - Bloodborne Pathogen Exposure Checklist
 - Exposure Incident Form
 - Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis (CDC MMWR September 30, 2005/ Vol 54/ No RR-9)
 - Consent for collection of blood sample
 - Understanding of Confidentiality
 - Postexposure Counseling Sheet (2-pages)
 - SJC Notice of Specific Biohazard Exposure Incident
 - Post-Exposure Evaluation and Follow-up