HAWAII HEALTH SYSTEMS C O R P O R A T I O N *"Touching Lives Everyday"* **Policies and Procedures**	**Department:** Legal Department	**Policy No.:** **PAT 0009**
		Revision No.: 1
	Issued by: Quality Council	**Effective Date:** October 4, 2002
Subject: ***Percutaneous Exposure Control Plan***	**Approved by:** Thomas M. Driskill, Jr. President & CEO	**Supersedes Policy:** July 2, 2001
		Page: 1 of 10

I. PURPOSE:

- To provide guidance to the Hawaii Health Systems Corporation (HHSC) healthcare facilities in complying with occupational health standards for exposure to bloodborne pathogens (29 C.F.R. 1910.1030) promulgated by the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor.

- To eliminate or minimize employee percutaneous exposure to bloodborne pathogens by identifying those employees at risk to exposure, methods of identifying sharps devices and/or work practices implicated in percutaneous injuries, and methods of selecting, implementing, and evaluating effective safe sharps devices and/or work practices designed to reduce the risk of percutaneous exposure to bloodborne pathogens.

- To eliminate or minimize employee exposure due to splashes to mucous membranes, eye or non-intact skin in addition to those exposures from sharps

- To serve as a supplement to existing policies on exposure control to obtain maximum protection for our employees.

II. DEFINITIONS:

A. Infectious materials, which is defined in the OSHA Standard (Standard), includes the following body fluids: blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, 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. Needleless Systems means a device that does not use needles for: (1) the collection of bodily fluids or withdrawal of bodily fluids after initial venous or arterial access is established; (2) the administration of medication or fluids; or (3) any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps. "Needleless Systems provide an alternative to needles for the specified procedures thereby reducing the risk of percutaneous injury involving contaminated needles limited to, intravenous medication

delivery systems that administer medication or fluids through a catheter port or connector site using a blunt cannular or other non-needle connection, and jet injection systems that deliver subcutaneous or intramuscular injections of liquids medication through the skin without a needle.

C. Sharps refers not only to needles, but also to all sharp objects and devices that have the potential to cause injury and/or exposure to blood and body fluids. These devices include but are not limited to: disposable syringes with needles, medication cartridge syringes, needles for injection, vascular access devices, suture needles, intravascular catheters, lancets, scalpels, razors, bone cutters, towel clips, trochars, surgical wires and pins, surgical instruments, surgical drill bits, glass vacuum blood tubes, glass capillary tubes and pipettes, glass medication vials and ampules, glass slides, and glass IV bottles.

D. Sharps with engineered sharps injury protections (SEPSIPS) are defined as "a nonneedle sharp or a needle safety device used for withdrawing bodily fluids, accessing a vein or artery, or administering medications or other fluids, with a built in safety feature or mechanism that effectively reduces the risk of an exposure incident." This term encompasses a broad array of devices that make injury involving a contaminated sharp less likely. They include, but are not limited to: syringes with guards or sliding sheathes that shield the attached needle after use; needles that retract into a syringe after use; shielded or retracting catheters used to access the bloodstream for intravenous administration of medication or fluids; intravenous medication delivery systems that administer medication or fluids through a catheter port or connector site using a needle that is housed in a protective covering, blunt suture needles; and plastic (instead of glass) capillary tubes.

III. POLICY:

A. Each Facility Will Be Required To:

1. Identify a responsible party/department who will be responsible for the implementation of the Exposure Control Plan (ECP). This responsible person/department will maintain, review, and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures.

2. Identify those employees at risk of occupational exposure to blood or other potentially infectious materials to assure compliance with these procedures and work practices outlined in the ECP (see Appendix A).

3. Maintain and provide all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as required by the Standard.

4. Maintain adequate supplies of the aforementioned equipment in the appropriate sizes.

5. Ensure that all medical actions required are performed and that appropriate employee health and OSHA records are maintained.

6. Ensure that training, documentation of training, and making sure the written ECP is available to all employees, OSHA, and HIOSH representatives. The training is done on an annual basis.

B. Employee Exposure Determination:

1. Each facility shall prepare:

   a. A list of all job classifications in which all employees have occupational exposure.

   b. A list of job classifications in which some employees have occupational exposure, and a list of tasks and procedures, or groups of closely related tasks and procedures, in which occupational exposure may occur for these employees (see Appendix A).

2. All employees (part time, temporary, contract, and per diem) are covered and shall, therefore, be included in the above list. Each facility shall describe in the ECP how the provisions of the Standard will be met for these employees.

C. Implementation and Control:

1. All employees will utilize "standard precautions" as defined by CDC.

2. All employees are required to attend appropriate training/explanation of the ECP during their initial orientation to the facility and annually.

3. Copies of the ECP shall be available to all employees so that a review of the material can occur during the employee's work shifts. If requested, the facility will provide an employee with a copy of the ECP free of charge within 7 days of the request.

D. Engineering Controls and Work Practices:

1. Each facility will develop a list of engineering controls and work practice controls, which will be used to prevent or minimize exposure to bloodborne pathogens. The engineering controls should include, but are not limited to:

   a. Puncture resistant sharps containers
   b. Containers for contaminated instruments
   c. Autoclaves/sterilizers
   d. Covered containers for medical and regular infectious waste
   e. Needleless IV tubing
   f. Safety syringes/IV catheters
   g. Handwashing facilities

2. Sharps containers should be inspected and maintained on a defined schedule to prevent overfilling.

3. The facilities will identify the need for changes in engineering control and work practices through the recommendations of an established multidisciplinary team focused on the reduction and minimization of exposure to blood and body fluids. This team should include (when available) representatives from:

- Infection Control
- Risk Management
- Quality Management
- Nursing Department
- Housekeeping
- Medical Staff
- Laboratory
- Employee/Occupational Health
- Safety Committee
- Materials Management
- Frontline workers/departments utilizing equipment

This may be the Infection Control and/or Environment of Care Committee at each facility. These committees will identify the need for new products, evaluate the efficacy of the product/procedure, and oversee the implementation of their recommendations. These committees will also evaluate the efficacy of the blood borne pathogen exposure plan on an annual basis per OSHA.

Decisions concerning the selection of safer medical devices should be based on:

- Data to support safer design and performance;
- Considerations of safety design features geared toward a passive design (design that incorporates a safety mechanism that does not rely on the worker to activate and is in effect throughout the use of the device);
- Cost/benefit consideration;
- Considerations related to balancing safety and clinical needs;
- Product availability;
- Related percutaneous injury data to support claims to reduce rate of injury;
- Feedback from primary users after a trial period; and
- Re-evaluation after implementation.
- Must have frontline worker input

E. Personal Protective Devices (PPE):

1. Education will be provided to all employees free of charge.

2. The education topics should include but are not limited to the following PPE:

    - Mask
    - Face shields
    - Gowns and aprons
    - Pocket mask
    - Resuscitator bags
    - Gloves
    - Surgical hats / hoods where appropriate
    - Shoe covers or boots
    - Reusable utility gloves
    - Goggles

3. All employees using PPE must observe the following precautions:

    - Wash hands immediately or as soon as feasible after removal of gloves or other PPE.
    - Remove PPE after it becomes contaminated, and before leaving the work area.
    - Used PPE may be disposed of only in approved containers.
    - Wear appropriate gloves when it can be reasonably anticipated that there may be hand contact with blood or other potentially infectious material (OPIM), and when handling or touching contaminated items or surfaces, replace gloves if torn, punctured, contaminated, or if their ability to function as a barrier is compromised.
    - Utility gloves may be decontaminated for reuse if their integrity is not compromised. Discard utility gloves if they show signs of cracking, peeling, tearing, puncturing, or deterioration.
    - Never wash or decontaminate disposable gloves for reuse.
    - Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or OPIM pose a hazard to the eye, nose, or mouth.
    - Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid with the outer surface.

4. Use your facility's policy and procedure for handling used PPE.

F. Housekeeping:

1. Regulated waste is placed in containers which are closable, constructed to contain all contents and prevent leakage. The containers must be leak proof and puncture resistant, appropriately labeled or color-coded red, and closed prior to removal to prevent spillage or protrusion of contents during handling.

2. Contaminated sharps, which include any contaminated object which can penetrate the skin such as needles, scalpels, and lancets, will be disposed of immediately or as soon as feasible in containers that are closable, puncture-resistant, leakproof on sides and bottoms, and labeled or color-coded appropriately.

3. Contaminated sharps will be disposed of in containers made specifically for that purpose.

4. Containers should be conveniently accessible to workers who use, maintain, or dispose of sharps. The container is placed within horizontal reach of the worker, allowing the worker to see the opening and access the container.

5. Specimens of blood, tissue, or other potentially infectious materials collected at hospitals will be placed in containers that prevent leakage during collection, handling, processing, storage, transport, or shipping.

6. Bins and pails (e.g., wash or emesis basins) are cleaned and decontaminated as soon as feasible after visible contamination.

7. Facilities must ensure that equipment which has become contaminated with blood or other possible infectious materials (OPIM) shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible. If decontamination is not feasible, a readily observable biohazard label shall be attached to the equipment stating so. This information shall be conveyed to all affected employees, the servicing representative, and the manufacturer, as appropriate.

8. Broken glassware which may be contaminated is picked up using mechanical means, such as a brush and dustpan.

9. Each facility shall establish specific policies and procedures which address the labeling, use, disposal, location, maintenance, etc. of such containers and its sharps and biohazardous contents.

G. Laundry:

1. Handle contaminated laundry as little as possible, with minimal agitation.

2. Place wet contaminated laundry in leak-proof, labeled, or color-coded containers before transport. Use red bags for this purpose or bags marked with the biohazard symbol. (Red bags can be eliminated for laundry if your facility uses Standard precautions for all laundry.)

3. Wear appropriate PPE when handling and/or sorting contaminated laundry.

H. Labels:

1. Red/orange biohazard labels will be used at all facilities to denote contamination and biohazard risk.

2. Ensure warning labels are affixed or red bags are used if regulated waste or contaminated equipment is brought into the facility. Employees are to notify the Safety Committee/Risk Manager if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc. without proper labels.

I. Hepatitis B. Vaccination:

1. Each facility will provide training to employees on hepatitis B vaccinations, addressing the safety, benefits, efficacy, methods of administration, and availability.

2. The hepatitis B vaccination series is available at no cost after training and within 10 days of initial assignment to employees identified in the exposure determination section of this plan.

3. Vaccination is encouraged unless: 1) documentation exists that the employee has previously received the series, 2) antibody testing reveals that the employee is immune, 3) medical evaluation shows the vaccination is contraindicated.

4. If an employee declines the vaccination, the employee must sign a declination form. Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the vaccination should be kept in the employee health file/Human Resource Department.

5. Documentation will be limited to whether the employee requires the hepatitis vaccine, and whether the vaccine was administered.

J. Post Exposure Follow-Up:

1. Each facility will assure that an assigned person or department will be responsible to act immediately if such an exposure incident occurs.

2. An immediate, available confidential medical evaluation and follow-up will be conducted and include:

   - Documentation of the routes of exposure and how the exposure occurred.

   - Identification and documentation of the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).

   - Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider. HIV testing may be ordered by the treating physician of the source patient without the source patient's informed consent if all of the following requirements are satisfied: 1) the treating physician of the source patient determines that the source patient is incapable of giving consent; 2) the source patient is suspected of possible HIV infection; 3) there is reason to believe that the safety of a health care worker may be affected by exposure to the blood or bodily fluids of the source patient; 4) availability and quality of healthcare for the source patient are not compromised based on the findings and testing performed; 5) the cost of the testing the source patient is borne by the facility; 6) the source patient is informed in a timely manner that a test for the presence of HIV has been performed pursuant to the state statutory provision; 7) the source patient is provided the opportunity to obtain the test results and appropriate counseling; and 8) the confidentiality of all records is protected as required by law.

   - If the source individual is already known to be HIV, HCV, and/or HBV positive, new testing need not be performed.

   - Assure that the exposed employee is provided with the source individual's test results and information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality).

   - After obtaining the appropriate consent(s), collect the exposed employee's blood as soon as feasible after the exposure incident, and test blood for HBV and HIV serological status.

- If the employee does not give consent for HIV serological testing during the collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days and if the exposed employee elects to have the baseline tested during this waiting period, perform testing as soon as feasible.

K. Administration of Post-Exposure Evaluation and Follow-up:

1. Each facility will assure that a responsible person or department will have the appropriate education, competency, and knowledge of OSHA's bloodborne pathogens standard.

2. Each facility will ensure that the healthcare professional evaluating an employee after an exposure incident 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.

3. Each facility will provide the employee with a copy of the evaluating health care professional's written opinion within 15 days after completion of the evaluation.

4. Each facility shall establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log shall be recorded and maintained in such a manner as to protect the confidentiality of the injured employee. The sharps injury log shall contain, at a minimum:

   - The type and brand of the device involved in the incident.
   - The department or work area where the exposure incident occurred, and
   - An explanation of how the incident occurred.

L. Procedures For Evaluating The Circumstances Surrounding an Exposure Incident:

1. The responsible person or department will review the circumstances of all exposure incidents to determine:

   - Engineering controls used at the time
   - Work practices followed
   - A description of the device used
   - Protective equipment or clothing that was used at the time of the exposure incident
   - Location of the incident
   - Procedure being performed when the incident occurred
   - Employee training

2. After an appropriate review, the facility will ensure that appropriate changes are made in the ECP.

M. Employee Training: All employees on initial hire and annually will receive training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. In addition, the training program covers, at a minimum, the following elements:

- A copy and explanation of the standard.
- An explanation of the ECP and how to obtain a copy.
- An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident.
- An explanation of the use and limitations of engineering controls, work practices, and PPE.
- An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE.
- An explanation of the basis for PPE selection.
- Information on 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.
- Information on the appropriate actions to take and persons to contact in an emergency involving blood and OPIM.
- 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.
- Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employees following an exposure incident.
- An explanation of the signs and labels and/or color-coding required by the standard and what is used at the facility.
- An opportunity for interactive questions and answers with the person conducting the training session.
- Information on the location of training materials for reference.

N. Recordkeeping:

1. Training records are completed for each employee upon the completion of training.
2. These documents will be kept for at least three years at each facility at a designated location.
3. The training records should include:

- The date(s) of the training session.
- The contents or a summary of the training session.
- The names and qualifications of persons conducting the training.
- The names and job titles of all persons attending the training sessions.

4. Employee training records are provided upon request to the employee or the employee's authorized representative within 15 days. Such request should be addressed to the Human Resource Department at each facility.

O. Medical Records:

1. Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.20, "Access to Employee Exposure and Medical Records."

2. The Human Resource Department is responsible for the maintenance of the required employees medical records.

3. These confidential records are kept at each facility for at least the duration of employment plus 30 years.

4. Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 days. Such request should be sent to the Human Resource department at the respective facility.

P. OSHA Recordkeeping: An exposure incident is evaluated to determine if the case meets OSHA's recordkeeping requirements (29 CFR 1904). The incident must be documented on the new OSHA 200 log.

IV. REFERENCES:

A. American Hospital Association*, Sharps Injury Prevention Program: A Step-By-Step Guide*, American Hospital Association, Chicago, 1999.

B. Occupational Safety and Health Administration, 29 CFR part 1910.1030*, Occupational Exposure to Bloodborne Pathogens,* Federal Register, January 18,2001, 66: 5317-5325.

C. Occupational Safety and Health Administration, CPL 2-2.44D, Federal Register 1999.

D. APIC, *Infection Control and Applied Epidemology – Principles and Practice*, 2000 edition.

E. NISOH, *Preventing Needlesticks in Health Care Settings*; Nov. 1999.

ATTACHMENT: A. Job Classification Exposure Listing (Sample)

Hawaii Health Systems Corporation

The following is a list of all job classifications in which ***all*** employees have occupational exposure.

Job Title	Department/Location
e.g. Phlebotomists	*Clinical Laboratory*

The following is a list of all job classifications in which ***some*** employees have occupational exposure.

Job Title	Department/Location	Task/Procedure
e.g. Housekeeper	*Environmental Services*	*Handling Regulated Waste*