

**BARNES-JEWISH HOSPITAL
ORGANIZATIONAL POLICIES/PROCEDURES**

TITLE: Bloodborne Pathogens (BBP) Exposure Control Plan Policy
BJC Healthcare, Barnes-Jewish Hospital, Washington University School of Medicine

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LAST REVIEWED/REVISION DATE: April 2014

PURPOSE: This Core Policy sets forth the minimum standards that must be met at each BJC and WUSM entity with respect to occupational exposures to bloodborne pathogens. In cases where these hazards exist, it is the responsibility of each entity to minimize or eliminate the potential for worker exposures. This Bloodborne Pathogen Exposure Prevention Plan is intended to meet the requirements of the Occupational Safety and Health Administration's (OSHA) *Occupational Exposure to Bloodborne Pathogens*; Final Rule 29 CFR 1910.1030. The minimum requirements are set forth below.

INFORMATION: This plan applies to all BJC HealthCare and Washington University School of Medicine (WUSM) permanent, temporary, PRN, medical staff, and volunteer workers who may anticipate risk of occupational exposure to blood or other potentially infectious materials. Additionally, all contract workers and students working in BJC HealthCare and WUSM facilities will be covered by this plan. This plan addresses the methods of compliance with the Occupational Safety and Health Administration's (OSHA) *Occupational Exposure to Bloodborne Pathogens; Final Rule 29 CFR 1910.1030 (Appendix 9)* through the use of institutional policies and standards of practice. These specific policies and procedures are intended to strengthen Standard Precautions and are consistent with existing policies, as well as with the intention of OSHA in publishing the final rule and subsequent directives. The focus of this plan is on reducing the risks of occupational bloodborne pathogen exposures throughout BJC HealthCare and WUSM.

Facility-Specific: Each BJC HealthCare and WUSM entity shall supplement this plan, as needed, through the adoption of an entity-specific written policy. The adopted policy may contain provisions beyond these minimum requirements, so long as the additional provisions in no way conflict with or abrogate the terms of this Core Policy.

Department-Specific: Each department *will* address compliance with the OSHA Standard. This Core Policy provides a framework through which each department *will* comply. As a minimum, each department with employees at risk will complete the applicable attached Appendices 1-4, and retain them as the key component of a department Exposure Prevention Plan. Retain records for current year, plus one. Other forms may be substituted provided they include the same minimum content.

Review and Update: This Core Policy *will* be reviewed annually by the recommending committees listed in Section XV, and when necessary it shall be changed to reflect new or modified requirements or circumstances. Facility-specific additions and department-specific supplements *will* also be reviewed annually by appropriate managers. Any changes in procedures, which alter occupational exposures, should be addressed in all affected documents immediately upon implementation.

A. STATEMENT OF POLICY

1. Introduction

BJC HealthCare, WUSM and Barnes-Jewish Hospital (BJH) have implemented an Exposure Prevention Plan in order to minimize occupational exposure to diseases transmitted by the bloodborne route. This is accomplished by providing a safe working environment through the practices of:

- a. Exposure Determination
- b. Standard Precautions
- c. Engineering Controls
- d. Hepatitis B Vaccination Program
- e. Post-Exposure Follow-up
- f. Housekeeping Practices
- g. Employee Education
- h. Use of Safer Sharp Devices
- i. Recordkeeping

2. Program Review

The Infection Prevention and Healthcare Epidemiology Consortium for BJC HealthCare and WUSM is the department primarily responsible for the core plan and for its maintenance, update, and annual review. However, each entity and department is responsible for maintenance, update and annual review of their entity specific Bloodborne Pathogens Exposure Prevention Plan, program, training, and supplements to this plan.

A copy of this Exposure Control Plan will be accessible to all employees, click [Policy and Procedure link](#) during working hours.

B. EXPOSURE DETERMINATION:

Directors and Managers are responsible for classifying tasks performed in their areas of responsibility according to the following classifications, and for developing and maintaining practices that eliminate or reduce task-associated risks. Supervisory staff must ensure that all employees have been assessed and classified according to risk.

1. **Classification I** - Jobs in which required tasks routinely involve potential for occupational exposure to blood or body fluids. (Complete Form - **Appendix 1**)
2. **Classification II** - Jobs in which required tasks normally do not involve the potential for occupational exposure to blood and body fluids, but may require performing unplanned Classification I tasks. (Complete Form - **Appendix 2**)
3. **Personnel Not Covered by the Standard** - Jobs in which required tasks involve no greater risk of exposure than would be encountered by a visitor and the worker can decline to perform tasks which involve a perceived risk without threat of retribution. (Complete Form - **Appendix 3**)

4. **Tasks and Procedures** – Tasks and procedures, or groups of closely related task and procedures, that involve the potential for occupational exposures to blood and body fluids that are performed by employees in job classifications I and II (Complete Form – Appendix 4)

C. METHODS OF COMPLIANCE:

1. Standard Precautions (SP):

All employees will utilize standard precautions. Standard precautions are designed to reduce the risk of transmission of pathogens by workers assuming that **all** human blood and body fluids are infectious for Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and other pathogens, and must be handled accordingly. Protection can be achieved through adherence to work practices designed to minimize or eliminate exposure and through use of PPE (i.e., gloves, masks, and protective clothing), which provide a barrier between the worker and the exposure source.

2. Engineering and Work Practice Controls

These preventions will be documented on the forms included as Appendices 1 through 3 as a part of the exposure determination process, or in department-specific written procedures. The documentation should simply state physical preventions utilized by the department (i.e. splash guards, etc.), specimen handling preventions, locations where food and drink are or are not permitted, and any other specific work practices or engineering preventions utilized by the department to minimize the likelihood of exposures.

- a. **Hand Hygiene** – Hand washing facilities must be readily accessible. If they are not, appropriate waterless hand cleaner will be provided. Hands shall be washed under the following conditions:

1. Immediately, or as soon as feasible, after contact with a patient or the patient's environment.
2. Immediately, or as soon as feasible after the removal of PPE.
3. Following contact with blood or other potentially infectious materials. Any other skin or mucous membranes that have contact with these materials shall be washed as soon as feasible.

- b. **Spill Clean-up** - Precautions should be taken when cleaning potentially infectious spills:

1. Obtain necessary supplies (rags, paper towels, PPE, appropriate disinfectant, and wet floor sign if necessary).
2. Never pick up contaminated glass or sharp objects with the hands. Use a dustpan and brush, clamps, or other device for this purpose. Dispose of sharp materials in sharps container (i.e., broken vacutainer tube).
3. Absorb liquid material with rags or paper towels and dispose of in the appropriate receptacle (linens - soiled linen bag; soiled paper towels - biohazard bag). Apply appropriate disinfectant to spill area. Let set for 10 minutes. Place wet floor sign in front of wet area if appropriate.
4. Wipe over areas with cleaning solution or water to complete cleaning process.
5. Dispose of PPE in appropriate receptacle.
6. Perform proper hand hygiene.

c. Sharps Injury Prevention Policy

1. Review of Safe Devices: BJC HealthCare and WUSM have processes in place to regularly review appropriate, commercially available safety devices and implement those that prove to be effective at eliminating or minimizing worker exposures and injuries.
2. The BJC IV Products Best Practice Team
 - a. Includes representation from all acute care hospitals and home care services.
 - b. Reviews organization-wide exposure data to identify trends in injuries and explore safer sharps device options.
 - c. Evaluates and implements new safer sharp devices and technology, as part of its mission.
 - d. Program components include a risk assessment, safety device identification and selection, device evaluation and system-wide implementation.
 - e. Maintains initial evaluation criteria to include reliability, staff trial and acceptance, and success of associated training/education.
 - f. If device evaluation is successful, it is introduced system-wide.
 - g. Conducts a general review and assessment of safety devices introduced on an annual basis, based on the feedback received by facility locations.
 - h. Documentations the consideration and evaluation of safer sharp devices as part of this team's minutes.
 - i. Each team member keeps a copy of team minutes at their respective locations.
3. Individual hospital or service organization
 - a. Is responsible to conduct and document a site-specific annual evaluation of the safer sharp devices being used at the facility.
 - b. Body Substance Exposure Task Force meets on a ~~bi-monthly~~ quarterly basis with 12 members in attendance.

Membership departments include Occupational Health, Infectious Disease, Worker's Compensation, BJC Infection Control, Emergency Department, Database Analyst, Education, Operating Room, E.H.& S and direct patient care providers from nursing divisions. Needlestick injury data are evaluated by the Task force. Based upon the review of the data, decisions are made to seek new safety products for review. Operational plans are reviewed to generate reductions to all exposures.

Year-to-Date exposure data is reviewed at each meeting:

- *Sharp Status – contaminated, no sharp, unknown
- *Injury Type – body substance exposure , bite, laceration, puncture
- *Location – OR, nursing divisions, ED, other areas
- *Job Title – nursing, doctor, and technician
- *Equipment – needle, safety needle, instruments, scalpel
- *Activity – suturing, injections, procedures, handling
- *Counts – ortho, surgery, OB, neuro, nsg. float

OSHA Sharps Log and utilization of all available safety products and devices are also evaluated per exposure. Bloodborne Pathogens Exposure Conduct Plan, Appendix 4 – Tasks/Procedures with Risk of BBP, is also reviewed annually along with Appendix 10 – Body Substance Exposure Evaluation and Treatment Procedures.

4. Any evaluation of safer sharp devices will include input from non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps, and in the selection, identification and evaluation process of safety devices.

5. To date, the following safety devices have been implemented:
 - a. Storage containers
 - b. IV Accessory Standardization includes leur locks, stopcocks, ports, etc.
 - c. IV Safety Catheters
 - d. Needleless IV tubing and accessories
 - e. Butterfly safety needles
 - f. Phlebotomy safety needles
 - g. IM/SQ safety products
 - h. Latex-free components on all IV devices
 - i. Needleless emergency medications
 - j. AV Fistula Needles
 - k. Sutureless securement devices

6. Sharps Handling - Contaminated sharps **shall not be**:
 - a. Bent
 - b. Sheared
 - c. Recapped (see comment below)
 - d. Removed

When recapping or needle removal is required, it shall be performed using a mechanical device (e.g., forceps, recapping device, or the one-handed "scoop" technique). Recapping or removing contaminated needles should only be performed when it can be demonstrated that no alternative is feasible or when it is required by a specific medical or dental procedure. Instances of recapping or manipulation of needles may include blood gas analysis, injections performed by nuclear medicine, some aspects of anesthesia, or combative or uncooperative patients.

7. Sharps Disposal - Contaminated sharps shall be discarded immediately, or as soon as possible, in a **container** that is:
 - a. Labeled with a Bio-Hazard Label
 - b. Color Coded
 - c. Puncture Resistant
 - d. Leak-proof
 - e. Placed as close as feasible to the area of use.

These containers must never be overfilled. They must be kept upright, stable and closed immediately prior to removal or replacement to prevent spillage. The ideal installation height for a fixed sharps container for a standing workstation is 52-56 inches above the standing surface of the user. The ideal container height for a seated workstation is 38-42 inches.

8. Reusable sharps handling – employees shall not place their hands into containers where the contents include reusable sharps contaminated with blood or other potentially infectious materials. The use of strainer type baskets to hold the instruments and/or forceps to remove items is preferred.
- d. **Work Area Restrictions** - Eating, drinking, smoking, applying cosmetics or lip balm, and the handling of contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure. This includes laboratory work areas, patient and treatment rooms, nursing units, and other patient care areas. Personnel are to eat, drink, and smoke only in areas designated for these purposes (clean areas such as cafeteria, lounges, and break rooms). Departments may identify an OSHA “Clean Zone” in their unit/department. An OSHA Clean Zone will NOT be designated where blood or other potentially infectious materials are kept. This space must be identified with an “OSHA Clean Zone” sign and ONLY covered lid drinks may be kept in this space. In addition, food and drink shall not be kept in refrigerators, freezers, shelves, or bench tops where blood or other potentially infectious materials are kept.
- e. **Procedures** - All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances (e.g., cleaning contaminated instruments, irrigations). Specific measures taken should be identified in department-specific written procedures. Mouth pipetting or suctioning of blood or potentially infectious material is prohibited. Blood or other potentially infectious materials collected during a procedure that will not be sent for laboratory testing should be appropriately disposed of immediately following a procedure by the person performing the procedure or by a designated person.
- f. **Specimen Handling** - All containers used to contain specimens of blood or other potentially infectious materials shall prevent leakage during collection, handling, storage, transport, or shipping. Since Standard Precautions are utilized in this facility, there is no need to label each specimen with a biohazard symbol; however, the containers must be recognizable as specimen containers. Biohazard labels must be attached to carriers designed to transport multiple specimens. If the outsides of the specimen containers are soiled with blood or other potentially infectious materials, the primary containers must be placed in a secondary container that prevents leakage during all phases of handling. The secondary container shall also be puncture resistant. If the transport container becomes contaminated, the person identifying the leakage shall promptly clean up the spill according to protocol.

- g. **Contaminated Medical Equipment** - All equipment which may become contaminated during use shall be examined prior to servicing or shipping and shall be decontaminated as necessary and when possible. Prior to sending equipment that may be decontaminated to Engineering or after initiating service call, it shall be decontaminated with hospital-approved disinfectant. When it is not possible or feasible to decontaminate the equipment, the parts that are contaminated must be labeled with a biohazard symbol stating which portions may be contaminated. This equipment shall be listed on the form, Appendix 5, *Potentially Contaminated Equipment* or in a department-specific procedure/form. Those who perform maintenance on potentially contaminated equipment must observe Standard Precautions and wear appropriate PPE when handling contaminated equipment. If it is necessary to ship equipment that has not been decontaminated to a manufacturer, the company representative or the manufacturer must be notified of the biohazard prior to shipping and appropriate labels must be affixed to the equipment.
- h. **Personal Protective Equipment** –
1. **Provision.** When there is a risk of occupational exposures, personal protective equipment (PPE) such as, but not limited to gloves, gowns, lab coats, face shields, masks, or respirators, will be provided at no cost to employees. PPE 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 prevents blood or other infectious material from passing through or reaching worker's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time that the protective equipment will be used. It is the responsibility of the employee to inform the manager/supervisor of difficulty or inability to obtain/use specific PPE so that an alternative solution may be determined.
 2. **Use.** All personnel who may have occupational exposure are required to use personal protective equipment when they have reasonable anticipation of exposure. The only exception is in rare circumstances when, in the employee's professional judgment, a specific instance would have prevented the delivery of care or would have posed an increased hazard to the safety of the worker or co-worker.
 3. **Accessibility.** Appropriate PPE in proper sizes shall be readily accessible at the worksite or issued to employees. Persons with allergies or other conditions limiting the ability to use certain PPE shall be evaluated by Occupational Health to determine the appropriate solution.
 4. **Cleaning, Laundering, and Disposal.** PPE shall be provided, replaced, cleaned, repaired, laundered, and/or disposed of at no cost to employees. Any time PPE is penetrated by blood or other potentially infectious materials, the garments shall be removed immediately, or as soon as feasible, in a manner that prevents contact with non-intact skin and mucous membranes and placed in the soiled linen hamper. (This does not include personal clothing items.) Soiled linen hampers are lined with blue bags marked "SOILED LINEN." All used laundry is to be placed in the bags and be treated the same. Standard Precautions will be used when handling all laundry. All PPE must be removed prior to leaving the work area. If personal protective equipment fails to protect against the soiling of employee personal clothing, the PPE is not appropriate for the tasks being performed. The employee should not take contaminated personal clothing home for laundering. Laundering of personal

clothing items may be addressed on a case-by-case basis at each facility. The same care shall be exercised in the handling of contaminated personal clothing as the PPE handling described above.

5. **Gloves.** Gloves shall be worn when contact with blood, mucous membranes, non-intact skin or other potentially infectious material is likely. *Disposable gloves* must be removed and replaced as soon as feasible when contaminated or if they are torn, punctured, or when the barrier properties are compromised. With the exception of reusable utility gloves, gloves should never be washed or decontaminated for reuse. ***Utility (heavy-duty reusable) gloves*** are to be decontaminated with approved solution following the last use of the shift. However, they must be discarded if they are cracked, torn, punctured, or exhibit other signs of deterioration. Disposable gloves are for single use only. After removal of gloves, remember to clean hands. A variety of gloves, including powder less and hypoallergenic gloves are available. Persons with known allergies to glove materials must notify Occupational Health of their condition to determine the appropriate solution.
6. **Masks, Eye Protection, Face Shields.** Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, shall be worn whenever splashes, sprays, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated. ***Eyeglasses without sidepieces are not considered personal protective equipment.*** Reusable goggles are to be cleaned with hospital provided decontamination solution by the user of the goggles. They shall be thoroughly cleaned and rinsed with water before reuse.
7. **Gowns, Aprons, Other Protective Body Covering.** Appropriate protective clothing shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated. In all circumstances the garment chosen will not allow blood or other potentially infectious materials to pass through to the skin or mucous membranes of the person. All used coverings shall be disposed of in appropriate receptacles after use.
8. **Surgical Caps or Hoods, Shoe Covers, or Boots.** Additional protective clothing shall be worn when gross contamination of the head or feet is reasonably anticipated (e.g., decontamination, obstetrical delivery, urologic procedures, or certain neurosurgical procedures).
9. **Resuscitation Devices.** Barrier devices shall be used in place of mouth-to-mouth resuscitation. Following use, such items, if reusable, will be decontaminated. Those devices that are disposable will be discarded in the appropriate receptacle.
 - i. **Laboratory Policies** Additional details of laboratory compliance are addressed in Laboratory Manuals of each facility.
 - j. **Housekeeping** - All BJC HealthCare and WUSM facilities are maintained in a clean and sanitary condition. Written cleaning and decontamination schedules for hospital areas have been determined and are maintained in the Environmental Services/Housekeeping Departments or in department-specific written guidance. General housekeeping practices include cleaning and decontaminating equipment and work surfaces after completing procedures, when surfaces are overtly contaminated, immediately after any spill of blood

or other potentially infectious materials, and at the end of the work shift. The department-specific cleaning schedule may be maintained on the form, Appendix 6, ***Department Cleaning and Sharps Container Changing Schedule***. All bins, pails, cans, and similar receptacles intended for re-use that have a potential for becoming contaminated with blood and other potentially infectious materials are inspected and decontaminated as soon as possible upon visible contamination. Biohazard waste receptacles in patient rooms will be disinfected with hospital approved solution upon patient discharge. Receptacles in all other areas of the hospital will be disinfected as above on a scheduled monthly basis and documented per Environmental Services/ Housekeeping personnel.

Broken glassware that may be contaminated shall not be picked up directly with the hands. It is handled by using mechanical means, such as a brush and dustpan, tongs, or forceps and deposited into a sharps container for disposal.

A hospital approved disinfectant or 1:10 bleach to water solution is used to clean spills of blood or other potentially infectious materials. Bleach solutions must be prepared fresh every 24 hours.

Sharps containers shall be maintained in an upright stable position and replaced routinely. They should be changed or replaced when two-thirds (2/3) or three quarters (3/4) full. The Appendix 6, ***Department Cleaning and Sharps Container Changing Schedule*** or department-specific written guidelines shall be used to document each department's routine changing schedule. When removing containers of sharps for disposal, they shall be closed tightly with no protruding of the contents. They shall also be placed in a leak-proof secondary container labeled with a biohazard label. Similar caution shall be taken when handling non-sharp, biohazard trash. This trash shall be in a sealed bag to prevent spillage or leakage and placed in an appropriate container labeled as a "Biohazard." Contaminated laundry will be handled as little as possible. It shall be bagged at the location where it was used and will not be sorted or rinsed at the location of use. If the laundry is being sent off site, the service accepting it is to be notified of the biohazard. Refer to local laundry contract procedures for your facility.

D. HEPATITIS B VACCINATION:

The purpose of the Hepatitis B Vaccination Program is to provide the Hepatitis B vaccine series free of charge to all employees who have occupational exposures or risk of exposures to blood and other potentially infectious materials while performing their work duties. This vaccine is offered through Occupational Health within 10 working days of their initial employment/ assignment. Post vaccination screening for antibodies to Hepatitis B shall be conducted on personnel within 30 – 60 days after completion of the vaccine series. If an employee chooses to decline the vaccination, they must sign the OSHA-required Declination Statement available through Occupational Health. (Reference Appendices 13 and 14 for Hepatitis B vaccination guidelines)

E. POST-EXPOSURE EVALUATION AND FOLLOW-UP:

Occupational exposure is defined in Appendix 8. The purpose of post-exposure evaluation and follow-up is to immediately follow-up all occupational exposures to blood and body fluids, confidentially evaluate the source and circumstances of exposure, and offer prophylactic treatment when necessary.

The post-exposure follow-up procedures, documentation, and evaluation are outlined in the BJC and WUSM Core Policy: *Body Substance Exposure Evaluation and Treatment Procedure*. (Appendix 10)

F. COMMUNICATION OF HAZARDS TO EMPLOYEES:

1. Labels and Signs:

Labeling with the biohazard symbol or the use of red bags or containers is used to warn employees of potential hazards. The universal biohazard symbol must always be used in conjunction with the word "biohazard." The warning labels must be fluorescent orange or red in color.

a. The following items **must be labeled** appropriately as biohazard:

- 1) Contaminated equipment
- 2) Containers of regulated waste
- 3) Refrigerators and freezers to store blood or other potentially infectious materials
- 4) Sharps disposal containers
- 5) Containers used to store, transport, or ship blood or other potentially infectious materials (e.g., blood drawing trays)
- 6) Containers used to transport items contaminated with blood or other potentially infectious materials (e.g., OR case carts, basins, specimen caddy)

b. Labeling is **not required** for:

- 1) Containers of blood, blood components, and blood products labeled as to their contents and released for transfusion or other clinical use because they have been screened for HBV and HIV prior to their release.
- 2) Individual containers of blood or other potentially infectious materials that are placed in secondary labeled containers during storage, transportation, shipment, or disposal.
- 3) Specimen containers: Standard Precautions are utilized when handling all specimens.
- 4) Laundry bags: Standard Precautions are used when handling all laundry.

2. Information and Training:

Training regarding occupational hazards and required personal protective measures will be provided to all new employees at general orientation for employees with risk of occupational exposures. As part of department specific orientation, employees with risk of occupational exposure will receive job specific training prior to beginning activities that may place them at risk of occupational exposure. Retraining must occur on an annual basis within one year of the original training date. Department managers must ensure that each employee with risk of exposure receives and documents annual training. An individual knowledgeable on the subject matter must conduct the training. There must be an opportunity for interactive questions and answers.

Training content must include:

- a. An accessible copy of the regulatory text of OSHA standard 29 CFR Part 1910.1030, *Bloodborne Pathogens Standard* (Appendix 9 of this policy).

- b. A general explanation of the epidemiology and symptoms of bloodborne pathogens.
- c. An explanation of the modes of transmission of bloodborne pathogens.
- d. An explanation of the exposure control plan and the means by which the employee can obtain a copy of the written plan.
- e. An explanation of how tasks and other activities that may involve exposure to blood or other potentially infectious materials can be recognized.
- f. An explanation of methods and their use to prevent or reduce occupational exposure, including appropriate engineering preventions, work practices, and PPE, and the limitations of each.
- g. Information on the types, proper use, location, removal, handling, decontamination, and disposal of PPE.
- h. An explanation of the basis for the selection of PPE.
- i. Information on the HBV vaccine including efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccination will be offered free of charge through the Occupational Health Department.
- j. Information on the appropriate actions to take and persons to contact in an emergency involving exposure to blood or other infectious materials.
- k. An explanation of the procedure to follow if an exposure incident occurs, including method of reporting the incident and the medical follow-up that will be made available.
- l. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
- m. An explanation of the signs and labels and/or color-coding used to identify hazards.

G. RECORDKEEPING:

1. Medical Records:

A medical record must be established and maintained for each employee with the potential for occupational exposures.

These records will include:

- a. The employee's name and employee number, which can be cross-referenced to obtain the employee's social security number.
- b. A copy of the employee's hepatitis B vaccination status, including the date of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive the vaccinations.
- c. A copy of all results of examinations, medical testing, and follow-up procedures that have been compiled as the result of an occupational exposure.
- d. Employee medical records will be maintained confidentially in a locked file in the Occupational Health Department. Contents of the medical record will not be disclosed or reported without the employee's written consent to any person within or outside the workplace except as required by law. Employees can access their medical records by requesting access through Occupational Health. Medical records may also be released to anyone having written consent of the employee. *Medical records must be maintained for the duration of employment plus 30 years.*

2. Sharps Injury Log

- a. BJC HealthCare and WUSM shall establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information on the sharps injury log shall be recorded and maintained in such manner as to protect the confidentiality of the injured employee.
- b. The sharps injury log shall contain, at a minimum:
 - 1) The type and brand of device involved in the incident,
 - 2) The department or work area where the exposure incident occurred, and
 - 3) An explanation of how the incident occurred
- c. The requirement to establish and maintain a sharps injury log shall apply to any employer whom is required to maintain a log of occupational injuries and illnesses under 29 CFR 1904.
- d. The sharps injury log shall be maintained for the period required by 29 CFR 1904.6.

3. Training Records:

- a. Training records may be maintained indefinitely but **minimally for three years** from date of training.
- b. Training records will include, at a minimum, the following information:
 - 1) The date of training sessions
 - 2) A contents or summary of the training sessions
 - 3) The name and qualifications of persons conducting the training
 - 4) The names and job titles of all persons attending training sessions
- c. Training records shall be provided to the employee or employee representative upon request for examination or copying.

4. Transfer of Records:

All facilities will comply with requirements involving transfer of records. If a facility ceases to do business and there is no successive employer to receive and retain the records for the prescribed period of time, the facility's administration must notify the Director of the National Institute for Occupational Safety and Health (NIOSH) at least three months before the records are scheduled for disposal. NIOSH may request that the records be forwarded to them to be maintained for the duration of the prescribed period of time.

H. POLICY ENFORCEMENT

To ensure employee adherence with the above plan, supervisors and managers will monitor compliance. Personnel who consistently violate these regulations will be subject to disciplinary action as defined by the BJC HealthCare and WUSM corrective action policy.

I. CONTRACTED EMPLOYEES

Each facility is ultimately responsible for providing all aspects of compliance associated with the Bloodborne Pathogen Standard, with respect to employees. Contracted employees will be expected to comply with the policies and practices of the facility in which they are working. Training pertaining to this policy must have been completed prior to the contracted employee performing occupational exposure-prone tasks. Individual contracts will specify training and hepatitis B vaccination provisions.

All contracted employees assigned to areas where occupational exposure may occur must present proof of training and hepatitis B vaccination before being permitted to work in the area. These items will be photocopied and Human Resources and the Occupational Health Department will maintain an employee personnel file and medical record. Department managers will assume responsibility for contract employee activities.

Exposure incidents may be handled in accordance with the BJC HealthCare and WUSM Core Policy: *Body Substance Exposure Evaluation and Treatment Procedure*. (Appendix 10) Charges incurred will be the responsibility of the contractor, in accordance with their policies.

J. EFFECTIVE DATES

The OSHA Bloodborne Pathogens Standard became effective March 6, 1992. Each facility has programs in place, which have been required since May 5, 1992. This Core Policy should be disseminated per facility process. If standing department programs meet the requirements of this policy, no actions are necessary beyond integration of the policy into the existing program. However, if deficiencies exist, they should be addressed immediately and an action plan should be developed to remedy them.

A COPY OF THIS POLICY MAY BE OBTAINED BY REQUESTING SUCH FROM THE DEPARTMENT MANAGER OR THEIR DESIGNATED REPRESENTATIVE.

RECOMMENDED BY: Infection Prevention and Healthcare Epidemiology Consortium
Council of Occupational Health Professionals
Washington University Environmental Health & Safety

ORIGINAL EFFECTIVE DATE: February 1, 1998

AUTHORIZED BY: Steven Lipstein
President and CEO of BJC

DATE OF REVIEW: February 1, 2000
August 16, 2001
February 15, 2002
July 17, 2003
July 2008
July 2010
July 2011
July 2012
July 2013

Name of Department
BBP Exposure Control Plan
Appendix 1
Classification I – Job Listing
Annual Review is required

Jobs in which required tasks routinely involve a potential for percutaneous injury, mucous membranes or skin contact with blood, body fluids, tissues or potential spills or splashes. Uses of appropriate measures are required for every healthcare provider in these jobs. (See pages 4-5 of the Exposure Control Plan)

Job Title

Date Reviewed _____ Dept. Manager _____

Name of Department

BBP Exposure Control Plan
Appendix 2
Classification II – Job Listing
A. Annual Review is Required

Jobs in which required tasks normally do not involve exposure to blood, body fluids or tissues, but may require performing unplanned Classification I Tasks. In these jobs the normal work routine involves no exposure to blood, body fluids or tissues, but exposure or potential exposure may be required as a condition of employment. (See pages 4-5 of the Exposure Control Plan)

Job Title

Date Reviewed _____ Dept. Manager _____

Name of Department

BBP Exposure Control Plan
Appendix 3
Personnel Not Covered by the Standard
Annual Review is Required

Jobs in which required tasks involve no greater exposure to blood, body fluids or tissues, than would be encountered by a visitor, and even rare performance of Category I Tasks is not a condition of employment. The normal work routine involves no exposure to blood, body fluids or tissues. The worker is not covered by the Rule, and can decline to perform tasks that involve a perceived risk without hesitation. (See pages 4-6 of the Exposure Control Plan)

Job Title

Date Reviewed _____ Dept. Manager _____

Name of Department

BBP Exposure Control Plan
Appendix 4

**1. Tasks/ Procedures With Risk of Bloodborne Pathogen
 Exposure For Job Classifications I and II**
Annual Review is Required

Required tasks routinely involve a potential for percutaneous injury, mucous membranes or skin contact with blood, body fluids, tissues or potential spills or splashes. (See pages 4-6 of the Exposure Control Plan)

(Samples are listed below, add or delete job tasks as specific to your hospital and remove this statement)

1. Providing direct patient care

<i>Aspiration/centesis, lumbar puncture</i> <i>Assisting childbirth</i> <i>Biopsy</i> <i>Cardiopulmonary resuscitation</i> <i>Debridement</i> <i>Endotracheal intubation</i> <i>Gastric suctioning</i> <i>Hemodialysis, peritoneal dialysis</i> <i>Hemostasis of bleeding wounds/lacerations</i> <i>Incision and drainage</i> <i>Injections</i>	<i>Proctoscopic, colonoscopic, endoscopic exams</i> <i>Rectal/vaginal digital exams</i> <i>Specimen collection</i> <i>Suctioning of bodily fluids</i> <i>Surgery</i> <i>Suturing</i> <i>Tracheal suctioning</i> <i>Urinary catheterization</i> <i>Venipuncture</i> <i>Venous cannulation</i>
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2. Involve the handling of contaminated materials

<i>Clean up of spills</i> <i>Cleaning of non-disposable instruments and supplies</i> <i>Handling and/or disposing of bodily fluids</i> <i>Handling and packaging of regulated waste</i>	<i>Handling and/or packaging of specimens</i> <i>Handling of contaminated laundry</i> <i>Handling of sharps</i>
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3. Involve interactions with violent and/or uncooperative patients that may result in exposure

<i>Biting</i> <i>Scratching</i> <i>Spitting (if visibly contaminated with blood)</i>	<i>Throwing of infectious materials (body fluids)</i>
--	---

Date Reviewed : _____ Administrator: _____

Name of Department

BBP Exposure Control Plan
 Appendix 5
Potentially Contaminated Equipment
Annual Review is Required

Potentially contaminated department equipment should be decontaminated after each use. If decontamination is not feasible, the equipment should be labeled with the specific hazard information. (See page 9 of the Exposure Control Plan.)

POTENTIALLY CONTAMINATED EQUIPMENT

EQUIPMENT / ITEM	EQUIPMENT SERVICE PROVIDER

Date Reviewed _____ Dept. Manager _____

Name of Department

BBP Exposure Control Plan

Appendix 6

Department Cleaning and Sharps Container Changing Schedule

Annual Review is Required

ITEM	CLEAN (C) DISINFECT (D) STERILIZE (S)	CLEANING AGENT
TASK FREQUENCY (daily, weekly, etc.)		JOB TITLE (of person cleaning)

ITEM	CLEAN (C) DISINFECT (D) STERILIZE (S)	CLEANING AGENT
TASK FREQUENCY (daily, weekly, etc.)		JOB TITLE (of person cleaning)

ITEM	CLEAN (C) DISINFECT (D) STERILIZE (S)	CLEANING AGENT
TASK FREQUENCY (daily, weekly, etc.)		JOB TITLE (of person cleaning)

ITEM	CLEAN (C) DISINFECT (D) STERILIZE (S)	CLEANING AGENT
TASK FREQUENCY (daily, weekly, etc.)		JOB TITLE (of person cleaning)

Date Reviewed _____ Dept. Manager _____

Name of Department

BBP Exposure Control Plan
Appendix 7
Compliance Checklist
OSHA BLOODBORNE PATHOGENS STANDARD (29 CFR 1910.1030)

Exposure Control Plan

- Is a copy of the Health Service Organization (HSO) Exposure Control Plan accessible to all employees?
- Have you supplemented the Exposure Control Plan by listing the classifications of the employees at risk of exposure and the tasks they do that might involve exposure?
- Have you used the forms provided as appendices to this plan or in department-specific written procedures that are at least as detailed?**
- Have you supplemented the Exposure Control Plan with additional information specific to your area where necessary?

Handling and Disposing of Sharps

- Are sharps containers closable, leak proof and puncture-resistant on the sides and bottom?
- Are sharps containers red and/or labeled with the universal biohazard symbol?
- Are sharps containers located as close as possible to the area of use?
- Is there a schedule and a method for determining when sharps containers need replacement?
- Are fixed sharps containers installed at the proper height (52-56 inches above the standing surface of the user)?
- Are employees prohibited from recapping, shearing, bending or breaking needles?
- Are reusable sharps used? If yes, do you have a written policy specifying situations in which recapping is allowed and safe practices required for doing so?
- Is there a mechanical means (broom, dust pan, tongs, etc.) available to clean up contaminated glass or other sharp materials?

Safe Equipment Practices

- Are hand washing facilities with soap and running water reasonably accessible to employees? If not, are appropriate alternatives (waterless hand cleaners, antiseptic towelettes, etc.) provided?
- Are employees prohibited from drinking, eating, smoking, applying cosmetics, etc. in potentially contaminated work areas?
- Is there a separate refrigerator for storage of food, drinks, etc.?
- Are employees who perform procedures that may produce splashes or aerosols of blood or OPIM (Other Potentially Infectious Materials) trained to perform these procedures in a manner that eliminates or reduces exposure risks?
- Is contaminated equipment decontaminated prior to servicing? If it can't be decontaminated, is it labeled to specify which portions remain contaminated?
- Are these equipment items documented on the form provided as Appendix 5 or in department-specific procedures?

Personal Protective Equipment (PPE)

- Is personal protective clothing and equipment, that is appropriate for the tasks to be performed, provided for all employees, and is it accessible and conveniently located?
- Are employees trained in the proper selection and mandated use of PPE? Are they trained in the proper procedures, for disposing of or reprocessing PPE?
- Is face and eye protection provided when there is a possibility for splashing, spraying or splattering of blood or OPIM? Does protective eyewear have side shields?
- Are emergency one-way resuscitation devices available, if necessary?
- Is a mechanism in place for cleaning, laundering and/or disposing of employees' protective clothing?
- Are employees trained to remove PPE before leaving the work area and as soon as it becomes contaminated with blood or OPIM?
- Are gloves readily accessible and suitable for the tasks being performed?
- Are gloves required when there is a reasonable likelihood of contact with blood or OPIM?
- Are hypoallergenic gloves provided for employees who are allergic to gloves used?
- Are employees instructed in how to properly remove and dispose of contaminated gloves?

Housekeeping

- Is there a written schedule and procedure for decontamination of environmental surfaces such as counter tops, work surfaces and floors?
- Are work surfaces cleaned and decontaminated upon completion of a procedure? After overt contamination during a procedure? At the end of each work shift?
- Is there a written procedure for inspecting and decontaminating biohazard trash receptacles?
- Is an EPA-approved cleaner or a 1:10 bleach solution used for disinfecting contaminated work surfaces, trash receptacles and other equipment?

Laundry

- Are employees instructed on how to bag, handle and transport contaminated laundry? Is contaminated laundry transported in a biohazard bag or appropriately labeled?
- Are employees instructed to never take contaminated clothing or PPE home with them for cleaning?
- Are laundry workers provided with appropriate PPE and trained in its proper use?

Regulated Waste

- Is waste contaminated with blood or OPIM disposed of in red biohazard waste bags, or in sharps containers (if it could possibly puncture a bag)?
- Are biohazard waste containers closable, leak proof and labeled with the biohazard symbol?
- Are secondary containers provided when the outside of the primary container becomes contaminated, and do they meet the same specifications?
- Are employees instructed to tightly close and double bag all biohazard bags or containers prior to removal to prevent spillage and leaking during handling, especially after autoclaving?

Employee Training

Are employees, at risk of exposure, trained in the following areas:

- An explanation of the transmission, symptoms and prophylactic treatment for bloodborne diseases such as HIV, HBV and HCV.
- An explanation of how to recognize whether the job involves exposure to blood or OPIM.

- An explanation of the use and limitations of methods that will prevent or reduce exposure, including appropriate engineering controls, including safer sharp devices, work practices and personal protective equipment.
- Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.
- An explanation of the basis for selection of personal protective equipment.
- Information on the Hepatitis B vaccine, including its efficacy, safety, availability and benefits.
- Information on the appropriate actions to take and persons to contact in an emergency involving exposure to blood or OPIM. This includes decontamination and waste disposal protocols for blood or OPIM.
- An explanation of the procedure to be followed in the event of an exposure, including the reporting procedure and medical follow-up.
- An explanation of the signs and labels and/or color-coding required by the standard.

Hepatitis B Vaccination

- Have you determined which employees are at risk of exposure and eligible for HBV vaccination?
- Is the vaccine provided to these employees for free and at a reasonable time and place?
- Do employees who decline vaccination sign the declination form and, is a copy of this kept by Occupational Health?

Post-Exposure Follow-Up

- Are employees instructed in procedures to follow in the event of an exposure incident (parenteral, mucous membrane or broken/non-intact skin contact with blood or OPIM)?
- Are employees aware of the reporting procedures and their rights to medical evaluation and follow-up following an exposure incident?

Signs and Labels

- Are all refrigerators, freezers and other areas used to store blood or OPIM labeled with the universal biohazard symbol and the word "biohazard"?
- Are containers used to ship, store or transport blood or OPIM labeled and color-coded?

- Are all containers used to hold regulated biohazard waste labeled and/or color-coded?
- Are sharps containers labeled and/or color-coded?

Recordkeeping

- Do you have a Sharps Injury Log?
- Have you completed an annual assessment of safe needle devices?

Appendix 8

DEFINITIONS

"Assistant Secretary" means the Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.

"Blood" means human blood, human blood components, and products made from human blood.

"Bloodborne Pathogens" means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

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

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

"Contaminated Laundry" means laundry that has been soiled with blood or other potentially infectious materials or may contain sharps.

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

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

"Director" means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designated representative.

"Engineering Controls" means controls (e.g., sharps disposal containers, self-sheathing needles safer medical devices, such as sharps with engineered sharps injury protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

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

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

"Licensed Healthcare Professional" is a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

"**HBV**" means hepatitis B virus.

"**HIV**" means human immunodeficiency virus.

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

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

"**Other Potentially Infectious Materials**" means (1) The following human body fluids: 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; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

"**Parenteral**" means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

"**Personal Protective Equipment**" is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

"**Production Facility**" means a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

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

"**Research Laboratory**" means a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

"**Sharps with Engineered Sharps Injury Protections**" means a nonneedle sharp or a needle device used for withdrawing body 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.

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

"Standard Precautions" is an approach to infection control. According to the concept of Standard Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

"Sterilize" means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

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

**Appendix 9
Occupational Safety and Health Administration
Occupational Exposure to Bloodborne Pathogens; Final Rule**

Standard Number: 1910.1030

Standard Title: Bloodborne pathogens.

SubPart Number: Z

SubPart Title: Toxic and Hazardous Substances

(a) Scope and Application. This section applies to all occupational exposure to blood or other potentially infectious materials as defined by paragraph (b) of this section.

(b) Definitions. For purposes of this section, the following shall apply:

Assistant Secretary means the Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.

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

Bloodborne Pathogens means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

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

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

Contaminated Laundry means laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

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

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

Director means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designated representative.

Engineering Controls means controls (e.g., sharps disposal containers, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury

protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

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

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

Licensed Healthcare Professional is a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.
HBV means hepatitis B virus.

HIV means human immunodeficiency virus.

Needleless systems means a device that does not use needles for:

(1) The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (2) The administration of medication or fluids; or (3) Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

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

Other Potentially Infectious Materials means (1) The following human body fluids: 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; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

Parenteral means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

Personal Protective Equipment is specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

Production Facility means a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

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

Research Laboratory means a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

Sharps with engineered sharps injury protections means a nonneedle sharp or a needle device used for withdrawing body 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.

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

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

Universal Precautions is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

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

(c) Exposure Control --

(c)(1) Exposure Control Plan.

(c)(1)(i) Each employer having an employee(s) with occupational exposure as defined by paragraph (b) of this section shall establish a written Exposure Control Plan designed to eliminate or minimize employee exposure.

(c)(1)(ii) The Exposure Control Plan shall contain at least the following elements:

(c)(1)(ii)(A) The exposure determination required by paragraph (c)(2),

(c)(1)(ii)(B) The schedule and method of implementation for paragraphs (d) Methods of Compliance, (e) HIV and HBV Research Laboratories and Production Facilities, (f) Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up, (g) Communication of Hazards to Employees, and (h) Recordkeeping, of this standard, and

(c)(1)(ii)(C) The procedure for the evaluation of circumstances surrounding exposure incidents as required by paragraph (f)(3)(i) of this standard.

(c)(1)(iii) Each employer shall ensure that a copy of the Exposure Control Plan is accessible to employees in accordance with 29 CFR 1910.1020(e).

(c)(1)(iv) The Exposure Control Plan shall be reviewed and updated at least annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure. The review and update of such plans shall also:

(c)(1)(iv)(A) Reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens; and

(c)(1)(iv)(B) Document annually consideration and implementation of appropriate commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure.

(c)(1)(v) An employer, who is required to establish an Exposure Control Plan shall solicit input from non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls and shall document the solicitation in the Exposure Control Plan.

(c)(2) Exposure Determination.

(c)(2)(i) Each employer who has an employee(s) with occupational exposure as defined by paragraph (b) of this section shall prepare an exposure determination. This exposure determination shall contain the following:

(c)(2)(i)(A) A list of all job classifications in which all employees in those job classifications have occupational exposure;

(c)(2)(i)(B) A list of job classifications in which some employees have occupational exposure, and

(c)(2)(i)(C) A list of all tasks and procedures or groups of closely related task and procedures in which occupational exposure occurs and that are performed by employees in job classifications listed in accordance with the provisions of paragraph (c)(2)(i)(B) of this standard.

(c)(2)(ii) This exposure determination shall be made without regard to the use of personal protective equipment.

(d) *Methods of Compliance* --

(d)(1) General.

Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between

body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

(d)(2) Engineering and Work Practice Controls.

(d)(2)(i) Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used.

(d)(2)(ii) Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

(d)(2)(iii) Employers shall provide hand washing facilities which are readily accessible to employees.

(d)(2)(iv) When provision of hand washing facilities is not feasible, the employer shall provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as feasible.

(d)(2)(v) Employers shall ensure that employees wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.

(d)(2)(vi) Employers shall ensure that employees wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

(d)(2)(vii) Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed except as noted in paragraphs (d)(2)(vii)(A) and (d)(2)(vii)(B) below. Shearing or breaking of contaminated needles is prohibited.

(d)(2)(vii)(A) Contaminated needles and other contaminated sharps shall not be bent, recapped or removed unless the employer can demonstrate that no alternative is feasible or that such action is required by a specific medical or dental procedure.

(d)(2)(vii)(B) Such bending, recapping or needle removal must be accomplished through the use of a mechanical device or a one-handed technique.

(d)(2)(viii) Immediately or as soon as possible after use, contaminated reusable sharps shall be placed in

appropriate containers until properly reprocessed. These containers shall be:

(d)(2)(viii)(A) Puncture resistant;

(d)(2)(viii)(B) Labeled or color-coded in accordance with this standard;

(d)(2)(viii)(C) Leak proof on the sides and bottom; and

(d)(2)(viii)(D) In accordance with the requirements set forth in paragraph (d)(4)(ii)(E) for reusable sharps.

(d)(2)(ix) Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.

(d)(2)(x) Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious materials are present.

(d)(2)(xi) All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.

(d)(2)(xii) Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.

(d)(2)(xiii) Specimens of blood or other potentially infectious materials shall be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping.

(d)(2)(xiii)(A) The container for storage, transport, or shipping shall be labeled or color-coded according to paragraph (g)(1)(i) and closed prior to being stored, transported, or shipped. When a facility utilizes Universal Precautions in the handling of all specimens, the labeling/color-coding of specimens is not necessary provided containers are recognizable as containing specimens. This exemption only applies while such specimens/containers remain within the facility. Labeling or color-coding in accordance with paragraph (g)(1)(i) is required when such specimens/containers leave the facility.

(d)(2)(xiii)(B) If outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage during handling, processing, storage, transport, or shipping and is labeled or color-coded according to the requirements of this standard.

(d)(2)(xiii)(C) If the specimen could puncture the primary container, the primary container shall be placed within a secondary container which is puncture-resistant in addition to the above characteristics.

(d)(2)(xiv) Equipment which may 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 employer can demonstrate that decontamination of such equipment or portions of such equipment is not feasible.

(d)(2)(xiv)(A) A readily observable label in accordance with paragraph (g)(1)(i)(H) shall be attached to the equipment stating which portions remain contaminated.

(d)(2)(xiv)(B) The employer shall ensure that this information is conveyed to all affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so that appropriate precautions will be taken.

(d)(3) Personal Protective Equipment

(d)(3)(i) Provision. When there is occupational exposure, the employer shall provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. Personal protective equipment will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

(d)(3)(ii) Use. The employer shall ensure that the employee uses appropriate personal protective equipment unless the employer shows that the employee temporarily and briefly declined to use personal protective equipment when, under rare and extraordinary circumstances, it was the employee's professional judgment that in the

specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety of the worker or co-worker. When the employee makes this judgement, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.

(d)(3)(iii) Accessibility. The employer shall ensure that appropriate personal protective equipment in the appropriate sizes is readily accessible at the worksite or is issued to employees. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

(d)(3)(iv) Cleaning, Laundering, and Disposal. The employer shall clean, launder, and dispose of personal protective equipment required by paragraphs (d) and (e) of this standard, at no cost to the employee.

(d)(3)(v) Repair and Replacement. The employer shall repair or replace personal protective equipment as needed to maintain its effectiveness, at no cost to the employee.

(d)(3)(vi) If a garment(s) is penetrated by blood or other potentially infectious materials, the garment(s) shall be removed immediately or as soon as feasible.

(d)(3)(vii) All personal protective equipment shall be removed prior to leaving the work area.

(d)(3)(viii) When personal protective equipment is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

(d)(3)(ix) Gloves. Gloves shall be worn when it can be reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures except as specified in paragraph (d)(3)(ix)(D); and when handling or touching contaminated items or surfaces.

(d)(3)(ix)(A) Disposable (single use) gloves such as surgical or examination gloves, shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

(d)(3)(ix)(B) Disposable (single use) gloves shall not be washed or decontaminated for re-use.

(d)(3)(ix)(C) Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

(d)(3)(ix)(D) If an employer in a volunteer blood donation center judges that routine gloving for all phlebotomies is not necessary then the employer shall:

(d)(3)(ix)(D)(1) Periodically reevaluate this policy;

(d)(3)(ix)(D)(2) Make gloves available to all employees who wish to use them for phlebotomy;

(d)(3)(ix)(D)(3) Not discourage the use of gloves for phlebotomy; and

(d)(3)(ix)(D)(4) Require that gloves be used for phlebotomy in the following circumstances:

(d)(3)(ix)(D)(4)(i) When the employee has cuts, scratches, or other breaks in his or her skin;

(d)(3)(ix)(D)(4)(ii) When the employee judges that hand contamination with blood may occur, for example, when performing phlebotomy on an uncooperative source individual; and

(d)(3)(ix)(D)(4)(iii) When the employee is receiving training in phlebotomy.

(d)(3)(x) Masks, Eye Protection, and Face Shields. Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

(d)(3)(xi) Gowns, Aprons, and Other Protective Body Clothing. Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

(d)(3)(xii) Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated (e.g., autopsies, orthopaedic surgery).

(d)(4) Housekeeping

(d)(4)(i) General. Employers shall ensure that the worksite is maintained in a clean and sanitary condition. The employer shall determine and implement an appropriate written schedule for cleaning and method of decontamination based upon the location within the facility, type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area.

(d)(4)(ii) All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.

(d)(4)(ii)(A) Contaminated work surfaces shall be decontaminated with an appropriate disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

(d)(4)(ii)(B) Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and environmental surfaces, shall be removed and replaced as soon as feasible when they become overtly contaminated or at the end of the workshift if they may have become contaminated during the shift.

(d)(4)(ii)(C) All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

(d)(4)(ii)(D) Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.

(d)(4)(ii)(E) Reusable sharps that are contaminated with blood or other potentially infectious materials shall not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.

(d)(4)(iii) Regulated Waste --

(d)(4)(iii)(A) Contaminated Sharps Discarding and Containment.

(d)(4)(iii)(A)(1) Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are:

(d)(4)(iii)(A)(1)(i) Closable;

(d)(4)(iii)(A)(1)(ii) Puncture resistant;

(d)(4)(iii)(A)(1)(iii) Leak proof on sides and bottom; and

(d)(4)(iii)(A)(1)(iv) Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard.

(d)(4)(iii)(A)(2) During use, containers for contaminated sharps shall be:

(d)(4)(iii)(A)(2)(i) Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);

(d)(4)(iii)(A)(2)(ii) Maintained upright throughout use; and

(d)(4)(iii)(A)(2)(iii) Replaced routinely and not be allowed to overfill.

(d)(4)(iii)(A)(3) When moving containers of contaminated sharps from the area of use, the containers shall be:

(d)(4)(iii)(A)(3)(i) Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;

(d)(4)(iii)(A)(3)(ii) Placed in a secondary container if leakage is possible. The second container shall be:

(d)(4)(iii)(A)(3)(ii)(A) Closable;

(d)(4)(iii)(A)(3)(ii)(B) Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and

(d)(4)(iii)(A)(3)(ii)(C) Labeled or color-coded according to paragraph (g)(1)(i) of this standard.

(d)(4)(iii)(A)(4) Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

(d)(4)(iii)(B) Other Regulated Waste Containment --

(d)(4)(iii)(B)(1) Regulated waste shall be placed in containers which are:

(d)(4)(iii)(B)(1)(i) Closable;

(d)(4)(iii)(B)(1)(ii) Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

(d)(4)(iii)(B)(1)(iii) Labeled or color-coded in accordance with paragraph (g)(1)(i) this standard; and

(d)(4)(iii)(B)(1)(iv) Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

(d)(4)(iii)(B)(2) If outside contamination of the regulated waste container occurs, it shall be placed in a second container. The second container shall be:

(d)(4)(iii)(B)(2)(i) Closable;

(d)(4)(iii)(B)(2)(ii) Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

(d)(4)(iii)(B)(2)(iii) Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard; and

(d)(4)(iii)(B)(2)(iv) Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

(d)(4)(iii)(C) Disposal of all regulated waste shall be in accordance with applicable regulations of the United States, States and Territories, and political subdivisions of States and Territories.

(d)(4)(iv) Laundry.

(d)(4)(iv)(A) Contaminated laundry shall be handled as little as possible with a minimum of agitation.

(d)(4)(iv)(A)(1) Contaminated laundry shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use.

(d)(4)(iv)(A)(2) Contaminated laundry shall be placed and transported in bags or containers labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard. When a facility utilizes Universal Precautions in the handling of all soiled laundry, alternative labeling or color-coding is sufficient if it permits all employees to recognize the containers as requiring compliance with Universal Precautions.

(d)(4)(iv)(A)(3) Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through of or leakage from the bag or container, the laundry shall be placed and transported in bags or containers which prevent soak-through and/or leakage of fluids to the exterior.

(d)(4)(iv)(B) The employer shall ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.

(d)(4)(iv)(C) When a facility ships contaminated laundry off-site to a second facility which does not utilize Universal Precautions in the handling of all laundry, the facility generating the contaminated laundry must place such laundry in bags or containers which are labeled or color-coded in accordance with paragraph (g)(1)(i).

(e) HIV and HBV Research Laboratories and Production Facilities.--

(e)(1) This paragraph applies to research laboratories and production facilities engaged in the culture, production, concentration, experimentation, and manipulation of HIV and HBV. It does not apply to clinical or diagnostic laboratories engaged solely in the analysis of blood, tissues, or organs. These requirements apply in addition to the other requirements of the standard.

(e)(2) Research laboratories and production facilities shall meet the following criteria:

(e)(2)(i) Standard Microbiological Practices. All regulated waste shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.

(e)(2)(ii) Special Practices.

(e)(2)(ii)(A) Laboratory doors shall be kept closed when work involving HIV or HBV is in progress.

(e)(2)(ii)(B) Contaminated materials that are to be decontaminated at a site away from the work area shall be placed in a durable, leak proof, labeled or color-coded container that is closed before being removed from the work area.

(e)(2)(ii)(C) Access to the work area shall be limited to authorized persons. Written policies and procedures shall be established whereby only persons who have been advised of the potential biohazard, who meet any specific entry requirements, and who comply with all entry and exit procedures shall be allowed to enter the work areas and animal rooms.

(e)(2)(ii)(D) When other potentially infectious materials or infected animals are present in the work area or containment module, a hazard warning sign incorporating the universal biohazard symbol shall be posted on all access doors. The hazard warning sign shall comply with paragraph (g)(1)(ii) of this standard.

(e)(2)(ii)(E) All activities involving other potentially infectious materials shall be conducted in biological safety cabinets or other physical-containment devices within the containment module. No work with these other potentially infectious materials shall be conducted on the open bench.

(e)(2)(ii)(F) Laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing shall be used in the work area and animal rooms. Protective clothing shall not be worn outside of the work area and shall be decontaminated before being laundered.

(e)(2)(ii)(G) Special care shall be taken to avoid skin contact with other potentially infectious materials. Gloves shall be worn when handling infected animals and when making hand contact with other potentially infectious materials is unavoidable.

(e)(2)(ii)(H) Before disposal all waste from work areas and from animal rooms shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.

(e)(2)(ii)(I) Vacuum lines shall be protected with liquid disinfectant traps and high-efficiency particulate air (HEPA) filters or filters of equivalent or superior efficiency and which are checked routinely and maintained or replaced as necessary.

(e)(2)(ii)(J) Hypodermic needles and syringes shall be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe-needle units (i.e., the needle is integral to the syringe) shall be used for the injection or aspiration of other potentially infectious materials. Extreme caution shall be used when handling needles and syringes. A needle shall not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe shall be promptly placed in a puncture-resistant container and autoclaved or decontaminated before reuse or disposal.

(e)(2)(ii)(K) All spills shall be immediately contained and cleaned up by appropriate professional staff or others properly trained and equipped to work with potentially concentrated infectious materials.

(e)(2)(ii)(L) A spill or accident that results in an exposure incident shall be immediately reported to the laboratory director or other responsible person.

(e)(2)(ii)(M) A biosafety manual shall be prepared or adopted and periodically reviewed and updated at least annually or more often if necessary. Personnel shall be advised of potential hazards, shall be required to read instructions on practices and procedures, and shall be required to follow them.

(e)(2)(iii) Containment Equipment.

(e)(2)(iii)(A) Certified biological safety cabinets (Class I, II, or III) or other appropriate combinations of personal protection or physical containment devices, such as special protective clothing, respirators, centrifuge safety cups, sealed centrifuge rotors, and

containment caging for animals, shall be used for all activities with other potentially infectious materials that pose a threat of exposure to droplets, splashes, spills, or aerosols.

(e)(2)(iii)(B) Biological safety cabinets shall be certified when installed, whenever they are moved and at least annually.

(e)(3) HIV and HBV research laboratories shall meet the following criteria:

(e)(3)(i) Each laboratory shall contain a facility for hand washing and an eye wash facility which is readily available within the work area.

(e)(3)(ii) An autoclave for decontamination of regulated waste shall be available.

(e)(4) HIV and HBV production facilities shall meet the following criteria:

(e)(4)(i) The work areas shall be separated from areas that are open to unrestricted traffic flow within the building. Passage through two sets of doors shall be the basic requirement for entry into the work area from access corridors or other contiguous areas. Physical separation of the high-containment work area from access corridors or other areas or activities may also be provided by a double-doored clothes-change room (showers may be included), airlock, or other access facility that requires passing through two sets of doors before entering the work area.

(e)(4)(ii) The surfaces of doors, walls, floors and ceilings in the work area shall be water resistant so that they can be easily cleaned. Penetrations in these surfaces shall be sealed or capable of being sealed to facilitate decontamination.

(e)(4)(iii) Each work area shall contain a sink for washing hands and a readily available eye wash facility. The sink shall be foot, elbow, or automatically operated and shall be located near the exit door of the work area.

(e)(4)(iv) Access doors to the work area or containment module shall be self-closing.

(e)(4)(v) An autoclave for decontamination of regulated waste shall be available within or as near as possible to the work area.

(e)(4)(vi) A ducted exhaust-air ventilation system shall be provided. This system shall create directional airflow that draws air into the work area through the entry area. The exhaust air shall not be recirculated to any other area of the building, shall be discharged to the outside, and shall be dispersed away from occupied areas and air intakes. The proper direction of the airflow shall be verified (i.e., into the work area).

(e)(5) Training Requirements.

Additional training requirements for employees in HIV and HBV research laboratories and HIV and HBV production facilities are specified in paragraph (g)(2)(ix).

(f) *Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up --*

(f)(1) General.

(f)(1)(i) The employer shall make available the hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure incident.

(f)(1)(ii) The employer shall ensure that all medical evaluations and procedures including the hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up, including prophylaxis, are:

(f)(1)(ii)(A) Made available at no cost to the employee;

(f)(1)(ii)(B) Made available to the employee at a reasonable time and place;

(f)(1)(ii)(C) Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional; and

(f)(1)(ii)(D) Provided according to recommendations of the U.S. Public Health Service current at the time these evaluations and procedures take place, except as specified by this paragraph (f).

(f)(1)(iii) The employer shall ensure that all laboratory tests are conducted by an accredited laboratory at no cost to the employee.

(f)(2) Hepatitis B Vaccination.

(f)(2)(i) Hepatitis B vaccination shall be made available after the employee has received the training required in paragraph (g)(2)(vii)(I) and within 10 working days of initial assignment to all employees who have occupational exposure unless the employee has previously received the complete hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.

(f)(2)(ii) The employer shall not make participation in a prescreening program a prerequisite for receiving hepatitis B vaccination.

(f)(2)(iii) If the employee initially declines hepatitis B vaccination but at a later date while still covered under the standard decides to accept the vaccination, the employer shall make available hepatitis B vaccination at that time.

(f)(2)(iv) The employer shall assure that employees who decline to accept hepatitis B vaccination offered by the employer sign the statement in Appendix A.

(f)(2)(v) If a routine booster dose(s) of hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster dose(s) shall be made available in accordance with section (f)(1)(ii).

(f)(3) Post-exposure Evaluation and Follow-up.

Following a report of an exposure incident, the employer shall make immediately available to the exposed employee a confidential medical evaluation and follow-up, including at least the following elements:

(f)(3)(i) Documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred;

(f)(3)(ii) Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law;

(f)(3)(ii)(A) The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the employer shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.

(f)(3)(ii)(B) When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.

(f)(3)(ii)(C) Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

(f)(3)(iii) Collection and testing of blood for HBV and HIV serological status;

(f)(3)(iii)(A) The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained.

(f)(3)(iii)(B) If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.

(f)(3)(iv) Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service;

(f)(3)(v) Counseling; and

(f)(3)(vi) Evaluation of reported illnesses.

(f)(4) Information Provided to the Healthcare Professional.

(f)(4)(i) The employer shall ensure that the healthcare professional responsible for the employee's Hepatitis B vaccination is provided a copy of this regulation.

(f)(4)(ii) The employer shall ensure that the healthcare professional evaluating an employee after an exposure incident is provided the following information:

(f)(4)(ii)(A) A copy of this regulation;

(f)(4)(ii)(B) A description of the exposed employee's duties as they relate to the exposure incident;

(f)(4)(ii)(C) Documentation of the route(s) of exposure and circumstances under which exposure occurred;

(f)(4)(ii)(D) Results of the source individual's blood testing, if available; and

(f)(4)(ii)(E) All medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain.

(f)(5) Healthcare Professional's Written Opinion.

The employer shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation.

(f)(5)(i) The healthcare professional's written opinion for Hepatitis B vaccination shall be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.

(f)(5)(ii) The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:

(f)(5)(ii)(A) That the employee has been informed of the results of the evaluation; and

(f)(5)(ii)(B) 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.

(f)(5)(iii) All other findings or diagnoses shall remain confidential and shall not be included in the written report.

(f)(6) Medical Recordkeeping.

Medical records required by this standard shall be maintained in accordance with paragraph (h)(1) of this section.

(f) Communication of Hazards to Employees --

(g)(1) Labels and Signs

(g)(1)(i) Labels.

(g)(1)(i)(A) Warning 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, except as provided in paragraph (g)(1)(i)(E), (F) and (G).

(g)(1)(i)(B) Labels required by this section shall include the following legend:



(g)(1)(i)(C) These labels shall be fluorescent orange or orange-red or predominantly so, with lettering and symbols in a contrasting color.

(g)(1)(i)(D) Labels shall be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.

(g)(1)(i)(E) Red bags or red containers may be substituted for labels.

(g)(1)(i)(F) Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirements of paragraph (g).

(g)(1)(i)(G) Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.

(g)(1)(i)(H) Labels required for contaminated equipment shall be in accordance with this paragraph and shall also state which portions of the equipment remain contaminated.

(g)(1)(i)(I) Regulated waste that has been decontaminated need not be labeled or color-coded.

(g)(1)(ii) Signs.

(g)(1)(ii)(A) The employer shall post signs at the entrance to work areas specified in paragraph (e), HIV and HBV Research Laboratory and Production Facilities, which shall bear the following legend:



(Name of the Infectious Agent)

(Special requirements for entering the area)

(Name, telephone number of the laboratory director or other responsible person.)

(g)(1)(ii)(B) These signs shall be fluorescent orange-red or predominantly so, with lettering and symbols in a contrasting color.

(g)(2) Information and Training.

(g)(2)(i) Employers shall ensure that all employees with occupational exposure participate in a training program which must be provided at no cost to the employee and during working hours.

(g)(2)(ii) Training shall be provided as follows:

(g)(2)(ii)(A) At the time of initial assignment to tasks where occupational exposure may take place;

(g)(2)(ii)(B) Within 90 days after the effective date of the standard; and

(g)(2)(ii)(C) At least annually thereafter.

(g)(2)(iii) For employees who have received training on bloodborne pathogens in the year preceding the effective date of the standard, only training with respect to the provisions of the standard which were not included need be provided.

(g)(2)(iv) Annual training for all employees shall be provided within one year of their previous training.

(g)(2)(v) Employers shall provide additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.

(g)(2)(vi) Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used.

(g)(2)(vii) The training program shall contain at a minimum the following elements:

(g)(2)(vii)(A) An accessible copy of the regulatory text of this standard and an explanation of its contents;

(g)(2)(vii)(B) A general explanation of the epidemiology and symptoms of bloodborne diseases;

(g)(2)(vii)(C) An explanation of the modes of transmission of bloodborne pathogens;

(g)(2)(vii)(D) An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan;

(g)(2)(vii)(E) An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials;

(g)(2)(vii)(F) An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;

(g)(2)(vii)(G) Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;

(g)(2)(vii)(H) An explanation of the basis for selection of personal protective equipment;
(g)(2)(vii)(I) Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;

(g)(2)(vii)(J) Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;

(g)(2)(vii)(K) 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;

(g)(2)(vii)(L) Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident;

(g)(2)(vii)(M) An explanation of the signs and labels and/or color coding required by paragraph (g)(1); and

(g)(2)(vii)(N) An opportunity for interactive questions and answers with the person conducting the training session.

(g)(2)(viii) The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address.

(g)(2)(ix) Additional Initial Training for Employees in HIV and HBV Laboratories and Production Facilities. Employees in HIV or HBV research laboratories and HIV or HBV production facilities shall receive the following initial training in addition to the above training requirements.

(g)(2)(ix)(A) The employer shall assure that employees demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with HIV or HBV.

(g)(2)(ix)(B) The employer shall assure that employees have prior experience in the handling of human pathogens or tissue cultures before working with HIV or HBV.

(g)(2)(ix)(C) The employer shall provide a training program to employees who have no prior experience in handling human pathogens. Initial work activities shall not include the handling of infectious agents. A progression of work activities shall be assigned as techniques are learned and proficiency is developed. The employer shall assure that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.

(g) Recordkeeping --

(h)(1) Medical Records.

(h)(1)(i) The employer shall establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29 CFR 1910.1020.

(h)(1)(ii) This record shall include:

(h)(1)(ii)(A) The name and social security number of the employee;

(h)(1)(ii)(B) A copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination as required by paragraph (f)(2);

(h)(1)(ii)(C) A copy of all results of examinations, medical testing, and follow-up procedures as required by paragraph (f)(3);

(h)(1)(ii)(D) The employer's copy of the healthcare professional's written opinion as required by paragraph (f)(5); and

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(h)(1)(ii)(E) A copy of the information provided to the healthcare professional as required by paragraphs (f)(4)(ii)(B)(C) and (D).

(h)(1)(iii) Confidentiality. The employer shall ensure that employee medical records required by paragraph (h)(1) are:

(h)(1)(iii)(A) Kept confidential; and

(h)(1)(iii)(B) Not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by this section or as may be required by law.

(h)(1)(iv) The employer shall maintain the records required by paragraph (h) for at least the duration of employment plus 30 years in accordance with 29 CFR 1910.1020.

(h)(2) Training Records.

(h)(2)(i) Training records shall include the following information:

(h)(2)(i)(A) The dates of the training sessions;

(h)(2)(i)(B) The contents or a summary of the training sessions;

(h)(2)(i)(C) The names and qualifications of persons conducting the training; and

(h)(2)(i)(D) The names and job titles of all persons attending the training sessions.

(h)(2)(ii) Training records shall be maintained for 3 years from the date on which the training occurred.

(h)(3) Availability.

(h)(3)(i) The employer shall ensure that all records required to be maintained by this section shall be made available upon request to the Assistant Secretary and the Director for examination and copying.

(h)(3)(ii) Employee training records required by this paragraph shall be provided upon request for examination and copying to employees, to employee representatives, to the Director, and to the Assistant Secretary.

(h)(3)(iii) Employee medical records required by this paragraph shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, to the Director, and to the Assistant Secretary in accordance with 29 CFR 1910.1020.

(h)(4) Transfer of Records.

(h)(4)(i) The employer shall comply with the requirements involving transfer of records set forth in 29 CFR 1910.1020(h).

(h)(4)(ii) If the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify the Director, at least three months prior to their disposal and transmit them to the Director, if required by the Director to do so, within that three month period.

(h)(5) Sharps injury log.

(h)(5)(i) The employer 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 manner as to protect the confidentiality of the injured employee. The sharps injury log shall contain, at a minimum:

(h)(5)(i)(A) The type and brand of device involved in the incident,

(h)(5)(i)(B) The department or work area where the exposure incident occurred, and

(h)(5)(i)(C) An explanation of how the incident occurred.

(h)(5)(ii) The requirement to establish and maintain a sharps injury log shall apply to any employer who is required to maintain a log of occupational injuries and illnesses under 29 CFR 1904.

(h)(5)(iii) The sharps injury log shall be maintained for the period required by 29 CFR 1904.6.

(i) Dates --

(i)(1) Effective Date. The standard shall become effective on March 6, 1992.

(i)(2) The Exposure Control Plan required by paragraph (c) of this section shall be completed on or before
May 5, 1992.

(i)(3) Paragraph (g)(2) Information and Training and (h) Recordkeeping shall take effect on or before June 4, 1992.

(i)(4) Paragraphs (d)(2) Engineering and Work Practice Controls, (d)(3) Personal Protective Equipment, (d)(4) Housekeeping, (e) HIV and HBV Research Laboratories and Production Facilities, (f) Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up, and (g)(1) Labels and Signs, shall take effect July 6, 1992.

[56 FR 64004, Dec. 06, 1991, as amended at 57 FR 12717, April 13, 1992; 57 FR 29206, July 1, 1992; 61 FR 5507, Feb. 13, 1996; 66 FR 5325 Jan., 18, 2001]

APPENDIX A

Hepatitis B Vaccine Declination (Mandatory) - 1910.1030AppA

- **Standard Number:** 1910.1030AppA
- **Standard Title:** Hepatitis B Vaccine Declination (Mandatory)
- **SubPart Number:** Z
- **SubPart Title:** Toxic and Hazardous Substances

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

[56 FR 64004, Dec. 06, 1991, as amended at 57 FR 12717, April 13, 1992; 57 FR 29206, July 1, 1992; 61 FR 5507, Feb. 13, 1996]

**Appendix 10
CORE POLICY**

- I. **NUMBER:** 5-1
- II. **TITLE:** **Body Substance Exposure Evaluation and Treatment Procedure**
- III. **APPLICABILITY:** This policy applies to BJC HealthCare and WUSM Member entities.
- IV. **PURPOSE:**

This core policy sets forth the minimum standards that must be met at each BJC HealthCare and WUSM entity with respect to Body Substance Exposures. Each BJC HealthCare and WUSM entity must adopt a written policy that meets these requirements. The adopted policy may also contain provisions beyond these minimum requirements, so long as the additional provisions in no way conflict with or abrogate the terms of this Core Policy. The minimum requirements are set forth below.

This policy is based on the Occupational Safety and Health Administration's (OSHA) *Occupational Exposure to Bloodborne Pathogens*; Final Rule 29 CFR 1910.1030; Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Post-exposure Prophylaxis, Morbidity and Mortality Weekly Report, June 29, 2001; 50 (no. RR-11):1-52.

V. DEFINITIONS:

- **Body Substance Exposure.** A percutaneous injury (e.g., a needlestick or cut with a sharp object) or contact of mucous membrane or nonintact skin (e.g., exposed skin that is chapped, abraded, or afflicted with dermatitis) with blood, tissue, or other body fluids that are potentially infectious.
- **Exposure Incident.** A term used by OSHA to identify those body substance exposures regulated in OSHA's Blood borne Pathogen Rule. An Exposure Incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral/percutaneous contact with blood or other potentially infectious materials that results from the performance of an employee's duties.
- **High Risk HIV (human immunodeficiency virus) Source Individual.** A known HIV positive (+), AIDS patient or one at high risk of being HIV+ including hemophiliacs, those with a history of blood transfusions before 1985, men who have sex with men, injection drug users, methamphetamine users, people who exchange sex for drugs or money, prostitutes, people with multiple sexual partners, victims of gunshot or knife wounds, or children whose mothers are in these high risk groups.
- **High Risk HBV (hepatitis B virus) Source Individual.** A known Hepatitis B positive patient (hepatitis B surface antigen [HBsAg] positive) or one at risk of being HBsAg+ including injection drug users, people of south east Asian, Sub-Saharan Africa, Asian Pacific islanders, (i.e. Alaskan, or Hawaiian) descent, or multiple sexual partners.
- **High Risk HCV (hepatitis C virus) Source Individual.** A known Hepatitis C positive patient (Hepatitis C Antibody +) or those with a history of injection drug use, received blood transfusions or solid organ transplant before 1992, or has evidence of liver disease.
- **Other Potentially Infectious Materials (OPIM).**
The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, breast milk, 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; feces, nasal secretions, saliva, sputum, sweat, tears, urine and vomitus are not considered potentially infectious unless they contain visible blood.

Any unfixed tissue or organ (other than intact skin) from a human (living or dead);
and

HIV-containing cells or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

VI. PROCEDURE

- A. Initial Response and Reporting

1. The exposed employee should immediately wash the affected area with soap and water or flush eyes or mucous membranes with water or normal saline.
2. The employee should report the exposure to his/her supervisor immediately.
2. The employee, with assistance from his/her supervisor, completes an Employee Report of a Work Related Injury, Illness, and Exposure.
3. The supervisor signs the report, and refers the employee to Occupational Health.
4. Each entity will determine and document their procedure for handling exposures after Occupational Health hours. To report a body substance exposure or needlestick injury after hours, please contact the BSE hotline at 314-747-3535.

B. Initial Assessment and Treatment

1. The Occupational Health Nurse (OHN) or designee administers first aid or assures that adequate rinsing and washing of the affected area (with soap and water) or flushing of the eyes or mucous membranes (with normal saline or water) has occurred.
2. The OHN reviews the employee's occupational health medical record and related immunization records.
3. The OHN shall offer the employee the opportunity to begin or complete the hepatitis B immunization series (if not previously completed). *Refer to Appendices 13 and 14.*
4. The OHN shall document the route(s) of exposure and circumstances under which exposure occurred, a description of the exposed employee's duties as they relate to the exposure incident, identification of the source individual, results of the source individual's blood testing, if available, and how the exposure occurred.
5. The OHN or designee determines if post-exposure prophylaxis (PEP) is indicated based upon the type of exposure, the type and amount of fluid or tissue involved, the infectious status of the source patient, and the susceptibility of the exposed employee.
6. For body substance exposures where PEP is recommended, the OHN or designee shall provide an assessment and care for potential HBV, HCV, and/or HIV transmission.

C. Source Individual Consultation

1. The OHN, licensed health care provider or designee shall provide counseling for the source individual, or his/her legal guardian or custodian prior to (pre-test) conducting HIV testing.
 2. Post-test counseling shall be completed by the OHN, health care provider, or designee at the time the test results or diagnosis is given to the source individual or his/her legal guardian or custodian.
 3. The OHN, licensed health care provider or designee shall only be allowed to provide consultation through the use of protocols and standing orders which shall be written, signed and dated by the physician prior to their implementation.
 4. The scope of the consultation shall be governed by the OHN, licensed health care provider or designee's professional judgement based on the clinical situation, including the purpose of and need for HIV testing and shall be at least as comprehensive as the type of consultation provided for other diagnostic tests or procedures.
 5. All newly identified persons with HIV must be reported to the appropriate department of health, as required by law.
- D. The OHN, licensed health care provider or designee assures that arrangements are made to have the source individual tested as soon as possible for HIV antibody (Rapid testing or ELISA), Hepatitis B surface antigen (HbsAg), and Hepatitis C Antibody (ELISA).
1. The OHN, licensed health care provider (HCP) or designee will implement the source individual standing order for obtaining laboratory testing.
 2. If the source individual is already known to be HIV, HBSAg, or Hepatitis C positive, new testing need not be performed.
- E. Employee Information and Consultation:
1. For body substance exposures that do not warrant PEP and are not an **Exposure Incident**, the Occupational Health Nurse will conduct the counseling and review the BSE Employee Information/Instruction Sheet with the employee. A copy of the Information/Instruction Sheet is placed in the employee's occupational health medical record and the original is given to the employee at the time they receive counseling.
 2. For body substance exposures where PEP is warranted and considered to be an **Exposure Incident**, the OHN shall complete the BSE Employee Information/Instruction Sheet. The provider and the employee sign the Information/Instruction sheet. A copy is placed in the employee's occupational health medical record and the original is given to the employee at the time they receive counseling.

- F. The OHN's role in the management of body substance exposures where PEP is warranted:
1. The OHN or designee will provide the employee with counseling as soon as possible after the exposure and ongoing as needed.
 2. The OHN or designee will refer body substance exposures that warrant treatment with PEP to an Infectious Disease Specialist for possible chemoprophylaxis. If the assessment indicates, PEP should be initiated as soon as possible, **(preferably within 2 hours)** after the exposure until the HIV source test comes back negative.
 1. The OHN or designee will obtain the employee's appropriate baseline blood sample as soon as feasible after exposure incident **if the source patient is confirmed to be HBV, HCV, and/or HIV positive.**
 2. For **Exposure Incidents** involving a positive HIV/HBV/HCV source individual or from an unknown source in a high risk environment, the employee must have baseline blood testing.
 - a. The employee should be tested for the specific BBP they were exposed to or HIV, HBV, and HCV.
 - 1) If exposed to HBV, HBV testing is only needed for an employee who has not completed the HBV vaccine series or if the employee was vaccinated but post-vaccine HBsAb titer is unknown.
 - 2) In a high risk environment when the source is unknown, employee baseline testing for HIV and HCV should be performed. HBV testing is only needed for an employee who has not completed the HBV vaccine series or if the employee was vaccinated but post-vaccine HBsAb titer is unknown.
 - 3) **The Occupational Health Nurse must obtain written consent for HIV testing before the employee's blood is tested.**
 - 4) If the employee does not consent to baseline HIV testing, the blood sample will be frozen/stored/preserved for at least 90 days.
 - 5) If the employee refuses to have their blood sample drawn and frozen, the Occupational Health Nurse will document their refusal on the "Employee Waiver for HIV Testing/Serum Save."
 - 6) For exposures to HBV: If the employee has documentation of receiving the Hepatitis B series, but no titer has been documented, a Hepatitis B quantitative surface antibody titer will be drawn. If the titer is >10 mIU/mL anti-HBs, no further follow-up is necessary. If the titer is <10 mIU/mL anti-HBs, administer HBV PEP as recommended in *Appendix 13*.

- b. Post-test counseling shall be completed by the OHN, health care provider, or designee at the time the test results or diagnosis is given to the employee.
 - 3. The employee will be provided with all lab test results and copies of such tests will be kept confidential in the occupational health files.
 - 4. The OHN will provide the employee with the source individual's test results ensuring the confidentiality of the information and will instruct the employee that the information is confidential and not to be shared with anyone.
 - 5. The OHN documents data in the employee's occupational health medical record, as appropriate *and ensures the employee is provided a written opinion within 15 days of the evaluation. (BSE Employee Information/Instruction Sheet and/or BSE Lab Documentation Sheet.)*
 - 6. The OHN ensures incident is recorded on the OSHA 300 log if it is recordable.
If the Hepatitis B series is initiated as a result of the Exposure Incident and/or PEP is given, the Incident will be recorded on the OSHA 300 Log.
- G. Evaluation of circumstances surrounding exposure incidents will be the responsibility of the Occupational Health Department. Evaluation of the exposure incident will include ascertaining if engineering controls and work practices were in place, if personal protective equipment (PPE) was used at the time of incident, and an evaluation of the policies and "failure of control" at the time of the incident (See Coding Sheet for BSEs).
- H. Trending of body substance exposures for BJC HealthCare will be the responsibility of BJC Occupational Health Services.
- VII. RECOMMENDED BY:** Infection Control and Healthcare Epidemiology Consortium
Council of Occupational Health Professionals
Risk Management/Safety Council
Washington University Biologic Safety Committee
- VIII. ORIGINAL EFFECTIVE DATE:** May 1, 1997
- IX. AUTHORIZED BY:** Steven Lipstein
President and CEO of BJC HealthCare
- X. DATE OF REVISION:** August 16, 2001, July 15, 2003, November 2010,
July 2011, July 2012, July 2013
- XI. DATE OF REVIEW** February 27, 2004, March 31, 2005

Employee Consent for HIV Testing/Consent for Sero-Save

A virus (HIV) is known to cause the Acquired Immunodeficiency Syndrome (AIDS), and tests are available to measure antibodies to this virus in the blood. Although a positive test suggests past or present infection with this virus, false-positive results do occur, particularly with the ELISA Screening test. For this reason, all positive screening (ELISA) test results are confirmed by the more specific Western Blot technique.

Although a positive Western blot test does not necessarily mean that you will develop AIDS, it does suggest that you are or have been infected, and that you may be able to transmit HIV infection to someone else by sexual intercourse or blood donation. A negative test does not mean that you can not develop AIDS or AIDS-related illness, although it does suggest that you are not likely to be infected now.

All laboratories which perform laboratory tests for HIV are required to report complete information on confirmed Anti-HIV seropositive tests to the State Health Department.

I have read and understand the above information, and would like to have HIV antibody testing on my serum. I understand that both false negatives and false positives occur with these tests.

Signed _____

Date _____

Witness _____

I have read and understand the above information, but would not like to have HIV antibody testing performed on my serum. However, I will agree to have my blood drawn and frozen for possible testing at a later time.

Signed _____

Date _____

Witness _____

Employee Waiver for HIV Testing/Sero-Saved

I have been counseled about the potential risks of HIV Infection (the virus that causes AIDS) after a high risk blood/bloody body fluid exposure, and have been advised to have blood samples drawn. I choose not to be tested or to have my blood drawn and stored (sero-saved).

I understand that it will be impossible to determine if this exposure (Date: _____) resulted in my developing HIV infection because no specimens are being tested or stored. I understand that my refusal to have blood samples drawn or stored at this time will jeopardize coverage for this exposure through workers' compensation. I understand that if my blood sample tests positive for HIV in the future, it will be impossible to prove that I was not positive at the time of this exposure. I have thought carefully about this question and understand why I have been advised to have blood samples drawn. I choose **not** to have them obtained.

Signed _____

Date _____

Witness _____

Protocol Source Patient: Pre-test/Post-test Exposure Counseling

Occupational exposures should be considered an urgent medical concern(s) to ensure timely post exposure management and administration of HBIG, hepatitis B vaccine and/or HIV PEP to the employee. It is essential that these services be easily accessible and available, and that the process be easy and streamlined for both the source patient and the healthcare provider.

Definitions:

Background information for physician or (physician) delegated representative providing consultation.

Healthcare Worker (HCW) is defined as persons (e.g., employees, students, attending clinicians, volunteers) whose activities involve contact with patients or with blood or other body fluids from patients in a healthcare, laboratory or public health setting.

Physician Delegated Representative is a state licensed professional involved in direct patient care, other than those persons licensed as physicians (Chapter 334, RSMo).

Exposure Incident that may place a HCW at risk to infection is defined as a percutaneous injury (i.e., needlestick or cut with a sharp object) or contact of mucous membrane or non-intact skin (i.e., exposed skin that is chapped, abraded or afflicted with dermatitis) with blood, tissue or other body fluids that are potentially infectious.

Pre-Test Counseling

I. Evaluation of Exposure

The person whose blood or body fluid is the source of an occupational exposure should be evaluated for HIV, HBV and HCV infection. Information available in the medical record at the time of exposure (laboratory test results, admitting diagnosis or previous medical history) or from the source person, might confirm or exclude bloodborne virus infection. Exposures are evaluated for the potential to transmit HIV, HBV or HCV based on the type of body substance involved and the route and severity of the exposure.

- ◆ Review source patient's medical record.
- ◆ Talk with the source patient. Begin by informing source patient/family member that there was an employee exposure incident. Tell them the date and time of exposure.
- ◆ Explain how the exposure occurred, activity being performed and device used (i.e., while drawing your blood the nurse stuck herself with the contaminated needle).

B. II. Source Patient Behavioral Risk Factors

Determining the source patient’s risk of transmitting an infectious virus to an employee can be obtained by review of medical records, source patient self-reporting or by directly asking the source patient questions related to risk behavior.

Talking points/questions related to risk behavior:

Yes	No	
		Injecting drug use?
		Blood transfusions prior to 1985?
		Sexual contact with know HIV+ partner?
		Unprotected sexual contact with multiple partners?
		Multiple surgeries?
		Dialysis patient?

III. Counsel the Source Patient

The HCW must counsel the patient before the HIV test is performed.

- ◆ Consultation should be based on the clinical situation, including the purpose of and need for HIV testing and shall be at least as comprehensive as the type of consultation provided for other diagnostic tests or procedures.
- ◆ Explain to the source patient that while their test(s) result(s) will be treated confidentially, the results will be disclosed to the healthcare worker who was exposed.
- ◆ There will be no charge to the source patient for this testing.
- ◆ Obtain necessary blood sample from source patient.
- ◆ Complete laboratory requisition (per laboratory requirements).
- ◆ Send blood sample to your lab testing facility.
- ◆ Document in source patient chart that pre-test counseling is complete

Post-Test Counseling

I. Test Results

The source patient results are confidential and must be treated in a confidential manner. The following methods for notification of test result that may be used include:

- ◆ Primary care physician to contact the source patient.
- ◆ Delegated healthcare provider to provide results to source patient.
- ◆ If testing indicates the possibility of an infection, recommend the primary care physician be notified, and he/she contact the source patient.
- ◆ If patient is discharged prior to notification, delegated healthcare provider to contact Occupational Health. The office will mail results to the source patient’s primary care physician.
- ◆ Post-test counseling has been documented in source patient’s medical file.

Body Substance Exposure Employee Counseling and Instruction Sheet

Employee Name _____ Employee SSN _____

Date of Exposure _____ Time of Exposure _____

You have reported that you were exposed to the body substances checked below:

- | | | |
|---|---------------------------------|---|
| <input type="checkbox"/> Blood | <input type="checkbox"/> Emesis | <input type="checkbox"/> Urine |
| <input type="checkbox"/> Semen | <input type="checkbox"/> Saliva | <input type="checkbox"/> Other body fluid:
_____ |
| <input type="checkbox"/> Unfixed tissue/organ | <input type="checkbox"/> Sputum | _____ |
| <input type="checkbox"/> Unknown body fluid | <input type="checkbox"/> Stool | _____ |

Because this body substance (check all that apply):

- | | | |
|---|--|---|
| <input type="checkbox"/> Contacted you for a short period of time (<1 min.) | <input type="checkbox"/> Penetrated your skin | <input type="checkbox"/> Unknown source from high risk environment |
| <input type="checkbox"/> Was from an unknown source in a low-risk area | <input type="checkbox"/> Was a large amount | <input type="checkbox"/> Was from a source patient who tested positive for: |
| <input type="checkbox"/> Was a very small amount (<5cc) | <input type="checkbox"/> Contained visible blood | ○ Hepatitis B |
| <input type="checkbox"/> Did not contain visible blood | <input type="checkbox"/> Contacted you for a prolonged duration | ○ Hepatitis C |
| <input type="checkbox"/> Was dry | <input type="checkbox"/> Was splashed in your eye, nose or mouth | ○ HIV |
| <input type="checkbox"/> Contacted only intact skin | <input type="checkbox"/> Contacted non-intact skin | |
| <input type="checkbox"/> Was from a source/individual who tested negative for HIV, Hepatitis B or C | <input type="checkbox"/> Other _____ | |

Determination:

- You are not at risk of getting Hepatitis or HIV from this exposure.
- Your risk of acquiring Hepatitis or HIV from this exposure is *very unlikely*.
- Your risk of acquiring Hepatitis or HIV from this exposure is related to whether the source individual is positive for Hepatitis B, Hepatitis C or HIV. If it is available, the source individual's test results will be provided to you.
- You are at risk of acquiring hepatitis B, hepatitis C or HIV (circle all that apply) from this exposure. Close follow-up with Occupational Health is essential.

Your assessment and care for this exposure has included:

- Basic skin and wound care. Keep the exposed area clean and dry. Watch for pain, redness or swelling. If any of these develop, return to occupational health for further assessment.
- Education regarding symptoms or signs compatible with developing HIV or Hepatitis. These include fever higher than 101, muscle aches, yellow appearance to eyes or skin, swollen lymph nodes, rash, dark urine, nausea, vomiting and abdominal pain. If any of these develop, return to occupational health for further assessment.
- The opportunity to start or complete the Hepatitis B vaccine series:
 - You have documentation indicating the series was completed in _____ (year)
 - You are interested in starting/completing the series.
 - You decline starting/completing the Hepatitis B vaccination series. (Signed declination form required)

Education about precautions you should take during the follow-up period:

- The follow-up period is defined as the time until it is determined that the source individual is negative or your test results at six months are negative, if testing is indicated.

For exposures to HIV and Hepatitis B:

- Do not share razors, toothbrushes, toothpicks or anything else that could be contaminated with blood or body fluids.
- Refrain from sexual activity to prevent sexual transmission and to avoid pregnancy.
- Use condoms with all sexual partners. Do not pass or receive body fluids, particularly blood, semen or vaginal secretions.
- Do not donate blood, plasma, tissue or sperm.
- Do not breast feed your infant without consulting with your pediatrician.

For exposures to Hepatitis C:

- Do not donate blood, plasma, tissue or sperm.

You have been counseled by a health professional about this exposure, and had the opportunity to ask any questions you may have about the health risk associated with it. If there are additional instructions for you, they are listed here:

Based on the exposure data, the following treatment has been made available to you:

Discuss side-effects of all immunizations/drugs administered/indicated:	Date offered:	Accepted or Declined:	Date:	N/A
Tetanus diphtheria toxoid (Td or Tdap)				
Hepatitis B vaccine				
Hepatitis B Immune Globulin (HBIG)				
Truvada + Isentress (Raltegravir)				
Protease Inhibitor*:				
Other:				

***Note:** For medication information please refer to the BJC HealthCare HIV Post-exposure Prophylaxis Brochure. Give employee-patient a copy of the brochure.

Follow-up at: _____

For: _____

When: _____



If you have any questions, call occupational health at:

Provider signature _____ Date

Employee/Patient signature _____ Date

Offer employee/patient copy: _____ Accepted _____ Declined

File original in employee's medical record.

Body Substance Exposure Lab Documentation Sheet

(To be given to employee after source individual results are known)

Employee Name _____ Employee SSN _____

Date of Exposure _____ Time of Exposure _____

The source individual results are confidential and must be treated in a confidential manner.

Test:	Date Ordered:	Date Drawn:	Result
HIV Screen			
HCVAb			
HbSAg			

Based on the source individual result, the following follow-up screening has been made available to you:

Test, Check all that apply:	Date Offered:	Date Drawn:	Result:	Date Declined:
<input type="checkbox"/> Baseline Hepatitis B antibody assay				
<input type="checkbox"/> Baseline Hepatitis C antibody assay and ALT activity				
<input type="checkbox"/> Qualitative HCV viral RNA at 4-6 weeks				
<input type="checkbox"/> 4 – 6 month Hepatitis C antibody assay and ALT activity				
<input type="checkbox"/> Baseline HIV antibody assay run/frozen				
<input type="checkbox"/> 6 week HIV antibody assay				
<input type="checkbox"/> 12 week HIV antibody assay				
<input type="checkbox"/> 6 month HIV antibody assay				
<input type="checkbox"/> 12 month HIV antibody assay, if source both HIV and HCV positive				

If you have any questions, call Occupational Health at _____

Referred to Dr. _____

Provider signature _____ Date _____

Employee/Patient signature _____ Date _____

Today's date _____

Offer patient copy _____ Accepted _____ Declined

File original in employee's occupational health medical record.

Occupational Health Standing Order

Title	Management of Potential Exposures to Blood and Body Fluids and Recommendations for PEP
Applicability	These standing orders apply to BJC HealthCare and Washington University School of Medicine employees, students, volunteers and Barnes Care clients.
Purpose	<p>These standing orders pertain to the evaluation and treatment of Body Substance Exposures (BSE) from the time of exposure to the time the source patient's HIV test result is confirmed negative. The orders cover only RNs who have completed the BSE Specialist Training. The orders are intended to facilitate timely assessment and administration of HIV PEP 24 hours a day.</p> <p>The orders are based on the Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Post-exposure Prophylaxis, September 2013; 34(9): 875-892, and Morbidity and Mortality Weekly Report, September 30, 2005; 54 (No. RR-9).; 1-17</p>

Objectives	Clinical Assessments and Interventions	Immediate Referral to ID Physician
Determine extent and severity of exposure	<ul style="list-style-type: none"> • Wash area with soap and water; mucous membranes should be flushed with water. • Determine the exposure risk and infection status of source <ul style="list-style-type: none"> - Determine if PEP is warranted or not warranted • Before ordering PEP, report employee's current medications to pharmacy and ask for possible medication interactions. • If indicated, order PEP until source patient test result is confirmed negative. • Counsel employee regarding precautions to take during follow-up period. 	<ul style="list-style-type: none"> - Before ordering any PEP - Exposure from a known HIV+ source - Exposure warranting PEP for pregnant employee - Potential medication interactions - Greater than 12-hour lapse since exposure with high-risk source individual - Employee requires additional immediate counseling - Unknown source from a high risk environment
		Notify ID Physician next business day
		<ul style="list-style-type: none"> - Known HCV+ source - Known HBSAg+ source - Non-immediate questions
Physician Signature:		Date:

(a)

Standing Order for Post-Exposure Prophylaxis Prescriptions

Abbreviations: BSE = Body Substance Exposure; PEP = Post-Exposure Prophylaxis

DRUG	DOSE	INDICATIONS	SIDE EFFECTS	CONTRAINDICATIONS	DRUG INTERACTIONS
Basic PEP Regimen					
Truvada (combination of 300mg Tenofovir and 200 mg Emtricitabine)	One tablet by mouth once daily With or without food.	BSE based on MMWR Vol. 54/No. RR-9 USPHS Guidelines for the management of Occupational Exposures to HIV and Recommendations for PEP, Sept 2013	Headache, nausea, diarrhea, abdominal pain, poor appetite; weakness; muscle aches Tingling sensation of hands and feet; lowered white blood cell counts; increases in liver and muscle enzymes; rash; darkening of the skin on palms and soles.	Hypersensitivity to any of the components Animal reproduction studies have failed to demonstrate a risk to the fetus and there are no adequate and well-controlled studies in pregnant women (Pregnancy CategoryB).	Avoid with adefovir (Hepsera) Avoid with lamivudine (Epivir, Epivir-HBV) or with drugs containing lamivudine (Combivir, Epzicom, or Trizivir) Avoid with drugs containing the same ingredients (Emtriva, Viread, Atripla, Complera, Stribild). Avoid Dabigatran (Pradaxa)
- AND -					
Raltegravir (400 mg tablet Isentress)	When combined with Truvada: One 400 mg tablet twice daily	USPHS Guidelines for the management of Occupational Exposures to HIV and Recommendations for PEP, Sept 2013	Nausea, diarrhea, abdominal discomfort, and rash. Insomnia, headache, dizziness, increases in blood sugar, increases in liver enzymes, decreases in blood counts	Hypersensitivity to any of the components Animal reproduction studies have failed to demonstrate a risk to the fetus and there are no adequate and well-controlled studies in	Rifabutin, Rifampin, St. John's wort may decrease serum concentrations of Raltegravir-monitor therapy Proton pump inhibitors (omeprazole, pantoprazole,

				pregnant women (Pregnancy CategoryB).	etc) may increase the serum concentrations of raltegravir-monitor therapy
Physician's Signature:					Date:

Note: The nurse should consult with the physician above as outlined by the "Management of Potential Exposures to Blood and Body Fluids and Recommendations for PEP" standing order.

* Online drug interaction reference: <http://hivinsite.ucsf.edu/InSite?page=md-rr-24>

ADDRESSOGRAPH
Hospital Registration Number
Patient Type: INPT
Patient Name: John Doe
Attending Physician: Jane Doe, MD
Patient Address: 1 Spring Lane, St. Louis, MO
63110
Medical Record Number: 000-00-00
(Required by JCAHO/Board of Health/Barnes-

Source Individual Body Substance Exposure (BSE) Standing Order

The orders are based on the Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Post-Exposure Prophylaxis, September 2013; 34(9): 875-892. Mortality and Morbidity Weekly Report, September 30, 2005; 54 (No.RR-9); 1-17..

Date/Time: _____ **Orders:** _____

Required Field DX: _____

Nature of Exposure: _____

Call House Officer or HCP for: Refusal of lab testing

BSE Counseling: Pre-test Counseling

Lab: Review chart for previous HIV, Hepatitis B Surface Antigen and Hepatitis C Antibody results. If the results are available, report to Occupational Health Nurse and/or designee, and/or document on the exposed employee's BSE Information Sheet. If no previous testing is available, or it has been greater than 30 days since source individual previously tested negative, order labs as indicated by BSE Specialist, Occupational Health Nurse or House Supervisor and instruct lab to run as BSE:

- Anti HIV 1-2
- Hepatitis C Antibody
- Rapid HIV Screen
- Hepatitis B Surface Antigen

As soon as test results are received, notify the Occupational Health Nurse and the source individual's physician or designated healthcare provider to provide post-test counseling to the source individual. If the HIV, Hepatitis B and/or Hepatitis C results are positive, the results must be reported to the local Department of Health and as otherwise required by law.

Additional Comments: _____

Healthcare Provider: _____ Date _____

MD _____ Date _____

BBP Exposure Control Plan

Appendix 11
Hepatitis B Vaccine Declination Statement
(Mandatory)

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring Hepatitis B Virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B Vaccine, at no charge to myself. However, I decline Hepatitis B Vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood and other potentially infectious materials and I want to be vaccinated with Hepatitis B Vaccine, I can receive the vaccination series at no charge to me.

Signed: _____

Printed Name: _____

Date: _____

**APPENDIX 12
Centers for Disease Control and Prevention Recommendations for All HIV
Occupational Exposures***

	Infection status of source			
	HIV positive source	Source of unknown HIV status[^]	Unknown source[#]	HIV negative source
All exposures	Recommend PEP (<i>Truvada, Raltegravir</i>)	Generally, no PEP is warranted, however consider PEP ^{^^} for source with HIV risk factors ⁺	Generally, no PEP is warranted, however consider PEP ^{^^} in settings in which exposure to HIV-infected persons is likely	No PEP warranted

* Including percutaneous, mucous membrane, and non-intact skin

[^] For example, deceased source patient with no samples available for HIV testing

[#] For example, a needle from a sharps disposal container

⁺If PEP is offered and administered and the source is later determined to be HIV-negative, PEP should be discontinued

^{^^}The recommendation “consider PEP” indicates that PEP is optional; a decision to initiate PEP should be based on discussion between the exposed person and the treating clinician regarding the risks versus benefits of PEP

APPENDIX 13

Table 1.0: Recommended Postexposure Prophylaxis for Exposure to Hepatitis B Virus

Vaccination and antibody response status of exposed workers*	Treatment		
	Source HBsAg Positive	Source HBsAg Negative	Source Unknown or not available for testing
Unvaccinated	HBIG [§] x 1 and initiate HB vaccine series	Initiate HB vaccine series	Initiate HB vaccine series
Previously vaccinated			
Known responder**	No treatment	No treatment	No treatment
Known non-responder**	HBIG x 1 and initiate revaccination or HBIG x 2 ^{§§}	No treatment	If known high risk source, treat as if source were HBsAg positive
Antibody response unknown	Test exposed person for antibody to HBsAg	No treatment	Test exposed person for anti-HBs
	<ol style="list-style-type: none"> If anti-HBs >10 mIU/mL, no treatment is necessary If anti-HBs <10 mIU/mL administer HBIG x 1 and vaccine booster, 		<ol style="list-style-type: none"> If anti-HBs >10 mIU/mL, no treatment is necessary If anti-HBs <10 mIU/mL, administer vaccine booster and recheck titer in 1-2 months

*Persons who have previously been infected with HBV are immune to re-infection and do not require post exposure prophylaxis.

[§]Hepatitis B immune globulin; dose is 0.06 mL/kg intramuscularly.

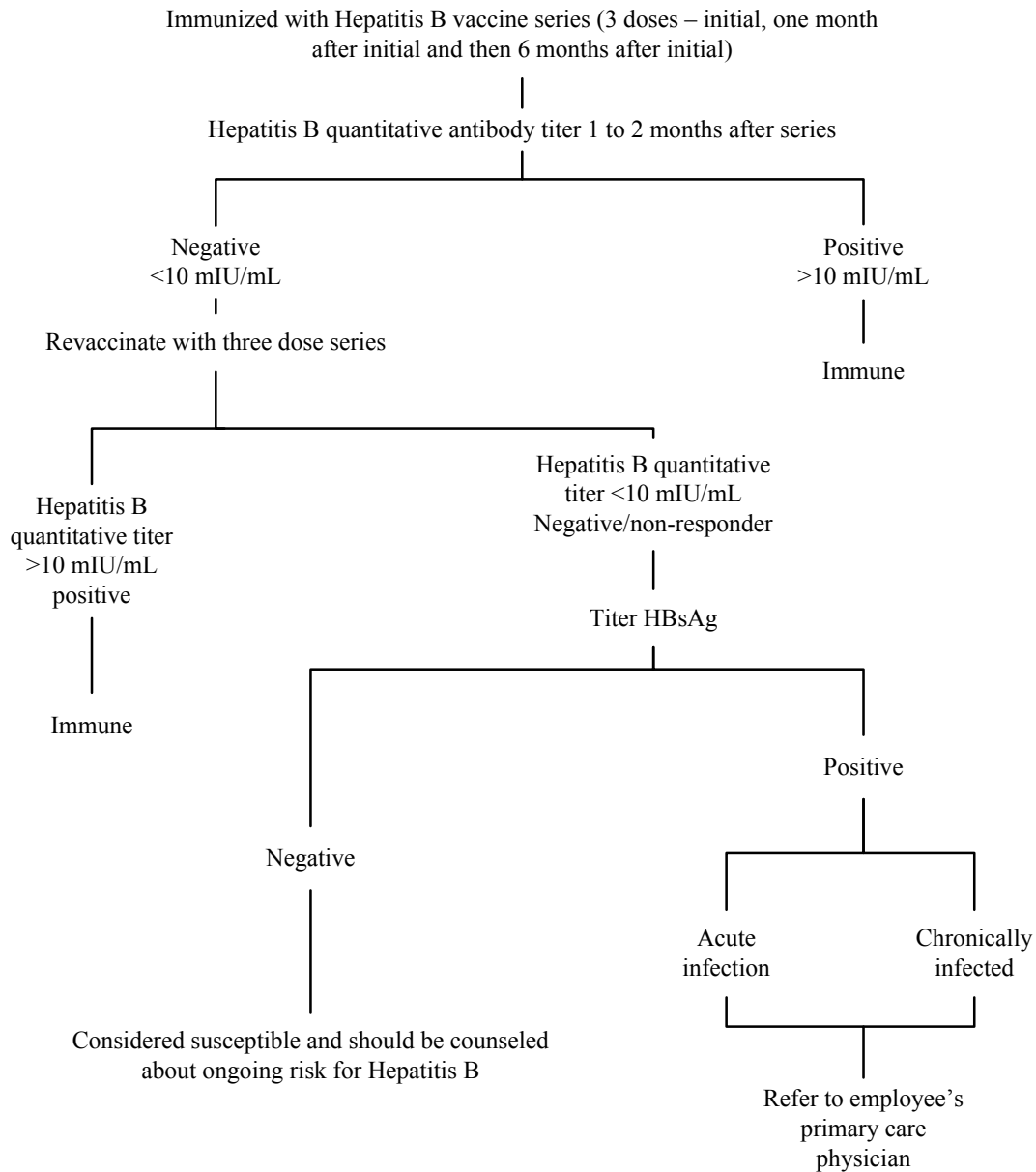
** A responder is a person with adequate levels of serum antibody to HBsAg (i.e., anti-HBs ≥10 mIU/mL).

** A non-responder is a person with inadequate response to vaccination (i.e., serum anti-HBs <10 mIU/mL).

^{§§} The option of giving one dose of HBIG and reinitiating the vaccine series is preferred for nonresponders who have not completed a second 3-dose vaccine series. For persons who previously completed a second vaccine series but failed to respond, two doses of HBIG are preferred.

APPENDIX 14

Algorithm for Immunization of Health Care Workers with Hepatitis B Vaccine



Anti-HBs – Hepatitis B Surface Antibody
mIU/mL – Milli-International Units per Milliliter
HBsAg – Hepatitis B Surface Antigen
Anti-HBc – Hepatitis B Core Antibody
HBV – Hepatitis B Virus

APPENDIX 15
Sample
C. Safety Sharps Device Evaluation Checklist

Entity Name: _____

Name of device: _____

Manufacturer: _____ Order #: _____

Date(s) trialed: _____ Number of devices trialed: _____

Did non-managerial employees responsible for direct patient care trial the device?
 Yes No

If yes, was feedback obtained from the employees? Yes No
If yes, please attach formal documentation of feedback.

Has the device been approved for use? Yes No

Date approved: _____

Committee(s) involved: _____

Have employees been trained on how to use the device? Yes No

If yes, please enter where training records are kept and dates of training:

Location: _____ Training date(s): _____

Date device was introduced for regular use: _____

Signature of person completing this form: _____

Date: _____

APPENDIX 15

SAFETY SHARPS DEVICE EVALUATION CHECKLIST

Entity Name: Barnes-Jewish Hospital

Name of device: Vanish Point Syringe

Manufacturer: Retractable Technologies Order #: _____

Date(s) trialed: May 2011 to January 2012 Number of devices trialed: 1

Did non-managerial employees responsible for direct patient care trial the device?
 X Yes No

If yes, was feedback obtained from the employees? X Yes No
If yes, please attach formal documentation of feedback.

Has the device been approved for use? X Yes No

Date approved: November 12, 2013

Committee(s) involved: HIT Team and Nurse Steering Committee

Have employees been trained on how to use the device? Yes No

- **Dates are not scheduled yet**

If yes, please enter where training records are kept and dates of training:

Location: _____ Training date(s): _____

Date device was introduced for regular use: _____

Signature of person completing this form: _____

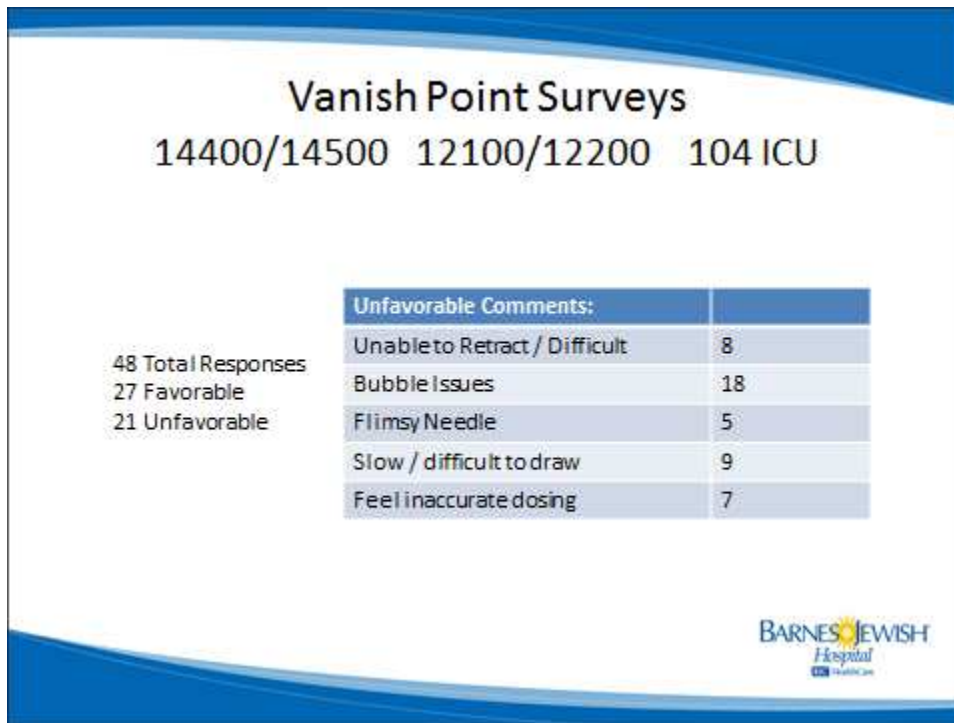
Date: _____

In order to evaluate increase in incidence of subcutaneous NSI among direct patient care providers with an active safety-engineered device, four medical nursing divisions 12100, 12200, 14400, 14500 and one ICU division, 10400 ICU, participated in a trial of a retractable, passive device, Vanishpoint syringe by Retractable Technologies, between May 2011 and January 2012. All existing active safety engineered devices were removed and replaced with Vanishpoint passive devices. RNs on divisions received training on all shifts from educational trainers provided by Retractable Technologies.

During the pre-trial period, 19 NSI were reported on those nursing divisions with a rate of 2.21 NSI per 100,000 productive hours. During the 9 month trial period of Vanishpoint syringes, 1 NSI was reported with a rate of 0.42 NSI per 100,000 productive hours.

At end of 9 month trial, surveys were distributed to team members who used the devices, surveys were then collected and data was tabulated.

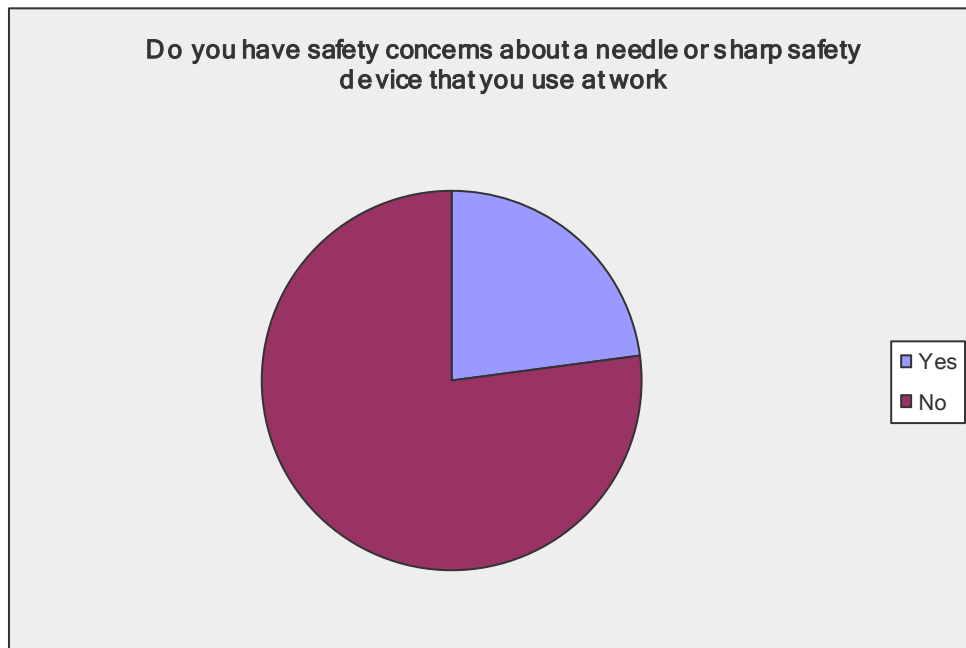
Results of trial findings, direct patient care providers survey results and cost analysis were presented to IV Best Practices Committee and BJH Administration. Those recommendations were then sent to BJC Procurement for system usage approval.



The following is the 2013 annual sharps device safety questionnaire. The questionnaire was distributed to BJH front line staff. The survey results were reviewed by front line staff and managers at the body substance exposure committee meeting in July 2013. The Occupational Health Department will document interventions implemented throughout the year.

2013 Annual Sharps Device Safety Questionnaire

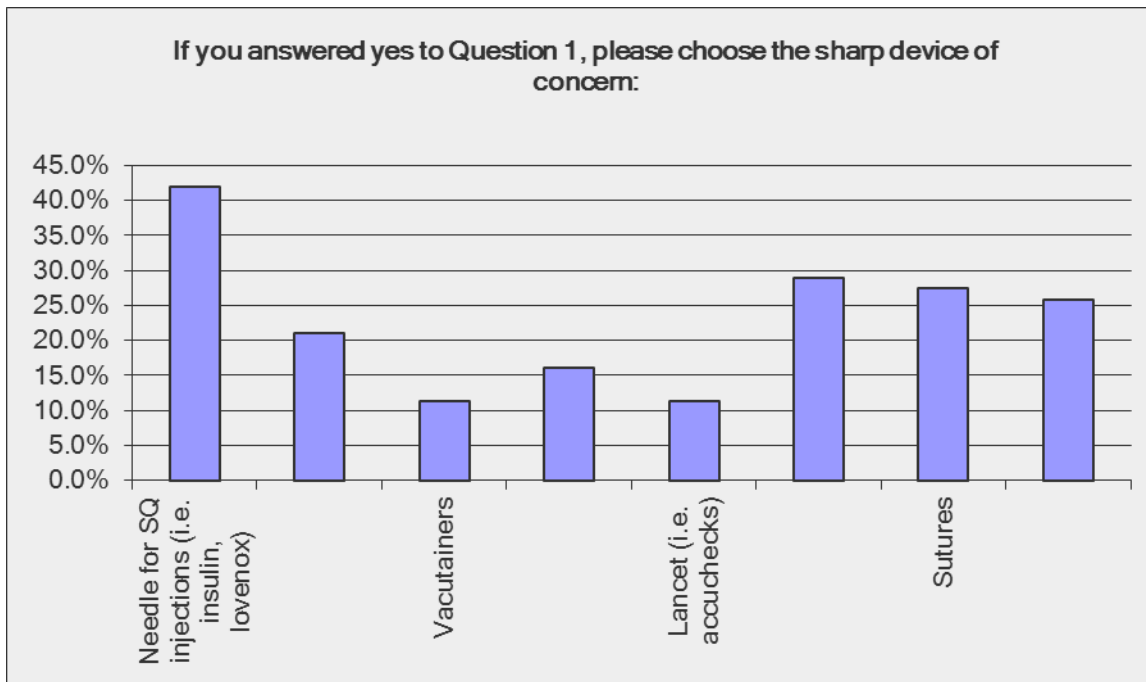
Do you have safety concerns about a needle or sharp safety device that you use at work		
Answer Options	Response Percent	Response Count
Yes	22.9%	64
No	77.1%	215
<i>answered question</i>		279
<i>skipped question</i>		0



Annual Sharps Device Safety Questionnaire

If you answered yes to Question 1, please choose the sharp device of concern:

Answer Options	Response Percent	Response Count
Needle for SQ injections (i.e. insulin, lovenox)	41.9%	26
IV access device	21.0%	13
Vacutainers	11.3%	7
Butterflies	16.1%	10
Lancet (i.e. accuchecks)	11.3%	7
Scalpel	29.0%	18
Sutures	27.4%	17
Other	25.8%	16
<i>answered question</i>		62
<i>skipped question</i>		217



Annual Sharps Device Safety Questionnaire

If you answered yes to Question 1, explain your concern(s):

Answer Options	Response Count
	58
<i>answered question</i>	58
<i>skipped question</i>	221

Annual Sharps Device Safety Questionnaire

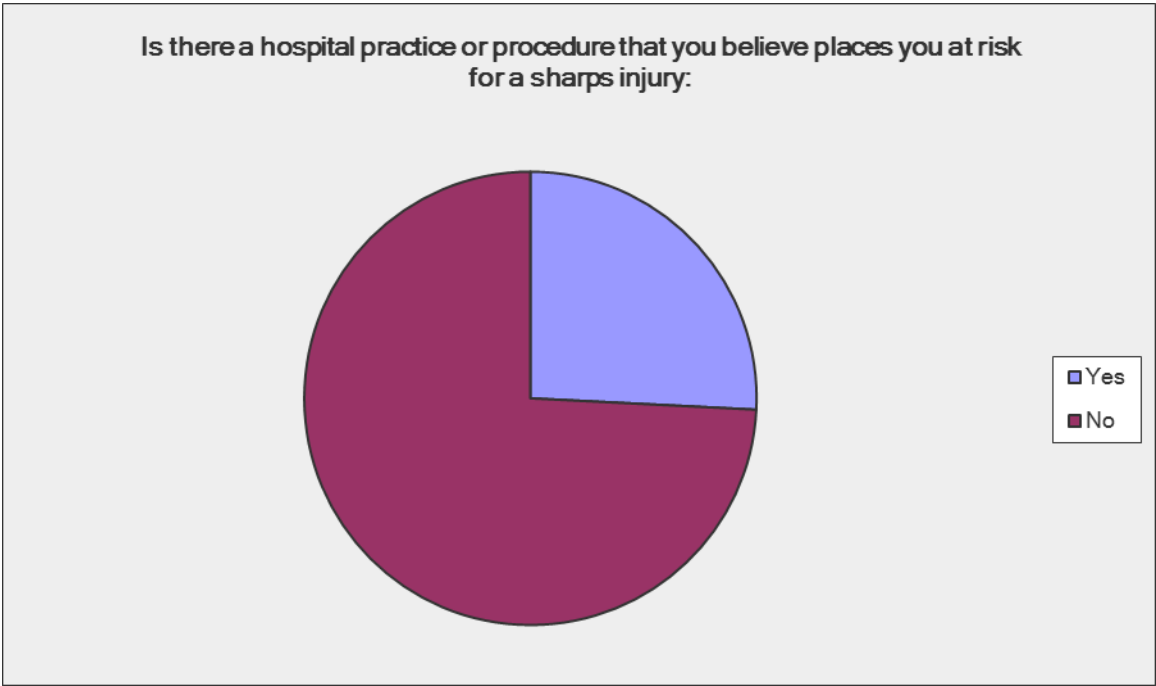
Would you like to have additional education or training provided on a needle or sharp device that you use? If so, please list the topic(s):

Answer Options	Response Count
	54
<i>answered question</i>	54
<i>skipped question</i>	225

Annual Sharps Device Safety Questionnaire

Is there a hospital practice or procedure that you believe places you at risk for a sharps injury:

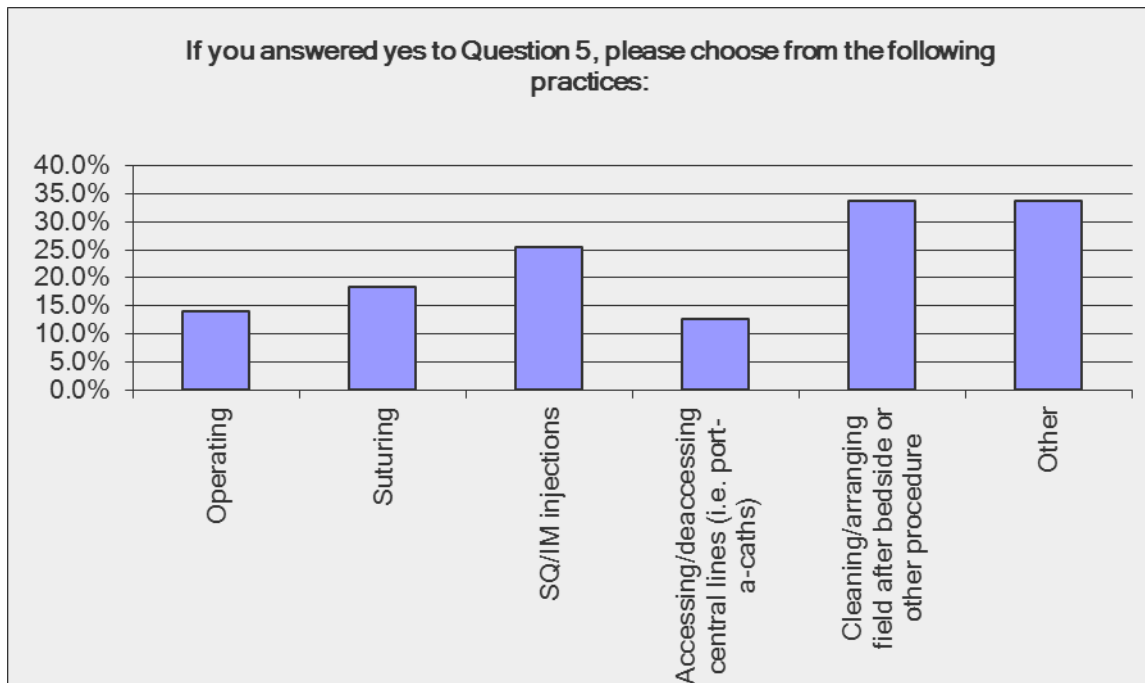
Answer Options	Response Percent	Response Count
Yes	25.8%	72
No	74.2%	207
<i>answered question</i>		279
<i>skipped question</i>		0



Annual Sharps Device Safety Questionnaire

If you answered yes to Question 5, please choose from the following practices:

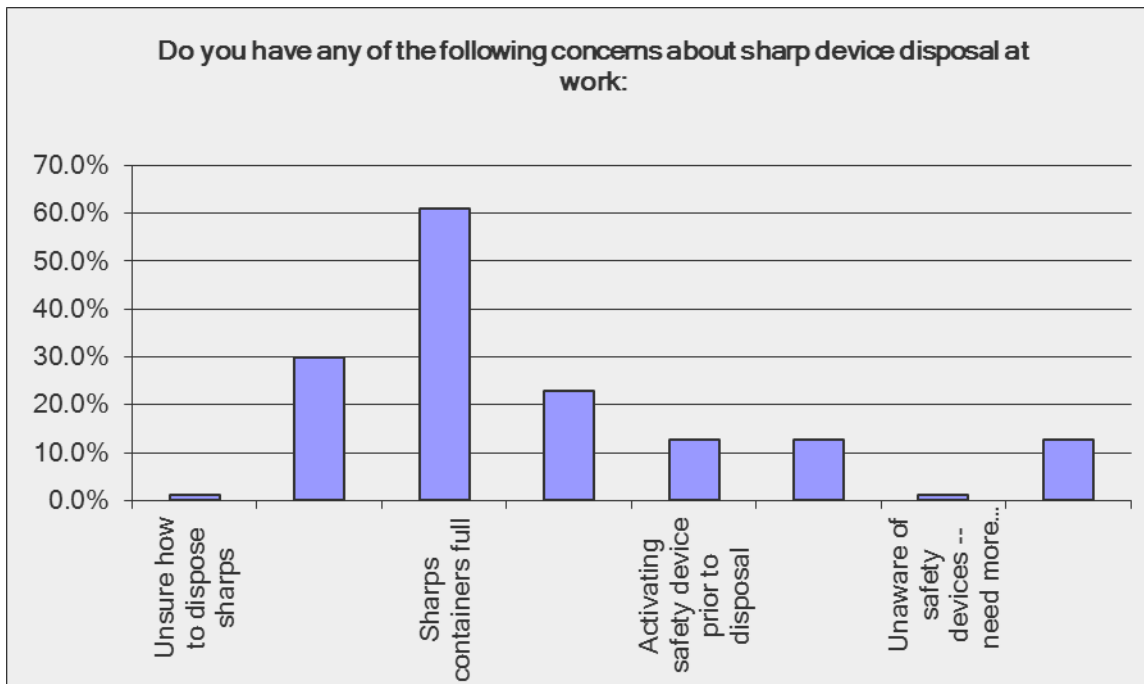
Answer Options	Response Percent	Response Count
Operating	14.1%	10
Suturing	18.3%	13
SQ/IM injections	25.4%	18
Accessing/deaccessing central lines (i.e. port-a-caths)	12.7%	9
Cleaning/arranging field after bedside or other procedure	33.8%	24
Other	33.8%	24
<i>answered question</i>		71
<i>skipped question</i>		208



Annual Sharps Device Safety Questionnaire

Do you have any of the following concerns about sharp device disposal at work:

Answer Options	Response Percent	Response Count
Unsure how to dispose sharps	1.1%	1
Disposal unit not available or easily accessible	29.9%	26
Sharps containers full	60.9%	53
Sharps disposed in improper location	23.0%	20
Activating safety device prior to disposal	12.6%	11
Safety device or shield not locking during activation	12.6%	11
Unaware of safety devices -- need more training	1.1%	1
Other	12.6%	11
<i>answered question</i>		87
<i>skipped question</i>		192



Annual Sharps Device Safety Questionnaire

If you answered yes to Question 7, please provide location of disposal (i.e. unit, department)

Answer Options	Response Count
	69
<i>answered question</i>	69
<i>skipped question</i>	210

Annual Sharps Device Safety Questionnaire

Have you experienced a "near miss" sharps injury (i.e. almost got injured) or a body substance exposure (i.e. needle stick, spray, splash) in the past year? If so, please choose from the following:

Answer Options	Response Percent	Response Count
Availability of eye and/or face protection on unit	3.8%	4
Personal protective equipment (PPE) available, but not easily accessible when needed	3.8%	4
Inability to obtain appropriate PPE prior to patient care activity	1.0%	1
Unsure when to use PPE -- need more training	0.0%	0
Sharps container full	27.9%	29
Sharp left on surface or disposed inappropriately	31.7%	33
Safety device not activated prior to disposal	8.7%	9
Difficultly activating safety device prior to disposal	15.4%	16
Patient combative/moved during patient care activity	47.1%	49
Other	14.4%	15
	<i>answered question</i>	104
	<i>skipped question</i>	175