UC San Diego Health

Department of Environmental Health & Safety (EH&S)
(858) 657-7166

BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

Effective Date: October 23, 2016
Review Date: July 26, 2020
<table>
<thead>
<tr>
<th>Date Reviewed</th>
<th>Reviewed by</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 23, 2017</td>
<td>Geverola, I.</td>
<td>[Signature Image]</td>
</tr>
<tr>
<td>April 23, 2018</td>
<td>Geverola, I.</td>
<td>[Signature Image]</td>
</tr>
<tr>
<td>July 26, 2018</td>
<td>Geverola, I.</td>
<td>[Signature Image]</td>
</tr>
<tr>
<td>August 26, 2019</td>
<td>Geverola, I. A</td>
<td>[Signature Image]</td>
</tr>
<tr>
<td>July 26, 2020</td>
<td>Geverola, I. A</td>
<td>[Signature Image]</td>
</tr>
</tbody>
</table>
HOTLINES

If exposed, IMMEDIATELY seek medical treatment. Call:

- **Emergency Department**
  - UC San Diego Medical Center, Hillcrest: (619) 543-6400
  - Thornton Hospital, La Jolla: (858) 657-7600

- **Center for Occupational and Environmental Medicine (COEM)**
  - Hillcrest: 330 Lewis Street, Suite 100: (619) 471-9210
  - La Jolla: 8899 University Center Lane, Suite 160: (858) 657-1600

For more details, see Section IV, Paragraph E of this Plan:

- Post-Exposure Evaluation and Follow-up
# Table of Contents

I. PURPOSE ................................................................................................................................... 1  
II. SCOPE ........................................................................................................................................ 1  
III. AUTHORITY ............................................................................................................................. 1  
IV. REFERENCE .............................................................................................................................. 1  
V. DEFINITIONS ............................................................................................................................ 1  
VI. POLICY ...................................................................................................................................... 3  
VII. PROCEDURES AND RESPONSIBILITIES ............................................................................. 4  
   A. Exposure Determination ....................................................................................................... 4  
   B. Methods of Compliance ........................................................................................................ 6  
      1. Standard Precautions ..................................................................................................... 6  
      2. Engineering and Work Practice Controls ...................................................................... 7  
      3. Sharps Safety Action Plan ............................................................................................. 8  
      4. Prohibited Practices .................................................................................................... 11  
      5. Requirements for Handling Contaminated Sharps ...................................................... 11  
      6. Effective Use and Management of Sharps Disposal Containers ................................ 12  
      7. Management of Regulated Waste ................................................................................. 12  
      8. Handling Specimens of Blood or OPIM .................................................................... 12  
      9. Servicing or Shipping Contaminated Equipment ........................................................ 13  
     10. Cleaning and Decontamination of the Worksite ........................................................... 13  
     11. Personal Hygiene “Hand Washing” ............................................................................ 13  
     12. Personal Protective Equipment ................................................................................... 14  
     13. Contaminated Linens ................................................................................................... 15  
   C. Hepatitis B Vaccination Program ....................................................................................... 16  
   D. Contamination Incidents .................................................................................................... 16  
   E. Post Exposure Incident Evaluation and Follow-Up ............................................................ 16  
   F. Communication of Hazards to Employees ......................................................................... 17  
   G. Recordkeeping .................................................................................................................... 19  
   H. Information and Training .................................................................................................... 20  
VIII. APPENDICES .......................................................................................................................... 22  
   A. Preparedness Plan for Ebola .............................................................................................. 22  
   B. Post-Exposure Prophylaxis (PEP) Guidelines ................................................................. 29  
      b.1) Non-occupational: ..................................................................................................... 29  
      b.2) Occupational: .......................................................................................................... 30
BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

I. PURPOSE
The goal of this Bloodborne Pathogen (BBP) Exposure Control Plan is to minimize or eliminate health care worker exposure to bloodborne pathogens. This plan represents the measures which are required in accordance with Cal/OSHA's Bloodborne Pathogens Standard - Title 8, California Code of Regulations, Section 5193 (c) (1) (a) and focuses on safe work practices, personal protective equipment, engineering and administrative controls. Adhering to this plan demonstrates our commitment to providing a safe and healthy environment in which to deliver patient care and ensures compliance with all applicable laws and regulations relating to bloodborne pathogens exposure.

II. SCOPE
This BBP Exposure Control Plan applies to all occupational exposure to blood or other potentially infectious materials as defined by this plan.

III. AUTHORITY
a. Title 8 CCR, § 5193. Bloodborne Pathogens
b. Title 8 CCR, § 3203. Injury and Illness Prevention Plan

IV. REFERENCE
a. MCP 612.3. Injury and Illness Prevention Program (IIPP)
b. Infection Control Policy & Procedure “Standard Precautions”
c. MCP 815.1. Sharps Safety
d. MCP 813.1, Hazardous Materials and Hazardous Waste Management
e. Infection Control Policy and Procedure “Hand Health and Hygiene”
f. Infection Prevention and Clinical Epidemiology “Employee Health General Information”

V. DEFINITIONS
Blood - means human blood, human blood components, and products made from human blood.

Bloodborne Pathogens – Pathogenic microorganisms that may be present in human blood and can cause disease in humans. These Pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV).

Contaminated – The presence, or the reasonably anticipated presence, of blood or other potentially infectious materials in or on the surface of an item.

Contaminated Linen - means linen which has been soiled with blood or other potentially infectious materials or may contain sharps.
**Decontamination** – The use of physical or chemical means to remove, inactivate or destroy bloodborne pathogens in or on the surface of an 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.

**Engineering Controls** – Controls such as sharps disposal containers, needleless systems and sharps with engineered sharps injury protection that isolate or remove the bloodborne pathogens hazard from the workplace.

**Exposure Incident** – A specific eye, mouth, or other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that result from the performance of an employee’s duties.

**Needle or Needle Device** – A needle of any type, including but not limited to, solid and hollow-bore needles.

**Needleless System** – A device that does not utilize needles for the withdrawal of body fluids after initial venous or arterial access is established and the administration of medications or fluids and any other procedure involving the potential for an exposure incident.

**Sharp Device** – Any object used or encountered that can be reasonably anticipated to penetrate the skin or any other part of the body, and to result in an exposure incident, including but not limited to, needle devices, scalpels, lancets, broken glass, broken capillary tubes, exposed end of dental wires and dental knives, drills and burs.

**Sharp Safety Device** – A physical attribute built into a needle device used for withdrawing OPIM, accessing a vein or artery, or administering medications or other fluids, which effectively reduces the risk of an exposure incident by a mechanism such as barrier creation, blunting, encapsulation, withdrawal or other effective mechanisms; or a physical attribute built into any other type of needle device, or into a non-needle sharp, which effectively reduces the risk of an exposure incident.

**Sharps Injury** – An injury caused by a sharp, including but not limited to, cuts, abrasions, or needle sticks.

**Sharps Injury Log** – A written or electronic record satisfying the requirements of the Cal/OSHA standard.

**Occupational Exposure** – A job category where skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials could be reasonably anticipated.

**Other Potentially Infectious Materials (OPIM)** – Human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures; any other body fluid that is visibly contaminated with blood such as saliva or vomitus; and all body fluids in situations where it is difficult or impossible to differentiate between body fluids such as in an emergency response; any unfixed tissue or organ (other than intact skin) from a human (living or dead); or any of the following, if known or reasonably likely to be infected with HIV, HBV or HCV:
• Cell, tissue, or organ cultures from humans or experimental animals.
• Blood, organs or other tissues from experimental animals.
• Culture medium or other solutions.

**Source Individual** – Any individual, living or dead, whose blood or OPIM 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** – An approach to infection control. Standard precautions expand the universal precautions concept *(see Universal Precaution below)* to include all OPIM with the intent of protecting employees from any disease process that can be spread by contact with a moist body substance. This isolation technique includes substances such as, feces, urine, saliva and sputum that were not included in universal precautions unless they contained visible blood.

**Universal Precautions** – An approach to infection control, created in 1985 largely in response to the HIV epidemic. This applies to blood and body fluid precautions universally to all persons regardless of their presumed infection status. Emphasize the use of barriers to prevent contact with blood and OPIM. Precautions apply to blood, semen, and vaginal secretions; amniotic, cerebrospinal, pericardial, peritoneal, pleural, and synovial fluids; and any other body fluid visibly contaminated with blood.

**VI. POLICY**

Per reference (a), it is the responsibility of department managers to ensure that all employees, physicians, residents and interns working within the UC San Diego Health, who may be potentially exposed to bloodborne pathogens, follow this policy and procedure. Failure to follow these procedures may result in disciplinary actions.

This program is managed by the “BBP Workgroup” which includes the Department of Environmental Health & Safety (EH&S), the Value Analysis Committee, and the Center for Occupational & Environmental Medicine (COEM). These are a multi-disciplinary team composed of representatives from EH&S, Infection Prevention & Clinical Epidemiology (IPCE), COEM, Nursing, Purchasing, Central Services, and Clinical Laboratories. The Workgroup will review and update the plan at least annually and whenever deemed necessary to:

1. Reflect new or modified processes, tasks and procedures relevant to exposure risk.
2. Reflect progress in the implementation of program components involving needleless systems and engineered sharps injury protection devices.
3. Reflect innovations or changes in exposure control procedures or technological developments, such as the use of new engineered devices or other controls.
4. Include new or revised health care worker positions with occupational exposure.
5. Include applicable lessons learned from the review and evaluation of exposure incidents, which have occurred since the previous program update.

6. Review and respond to information indicating that the Exposure Control Plan is deficient in any area.

7. Foster continuous improvement of the Plan and ensuing performance.

8. Incorporate input and feedback solicited from non-managerial employees with respect to procedures performed in their respective work departments. Methods of soliciting employee feedback may include:
   a. Involvement in informal problem-solving groups.
   b. Employee surveys.
   c. Participation in safety meetings, inspections or audits.
   d. Exposure incident investigations.
   e. Participation in pilot testing of devices.

VII. PROCEDURES AND RESPONSIBILITIES

A. Exposure Determination

All of the UC San Diego healthcare worker job classifications listed below have been determined to be at risk for occupational exposure. All elements of this exposure control plan apply to all employees in these jobs:

Classification 1: High Risk (job classification in which all employees have ROUTINE occupational exposure)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Job Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesia Technicians</td>
<td>Nursing Assistants/Aides</td>
</tr>
<tr>
<td>Anesthesiologists</td>
<td>OB Technicians</td>
</tr>
<tr>
<td>Central Processing Unit Staff</td>
<td>Ophthalmic Technicians</td>
</tr>
<tr>
<td>Cytogenetic Technologists</td>
<td>OR Technicians</td>
</tr>
<tr>
<td>Cytotechnologists</td>
<td>Pathology Assistants</td>
</tr>
<tr>
<td>Environmental Services staff</td>
<td>Perfusionists</td>
</tr>
<tr>
<td>Histology Technologists</td>
<td>Phlebotomists</td>
</tr>
<tr>
<td>IV Therapists</td>
<td>Physician Assistants</td>
</tr>
<tr>
<td>Laboratory Staff personnel</td>
<td>Physicians (includes Residents, Fellows and Interns)</td>
</tr>
<tr>
<td>Licensed Vocational Nurses</td>
<td>Nurses</td>
</tr>
<tr>
<td>Medical Assistants</td>
<td>Respiratory Therapists</td>
</tr>
<tr>
<td>Medical Technologists</td>
<td>Surgeons / Surgery Technicians</td>
</tr>
</tbody>
</table>
### Classification 2: Moderate Risks (job classification which some employees have POSSIBLE occupational exposure)

<table>
<thead>
<tr>
<th>Job Classification</th>
<th>Tasks/Procedures which POSSIBLE occupational exposure occurs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration/Management Staff</td>
<td>First aid response procedures</td>
</tr>
<tr>
<td>Audiologist</td>
<td>Providing first aid. Examining ear infections</td>
</tr>
<tr>
<td>Clinical Engineering</td>
<td>Doing maintenance/repairs on equipment contaminated with blood, OPIM, or containing used sharps</td>
</tr>
<tr>
<td>Dietary Employees</td>
<td>Handling food contaminated with vomitus, blood, or OPIM</td>
</tr>
<tr>
<td>EEG Technicians</td>
<td>Attaching/handling/cleaning diagnostic equipment</td>
</tr>
<tr>
<td>EKG Technicians</td>
<td>Attaching/handling/cleaning diagnostic equipment</td>
</tr>
<tr>
<td>Mammography/Radio Imaging/Ultrasound/Nuclear Technicians and Technologists</td>
<td>Attaching/handling/cleaning diagnostic equipment</td>
</tr>
<tr>
<td>Occupational Therapists</td>
<td>Examining the condition of high-risk patients. Providing first aid</td>
</tr>
<tr>
<td>Optometrists</td>
<td>Assessing and assisting patients with microbial infections/ocular tissues</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>Counseling high-risk patients on drug administration. Providing first aid</td>
</tr>
<tr>
<td>Physical Therapists/Assistants/Aides</td>
<td>Conducting exams, providing patient therapy</td>
</tr>
<tr>
<td>Plant Operations/Engineers</td>
<td>Doing maintenance/repairs on systems or equipment contaminated with blood, OPIM, or containing used sharps</td>
</tr>
<tr>
<td>Security Services Personnel</td>
<td>Responding to emergencies (ex: restraining confrontational patients and staff). Searches</td>
</tr>
<tr>
<td>Speech Therapists</td>
<td>First aid response procedures</td>
</tr>
<tr>
<td>Transporters/Patient Escorts</td>
<td>First aid response procedures</td>
</tr>
<tr>
<td>Volunteers</td>
<td>First aid response procedures</td>
</tr>
</tbody>
</table>
B. Methods of Compliance

This section reviews the numerous work practices and procedures necessary to minimize or eliminate unprotected exposure to bloodborne pathogens. Compliance with these practices and procedures is mandatory and is a condition of employment.

The methods of implementing these provisions are cross-functional and multifaceted. They are set forth in this plan and include collaborative, integrated efforts of Infection Prevention & Clinical Epidemiology, Center for Occupational & Environmental Medicine, EH&S, Nurse Education, Labor and Management. These efforts, performance and compliance are monitored through the Infection Control, Value Analysis/Products, and Environment of Care Committees to ensure that the safe use of selected technologies / devices, work practices, preventive measures and post-exposure activities are standardized and pervasive throughout the organization’s culture and business operations.

This section of the Plan sets forth general protocols and methods by which healthcare workers are protected from exposure to bloodborne pathogens, including the use of Universal/Standard Precautions, engineering controls, work practice controls, personal protective equipment, proper cleaning, sanitation, and waste handling.

1. Standard Precautions

Universal/Standard precautions must be unilaterally implemented throughout all UC San Diego Health facilities to prevent personnel exposure to blood or Other Potentially Infectious Materials (OPIM) per reference (b). Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids must be considered potentially infectious. The following body fluids are always treated as if infectious for HIV, HBV or HCV:

- Human blood, blood components and products made from human blood
- OPIM:
  - Semen
  - Vaginal
  - Secretions
  - Cerebrospinal
  - Fluid synovial
  - Pleural fluid
  - Pericardial fluid
  - Peritoneal fluid
  - Amniotic fluid
  - Any other body fluid contaminated with blood such as saliva or vomitus
  - Any unfixed tissue or organ from a human
In addition to HIV, HBV, HCV and MRSA, there are other viruses, bacteria, and parasites that may be present in blood, human body fluids, or tissues. A few of these agents include:

- Arbovirus
- Brucella species
- Ebola
- Zika
- Marburg
- Plasmodium species
- Prion

Hand-washing facilities and/or approved waterless hand cleansing solutions are readily accessible for use throughout all buildings. Washing hands thoroughly with soap and running water must be done frequently and as soon as feasible following contamination to flush contaminated materials from the skin.

Department Managers are responsible for overseeing the use of standard precautions by all health care workers in this setting.

2. Engineering and Work Practice Controls

Pursuant to the provisions of this Plan, bloodborne pathogen exposures are prevented through a comprehensive program, which includes the selection and use of effective engineering and work practice controls. These control methods are the primary means of eliminating occupational exposure or reducing it to the lowest feasible level.

a. Engineering and work practice controls must be used to eliminate and/or minimize health care worker exposure.

b. Engineering controls must be examined and maintained or replaced on a regular schedule to ensure their effectiveness. Regularly scheduled inspections (internal surveillance rounds) are used to confirm that engineering controls, such as safer sharps devices, sharps containers, etc., continue to function effectively, protective shields/features have not been removed or broken and the controls are functioning as designed and provide protection as intended. Any discrepancies discovered through this process will be corrected and reported immediately to EH&S, EVS and Material Management, as applicable for follow-up.

c. Work practice controls must be evaluated and updated on a regular schedule to ensure their effectiveness.

d. All procedures involving blood or OPIM must be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets.
3. **Sharps Safety Action Plan**

Per reference (c), UC San Diego Health will stock and use only safety-device equipped sharps wherever possible to reduce the risk of injury to staff, patients and visitors and to comply with California Code of Regulations, Title 8, Section 5193, Bloodborne Pathogens Standard. The only exception to this is where specific clinical procedures require that a sharp device be used.

The following workgroups and evaluation processes have been established to provide a framework for reducing employee occupational exposures to Sharps injuries: Pathogens. Information from these groups will be incorporated into the Exposure Control Plan. The Workgroups will report to the Environment of Care Committee, which meets on a monthly basis.

a. **BBP Exposure Control Workgroup (BBP Workgroup)**

This group is a multi-disciplinary team composed of representatives from Environmental Health & Safety, Infection Prevention & Clinical Epidemiology, Central Services, Clinical Laboratories, Purchasing, Nursing and Center for Occupational & Environmental Medicine. This Workgroup provides guidance and authority for the sharps safety action plan. Work product from all workgroups is reviewed, amended if necessary and approved for implementation throughout the facility. The function of this Committee is to:

- Review, modify and approve sharps safety action plan.
- Ensure effective implementation of the sharps safety action plan.
- Support and assist the Device Selection Workgroup.
- Review and revise BBP Exposure Control Plan at least annually.

b. **Device Selection Workgroup is an Ad Hoc Committee**

This workgroup is selected by, and reports to the Value Analysis Committee and is composed of frontline health care workers who are included in all phases of the device evaluation and selection process. The group will evaluate current products and review new devices as they are introduced in the marketplace. The devices will be evaluated according to standardized criteria previously developed and accepted by the group. This workgroup is responsible for:

- Developing the standardized criteria that will be used to review and select available safety products.
- Developing product evaluation forms based on the standardized criteria.
- Establishing test project protocol to ensure each product is
adequately and fairly evaluated.

- Consulting with materials management/purchasing and administration during the product selection process.
- Submitting data from tests to the Guidance Committee with recommendations for purchase.
- Reviewing performance of existing safety devices and evaluate devices newly introduced to the marketplace at least annually and as appropriate.
  - Suggested members
  - Nurses
  - Employee health personnel
  - Infection control personnel
  - Purchasing/materials management
  - Care providers from:
    - Anesthesiology
    - Dialysis
    - Emergency department
    - Critical care
    - Laboratory
    - Operating room
    - Pediatrics/nursery
    - Respiratory therapy

c. Selection of Sharps Safety Devices for Testing

The UC San Diego Health Department of Environmental Health & Safety is represented on the Value Analysis Committee and will report the following information to the Environment of Care Committee as deemed appropriate:

- All sharps devices currently in use.
- All procedures performed where sharps are used to deliver medication or access veins or arteries.
- Information on devices currently available in the marketplace.

The recommendations for upgrading sharps products will be shared with the Infection Control Committee for approval or feedback as appropriate. Devices that reduce high-risk exposure will be given priority for review and implementation.
d. **Product Screening**

Criteria for screening products provide a systematic way to screen new products and will to make objective decisions. If the product does not meet the criteria, it will not be tested.

e. **Test Products**

As with the initial selection of safety devices, it is essential that a protocol be followed for testing the safety devices. Following protocol will ensure that devices are tested objectively and fairly. The BBP Workgroup will select products, by consensuses, which are favorably reviewed by frontline staff during test projects. When two products are available on the market, which meet the criteria and are recommended by frontline health care workers, both products will be submitted for contract negotiations.

f. **Educate Staff and Implement Devices**

Education regarding the use of all engineering controls, such as sharps safety devices, is provided prior to implementation of such devices and as needed to assure appropriate and successful use of all engineering controls. Department Managers are responsible to assure device related education.

Once the BBP Workgroup chooses which new products to purchase, staff must learn how to use them. A knowledgeable manufacturer's representative should instruct staff on all shifts in the proper use of the device and its safety features. During the device selection process, the Director of Patient Care Services will designate a champion and direct the device education process.

As with any new device, there will be a learning curve. It will take time for staff to become skilled with new products. Problems may surface during this initial trial. Encourage workers to report problems to their supervisors, who in turn, will relay them to the test project coordinator.

g. **Evaluate Existing and New Products**

The law requires an annual evaluation of safety products and should address several issues. It is recommended that the BBP Workgroup review existing and new products after six months, and then on an annual basis and when advances in product safety occur. The same systematic approach used in selecting and testing safety devices (as outlined above) should be followed.

This ongoing review will reveal important information and should address several issues. Has the new product proven safer? Have injuries declined? Is a new safety product available that's better? Are workers using the safety devices? If not, is there a problem with the devices?
4. Prohibited Practices

- Sheering or breaking of contaminated needles and other contaminated sharps is strictly forbidden.
- Disposable scalpel holders and blades must not be recapped but should be discarded directly into sharps disposal containers.
- Sharps meant for disposal must not be reused.
- Contaminated sharps must not be stored or processed in a manner that requires health care workers to reach by hand into the containers where these sharps have been placed.
- Contaminated needles and other contaminated sharps must not be bent, recapped or removed from devices.
- Scalpel blades must never be removed from re-usable holders without the use of a clamp or hemostat.
- Broken glassware, which may be contaminated, must not be picked up directly with the hands. It must be cleaned up using a mechanical means, such as a brush and dustpan, tongs, or forceps.
- Never force sharps into a sharps container.
- The contents of sharps containers must not be accessed unless properly reprocessed or decontaminated. Never place fingers into opening of sharps containers.
- Sharps containers must not be opened, emptied, or cleaned manually or in any other manner, which could expose health care workers to the risk of sharps injury.
- Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.
- 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.
- Food and drink must not be kept in refrigerators, freezers, shelves, cabinets, or on countertops or bench tops where blood or OPIM are present.

5. Requirements for Handling Contaminated Sharps

- All procedures involving the use of sharps in connection with patient care, such as withdrawing body fluids, accessing a vein or artery or administering vaccines, medications or fluids, must be performed using effective patient handling techniques and other methods designed to minimize the risk of a sharps injury.
- Use extreme caution when handling, passing and/or discarding any needle I syringe and sharp, even those with engineered sharps injury protection.
c. A stationary needle cap holder must be used for incremental doses of medication to the same patient – ICU, ER, during cardiac/respiratory arrests.
d. Because blood gas analysis requires transfer of blood from syringe to the lab analyzer, blood gas kits / trays must include safety devices to be used for transport to the lab.
e. Ensure there is adequate lighting when performing procedures that involve needles or sharps.
f. Non-reusable sharps should be immediately discarded into an easily accessible sharps container.
g. Contaminated sharps that are reusable are to be placed immediately, or as soon as possible after use, into designated sharps containers. Reusable sharps (e.g., histology knife blades, scalpels) should be handled using some type of tong or device that eliminates the need for a health care worker to reach into the container where they are placed.

6. Effective Use and Management of Sharps Disposal Containers

At all times during the use of sharps, containers for contaminated sharps must be:
a. 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);
b. Maintained upright throughout use, where feasible; and
c. Replaced when no more than 1/2 full.

7. Management of Regulated Waste

Handling, storage, treatment and disposal of all regulated (sharps and non-sharps) waste must be conducted very carefully, in a way that protects the health care worker from exposure. Regulated waste management must be conducted in accordance with all applicable state, county and city regulations, including proper containment, labeling, and handling per reference (d).

8. Handling Specimens of Blood or OPIM

Specimens of blood or OPIM must be placed in a container that prevents leakage during collection, handling, processing, storage, transport, or shipping. The container for storage, transport, or shipping must be labeled and closed prior to being stored, transported, or shipped.

NOTE: Since UC San Diego Health uses Universal/Standard Precautions for all specimens, and containers are recognizable as containing specimens, labeling or color-coding containers is not necessary when such specimens / containers remain within the facility. When these specimens /containers leave the facility they must be labeled in accordance with Section IV (F)(2) of this control plan.
If outside contamination of the primary container occurs, the primary container must be placed within a second container which prevents leakage during handling, processing, storage, transport, or shipping and is appropriately labeled or color coded.

If the specimen could puncture the primary container, the primary container must be placed within a secondary container that is puncture resistant.

9. Servicing or Shipping Contaminated Equipment

a. Equipment that may become contaminated with blood or OPIM must be examined for contamination prior to servicing or shipping. If contaminated, the designated department, prior to testing, servicing, or shipping, should decontaminate the equipment.

b. If full decontamination is not feasible, a biohazard label must be affixed to the equipment indicating the presence and location of contamination. The supervisor in charge of the equipment must ensure that this information is conveyed to all affected health care workers, the servicing representative, and/or the manufacturer, as appropriate, and prior to handling, servicing, or shipping so that appropriate precautions must be taken.

c. All bins, pails, cans, and similar receptacles used to contain contaminated instruments and equipment intended for reuse must be inspected and decontaminated on a regularly scheduled basis.

10. Cleaning and Decontamination of the Worksite

a. The worksite must be maintained in a clean and sanitary condition.

b. Appropriate cleaning schedules for rooms where body fluids are present must be determined, written and implemented. Schedules must be as frequent as necessary depending on the area within the facility, the type of surface to be cleaned, and the amount and type of soil present.

c. Initial clean-up of blood or other potentially infectious materials must be followed with the use of an EPA registered germicide approved by Infection Control Committee.

11. Personal Hygiene “Hand Washing”

Note: Refer to reference (e)

a. Facilities and products for hand washing must be provided in all exam rooms, procedure rooms, nursing stations, laboratories, radiology departments and technical services I EKG departments.

b. The use of alcohol degremer products instead of hand washing is acceptable in all situations where the hands are not soiled with physical dirt. Alcohols are poor cleaning agents and hands must be free from dirt for the alcohol to be effective.
c. Hand washing with plain soap and water is recommended if hands are visibly soiled, if staff is preparing food, or if patient has a spore-forming organisms like Clostridium Difficile.

d. A waterless alcohol degermer product must be used if clean running water is not available and hands are not soiled; antiseptic towelettes can be used if hands are soiled and clean running water is not available; hands must be washed with soap and water as soon as it becomes available after 10-12 applications of the alcohol degermer and whenever hands are visibly soiled.

12. Personal Protective Equipment

Personal Protective Equipment (PPE) is an essential component of a plan to reduce or eliminate exposure to bloodborne pathogens. The following policies and procedures will be adhered to:

a. Personal protective equipment will be used in conjunction with engineering controls and work practice controls.

b. Where the potential for occupational exposure exists, staff will be provided, at no cost to the employee, appropriate personal protective equipment such as gloves, gowns, aprons, laboratory coats, and splash goggles, glasses, face shields, masks, mouthpieces, resuscitation bags, pocket masks, hoods, shoe covers, etc.

c. Appropriate personal protective equipment will not permit blood or OPIM to pass through (e.g., impervious gowns) or to reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth or other mucus membranes under normal conditions of use.

d. Hypoallergenic gloves, glove liners, powderless gloves, and other similar alternatives will be readily available to those employees who experience allergic problems with the standard gloves.

e. Department managers will insure that personal protective equipment in the appropriate size is readily available and utilized when necessary to provide the needed level of protection from anticipated exposure. Infection control and/or safety will monitor compliance by checking use of personal protective equipment as part of the environmental rounds.

f. Employees will be provided training on the appropriate use of personal protective equipment. Training will be completed at the time of initial assignment to a job classification or task/procedure that presents the potential for blood, body fluid or other potentially infectious material exposure.

g. A staff member may temporarily and briefly decline to use personal protective equipment only under rare and extraordinary circumstances. If he/she believes, based on their own professional judgment, which its use would prevent the delivery of health care or public safety services or would pose an increased hazard to worker safety, and then they may decline to use the personal protective equipment. If this occurs, the Bloodborne Pathogen
Program Committee will investigate and document the circumstances to determine whether changes should be implemented to prevent a similar occurrence in the future. UC San Diego Health encourages employees to report all such instances.

h. UC San Diego Health will be responsible for the cleaning, laundering, repairing, replacing and disposing of personal protective equipment as needed to maintain effectiveness at no cost to the employee.

i. Any garment(s) penetrated by blood or OPIM will be removed immediately or as soon as feasible, and placed in the designated area or container for storage until washed or disposed of by the facility.

j. All personal protective equipment will be removed prior to leaving the work area.

k. Employees are responsible for placing their personal protective equipment, after removal, in a designated area or container for storage, washing, decontamination or disposal.

l. Employees will wear gloves when it is reasonably anticipated that they will have hand contact with blood or OPIM, mucous membranes and non-intact skin when performing vascular access procedures, and when handling or coming into contact with contaminated items or surfaces.

m. Disposable gloves will be replaced, as soon as practical when contaminated, torn or punctured or when their ability to function as a barrier has been compromised.

n. Disposable gloves will not be washed or decontaminated for reuse.

o. Heavy duty, utility gloves may be decontaminated for reuse; however, they must be discarded if cracked, peeling, torn or exhibit any signs of deterioration that would compromise their barrier protection.

p. Employees will wear masks in combination with eye protective devices such as glasses with solid sidepieces, goggles or face shields whenever splashes, spray, spatter or droplets of blood or OPIM may be generated and eye, nose or mouth contamination can be reasonably anticipated.

q. Gowns, aprons, lab coats or similar outer garments will be worn whenever the potential for exposure to blood or OPIM is likely.

r. Surgical caps or hoods, and impermeable shoe covers or boots will be worn in instances where "gross contamination" is anticipated (e.g., autopsies, orthopedic surgery, labor and delivery).

13. Contaminated Linens

a. Employees handling contaminated linen will wear protective gloves and other appropriate PPE to prevent exposure to blood or other potentially-infectious materials during the handling and sorting of soiled linen and other fabric items.
b. Contaminated linens will be bagged appropriately at the location where it was used.
c. Pick up soiled linen and place in soiled linen hamper fitted with plastic liner labeled “soiled linen”.
d. Never place soiled linen on the floor or any clean surfaces.
e. Transport soiled linen in hamper to soiled linen cart or chute.

C. Hepatitis B Vaccination Program

In an effort to provide maximum protection from Hepatitis B infection, UC San Diego Health offers a vaccination program, at no employee cost, to all staff that has potential occupational exposure to bloodborne pathogens. Components of the program are outlined in reference (f).

An employee has the right to decline immunization and is required to complete and sign the declination statement. If the employee subsequently changes his/her mind and requests the vaccine, it will be provided at no cost to the employee.

D. Contamination Incidents

In the event of an emergency involving blood or other infectious material (for example, a specimen container falls and breaks), the following procedures are recommended:

1. Notify coworkers and patients in the vicinity about the hazard.
2. Notify appropriate staff about the spill for clean-up. Body Substance Isolation must be observed as part of the spill clean-up.
3. Assign someone to monitor the site until clean-up is complete.
4. If an exposure to blood or potentially infectious materials has occurred, notify your supervisor to begin documenting what happened.

E. Post Exposure Incident Evaluation and Follow-Up

A bloodborne pathogen exposure prophylaxis protocol has been implemented to provide an immediate, confidential medical evaluation, and follow-up of employees exposed to blood or OPIM. This protocol is in accordance with the most recent recommendations of the U.S. Public Health Service. Current recommendations and checklists are incorporated into packets and outlined below to ensure comprehensive and appropriate treatment.

When an exposure incident occurs, the following three steps are recommended for immediate action:

1. Cleanse the area of exposure to minimize the chance of infection.
2. Seek medical treatment and evaluation, either at the COEM or at the Emergency Department depending on circumstances and your location at the time. Further
follow-up at the COEM may also be indicated. The COEM Post Exposure Management Program (PEMP) may be paged directly via the hospital page system to pager 290-1447 between the hours of 8:00 and 16:00, Monday through Friday. After hours, go directly to the Emergency Department at either Hillcrest or La Jolla (Thornton). Refer to sections 6 and 7 of reference (f).

3. Notify your supervisor to begin documenting what happened. Complete employee incident report within 24 hours of incident by calling 619-543-7877. DO NOT delay in contacting the Post Exposure Management Program or the Emergency Department if your supervisor is not immediately available.

The evaluation will include the following:

1. Written report on the route of exposure and circumstances surrounding the incident including the type, brand of device, and any safety mechanisms, if known.

2. HIV, HBV, and HCV tests of source individual (when source is available and if source consents to be tested), unless source is known to be infected with HIV, HBV or HCV. Employees have the right to know the results of testing, but they must also be informed of applicable laws governing disclosure of this information.

3. Documentation of evaluation and medical follow-up, including results of employee serological testing (for HIV, HBV, and HCV as appropriate) will be maintained in confidential files at the COEM.

4. If occupational exposure of the employee to a bloodborne pathogen is confirmed, UC San Diego Health shall provide, through the healthcare service, confidential counseling and evaluation of any consequent illness that the employee reports for a period of up to 6 months.

5. Extended testing to 12 months is only indicated for healthcare personnel who actually became infected with HCV after exposure to an HCV-HIV co-infected source.

For more information on HIV, HBV, and HCV bloodborne pathogens exposure, refer to Appendix B for non-occupational and occupational post-exposure prophylaxis (nPEP) guidelines.

F. Communication of Hazards to Employees

1. Communication of hazards to employees has two primary goals:
   a. To clearly identify hazardous substances being used in the workplace, and
   b. To thoroughly inform employees about the hazardous properties of those substances, as well as methods of handling and personal protection that will ensure their well-being while on the job.

2. Communication of hazards to employees has two primary goals:
Appropriate warning labels must be affixed to containers of regulated waste, refrigerators, and freezers containing blood or other potentially infectious materials and other containers used to store, transport, or ship blood or other potentially infectious material. Labels must be affixed as close as feasible to the container by string, wire, adhesive, or other methods that prevents their loss or unintentional removal.

The biohazard warning label which is predominantly fluorescent orange or orange-red includes the following symbol:

![Biohazard Symbol](image)

The biohazard label is attached to:

- All containers of biological waste;
- Refrigerators/freezers where human blood or OPIM are stored;
- Containers used to store, transport or ship human blood or OPIM; and equipment that have been contaminated with human blood or OPIM if not decontaminated immediately.

3. Exceptions to this requirement are:

- Red bags or red containers may be substituted for labels.
- Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal.
- Containers of blood, blood contents, or blood products that are labeled as to other contents and have been released for transfusion or other clinical use; and individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment, or disposal.

HIV and HBV Research Laboratories shall have signs posted at the entrance to work areas that contain the following information:

![Biohazard Sign](image)

**Biohazard**

(Name of the infectious agent)

(Special requirements for entering the area)

(Name, telephone number of the laboratory director or other responsible person)
The term “hazardous substance” refers to any material that is known to be a physical or health hazard or is included in any one of a number of federal and state toxic chemical lists. These materials are identified by the keywords “CAUTION” “WARNING”, or “DANGER” appearing on the manufacturer’s original product label. Such substances require special storage, handling, and usage-reporting procedures.

G. Recordkeeping

1. Medical Records - OSHA requires UC San Diego Health to keep confidential medical records for all employees with occupational exposure. These should include:
   - Employee's name.
   - Social Security number.
   - Hepatitis B vaccination status (including dates of vaccinations and records relating to the employee's ability to receive the vaccine.)
   - Results of follow-up procedures to exposure incidents.
   - All information given to the evaluating health care professional in the event of an exposure incident.
   - A copy of evaluator's written response.

Medical records are to be kept for at least 30 years after the person leaves employment. Access to the records is only possible from the employee.

2. Training Records

   Employers must keep training records. This responsibility is vested in the employee's manager or supervisor. These should include:
   - Dates of training sessions
   - Material covered
   - Names and qualifications of the trainer

   The records must be kept for three years from the date of the training session. Upon request, workers or their representatives must be given access to the training records.

3. Cal/OSHA Access to Records

   Cal/OSHA requires that training records and employee medical records be made available to the Assistant Secretary of Health and Human Services and the Cal/OSHA Director upon their request. If the facility closes and has no successor to retain the records, the employer must inform the Director of this at least three months before disposing of the records. If during the three months the Director requests the records, the employer must transfer them.
4. Sharps Injury Log

All percutaneous injuries from contaminated sharps are recorded in the Needlestick and Sharp Object Injury Log which contains the following information:

- Date of the injury
- Position of injured employee
- Department and work area where the incident occurred
- Body part affected
- Type and brand of the device involved (syringe, injection). Additionally, include the following information.
  - If the sharp had engineered sharps injury protection, whether the protective mechanism was activated, and whether the injury occurred before the protective mechanism was activated, during activation of the mechanism, or after activation of the mechanism.
  - If the sharp had no engineered sharps injury protection, the injured employee's opinion about whether and how such a mechanism could have prevented the injury.
- Description of how the incident occurred

The Needlestick and Sharp Object Injury Log is managed and maintained by the Center for Occupational and Environmental Medicine (COEM).

H. Information and Training

1. All employees covered by this plan will be provided training at the time of initial assignment to an at-risk job classification.

2. Training will occur:
   - At the time of initial assignment.
   - Annually, within 12 months of the previous training.
   - When changes affect the employee's occupational exposure, such as new engineering, administrative or work practice controls, modifications of tasks/procedures or institution of new tasks/procedures. This training may be limited to these changes.

3. The training program will contain, at a minimum, the following elements:
   - Explanation of the Standard – Cal OSHA’s Bloodborne Pathogens Standard is available for review by calling the Safety Office at 858-657-7166 or by accessing the Safety Plus Website.
   - Epidemiology and symptoms - A general explanation of the epidemiology and symptoms of bloodborne pathogens.
• Modes of transmission - A general explanation of the modes of transmission of bloodborne pathogens.
VIII. APPENDICES

A. Preparedness Plan for Ebola

Exposure Control Plan

UC San Diego Health has an established protocol for the Bloodborne Pathogen (BBP) Exposure Control Plan and the Aerosolized Transmissible Diseases/Tuberculosis Control Plan. The purpose of this control plan is to minimize or eliminate employees’ exposure by implementing a range of exposure control measures, including engineering and work practice controls, administrative controls, and use of personal protective equipment (PPE).

This exposure control plan is updated to include specific Ebola virus management to ensure healthcare workers providing care to suspected or confirmed Ebola patients are protected during the course of treatment.

Active Employee Involvement

All employees are encouraged to inform their supervisor or manager about workplace safety to reduce potential risk of disease, injuries, and illnesses. Thus, healthcare workers (HCWs) who are at risk of exposure to the Ebola virus or involved in the care of suspected or confirmed Ebola patients must address their occupational safety concern to their department supervisor or manager.

In reference to UC San Diego Health’s (UCSDH) Injury and Illness Prevention Plan (IIPP), employees are encouraged to report any potential health or safety hazard to the Department of Environmental Health & Safety (EH&S). They should realize there are no reprisals for expressing a concern, comment, or suggestion or complaint about a safety matter. If desired, employees can anonymously report safety issues through the Environmental Health and Safety Website. Such reports are given a priority with documented follow up activities. Adherence to safe work practices and proper use of personal protective equipment is an integral part of workplace safety.

Active involvement of employees on safety matters within UC San Diego Health is stipulated in the Injury and Illness Prevention Plan and in the Environment of Care Program (MCP 811.1).

Exposure Determination

The following UCSDH medical personnel are determined to be at the higher risk of exposure to Ebola virus because they are directly involved with providing care to suspected or confirmed Ebola patients. These medical providers represent the following:

- Emergency Medicine medical doctors and nurses
- All medical providers assigned to Infectious Disease Care Unit (IDCU)
• Medical doctors and nurses from Medical staff assigned to other departments where suspected Ebola patients are likely to be admitted
• Medical doctors and nurses from Critical Care, Ambulatory, and OB
• Respiratory Therapists
• Infection Prevention and Clinical Epidemiology (IPCE) staff

Allied HCWs who are providing operational support to this core group of medical providers are also at risk of exposure to Ebola virus. These allied healthcare workers are the following:

• Respiratory therapists
• ED technicians
• Support medical staff assigned to IDCU but not directly in contact with suspected or confirmed Ebola patients
• Environmental Services staff

A complete list of all UC San Diego healthcare worker job classifications determined to be at risk for occupational exposure is listed in the Bloodborne Pathogen Exposure Control Plan. Further, the Aerosolized Transmissible Diseases Standard/Tuberculosis Control Plan provides a comprehensive procedure in minimizing the risk for transmission of aerosol transmissible disease (ATD) infection.

Engineering Control

The Infectious Disease Care Unit (IDCU) is the official Ebola treatment area at UCSDH. This is an isolated area away from the general patient population. The IDCU is constructed in different isolation rooms and designated for a specified functionality. These rooms are:

• Treatment room
• Observation room
• Donning room
• Doffing room
• Soiled utility room
• Doffing observer room
• Clean changing room
• Staff waiting area

In addition, this unit has negative air pressure, which means the air inside the isolation room is slightly lower than that outside so particles from inside the room cannot float out. IDCU runs its own air circulation system and the air is passed
through a high-efficiency particulate air (HEPA) filter before it is vented outside of the building.

More comprehensive IDCU information can be found in the document, *UC San Diego Health Infectious Disease Care Unit (IDCU), and Staffing Plan.*

**Work Practice Control**

Only the IPCE team can activate IDCU and the Incident Command Center (ICC). When the ICC is activated, the Nursing Supervisor is the incident commander until the administrator-on-call (AOC) arrives.

The isolation and transfer procedures and protocols, along with work practice controls, are delineated in IDCU’s Patient Flow Protocols consisting of the following:

a. Path of Travel
   - Admission to Hillcrest Pathway
   - Admission to Thornton Pathway
   - Admission Request to Transfer Center

b. Patient Flow
   - Direct Admission Ebola Viral Disease Screening
   - Patient Transport for Suspected/Known Ebola Disease
   - Suspect Ebola Patient Contact Tracer

c. Clinical Laboratory Ebola Handling Procedure
   The procedure for collection, transport, and testing performed on any clinical specimen in the clinical laboratories is clearly defined in the UC San Diego Health’s documents, *Enhanced Precautions for Collection, Transport, and Testing of Clinical Specimens from patients with suspected Ebola Virus Disease (EVD), and IDCU protocol for EVD Testing, Malaria testing, and Blood cultures.*

**Personnel Protective Equipment**

Healthcare providers caring for suspected or confirmed Ebola patients should have no skin exposed. Therefore, all healthcare workers directly involved with caring of Ebola patients must wear the proper personal protective equipment (PPE) provided by UCSDH.

There are two different PPE configurations that must be worn by healthcare providers in providing care for Ebola patients.

a. Level 1: involves donning and doffing of lower level protective equipment which is used for patients that do not have uncontrolled infectious fluids.
b. Level 2: involves donning and doffing a higher level of protective equipment which is used for patients that excrete infectious body fluids.

The following lists are the authorized PPE for each degree level.

a. Level 1 PPE
   - Boots cover
   - Nitrile ambidextrous gloves
   - Surgical gloves
   - Fog-free surgical mask with lining
   - Tyvek gown
   - Washable boots
   - Surgical hood
   - Scrubs

b. Level 2 PPE
   - Powered Air Purifying Respirator (PAPR)
   - Breathable High Performance Gown
   - Washable boots
   - Boots cover
   - Nitrile ambidextrous gloves
   - Surgical gloves
   - Cap
   - Impermeable apron
   - Tyvek hood
   - Scrubs

Proper PPE is required for all healthcare workers entering the room of a patient hospitalized with Ebola virus disease (EVD). Each step of every PPE donning/doffing procedure must be supervised by a trained observer to ensure proper completion of established PPE protocols.

Procedures for donning and doffing of Level 1 and Level 2 required PPE are found in the following documents:

a. Donning PPE, Level 1
b. Doffing PPE, Level 1
c. Donning PPE, Level 2
d. Doffing PPE, Level 2
Medical services

The IDCU is a free standing unit designed to provide care to suspected or confirmed Ebola patients. The level of staffing and medical services is covered in the document, *UC San Diego Health Infectious Diseases Care Unit (IDCU) and Staffing Plan*.

Under the Bloodborne Pathogens (BBP), Aerosolized Transmissible Diseases (ATD), IIPP, and Respiratory Protection standards, UCSDH provides medical services to employees, such as vaccinations, respirator examinations, and post-exposure follow-up. In addition, all employees who will use respirators must be given a medical evaluation to determine whether the employee can safely use a specific type of respirator under the conditions at the worksite.

Respiratory Care Providers (RCPs) are required to serve and assist in the direct care of patients with suspected or confirmed EVD. RCPs will receive supplemental pay due to the requirements to perform this special assignment.

Training

As part of the comprehensive and coordinated response to treating Ebola patients, UCSDH IPCE team provides continuous training for licensed clinicians (e.g. physicians, nurses, and allied healthcare providers). All medical providers engaged with providing care to Ebola patients and all allied healthcare workers providing support to these medical providers must undergo intensive training and drills on all aspects of care, including the proper and safe use of PPE.

The training must be geared towards the methodology of preventing employees’ exposure to any recognized hazards while providing care to suspected or confirmed Ebola patients. The following training for protecting healthcare workers whose work activities are conducted in an environment that is known or reasonably suspected to be contaminated with Ebola virus must include but not limited to:

a. Application of good infection control practices, complying with applicable requirements in the Bloodborne Pathogens Exposure Control Plan, Personal Protective Equipment, Respiratory Protection Program, and Aerosolized Transmissible Diseases Standards.

b. Knowledge on the following standards:
   - Bloodborne Pathogen
   - Respiratory Protection
   - Aerosolized Transmissible Diseases Prevention
   - Injury and Illness Prevention Plan

c. Employees’ participation in reviewing and updating the exposure control plans.

d. Use of proper personal protective equipment (e.g. hands-on training on donning and doffing of PPE).

e. Practice good hand hygiene protocols to avoid exposure to infected blood and body fluids, contaminated objects, or other contaminated environmental surfaces.
f. Cleaning and decontamination of Ebola on surfaces.
g. Safe handling, transport, treatment, and disposal of Ebola-contaminated waste.
h. Sources of Ebola exposure and appropriate precautions.
i. Control measures used to prevent employee exposure.
j. Access to medical care or services.

**Personal Protective Equipment (PPE)**

Healthcare providers wearing PPE ensemble are subjected to additional workload on their body. Under the Injury and Illness Prevention Program (IIPP) standard and UCSDH Respiratory Protection Program, hospital employers must establish work regimens allowing employees sufficient time and opportunity to recover, and they must monitor the health status of employees using the PPE ensemble.

UCSDH Center for Occupational and Environmental Medicine (COEM) provides medical evaluation, assessment, and medical monitoring of healthcare workers during the course of providing care on Ebola patients.

IDCU provides onsite management and oversight on the safe use of PPE and implement administrative and environmental controls with continuous safety checks through direct observation of healthcare workers during the PPE donning and doffing processes.

**Respiratory Protection**

Basic principles of respiratory protection dictate that employers select respirators based on the respiratory hazard to which the employees are exposed, as well as workplace and user factors that affect respirator performance and reliability.

UCSDH Respiratory Protection Program is in place to protect employees by establishing accepted practices for respirator use, providing guidelines for training and respirator selection, and explaining proper storage, use and care of respirators.

All healthcare workers engaged with the care of Ebola patients are issued with the correct configuration of respirators (e.g. PAPR and N-95 respirators), depending on the provision of the level of care (e.g. Level 1 or Level 2).

Cleaning of the PAPR after its use is found in the document, *PAPR Reprocessing: New Clean Nurse Duties*.

**Environmental Services:**

Waste generated in the care of patients with known or suspected EVD is subject to procedures set forth by local, state and Federal regulations. Basic principles for spills of blood and other potentially infectious materials are outlined in the Bloodborne Pathogen Exposure Control Plan.

All waste generated from suspected/confirmed patient should be treated as special Category A infectious substance regulated as hazardous waste under the Department of Transportation (DOT) Hazardous Material Regulation.

IDCU has established protocols for safe handling, transport, and disposal of Ebola-contaminated waste stipulated in the following documents:
a. Environmental Services Module
b. Waste Management for Patients with Ebola
c. Cleaning of the Ebola Clinical Care Environments
d. Donning of Environmental Services PPE
e. Doffing of Environmental Services PPE
B. Post-Exposure Prophylaxis (PEP) Guidelines

b.1) Non-occupational:

UCSD HIV, HBV and HCV Blood-Borne Pathogen
Non-Occupational Post-Exposure Prophylaxis (nPEP) Guidelines
Approved by P&T Committee 4/17/2013, 3/24/2015, 11/16/2016, 2/21/2018

Possible Non-Occupational HIV Exposure of: Patient’s vagina, rectum, eye, mouth or other mucous membrane, non-intact skin, or percutaneous contact

Substantial Risk Exposure:
Exposure with source blood, semen, vaginal or rectal secretions, breast milk, or any body fluid visibly contaminated with blood.

Negligible Risk Exposure:
Exposure with source urine, nasal secretions, saliva, sweat or tears if not visibly contaminated with blood.

Exposure within 72 hours?

YES

HIV Negative Source

HIV Unknown Status

HIV Positive

Case-by-case determination

nPEP not recommended

This guideline to be used to assist in clinical efficiency, but is not a substitute for clinical judgment.

nPEP Recommended
Review risk and benefits with patient. If patient wishes to proceed, refer to regimen instructions below.

Preferred regimen*: Truvada [Emtricitabine 200 mg/Tenofovir 300 mg] 1 tab po daily + Dolutegravir 50 mg po daily
*If exposure source with known resistance, contact Owen On Call Attending for customization of regimen.

Other medications**: Tdap 0.5 mL IM and Hepatitis B Immune Globulin 0.06 mL/kg subcutaneous**
**Refer to UCSD Guideline for Medical Management of Sexual Assault Survivors and STD Exposures

1. Order HIV-Ab 4th generation test, HIV-Ab rapid blood test, CBC, CMP and urine pregnancy test (if applicable). Order HBsAg (blood), HBSAb (blood), and Hep C antibody, SCR and LFTs if no results in last 6 months.
   a. Consult Owen On Call Attending if AST or ALT > 100 units/L
   b. Call FOCUS On Call Attending if any HIV test is positive.

2. Provide nPEP patient information sheet (available in Spanish) and counsel on side effects:
   a. Truvada: HA, body aches, N/V/D, SOB, CAUTION: renal impairment, liver disease, anemia
   b. Dolutegravir: pruritus/itch, N/V/D, insomnia, fatigue

3. Prior to discharge, ensure patient receives initial doses in-house. INITIAL DOSE MOST IMPORTANT PROPHYLAXIS.
   a. Discharged during regular hours: provide Rx for 5 day supply (UCSD outpatient pharmacies stock HIV meds)
   b. Discharged from ED afterhours: provide 5 day supply from inpatient pharmacist.

4. Refer patient to UCSD Owen clinic for follow up within 5 days.
5. See the UCSD Guideline for the Medical Management of Sexual Assault Survivors and STD exposures for prevention of pregnancy and other infections.

For additional assistance with nPEP decision making, contact the Owen On Call Attending

W1094(2-11) Page 1 of 2
b.2) Occupational:

UCSD HIV, HBV, and HCV Blood-Borne Pathogen
Occupational Post-Exposure Prophylaxis (PEP) Guidelines
Approved by P&T Committee 4/17/2013, 3/24/2015, 11/16/2016, 2/21/2018

Possible Occupational HIV Exposure for Health-Care Providers

Percutaneous injury:
Needlestick or cut with a sharp object from a sharps container or with possible use in a patient’s artery or vein

Exposure of nonintact skin or mucous membranes to:
Blood, tissue or other bodily fluids (semen, vaginal secretions, CSF, synovial, pleural, peritoneal, pericardial, and amniotic fluids)

Exposure within 72 hours?

HIV Negative Source

HIV Unknown Status

HIV Positive

PEP not recommended

Case-by-case determination

PEP Recommended
Review risk and benefits with patient. If patient wishes to proceed, refer to regimen instructions below.

Preferred regimen*: Truvada [emtricitabine 200 mg/tenofovir 300 mg] 1 tab po daily + Dolatregravir 50 mg po daily
*If exposure source with known resistance, contact Owen On Call Attending for customization of regimen.

Other medications: Tdap 0.5 mL IM and Hepatitis B Immune Globulin 0.06 mL/kg subcutaneous **

**Refer to UCSD Guideline for Medical Management of Sexual Assault Survivors and STD Exposures

1. Order HIV-Ab 4th generation test, CBC, CMP and urine pregnancy test (if applicable). Order HBsAg (blood), HBsAb (blood), Hep C antibody, Scr and LFTs if no results in last 6 months.
   a. Consult Owen On Call Attending if AST or ALT > 100 units/L
2. Provide PEP patient information sheet (available in Spanish) and counsel on side effects:
   a. Truvada: HA, body aches, N/V/D, SOB; CAUTION: renal impairment, liver disease, anemia
   b. Dolutegravir: pruritis/rash, N/V/D, insomnia, fatigue
3. Prior to discharge, ensure patient receives initial doses in-house. INITIAL DOSE MOST IMPORTANT PROPHYLAXIS.
   a. Discharged during regular hours: provide Rx for 3 day supply (UCSD outpatient pharmacies stock HIV meds)
   b. Discharged from ED after hours: provide 5 day supply from inpatient pharmacist.
4. Refer patient immediately to Occupational Medicine clinic for follow up next business day. Monday-Friday (non-holiday) 08:00-16:00. Occupational Medicine will initiate an Owen Clinic consult for follow-up.
5. For more information: UCSF Clinical Consultation Center’s PEP Quick Guide for Occupational Exposures

For additional assistance with nPEP decision making, contact the Owen On Call Attending

WD1994 [1-18] Page 2 of 1