



UNIVERSITY *of* NEW HAMPSHIRE

Bloodborne Pathogen Exposure Control Plan

Revised:
June 2, 2005

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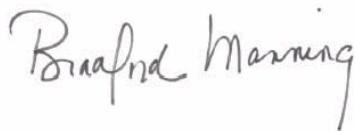
I. INTRODUCTION TO THE BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

The University of New Hampshire's Bloodborne Pathogen Exposure Control Plan has been developed in response to both the Federal Occupational Safety & Health Administration's Bloodborne Pathogen Standard (codified under 29 CFR 1910.1030) and UNH's concerns for individual's safety. The Bloodborne Pathogen Standard requires that specific issues be addressed in the Exposure Control Plan to address safety concerns. These include:

- ◆ Methods of compliance (engineering controls, work practices, and personal protective equipment used to minimize exposures)
- ◆ Employee exposure situations
- ◆ Communication of hazards to individuals
- ◆ Procedures for hepatitis B vaccinations, post-exposure vaccinations and follow-ups
- ◆ Record keeping practices

The specific methods instituted to implement each of these sections of the Exposure Control Plan are described in the designated chapters of this document. The Plan will be reviewed and updated annually to reflect new or modified tasks or procedures, which affect potential occupational exposure situations. The OSHA Bloodborne Pathogen Standard went into effect on March 6, 1992. All provisions of the Standard became effective July 6, 1992.

The Office of Environmental Health & Safety (OEHS) will coordinate Train the Trainer seminars to educate key persons in each department to carry forth the training process to individuals. A central training record will be kept in the OEHS to track training and refresher training for all faculty and staff. Training for students will be the responsibility of the individual faculty.



Bradford Manning
Director of Environmental Health & Safety

II. PROGRAM MANAGEMENT

The President of the University of New Hampshire (UNH) is the chief administrative officer for the campus and holds ultimate responsibility for implementation of UNH's Environmental Health & Safety policy at all facilities under campus control. The OEHS Department is responsible for monitoring compliance with the Exposure Control Plan.

The Occupational Health & Safety Coordinator (OHSC) will work closely with campus administrators to develop any additional policies and practices needed to support the effective implementation of the Exposure Control Plan, as well as review, revise, or update the plan as needed. In a coordinated effort with department Chairs and department Directors, hazards will be identified, individuals will be trained and vaccinated when needed, and records will be kept to qualify the individuals for periodic retraining.

Department Chairs and department Directors are responsible for exposure control in their areas and are responsible for ensuring that proper exposure control procedures are followed. Supervisors are responsible for providing information and training to all employees under their jurisdiction who have the potential for exposure to bloodborne pathogens.

Individuals have a responsibility for their own safety and shall comply with the procedures outlined in the Exposure Control Plan.

III. EMPLOYEE EXPOSURE DETERMINATION

UNH has conducted an exposure determination to identify which UNH employees, students and visitors may be exposed to bloodborne pathogens. This determination was made without regard to the use of personal protective equipment and regardless of the frequency of exposure. The following job classifications were determined to incur occupational exposure to (human) blood or other potentially infectious material (OPIM).

Student Services

- Health Services
 - Medical Doctor
 - Registered Nurse
 - Nurse Practitioner
 - Medical Laboratory Technician
 - X-ray Technician

Public Safety

- University Police Lieutenant
- University Police Sergeant
- University Police Officer II
- University Police Detective
- Director, Public Safety
- Security Officer

Facilities Management/Housing

- Plumber
- Plumber Supervisor
- Grounds & Roads
- Housekeeping Personnel
- Building Service Worker
- Operation Coordinator

Intercollegiate Athletics and Campus Recreation Center

- Athletic Trainer
- Personal Trainer
- Life-Guard

Academic Colleges and Divisions

College of Health and Human Services

Department of Kinesiology

Department of Nursing

Department of Occupational Therapy

College of Engineering and Physical Sciences (CEPS)

Department of Chemical Engineering

College of Life Sciences and Agriculture (COLSA)

Biology Program

Department of Medical Laboratory Science

Department of Biochemistry and Molecular Biology

Department of Animal and Nutritional Sciences

Department of Microbiology

Genetics Program

College of Liberal Arts

Department of Psychology

Child Study and Development Center (CSDC)

University Hospitality Services

Catering/Dining/Bakery/New England Center/Memorial Union Food Service

Food Service Workers

Bakers

Cooks

Waitstaff

New England Center Housekeeping Personnel

Other positions may be included in this program by request or further evaluation.

IV. EMPLOYEE EXPOSURE SITUATIONS AND SAFE WORK PRACTICES

Potential Exposure Situations for Medical Staff

The following descriptions are geared towards the general duties associated with nursing, physician-care, laboratory personnel, and other medical activities.

Job Classification- Medical Staff, Nurses, Physicians, etc.

WORK TASK	POTENTIAL EXPOSURE SITUATION
Handling patients	Contact with blood and OPIM.
Handling syringes, needles	Accidental self-inoculation, needle sticks.
Working with handpieces and equipment containing blood or OPIM	Cuts and pricks from equipment; contact with infectious materials from spills, splashes and routine equipment handling procedures.
Collecting specimens of blood or OPIM	Accidental self-injection, spillage of fluids, aerosol droplet contamination.
Preparing samples of blood or OPIM	Cutting finger on sharp edge of slide/cover-slip. Exposure from non-intact
Testing specimens of blood and OPIM	Accidental self-injection.
Administration of Cardio Pulmonary Resuscitation (CPR)	Contact with saliva, open wounds of the mouth, aerosol droplets.
Cleaning and disposal of stool, urine, emesis	Contact with OPIM, accidental spillage.
Involvement in invasive procedures	Contact with large amount of blood/OPIM.
Assisting with births	Contact with blood, placental fluids, OPIM.

SAFE WORK PRACTICES FOR MEDICAL STAFF

The following safe work practices apply to the general duties associated with nursing, physician-care, laboratory personnel, and other medical activities:

1. Follow Universal Precautions at all times.
2. Health care workers who participate in invasive procedures shall wear gloves and surgical masks.
3. Protective eyewear or face shields shall be worn for invasive procedures that commonly result in the generation of droplets, splashing of blood, other bodily fluids, or bone chips.
4. Gowns or aprons shall be worn during invasive procedures that are likely to result in the splashing of blood or other bodily fluids.
5. If a glove is torn, the glove shall be removed and replaced immediately.
6. If a needle-stick or other instrument-related injury occurs, the needle or instrument involved in the incident shall be removed from the sterile field.
7. All health care workers who assist in vaginal or cesarean deliveries shall wear gloves and gowns when handling the placenta or infant until the blood and amniotic fluid have been removed from the infant's skin and shall wear gloves during post-delivery care of the umbilical cord.

Potential Exposure Situations for Employees of Public Safety

The following descriptions are geared toward the general duties associated with law enforcement.

Job Classification - Law Enforcement

WORK TASK	POTENTIAL EXPOSURE SITUATION
Contact with drug paraphernalia on a raid	Accidental self-inoculation / needle sticks.
First aid on victims of accidents, violence or those experiencing medical emergencies	Contact with blood or OPIM.
Handling uncooperative individuals	Getting bitten, contact with OPIM.
Contact with knives or other weapons	Cuts from potentially contaminated items.
Administration of CPR	Contact with saliva, open wounds of the mouth, aerosol droplets.
Processing the crime scene during investigations	Contact with blood or OPIM, potentially contaminated items or surfaces.

SAFE WORK PRACTICES FOR EMPLOYEES OF PUBLIC SAFETY

The following safe work practices apply to the general duties associated with public safety:

1. Law enforcement employees shall wear gloves whenever they anticipate touching blood, bodily fluids, mucous membranes, or non-intact skin while they conduct their operations.
2. Gloves shall be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
3. Hands and other skin surfaces shall be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.
4. Hands shall be immediately washed after the gloves are removed.
5. Employees shall take precautions to prevent injuries caused by needles, syringes and other sharp objects. Law enforcement employees shall pay attention to their hands whenever they handle needles, syringes and other sharp objects.
6. Mouthpieces, resuscitation bags, or other ventilation devices shall be available to those officers who may reasonably be expected to perform CPR.
7. Clothing which becomes contaminated with blood or other bodily fluids during operations shall be removed immediately (or as soon as possible) and separated from other clothing until properly laundered.
8. Areas and equipment that become contaminated with blood or other bodily fluids shall be cleaned immediately with a bleach solution containing one part household bleach (5.25%) to nine parts of water.
9. Whenever employees handle uncooperative individuals, they shall attempt to keep the individuals back towards themselves minimizing the opportunity to be bitten. Employees shall make every effort to obtain additional assistance whenever handling an uncooperative individual.

Potential Exposure Situations for Plumbers and Grounds & Roads

The following descriptions are geared toward the general duties of Plumbers and Grounds & Roads workers that may be involved in sewerage repair work.

Job Classification – Plumbers and Grounds & Roads

WORK TASK	POTENTIAL EXPOSURE SITUATION
Repairing sanitary fixtures and sewer lines	Contact with OPIM.

SAFE WORK PRACTICES FOR PLUMBERS AND GROUND & ROADS

The following safe work practices apply to the general duties associated with plumbers and Grounds & Roads workers:

1. Employees shall wear gloves whenever they anticipate touching blood, bodily fluids, mucous membranes, or non-intact skin while they conduct their operations.
2. Gloves shall be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
3. Hands and other skin surfaces shall be washed immediately and thoroughly with water and antiseptic cleaner if contaminated with blood or other bodily fluids.
4. Hands shall be immediately washed after gloves are removed.
5. Areas and equipment, which become contaminated with blood or other bodily fluids, shall be cleaned immediately with a bleach solution of one part household bleach (5.25%) to nine parts of water.

Potential Exposure Situations for Employees of Housekeepers (Building Service Workers)

The following descriptions are geared toward general duties associated with housekeeping services.

Job Classification – Housekeepers (Building Service Workers)

WORK TASK	POTENTIAL EXPOSURE SITUATION
Cleaning sinks, toilets, bathroom fixtures	Contact with blood and OPIM.
Clean up of vomit or other OPIM	Contact with OPIM.
Removal of waste	Handling disposed syringe needles and contaminated sharps.
General site clean-up	Contact with disposed personal items and OPIM.

SAFE WORK PRACTICES FOR HOUSEKEEPING (BSW) EMPLOYEES

The following safe work practices apply to the general duties associated with housekeeping services:

1. Employees shall wear gloves whenever they anticipate touching blood, bodily fluids, and mucous membranes while they conduct their operations.
2. Gloves shall be worn when handling items or surfaces obviously contaminated with blood or bodily fluids.
3. Hands and other skin surfaces shall be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.
4. Hands shall be immediately washed after gloves are removed.
5. Employees shall wear gloves and eye protection whenever they are cleaning toilets, sinks or other facilities.
6. Employees shall take precautions to prevent injuries caused by needles, syringes and other sharp objects.
7. Clothing which becomes contaminated with blood or other bodily fluids during custodial activities shall be removed immediately (or as soon as possible) and separated from other clothing until properly laundered.
8. Areas and equipment that become contaminated with blood or other bodily fluids shall be cleaned immediately with the housekeeping disinfectant.

Potential Exposure Situations for Athletic Trainers / Personal Trainers

The following descriptions are geared toward the general duties associated with athletic and personal trainers.

Job Classification - Athletic Trainers / Personal Trainers

WORK TASK	POTENTIAL EXPOSURE SITUATION
Handling syringes, needles, other sharps	Accidental self-inoculation, needle sticks.
Handling injuries athletes	Contact with blood, OPIM, non-intact skin.

SAFE WORK PRACTICES FOR ATHLETIC TRAINERS / PERSONAL TRAINERS

The following safe work practices apply to the general duties associated with athletic and personal trainers:

1. Employees shall wear gloves whenever they anticipate touching blood, bodily fluids, mucous membranes, or non-intact skin while they conduct their operations.
2. Gloves shall be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
3. Hands and other skin surfaces shall be washed immediately and thoroughly with water and antiseptic cleaner if contaminated with blood or other bodily fluids.
4. Hands shall be immediately washed after gloves are removed.
5. Areas and equipment, which become contaminated with blood or other bodily fluids, shall be cleaned immediately with a bleach solution containing one part household bleach (5.25%) to nine parts of water.

Potential Exposure Situations for Lifeguards

The following descriptions are geared toward the general duties associated with lifeguards.

Job Classification – Lifeguard

WORK TASK	POTENTIAL EXPOSURE SITUATION
First aid on accident victims or those experiencing medical difficulties	Contact with blood or OPIM.
Performing CPR or rescue breathing on drowning victims	Contact with saliva, open mouth sores, OPIM.

SAFE WORK PRACTICES FOR LIFEGUARDS

The following safe work practices apply to the general duties associated with lifeguard operations:

1. Lifeguards shall wear gloves whenever they anticipate touching blood, bodily fluids, mucous membranes, or non-intact skin while they perform life-saving services.
2. Gloves shall be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
3. Hands and other skin surfaces shall be washed immediately and thoroughly with water and antiseptic cleaner if contaminated with blood or other bodily fluids.
4. Mouthpieces, resuscitation bags, or other ventilation devices shall be available to those employees who may reasonable be expected to perform CPR.
5. Areas and equipment, which become contaminated with blood or other bodily fluids, shall be cleaned immediately with a bleach solution containing one part household bleach (5.25%) to nine parts of water.

Potential Exposure Situations for Academic Colleges and Divisions (Educational and Research Labs)

The following descriptions are geared toward the general duties associated with work in educational and research settings.

Job Classification – Educational and Research Labs

WORK TASK	POTENTIAL EXPOSURE SITUATION
Handling syringes	Accidental self-inoculation, recapping and bending needles after use.
Handling vials, containers of blood, or OPIM	Breakage of containers may lead to contact with blood and OPIM.
Using blenders and sonicators	Generation of OPIM droplets.
Separating serum fractions using a centrifuge	Splashing blood by opening centrifuge lid before rotor has sopped spinning; unbalanced centrifuge that results in breakage of test tubes, producing aerosol; centrifuged blood specimens by removing rubber stoppers on vacuum tubes.
Collecting and testing specimens of blood and OPIM	Accidental self-infection via spillage of fluids. Aerosol droplet contamination.
Preparing samples of blood or OPIM for microscopic examination	Cutting finger on sharp edges of slide or cover slip.
Working at laboratory benches and other areas where potential infectious material are handled	Contact with blood, OPIM at sites that may or may not be contaminated.
Working with specialized glassware and other apparatus during experiments	Breakage of glassware, leakage from lines can lead to contact with OPIM

SAFE WORK PRACTICES FOR EDUCATIONAL AND RESEARCH LABS

The following safe work practices apply to the general duties associated with research and diagnostic activities in the University's educational or research laboratories:

1. Follow Universal Precautions at all times.
2. Protective eyewear shall be worn in laboratories at all times when working with blood or OPIM.
3. Face shields shall be worn for procedures that commonly result in the generation of droplets, splashing of blood or other bodily fluids.
4. Laboratory coats shall be worn when conducting laboratory procedures. Additional protection, such as gowns or aprons, shall be worn during procedures in which the splashing of blood or other bodily fluids can be reasonably anticipated.
5. Gloves shall be worn during all procedures that involve the handling of items containing or contaminated with blood, or in areas where there may be locations (such as benches) which could be contaminated with potentially infectious materials.

6. If a glove is torn, the glove shall be removed and replaced immediately.
7. Gloves shall be changed and hands washed after completion of specimen processing.
8. All specimens of blood and bodily fluids shall be put in a well-constructed container with a secure lid to prevent leaking during transport.
9. Care shall be taken when collecting each specimen to avoid contaminating the outside of the container and the laboratory from accompanying the specimen.
10. For routine procedures, such as cytological and pathologic studies or microbiological culturing, a biologic safety cabinet is not necessary.
11. Biological safety cabinets or hoods shall be used whenever procedures are conducted that have a potential for generating droplets (blenders and centrifuges).
12. Mechanical pipetting devices shall be used for manipulating all liquids in the laboratory. Mouth pipetting shall never be done.
13. Laboratory work surfaces shall be decontaminated with an appropriate chemical germicide after a spill of blood or other bodily fluids and when work activities are completed.
14. All equipment shall be cleaned with a chemical germicide immediately after completion of laboratory procedures.
15. Scientific equipment that has been contaminated with blood or other bodily fluids shall be decontaminated and cleaned before being repaired in the laboratory or transported to a repair facility.
16. All laboratory staff shall wash their hands after completing laboratory activities and shall remove protective clothing before leaving the laboratory.
17. Decontaminate work surfaces by disinfecting with a solution of one part household bleach (5.25%) to nine parts of water.

Potential Exposure Situations for Child Study and Development Center

The following descriptions are geared towards the general duties associated with childcare workers.

Job Classification - Childcare Workers

WORK TASK	POTENTIAL EXPOSURE SITUATION
First aid on victims of accidents or violence	Contact with blood or OPIM.
Performing CPR	Contact with saliva, open mouth sores, OPIM
Cleaning stools, vomit and OPIM	Contact with blood or OPIM.

SAFE WORK PRACTICES FOR CHILDCARE WORKERS

The following safe work practices apply to the general duties associated with childcare workers:

1. The following safe work practices apply to the general duties associated with child care workers.
2. Employees shall wear gloves whenever they anticipate touching blood, bodily fluids, mucous membranes, or non-intact skin while they conduct their operations.
3. Gloves shall be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
4. Hands and other skin surfaces shall be washed immediately and thoroughly with water and antiseptic cleaner if contaminated with blood or other bodily fluids.
5. Hands shall be immediately washed after gloves are removed.
6. Areas and equipment, which become contaminated with blood or other bodily fluids, shall be cleaned immediately with a bleach solution containing one part household bleach (5.25%) to nine parts of water.

Potential Exposure Situations for University Hospitality Services

The following descriptions are geared towards the general duties associated with Catering, Dining, Bakery, New England Center, and Memorial Union food service workers.

Job Classification – Food Service Workers, Bakers, Cooks, Waitstaff

WORK TASK	POTENTIAL EXPOSURE SITUATION
Basic First aid* on victims of accidents or violence (*First aid training is not provided by UHS)	Contact with blood or OPIM.
Performing CPR	Contact with saliva, open mouth sores, OPIM

SAFE WORK PRACTICES FOR UNIVERSITY HOSPITALITY SERVICES WORKERS

The following safe work practices apply to the general duties associated with Catering, Dining, Bakery, New England Center, and Memorial Union food service workers:

1. Employees shall wear gloves whenever they anticipate touching blood, bodily fluids, mucous membranes, or non-intact skin while they are assisting an individual.
3. Gloves shall be worn when handling items or surfaces obviously contaminated with blood or other bodily fluids.
4. Hands and other skin surfaces shall be washed immediately and thoroughly with water and antiseptic cleaner if contaminated with blood or other bodily fluids.
5. Hands shall be immediately washed after gloves are removed.
6. Areas and equipment, which become contaminated with blood or other bodily fluids, shall be cleaned immediately with a bleach solution containing dilute one part household bleach (5.25%) to nine parts of water.

V. METHODS OF COMPLIANCE WITH STANDARD SAFETY POLICY

This section describes the universal precautions, engineering controls and personal protective equipment at UNH for employees who may come in contact with blood, blood products, or OPIM. This section also delineates specific safe work practices that shall be followed by every employee who may be exposed to infectious agents.

1. UNIVERSAL PRECAUTIONS

The principle of Universal Precautions is a conservative approach to infection control. Simply stated, the concept behind Universal Precautions is that:

ALL HUMAN BLOOD AND BODY FLUIDS ARE TREATED AS IF THEY ARE KNOWN TO CONTAIN HEPATITIS B VIRUS, HUMAN IMMUNODEFICIENCY VIRUS (HIV), OR OTHER BLOODBORNE PATHOGENS.

Employees at UNH shall use this approach whenever they handle blood, bodily fluids, or OPIM. By using universal precautions, employees will avoid all contact with potentially contaminated items by following standard safety precautions, using proper safety controls, and wearing the appropriate personal protective equipment. Please see Table 1 for a list of Universal Precautions.

2. ENGINEERING AND WORK PRACTICE CONTROLS

It is the policy of UNH to use engineering controls and work practices whenever feasible to eliminate or minimize employee exposures to bloodborne pathogens. Personal protective equipment shall be worn when the potential for occupational exposures still exists after controls have been implemented. The following sections describe the engineering controls and work practices currently in place at UNH.

Engineering Controls

Engineering controls are those devices that isolate or remove the bloodborne pathogen hazard from the work place. These engineering controls are routinely examined as part of the Exposure Control Plan Inspection Program. A list, such as the one shown in Table 2, shall outline the engineering controls that will be established where appropriate to protect employees from potential exposure situations.

TABLE 1

UNIVERSAL PRECAUTIONS

1. All bodily fluids from all (human) patients are considered infectious and shall be handled and transported appropriately.
2. All healthcare workers will use appropriate barrier precautions to prevent skin and mucous membrane exposure when contact with blood or bodily fluids are anticipated.
3. Gloves shall be worn when touching blood, bodily fluids, mucous membranes, or non-intact skin.
4. Gloves shall be worn when handling items or surfaces contaminated with blood or bodily fluids.
5. Gloves shall be worn while performing venipuncture and other vascular access procedures.
6. Gloves shall be changed after contact with each patient.
7. Masks and protective eyewear or face shields shall be worn during procedures that are likely to generate droplets of blood or other bodily fluids in order to prevent exposures of the mucous membranes of the mouth, nose, and eyes.
8. Gowns or aprons shall be worn during procedures that are likely to generate splashes of blood or other bodily fluids.
9. Hands and other skin surfaces shall be washed immediately and thoroughly with water and antiseptic cleanser if contaminated with blood or other bodily fluids.
10. Hands shall be immediately washed after gloves are removed.
11. Employees shall take precautions to prevent injuries caused by needles, scalpels, and other sharp instruments or devices during or after medical procedures, when cleaning instruments, and during disposal of used needles.
12. To prevent needle-stick injuries, needles shall not be recapped, purposely bent or broken by hand, removed from disposable syringes, or otherwise manipulated by hand.
13. After use, disposable syringes, needles, scalpel blades, and other sharp items shall be placed in puncture-resistant containers for disposal. These containers shall be as close as practical to the area where disposable sharps are used.
14. Mouthpieces, resuscitation bags, or other ventilation devices shall be available for use in areas in which the need for resuscitation procedures is reasonably anticipated.

TABLE 2

**ENGINEERING CONTROL EQUIPMENT AND INSPECTION SCHEDULE
(EXAMPLE)**

Engineering Control	Location	Inspection Period	Comment
Sharps Containers	Room XXX	As Needed	For disposal of sharps

Hand-washing Facilities

Hand-washing facilities shall be made readily accessible to all employees, in accordance with the Bloodborne Pathogen Standard. Employees shall wash their hands at these facilities every time they come in contact with items containing or contaminated with potentially infectious agents.

Where the construction of hand-washing facilities is not feasible, the University provides an antiseptic hand cleanser. Employees shall wash their hands with running water as soon as possible after using these antiseptic cleaners.

3. WORK PRACTICE CONTROLS

Work practices are defined as those procedures that have been developed by UNH to reduce or eliminate employee exposures to bloodborne pathogens during the execution of their work tasks.

The Importance of Avoiding Routine Exposures

The majority of biological contamination (human blood and/or OPIM) is the result of small sprays, splashes, or mists. Most of these contaminations do not cause an immediate adverse health effect. Therefore, many workers do not fully appreciate the hazards they face during the completion of certain work tasks. One accidental exposure to bloodborne pathogens can result in serious health effects. Employees shall strictly follow all the procedures described in this Exposure Control Plan and associated training programs.

Basic Hygiene

The following basic hygiene procedures are mandatory under the Bloodborne Pathogen Standard. These procedures have been implemented by UNH and shall be followed by employees who may be exposed to bloodborne pathogens.

- ◆ All procedures involving blood or other potentially infectious materials shall be performed in such a manner to prevent or minimize splashing, spraying, spattering, and generation of droplets of these substances.
- ◆ Employees shall wash their hands immediately after removal of gloves or other personal protective equipment (or as soon as feasibly possible).
- ◆ Upon accidental skin contamination, the area will be washed with copious amounts of soap and water for 15 minutes.
- ◆ If the eye or mucous membranes are accidentally contaminated, they shall be flushed with water for at least 15 minutes.
- ◆ All accidental exposures shall be immediately reported to the area supervisor.

Contaminated Needles and Other Sharps Handling Procedures

Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed unless it is through the use of a mechanical device or a one-handed technique. Shearing or breaking of contaminated needles is forbidden.

Contaminated, reusable sharps will be placed in appropriate containers immediately after use. These containers shall be puncture-resistant, labeled (and/or color-coded), and leak-proof on all sides and bottom.

Actions Prohibited in Work Area

Eating, drinking, smoking, and applying cosmetics are forbidden in areas where there is a reasonable possibility of occupational exposure to potentially infectious materials. Food and beverages shall not be kept in refrigerators, freezers, shelves, cabinets, or on bench-tops where blood or other potentially infectious materials are present. Mouth pipetting or suctioning of blood or other potentially infectious materials is prohibited.

Containerization Procedures

Specimens of blood or other potentially infectious materials shall be placed in containers that prevent leakage during collection, handling, processing, storage, transport or shipping. These containers shall be closed prior to being stored, transported, or shipped. Containers for storage, transport or shipping will be labeled in accordance with the standard. If outside contamination of the primary container occurs (or if specimens contained within the primary container could puncture that container), the primary container will be placed within a secondary container which prevents leakage during handling, processing, storage, transport, or shipping. The secondary container shall be puncture-resistant and labeled/color coded under the requirements of the standard.

Disposal of Refrigerators Used to Store Blood or OPIM

Refrigerators that have been used to store blood or other biological materials must be properly disinfected prior to pick up and disposal. The following steps should be taken prior to refrigeration removal:

1. Wearing gloves, wipe down the entire inside of the refrigerator with paper towels soaked in a solution containing one part household bleach (5.25%) to nine parts of water.
2. Discard all contaminated material as biohazard waste.
3. Remove gloves and wash your hands with soap and water.
4. Remove the biohazard sticker(s) from the exterior of the refrigerator.

The refrigerator is now able to be safely removed.

Equipment Handling Procedures

Equipment, which may become contaminated with blood or other potentially infectious materials, will be examined prior to servicing or shipping and will be decontaminated, when necessary. Accidents involving glassware are a significant cause of injuries in laboratories and related facilities. Glassware shall be handled carefully and stored properly. Damaged items shall be repaired or discarded. Hand protection shall be worn when inserting rubber stoppers or corks into glassware, or when placing rubber tubing in glass hose connections. Employees shall ask their supervisors if they are unsure how to handle equipment or if they feel items are not being used properly.

4. PERSONAL PROTECTIVE EQUIPMENT

UNH provides, at no cost to the employee, appropriate personal protective equipment for personnel who may be exposed to bloodborne pathogens. If blood or potentially infectious materials penetrate protective clothing, these items shall be removed immediately (or as soon as feasible). All personal protective equipment will be removed prior to leaving the work area. Laundering, disposal, repair and replacement of this equipment will be done at no cost to the employee.

Gloves

The routine use of gloves is one of the most basic safety procedures used to protect employees from the hazards associated with infectious agents. Gloves shall be worn whenever there is an opportunity for hand contact with blood, blood products, mucous membranes, non-intact skin, OPIM or contaminated items and surfaces.

Disposable gloves (such as surgical or examination gloves) shall be replaced immediately if they are torn, punctured, or their ability to function as a protective barrier is compromised in any way. Disposable gloves will not be washed or decontaminated for re-use.

Utility gloves (gloves designed for multiple uses) may be decontaminated and re-used if the integrity of the glove is not compromised. To ensure this integrity, employees shall inflate the glove, seal and roll the cuff, and then inspect for any air leaks. Utility gloves shall be discarded if they show signs of cracking, peeling, tears, punctures, or exhibit any other signs of deterioration.

Hypoallergenic gloves, glove liners, powdered gloves, or other similar protective gear are available to employees who are allergic to the gloves normally provided. Employees who require such items shall contact their supervisor or OEHS.

Face Protection

Masks, in combination with eye protection devices (i.e. goggles, safety glasses with shields, face shields) shall be worn when splashes, spray, splatter or droplets of blood or OPIM may be generated and contamination of the eyes, nose or mouth can be reasonably anticipated. Employees with acne, dermatitis or other ailments involving the facial region shall consider wearing face protection while conducting operations where potential exposure may occur.

Other Protective Apparel

Gowns, aprons, lab coats, or other similar outer garments may be worn in occupational exposure situations. The type of garment will be selected based on the degree of anticipated exposure. Employees shall contact their supervisors or OEHS if they have any questions concerning the type of personal protective apparel appropriate for certain job tasks. Such clothing will not be worn outside of designated work areas. Surgical caps, hoods, shoe covers, or boots shall be worn in instances where gross contamination can be reasonably anticipated (i.e. autopsies, surgeries, clean up of a significant release of potentially infectious materials). For routine work situations, close-toed shoes shall be worn at all times.

Employees will use the appropriate personal protective equipment whenever they are potentially exposed to bloodborne pathogens.

VI. HOUSEKEEPING PROCEDURES

Effective housekeeping is essential to minimize all occupational hazards. Good housekeeping is paramount to the protection of UNH employees from the hazards associated with potentially infectious agents.

Housekeeping Procedures for Equipment

All equipment and working surfaces will be decontaminated after contact with blood or other potentially infectious materials. Work surfaces will be washed with disinfectant after completion of procedures that lead to contamination of these surfaces.

Work surfaces will be cleaned at the end of the work shift when operations conducted during the shift involve potentially infectious materials. Protective coverings, such as plastic wrap, aluminum foil, or imperviously backed absorbent paper used to cover equipment and surfaces shall be replaced as soon as feasible when they become overly contaminated or at the end of a work shift. All bins, pails, cans, and similar receptacles intended for reuse, which may become contaminated with blood or other OPIM, will be routinely inspected, cleaned, and decontaminated. These receptacles shall also be immediately decontaminated whenever they become visibly contaminated.

Housekeeping Procedures for Sharps

Broken glassware, which may be contaminated, shall never be picked up directly with the hands. A brush and dustpan, tongs, or forceps shall be used to clean up this broken glassware. Employees shall wear gloves every time they clean up broken glassware.

Contaminated sharps shall be discarded immediately after use. Containers for waste sharps shall be:

- ✓ Closable
- ✓ Puncture Resistant
- ✓ Leak-proof on all sides and bottom
- ✓ Labeled/color coded
- ✓ Easily accessible to personnel
- ✓ Maintained upright throughout use
- ✓ Replaced routinely and not allowed to be overfilled

When moving containers of contaminated sharps from the area of use, the containers will be closed immediately and prior to removal to prevent the accidental release of contents or placed in a secondary container if leakage is possible. This secondary container shall be closable, constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping. Please see Table 3 for an example of a cleaning schedule.

Housekeeping Procedures for Laundry

Contaminated laundry will be handled as little as possible with a minimum of agitation. Contaminated laundry will be bagged in the area of use and shall not be sorted or rinsed in the location of use. Wet laundry, which presents a potential leak problem, will be placed in leak-proof containers. Employees who have contact with contaminated laundry shall wear gloves and other appropriate personal protective equipment, as deemed necessary for the safe handling of this laundry.

Chemically and biologically contaminated laboratory coats and gowns may be laundered by using any of the following methods:

A. UNH Laundering Facilities

Laundry facilities exist in a few departments at UNH. Follow departmental procedures for cleaning laboratory coats and gowns. Generally, these facilities are for intra-department use only.

B. Professional Laundering

A professional service company may be used if your department does not have the capability to launder laboratory coats and gowns. Ask your local cleaner if they are capable of laundering soiled laboratory coats and gowns.

C. Autoclaving/Personal Laundering

Laboratory coats and gowns may be cleaned at home only after they have been autoclaved at UNH. **Note:** This method is not approved for chemically-contaminated items.

TABLE 3

FACILITY SCHEDULE FOR CLEANING AND METHOD OF DECONTAMINATION

Item or Area	Method of Decontamination	Cleaning Schedule	Comment

VII. HEPATITIS B VACCINATION PROGRAM

Hepatitis B vaccinations (HBV) are an important part of the UNH Exposure Control Plan. The Hepatitis B vaccine and vaccination series are available to all employees who have occupational exposures to potentially infectious materials. These vaccinations are provided at no cost to the employee (with occupational exposures) and are provided by or under the supervision of a licensed physician (or another licensed health care professional).

If routine booster doses of HBV are recommended by the US Public Health Service, the booster shots will be made available to UNH faculty and staff. These vaccinations are provided at no cost to the employee.

Obtaining Hepatitis Vaccinations

In accordance with the requirements of the bloodborne pathogen standard, the HBV will be provided to employees after the appropriate information on the Hepatitis B virus is reviewed during training programs.

Vaccinations are provided within ten (10) working days of initial assignment to all employees who have occupational exposures. The vaccination is being offered through the UNH Health Services.

Exemptions to the Hepatitis B Vaccination Program

Employees who have already completed the HBV series are exempt from UNH vaccination requirements. Employees for whom antibody testing has revealed immunity to the Hepatitis B virus or whom vaccination is contra-indicated for medical reasons are also exempt from the vaccination requirements.

Employees Who Decline the HBV Series

Employees may decline the HBV. When an employee elects not to participate in the HBV program, the employee declining treatment shall sign the Declination Statement (Figure 4). Employees who decline the HBV may receive the series at a later date.

VIII. POST-EXPOSURE VACCINATIONS AND MEDICAL EVALUATIONS

Post-exposure vaccinations and medical evaluations following an exposure incident are essential to an effective Exposure Control Plan. Post-exposure vaccinations and medical evaluations are available to all employees who have had an exposure incident. These vaccinations and evaluations are provided at no cost to the employee. Confidential medical evaluations and follow-ups will be made available to all affected employees following the report of an exposure incident. These medical evaluations will include the following elements.

- ✓ Report any exposure incident to your immediate supervisor.
- ✓ Document the routes of exposure and circumstances by which exposure occurred.

The employee will be offered the option of having his/her blood collected for testing of the employee's HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood shall be tested for HIV serological status. However, if the employee decides prior to that time that testing will or will not be conducted, then the appropriate action can be taken and the blood sample discarded.

The employee will be offered post-exposure prophylaxis in accordance with the current recommendations of the US Public Health Service. These recommendations are currently outlined in the Center for Disease Control supplement: Guidelines for Prevention of Transmission of HIV & HBV to Health-Care & Public Safety Workers, USPHS, June 1989. (<http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000114/p0000114.asp>)

The employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident along with information on what potential illnesses to be watchful of as well as reporting any related experiences to appropriate personnel.

Health Care Professionals Written Opinion

A written opinion shall be obtained from the health care professional when evaluating employees.

Written opinions will be obtained in the following instances.

1. When the employee is sent to obtain the Hepatitis B vaccine.
2. Whenever the employee is sent to a health care professional following an exposure incident.

Health care professionals shall be instructed to limit their opinions to:

1. Whether the Hepatitis B vaccine is indicated; if the employee has received the vaccine; and/or evaluation following an exposure incident.
2. The employee having been informed of the results of the evaluations, and
3. The employee having been told about any medical conditions resulting from exposure to blood or other potentially infectious materials. The written opinion to the employee is not to reference any personal medical information.

IX. POST EXPOSURE PLAN

UNH has the responsibility to investigate all incidents resulting in possible exposure to blood or OPIM.

- All incidents SHALL be reported to a supervising authority immediately.
- If needed, medical treatment shall be sought.
- The Report of Injury/Occupational Illness form shall be completed and sent to the Occupational Health & Safety Coordinator (Fax: 862-0047) and the Workers' Compensation Coordinator (Fax: 862-1222).
- If the incident involves a needle, syringe or other suspicious apparatus, the UNH Police shall be included in the investigation process.
- If the incident is a direct result of a violation of proper disposal policy (Sharps container) or illegal use of "Sharps", every effort will be made, through the investigation process, to identify the responsible individual(s). The responsible individual(s) will be subject to the UNH Fast & Impartial Resolution (FAIR) Complaint & Grievance Process (<http://www.unh.edu/hr/empl-rel.htm#Definitions>) and the Occupational Safety Committee will review the findings.

Figure 4
Training and Vaccination Form

1. I have received training on the risks of working with human blood or other potentially infectious materials as outlined in the University of New Hampshire's Bloodborne Pathogen Exposure Control Plan.

HEPATITIS B VACCINATION
ACCEPTANCE/DECLINATION STATEMENT

2. In full recognition of the above:

I accept participation in the vaccination series.

I decline participation in the vaccination series.

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring the Hepatitis B Virus infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline the Hepatitis B vaccination at this time.

I understand that by declining this vaccination, 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 wish to be offered the Hepatitis B vaccine, I can be vaccinated at that time at no charge to me.

I have already received the HBV vaccination series on: _____.
Date

Print Name

Signature

Social Security Number
(last four numbers)

Department

X. COMMUNICATION OF HAZARDS TO EMPLOYEES

Communication of the hazards associated with blood, blood products, or OPIM is extremely important. UNH provides such hazard information to employees through the use of labels and signs.

Label Requirements

Warning labels will be affixed to containers of regulated waste, refrigerators, and freezers containing blood or OPIM. Labels shall also be affixed to containers used to store, transport, or ship blood or other potentially infectious materials. Labels shall include the universal biohazard symbol and be fluorescent orange or orange-red, with lettering or symbols in a contrasting color. Labels are also required for equipment that has been contaminated with potentially infectious materials.

Red bags or red containers may be substituted for labels. Containers of blood or blood products that are labeled as to their contents and have been released for transfusion or other chemical use are exempt from these requirements. Individual containers placed in a labeled container during storage, transport, shipment, or disposal are also exempt under the label requirements. Regulated waste that has been decontaminated need not be labeled or color-coded.

XI. TRAINING



UNH provides all potentially exposed employees with appropriate training to be conducted prior to initial assignment to tasks where an occupational exposure may occur. Training for employees will be provided at no cost to the employee and will include explanations of:

1. The OSHA Standard for Bloodborne Pathogens
2. Epidemiology and symptomatology of bloodborne diseases.
3. Modes of transmission of bloodborne pathogens.
4. The UNH Exposure Control Plan.
5. Procedures which might cause exposure to bloodborne pathogens.
6. Control methods that will be used to control exposure to bloodborne pathogens.
7. Personal protective equipment available and who shall be contacted concerning availability.
8. Post-exposure evaluation and follow-up.
9. Biohazard signs and labels used.
10. Hepatitis B vaccination program.
11. Emergency procedures.

All employees will receive annual refresher training.

X. RECORDKEEPING

Training records are kept in the department as well as the Office of Environmental Health & Safety. The record includes the following items:

-  Dates of the training session
-  Name and department