

MOUNT HOLYOKE COLLEGE

**Bloodborne Pathogen
EXPOSURE CONTROL PROGRAM**

October 2016

In compliance with the
OSHA BLOODBORNE PATHOGEN STANDARD
29 CFR 1910.1030

Environmental Health and Safety
538-2529

**Mount Holyoke College
Bloodborne Pathogen Control**

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I. OSHA Requirements

The Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard (29 CFR 1910.1030) requires that employers who have employees who are occupationally exposed to human blood or other potentially infectious materials develop a program to eliminate or minimize such exposures. This Bloodborne Pathogen Exposure Control Plan describes that program at Mount Holyoke College. This Plan is reviewed annually or more frequently as needed. The Office of Environmental Health & Safety coordinates the review.

The program includes all employees who have occupational exposure to bloodborne pathogens. OSHA defines occupational exposure as "reasonably anticipated skin, eye, mucous membrane, or parenteral (under the skin) contact with blood or other potentially infectious materials that may result from the performance of an employee's duties". The OSHA Standard does not cover "good samaritan" assistance provided in an emergency, however, should an employee be exposed while providing such assistance in the workplace, the College offers post-exposure evaluation and follow-up as described in Section VI.

Employees with occupational exposure may obtain a copy of this Plan by requesting it from their Supervisor, Department Head, or the Office of Environmental Health & Safety.

II. Exposure Determination

Employees in the following job classifications have occupational exposure to bloodborne pathogens. The Office of Environmental Health & Safety maintains an up-to-date list of employees with occupational exposure.

Health Center

College Physician
Director
Nurse
Medical Technologist
X-ray Technician
Nurse Practitioner
Clinic Assistant
Students Health Aide

Physical Education and Athletics

Head Athletic Trainer
Assistant Athletic Trainer
Student Athletic Trainer

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Facilities Management

Housekeeping Supervisor
Housekeeper
General Laborer
Custodial Supervisor
Custodian

Campus Police

Director
Assistant Director
Sergeant
Officers
Student EMT

Dining Services
Selected employees for contamination clean-up

Biology Department

Faculty and Teaching Assistants in Selected Laboratories

Willits-Hallowell

Cleaner

III. Exposure Control

Universal precautions must be observed to prevent contact with blood and other potentially infectious materials. Under the concept of universal precautions, all blood and certain human body fluids are always handled as if they are infectious. Blood is the single most important source of bloodborne pathogens in occupational settings. As defined by OSHA, other "potentially infectious materials" include tissue, semen, vaginal secretions, and the following fluids (surrounding the): cerebral (brain), spinal (spine), synovial (joints), pleural (lungs), peritoneal (abdomen), pericardial (heart), and amniotic (fetus). Feces, nasal secretions, sputum, saliva, sweat, tears, urine, and vomit are not included unless they are visibly contaminated with blood.

Under circumstances in which it is difficult to distinguish between infectious and noninfectious body fluids, all body fluids shall be considered "potentially infectious materials". If any of the exposure control methods are not feasible for a certain operation, permission to use alternate methods must be obtained from the Department Head.

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Departments are responsible for providing all materials and equipment necessary to comply with the requirements of this Plan.

A. Engineering and Work Practice Controls

The following engineering and work practice controls must be used in all applicable operations with potential exposure.

Personal Hygiene

1. Hand washing facilities or antiseptic towelettes (for use in remote locations) are available to all exposed employees. Exposed skin that comes into contact with any body fluid must be washed immediately. Employees must wash their hands immediately or as soon as feasible after removing gloves. If antiseptic towelettes are used, the hands must be washed with soap and water as soon as feasible. Antiseptic towelettes are kept in all first aid kits that are used in remote areas.
2. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of exposure. Each department is responsible for designating such areas.
3. Food and drink must not be kept in areas (e.g. refrigerators, freezers, shelves, cabinets, or countertops) where blood or other potentially infectious materials are or may have been present.

Handling Sharps

1. Contaminated needles or other contaminated sharps must not be bent, broken, or sheared. Recapping of needles is only allowed when the Director of the Health Center has determined that no other method is feasible. In that case, recapping must be done using a mechanical device or a one handed technique.
2. All contaminated disposable sharps must be immediately placed in a disposable, closeable, puncture resistant container, leakproof on the sides and bottom, and bearing a biohazard label.
3. All contaminated reusable sharps must be immediately placed in a puncture resistant container, leakproof on the sides and bottom, and bearing a biohazard label. The container must be designed such that employees do not have to reach into the container by hand.
4. Containers for contaminated sharps must be easily accessible and located as close as feasible to the area where sharps are being used or anticipated to be found; including each examination room, the emergency room and the laboratory at the Health Center, and in academic laboratories where sharps are generated. Campus Police and Custodial and Housekeeping supervisors also have sharps containers for use if sharps are found elsewhere on campus.
5. Containers must be kept upright and must not be overfilled.

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6. When full, containers of disposable sharps must be closed and taken to the Health Center or Clapp Laboratory biomedical waste collection areas. Once closed, no attempt should be made to reopen the container.

Material Handling Procedures

1. All procedures involving blood or other potentially infectious materials must be performed so as to minimize splashing, spraying, spattering, or the generation of droplets or aerosols of these materials.
2. Mouth pipetting or suctioning of blood or other potentially infectious materials, or any other material is prohibited.
3. All specimens are placed in closed labeled containers to prevent spill or leaks during collection, handling, processing, storage, transport, or shipping. Specimen containers are placed in biohazard bags for transport to the laboratory.
4. All specimens of blood or other potentially infectious materials shipped off-site must be labeled with the biohazard symbol and packaged in accordance with Department of Transportation requirements.
5. Secondary containers must be used as necessary if outside contamination of the primary container occurs or if the specimen could puncture the primary container.
6. Equipment that may be contaminated with blood or other potentially infectious materials must be examined and decontaminated as necessary prior to servicing or shipping. If portions cannot be decontaminated, a label must be affixed indicating those areas, and the appropriate service representative or manufacturer informed.
7. All refrigerators or other storage areas where blood or other potentially infectious materials are kept must be marked with a biohazard label.

B. Personal Protective Equipment

Mount Holyoke College provides appropriate personal protective equipment (PPE) to all employees. The employee must use the equipment provided. Departments are responsible for providing the necessary PPE. If under unusual circumstances, it is the employee's professional judgment that use of the equipment would prevent the delivery of health care or public safety services or pose an increased risk to the worker or co-worker, the employee should petition their Department Head.

If the employee's judgment is made in an emergency situation, the circumstances will be investigated by the Department Head, and documented to determine whether changes can be instituted to prevent future occurrences.

1. All PPE must be removed before leaving the work area. PPE, which is penetrated by blood or other potentially infectious material, must be removed immediately.
2. Gloves must be worn by all employees when it is reasonably anticipated that there may be hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; and when handling or touching contaminated

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items or surfaces. This requirement includes all vascular access procedures, and all handling of specimens and specimen containers.

3. Disposable (single use) gloves must be replaced as soon as practical when contaminated and immediately when they are torn, punctured, or no longer act as a barrier. Disposable gloves cannot be reused and must be discarded in the appropriate location after each use.
4. Gloves must be changed between patient contact.
5. Utility gloves may be decontaminated and reused, by washing with a disinfectant cleaner, rinsing and air-drying. They must be discarded when any deterioration is noticed (e.g. punctures, tears, cracks, peeling, discoloration).
6. Masks, splash goggles or face shields must be worn whenever splashes, spray, splatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose or mouth contamination is reasonably anticipated.
7. Gowns, aprons, or other protective clothing must be worn in all situations where exposure is anticipated.
8. Lab coats worn as PPE are either disposable or laundered by the College.
9. Mouthpieces, resuscitation bags (ambu), or pocket masks must be worn when performing artificial resuscitation.

At the Health Center, disposable gloves are available in each examination room, the emergency room, and the laboratory. Gowns, masks, eye protection and resuscitation devices are kept in the emergency room. Campus Police has gloves, masks, eye protection, a gown, and resuscitation devices in each vehicle and in the main office. Officers also carry gloves on their person. Physical Education and Athletics keep gloves in the training room and with first aid supplies. Facilities Management personnel keep gloves with their cleaning or material handling supplies. The Biology department supplies gloves and eye protection to every lab. Any employee who is allergic to latex will be provided an alternative glove.

C. Housekeeping

The work site must be maintained in a clean and sanitary condition. A written schedule for cleaning fixed locations of exposure is included in Appendix A. A bleach solution (1/4 cup per 1 gallon), or hospital disinfectant is used for cleaning all surfaces visibly contaminated with blood. A general-purpose disinfectant is used for other surfaces. Gloves are worn during all cleaning procedures.

1. All equipment and surfaces are decontaminated immediately with a disinfectant after overt contamination with blood or other potentially infectious materials; and at the end of the work shift if it may have been contaminated since the last cleaning.
2. Protective coverings, such as foil or imperviously backed absorbent paper, are removed and replaced as soon as feasible when they become contaminated.

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3. All containers intended for reuse, including contaminated waste containers, which have a reasonable likelihood of becoming contaminated are inspected and decontaminated at least monthly and as soon as feasible after known contamination.
4. Broken glassware, which may be contaminated, must not be picked up directly with the hands; forceps, dustpan and brush/spatula or other equipment are used. A brush should not be used to avoid splashing or generation of aerosols.
5. Only trained personnel are authorized to clean-up potentially infectious materials.
6. Procedures for cleaning contaminated areas are included in Appendix A. Emergency biohazard clean-up kits are available in the Otto Kohler stockroom and Safford custodial storage area and are issued to each custodian and housekeeper for storage in their area.

D. Waste Disposal

1. All contaminated disposable sharps, including broken glass, are immediately placed in a disposable, closeable, puncture resistant container, leak proof on the sides and bottom, and bearing the international biohazard label.
2. All other contaminated waste are segregated from uncontaminated trash and placed in red bags or other appropriate containers. Any wastes containing free liquids are placed in a liquid tight container marked with the international biohazard symbol. Any items that could puncture a bag should be put in a puncture resistant container and then a red bag.
3. Secondary containers must be used if outside contamination of the primary container occurs, or if the waste could puncture the primary container.
4. All red bags are tied prior to removal from the area of generation to the biomedical waste storage area.
5. In the Biology Department contaminated material may also be autoclaved. Once autoclaved, waste is labeled with the statement, "Noninfectious Biomedical Waste, Treated by Mount Holyoke College" prior to disposal as solid waste.

Biomedical waste is collected by Facilities Management daily from, Reese, and Clapp, and weekly from the Kendall training room. It is taken to the Health Center or Clapp basement for storage. A freezer is used to store degradable material in Clapp basement. Waste is transported by a vendor to a licensed incinerator every weeks during the academic year and as needed during the remainder of the year.

E. Contaminated Laundry

1. Gloves are worn when handling all dirty laundry. A gown is also used when the laundry is grossly soiled with blood or other potentially infectious materials.
2. Soiled laundry is handled as little as possible and in a manner that prevents the laundry from coming into contact with the body or clothing.

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3. Soiled laundry is placed directly into designated laundry bags. Grossly soiled laundry is placed in the regular laundry bag and that bag placed in a red biohazard bag. If the laundry is wet it is placed in a double bag or other container to prevent soak-through or leakage of the fluids.
4. Contaminated laundry is brought directly to the Health Center receiving area to await pickup by a commercial laundry that practices Universal Precautions.

IV. Needlestick Safety and Prevention

In addition to the specific engineering and work practice controls described about for handling needles, the College is committed to evaluation and implementation of commercially available and effective safer medical devices. At least annually, the College reviews the potential use of available devices as identified by our medical supplies vendor. This review includes input from Health Center employees directly responsible for medical care. A report on the latest annual review and the implementation of engineering controls for the previous year is available at the Health Center and in the Office of Environmental Health & Safety.

V. Hepatitis B Vaccination

Hepatitis B vaccination is available to all employees who have occupational exposure at no cost to the employee. The vaccine is offered to employees with occupational exposure after initial training and within 10 days of assignment to a position with occupational exposure. Vaccines are administered by the Health Center, or, when the Health Center is closed, the Work Connection at Holyoke Hospital. Appointments with the Health Center can be made directly by the employee. When the Health Center is closed, the employee should call the Office of Environmental Health & Safety to coordinate services provided at Holyoke Hospital.

Occupationally exposed employees are given a fact sheet (Appendix B) describing the vaccination series and are asked to elect to have the series or sign the mandatory declination (Appendix C). Declination statements are returned to the Office of Environmental Health & Safety. The Office of Environmental Health & Safety records that a declination statement has been received and forwards the signed statement to the Health Center to be included in the employee's medical record. Should an employee who continues to work in a position with occupational exposure and who has signed a declination wish to have the vaccination at a later time, it will be provided upon request to the Health Center or the Office of Environmental Health & Safety.

VI. Emergency Procedures and Reporting Exposure

Upon skin contact, the area should be washed immediately with soap and water. If soap and water is not available, an antiseptic towelette should be used, and soap and water used as soon as possible.

Upon eye or other mucous membrane contact, the area should be flushed immediately with water or saline solution, whichever is available.

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Employees must **immediately** report all exposure incidents to their immediate supervisor, who will notify the Department Head. An exposure incident is "a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral (under the skin) contact with blood or other potentially infectious material that results from the performance of an employee's duties".

The Department Head is responsible for initial investigation of the incident, and notification of Human Resources and the Office of Environmental Health & Safety within 24 hours. The Department Head may designate these duties to a supervisor who has attended the Bloodborne Pathogen Training.

An Exposure Incident Report (see Appendix D) should be attached to the employee accident report form, which can be obtained from and should be returned to the Office of Environmental Health & Safety. The investigation must document:

1. The route and circumstances of exposure.
2. Identification and documentation of the source individual, unless that identification is not feasible.
3. Procedural changes identified which would prevent reoccurrence of any conditions that increased the risk of exposure.

VII. Post-Exposure Evaluation and Follow-Up

Following a report of an exposure incident to the Department Head, the employee will be offered a confidential evaluation and follow-up. The employee and the source individual, if identified, will be immediately referred to the Work Connection at Holyoke Hospital by the Department head or the Office of Environmental Health & Safety. If the exposed employee or source individual is a student, she will be referred to the Health Center. The employee will be advised that post-exposure evaluation is recommended within 24 hours of exposure.

The College has confirmed that the Work Connection has a copy of the OSHA Standard that describes the requirements for exposure evaluation and follow-up, and will provide, at the time of the incident, the results of the investigation of exposure. The Work Connection at Holyoke Hospital or the Health Center will follow the procedures established by OSHA and the Center for Disease Control for post-exposure medical evaluation and provide Office of Environmental Health & Safety a written opinion within 15 days of completion of the evaluation as prescribed by the OSHA Standard.

VIII. Recordkeeping

Medical records required by the OSHA Standard are kept at the Health Center. Those records include for all employees with occupational exposure:

- the employee name and social security number
- a copy of the employee's vaccination status or declination
- a copy of any results of examination and medical testing

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- a copy of any health professional written opinions
- a copy of any information provided to the health care professional

All medical records are kept confidential and are not to be disclosed without the employee's express written consent to any person within or outside the workplace except as required by the OSHA Standard or as may be required by law.

Human Resources maintain the sharps injury log required by OSHA in 29 CFR 1910. The sharps injury log required by the Massachusetts Department of Public Health in 105 CMR 130.00 is maintained by the Health Center.

IX. Communication of Hazards

A. Signs and Labels

1. Warning labels are firmly affixed to all equipment and containers used to store, or ship blood or other potentially infectious materials. The labels include the international biohazard symbol.
2. Waste may either be labeled as described above or placed in a red bag or container.
3. Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempt from additional labeling requirements.
4. Individual containers of blood or other potentially infectious materials that are placed in a labeled container during transport, shipment or disposal are exempted from the additional labeling requirements.
5. If equipment that may be contaminated with blood or other potentially infectious materials cannot be decontaminated, a label is affixed indicating those areas, and the appropriate service representative or manufacturer informed.

B. Information and Training

All employees with occupational exposure are trained during working hours at no cost to the employee. At the time the Standard became effective, initial training of existing employees with occupational exposure took place prior to June 4, 1992, or for 9-month employees upon their return in September.

All new or transferred employees with occupational exposure are trained at the time of initial assignment to tasks where occupational exposure may take place. Training is updated at least annually and whenever a modification of tasks or procedures affects occupational exposure. Training includes the elements listed in Appendix E. There is opportunity for the employee to ask questions during the training session.

Employee training is coordinated by the Office of Environmental Health & Safety, the Health Center (Health Center Employees and Student Health Aides only), or Campus Police (Campus Police employees and student EMTs only). All supervisors with

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occupationally exposed staff must also attend training. Departments are responsible for scheduling new employee training with the Office of Environmental Health & Safety at least one week before training is required. The Office of Environmental Health & Safety, Health Center, and Campus Police maintain training records for at least three years.

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MOUNT HOLYOKE COLLEGE
FACILITIES MANAGEMENT, CLEANING SERVICES
GROVES HEALTH CENTER

HOUSEKEEPING CLEANING PROCEDURE

WEAR GLOVES FOR ALL PROCEDURES including trash handling

General cleaning and disinfection is done using general-purpose disinfectant. If visible contamination with blood is present a hospital disinfectant should be used. Cleaning of areas with visible blood should be done with disposable towels that should be discarded with the biomedical waste.

EMERGENCY ROOM (Daily)

Spray disinfectant cleaner over counter top, stainless steel sinks, basins and trash can covers, inside and out. Let stand 10 minutes. Scrub sink with general-purpose disinfectant, rinse well. Dry counter and sink with disposable towels. Dry basins and can covers with disposable towels. Dispose of towels with contaminated waste. (Health Center staff clean examining tables.)

DOCTOR'S OFFICES, EXAMINING ROOMS (Daily)

Spray sinks, carts, and can covers inside and out with disinfectant cleaner, let stand 10 minutes. Rinse cart well with disposable towels and dry with disposable towels. Use disposable towels to rinse sink, spray disinfectant cleaner again and wipe lightly with disposable towels. Rinse and dry can covers with disposable towels. Dispose of all disposable towels as biomedical waste after each room.

CONTAMINATED TRASH DISPOSAL (Daily)

It is very important to dispose of all contaminated materials from the covered trashcan lined with red plastic bags in double bags. All examining rooms, offices, the Lab, and Emergency Room are equipped with covered cans for red bag waste. Place double-red bag in the collection box in Room 20I for vendor pick-up. Never put the red bags with the trash. Red bag trashcans are cleaned with disinfectant cleaner once a month.

REGULAR TRASH (Daily)

Empty each basket in the big cart, change the liner if needed. Always keep 2 liners in the trash can change the top one, the bottom one keeps the can clean. Take the trash bag from the cart and bring it outside in the trash closet on the loading dock, back of Room 20I. Facilities Management general laborers are in charge of cleaning outside trash closets and do so on request.

CLEANING BEDROOMS (Daily)

Spray disinfectant solution on mattress, pillows, bed table inside and out, the nightstand, telephone, beeper, headboard, lamp switch, windowsill, chairs, baskets, doorknobs, and let stand 10 minutes then rinse with a wet paper towel and wipe dry with a paper towel.

CLEANING BATHROOMS (Daily)

Spray disinfectant solution in sink, around the sink, around the toilet seat and outside toilet bowl, the shower walls, the tub and curtains, waste basket, door knob, light switch, towel racks, pipes, and let stand 10 minutes. Using scrubbing sponge scrub the shower, sink, tub, and curtain with disinfectant, use Comet if needed, rinse well. Wipe everything with disposable towels. Use toilet bowl cleaner to swab around the rim and inside bowl. Flush. Squirt disinfectant cleaner into bowl when done cleaning. Wash floor with disinfectant cleaner. Wipe toilet seat with disposable towels, dispose of towels after each room.

FLOORS AND RUGS

Wet mop hallways with cold water and all-purpose cleaner once a week, use general-purpose disinfectant in the examination room and waiting room. Floors of Emergency Room and Examination Rooms should be cleaned 2 - 3 times a week with disinfectant cleaner. Vacuum all rugs once a week, the entrance rug everyday if needed. Spot clean as necessary.

GROVES HEALTH CENTER CLINIC ASSISTANTS' CLEANING ROUTINE

SUTURE SET - Soak in green soap & bleach & sterilize in Autoclave.

I & D SET - Soak in green soap & bleach & sterilize in Autoclave.

MERAL SPECULUMS - Soak in green soap & bleach & sterilize in Autoclave.

BASINS - Soak in green soap & bleach & sterilize in Autoclave.

CERVICAL CAPS - Soak in green soap & bleach & sterilize in Autoclave.

DIAPHRAGMS - Soak in green soap & bleach & water, rinse, soak 95% alcohol for 20min.

EYE OCCLUDER - Wipe with 95% alcohol or bleach.

EAR SYRINGE - Soak in bleach & water for 15-20 min.

NASAL & EAR SPECULUMS - Soak in bleach, green soap & water - 20 min.

EXAM TABLES - Wipe with disinfectant after each use. Use a 1% bleach solution, or hospital rated disinfectant if visibly contaminated with blood.

LIGHT TO ILLUMINATOR - Soak in straight bleach 20 min.

EKG STRIPS - Soak in green soap & bleach; soak metal leads clean with alcohol sponge.

PROCEDURE FOR CLEANING BODILY FLUIDS CONTAMINATION

1. Obtain a biomedical spill clean-up kit, utility gloves, and disinfectant (bleach and water (1/4 cup/gallon) or hospital disinfectant
2. Put on protective gloves and safety glasses or goggles.
3. Absorb liquid with absorbent powder.
4. When liquid is absorbed, use scoops to collect as much of the absorbed material as possible and put material and scoops in a red biohazard bag.
5. Flood area with disinfectant, for small area germicidal cloth supplied with clean-up kit may be used, and let stand for 10 minutes.
6. Wipe up remaining contamination with disposable wipes and put in the red biohazard bag.
7. Remove and dispose and gloves in the red biohazard bag.
8. Wash hands thoroughly with soap and water. If water is not immediately available use an antiseptic towelette and wash with soap and water as soon as possible.
9. Notify Facilities Management for transport of red-bagged biohazard waste to the Health Center or Clapp Laboratory biomedical waste storage areas. Use gloves when handling the bag.

MOUNT HOLYOKE COLLEGE

BLOODBORNE PATHOGENS EXPOSURE CONTROL PROGRAMHEPATITIS B VACCINE (RECOMBINANT)
EMPLOYEE INFORMATION SHEET

Hepatitis B Recombinant vaccine is a non-infectious viral vaccine derived from Hepatitis B surface antigen (HBsAg) produced in yeast cells. A portion of the Hepatitis B virus gene, which codes for HBsAg is cloned into yeast, and the vaccine for Hepatitis B is produced from cultures of this recombinant yeast strain. The HBsAg proteins are released from the yeast cells by cell disruption and purified by a series of physical and chemical methods. The vaccine may contain up to 4% yeast protein. It has been shown to be comparable to the plasma-derived vaccine. Each lot is tested for safety and sterility. This recombinant vaccine is free of association with human blood or blood products.

Employees occupationally exposed to blood or other potentially infectious materials are encouraged to have the vaccine. Hepatitis B may occur when the virus, transmitted by infected body fluids, is absorbed by mucous membranes or through breaks in the skin. The virus is predominantly in the blood of patients with active Hepatitis B or patients who are chronic carriers. It is also found in tears, saliva, breast milk, urine, semen and vaginal secretions. It can survive for days on environmental surfaces. Transmission is also associated with close interpersonal contact with an infected individual and crowded living conditions.

The recombinant vaccine induces protective levels of antibodies in greater than 90% of healthy adults who receive the recommended 3 doses. Two additional follow-up booster doses may be needed for some individuals. Hepatitis B Immune Globulin given simultaneously with recombinant Hepatitis B vaccine does not interfere with the induction of Hepatitis B antibodies by the vaccine.

The vaccine is not recommended for those with hypersensitivity to yeast, aluminum hydroxide, and thimerosal (a mercury derivative).

It is not known whether recombinant Hepatitis B vaccine can cause fetal harm when administered to a pregnant woman or can affect reproductive capacity. Also, it is not known whether it is excreted in human milk. Pregnant women should consult with their obstetrician prior to vaccination.

The vaccine is generally well tolerated. No serious adverse effects or serious hypersensitivity reactions have been reported. No adverse experiences related to yeast antibodies have been reported. However, as with any vaccine, further broad use of the vaccine could reveal adverse reactions not noted in clinical trials. Injection site and generalized complaints have been reported. These include local pain, redness, and swelling at the injection site. Generalized complaints many include fatigue/weakness, headache, low fever, malaise, nausea, diarrhea, and cold-like symptoms.

The vaccine is given intra-muscularly in 3 doses. The first 2 doses are given one month apart, and the third dose 6 months after the first. Persons with immuno-deficiency or those receiving immuno-suppressive therapy (radiation therapy, chemotherapy, or steroids), should report this information before receiving the vaccine. Also, those with any active infection or severe cardiopulmonary condition should report this before receiving the vaccine. **Recipients of the vaccine should still continue to use precautions in handling blood, blood products, and other body fluids. They should also continue to report needle sticks and direct contact with those products to their Supervisor.**

The vaccine will be administered by The Health Center, or, when the Health Center is closed, by the Work Connection at Holyoke Hospital. If you choose not to receive the vaccine at this time, you must sign the attached declination statement. Please decide if you would like to receive the vaccine by _____. If you would like to receive the vaccine, call the Health Center at ext. 2800, or when the Health Center is closed, call the Office of Environmental Health and Safety at ext. 2529, to arrange an appointment at Holyoke Hospital. If you choose not to receive the vaccine, sign the attached declination statement and return it to the Office of Environmental Health and Safety.

MOUNT HOLYOKE COLLEGE
Programa Control de Elementos Infecciosos en la Sangre

VACUNA DE HEPATITIS B (RECOMBINANTE) HOJA DE INFORMACIÓN

La vacuna hepatitis B recombinante es una vacuna virulenta no infecciosa derivada de la hepatitis B antígeno superficial (HBsAg) producidas en células de levadura. Una parte del gene que contiene el virus de la hepatitis B, el cual es configurado como HBsAg, es reproducido mediante un proceso de fermentación teniendo como resultado la vacuna hepatitis B. Esta se obtiene de los cultivos de esta recombinación en la cadena del germen. Las proteínas del HBsAg se rompen de esta cadena de células y son purificadas por una serie de métodos físicos y químicos. La vacuna puede contener hasta un 4% de proteína. Estos resultados han sido comparados con los obtenidos en la vacuna del derivado de plasma. Cada resultado es cuidadosamente examinado por seguridad y esterilidad. Esta vacuna recombinada está libre de cualquier relación con sangre humana o productos sanguíneos.

Aquellos empleados expuestos a sangre u otros materiales potencialmente infecciosos se les recomienda que tengan esta vacuna. La hepatitis B ocurre cuando el virus es transmitido a través de fluidos corporales y es absorbido por las membranas mucosas o a través de cortaduras en la piel. El virus es predominante en la sangre de pacientes que padecen de hepatitis B o pacientes que son portadores crónicos. Además, se puede encontrar en lágrimas, saliva, leche materna, orín, sémen y secreciones vaginales. Este virus puede sobrevivir por días en superficies ambientales. La transmisión de este virus también es asociada con el contacto cercano con personas que están ya infectadas y por condiciones pobres de vivienda.

La vacuna recombinante ocasiona niveles protectores de anticuerpos tan altos como un 90% en adultos saludables que reciben las 3 dosis recomendadas. Dos dosis consecutivas de refuerzos pueden ser necesarias para algunos individuos. La hepatitis B de inmuno globulina administrada con la recombinante vacuna de hepatitis B no interfiere en la admisión de anticuerpos de la vacuna hepatitis B.

La vacuna no es recomendada para aquellas personas que son hiper-sensitivas a la levadura, al hidróxido de aluminio y al timerosal (el cual es un derivado del mercurio).

No se ha comprobado si el recombinante de la vacuna hepatitis B puede causarle daño al feto cuando es administrado a una mujer embarazada o que puede dañar el sistema reproductivo. Además, no se ha comprobado si puede contaminar la leche materna. Se le recomienda a las mujeres embarazadas consultar primero con su obstetra antes de recibir la vacuna.

Generalmente la vacuna no es dolorosa. No se han reportado casos con efectos negativos o serias reacciones en personas hipersensitivas. No hay informes de experiencias adversas relacionadas con anticuerpos derivados de levadura. Aunque se debe mencionar que como toda vacuna el uso prolongado de la misma puede causar reacciones que no son detectadas en pruebas clínicas. Se han reportado molestias en el lugar inyectado y algunas quejas generales. Como ejemplo de estas molestias se ha reportado dolor leve en el lugar inyectado, roncha o hinchazón. Como quejas generales encontramos fatiga/debilidad, dolor de cabeza, fiebre baja, malestar, náuseas, diarrea y síntomas semejantes a un catarro.

La vacuna es administrada vía intra-muscular en 3 dosis. Las primeras 2 dosis se administran una vez al mes y la tercera dosis 6 meses después de la primera dosis. Personas con deficiencia inmunológica o que reciben terapia inmuno-supresiva (terapia radioactiva, quimioterapia, o esteroides) deben de notificar esta información antes de recibir la vacuna. También, personas que tengan alguna infección o una condición severa cardio-pulmonar deben de informarlo antes de recibir la vacuna. **Receptores de esta vacuna deben de continuar tomando las debidas precauciones en el manejo de sangre, productos sanguíneos y otros fluidos corporales. Además, se debe de reportar al Supervisor inmediato cualquier hincada con agujas o si se ha tenido contacto directo con alguno de estos productos.**

La vacuna será administrada por el Centro de Salud o en caso de que el Centro esté cerrado, por el Hospital de Holyoke, el departamento de Work Connection. Si usted decide no vacunarse en estos momentos debe firmar una hoja rehusando la vacuna. Favor de decidir si va a recibir la vacuna para el día _____. Si quisieras recibir la vacuna, llamar el centro de la salud en la extensión 2800, o cuando el centro de la salud es cerrado, llamar la Oficina de la Salud y de la Seguridad Ambientales en la extensión 2529, para arreglar una cita en el hospital de Holyoke. Si eliges no recibir la vacuna, firmar la declaración y volverla a la Oficina de la Salud y de la Seguridad Ambientales.

Mount Holyoke College
BLOODBORNE PATHOGEN CONTROL PROGRAM

DECLINATION OF HEPATITIS B VACCINATION

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

Employee Name (print)

Employee Signature

Department

Date

Return to: Environmental Health, Safety & Sustainability
50 College Street, South Hadley, MA 01075

MOUNT HOLYOKE COLLEGE
Programa Control de Elementos Patógenos en la Sangre

RECHAZO DE LA VACUNA HEPATITIS B

Entiendo que mi trabajo me obliga a exponerme a sangre y a materiales sumamente infecciosos, corriendo el riesgo de contraer el virus de la hepatitis B (HBV). Entiendo que tengo la oportunidad de vacunarme sin pagar costo alguno. Sin embargo, he decidido no recibir la vacuna en este momento. Entiendo que al negarme a recibir esta vacuna continuo en un riesgo de contraer hepatitis B, la cual se considera una enfermedad muy peligrosa. Si en el futuro (y si continúo mi empleo con Mount Holyoke College) continúo en mi trabajo exponiéndome a sangre u otros materiales infecciosos y quisiera recibir la vacuna hepatitis B, puedo recibirla gratis (dependiendo de los requisitos bajo el programa de OSHA Bloodborne Pathogen Standard).

Nombre del empleado (letra de molde)

Firma del empleado

Departamento

Fecha

Return to: Environmental Health, Safety & Sustainability
50 College Street, South Hadley, MA 01075

**Mount Holyoke College
Bloodborne Pathogen Control**

Appendix – D

EXPOSURE INCIDENT REPORT	
<p>Date: _____</p> <p>Time: _____</p> <p>Location: _____</p> <p>Exposed Employee: _____</p> <p>Witnesses: _____</p>	<p>What was the employee doing at the time of the exposure?</p> <p align="right"> First Aid: _____ Cleaning: _____ Waste Handling: _____ Laboratory Procedure: _____ Medical procedure: _____ Other [describe]: _____ _____ </p>
<p>What was the route of exposure?</p> <p align="center"> Non-Intact Skin: _____ Mucous membrane: _____ Parenteral: _____ [e.g., needle sticks, bites] </p>	<p>What protective equipment was the employee wearing at the time of the exposure?</p> <p align="right"> Exam/Surgical Gloves: _____ Utility Gloves: _____ Goggles: _____ Safety Glasses: _____ Mask/Eye Shield Comb.: _____ Mask: _____ Lab Coat/Gown: _____ Other [describe]: _____ </p>
<p>Has the Source Individual been identified?</p> <p align="center">Yes ___ No ___</p> <p>If the Source Individual can't be identified describe why.</p> <p>_____</p> <p>_____</p> <p>Who contacted the Source Individual to discuss blood testing?</p> <p>_____</p>	<p>Did the employee receive immediate first aid or medical care? _____</p> <p>If yes, where: _____</p> <hr/> <p>Did the employee receive a post exposure medical evaluation? _____</p> <p>If yes, where: _____</p>
<p>Describe the specific circumstances of the exposure incident. What was the employee doing?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Describe any procedures intended to prevent exposure which were not being followed.</p> <p>_____</p> <p>_____</p> <p>What steps could be taken to prevent a similar exposure from occurring in the future?</p> <p>_____</p> <p>_____</p>	
<p align="center"> Signature of Investigator: _____ Date: _____ Signature of Department Head: _____ Date: _____ </p>	
<p>Attach to Accident Report and send to Human Resources with a copy to the Environmental Health and Safety Office</p>	

TRAINING ELEMENTS

1. An accessible copy of the text of the OSHA Standard and explanation of its contents.
2. A general explanation of the epidemiology and symptoms of bloodborne disease and the modes of transmission of bloodborne pathogens.
3. An explanation of this Bloodborne Pathogen Exposure Control Plan and means by which an employee can obtain a copy.
4. An explanation of the appropriate methods for recognizing tasks and other activities that may involve occupational exposure to blood or other potentially infectious materials.
5. An explanation of the use and limitations of methods available to control exposure as described in Section III.
6. Information on the types, proper use location, removal, handling, decontamination and disposal of personal protective equipment.
7. An explanation of the basis for selection of personal protective equipment.
8. Information on the Hepatitis B vaccine including its efficacy, safety, method of administration, benefits, and availability. (Appendix B Fact Sheet)
9. Information on appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
10. An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting the incident, and the medical follow-up that will be available.
11. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.
12. An explanation of the signs, labels and color-coding requirements.

TRAINING RECORD

In compliance with the OSHA Bloodborne Pathogen Standard, 29 CFR 1910.1030

I have attended training on the Mount Holyoke College Bloodborne Pathogen Exposure Control Plan. That training included a discussion of the following:

- ◆ the types and characteristics of bloodborne pathogens
- ◆ the symptoms of the diseases
- ◆ the routes of occupational exposure
- ◆ recognizing jobs with potential exposure
- ◆ work practices and engineering controls
- ◆ personal protective equipment
- ◆ signs and labels
- ◆ information on the Hepatitis B vaccination
- ◆ emergency procedures following exposure
- ◆ post-exposure evaluation and follow-up

I understand that I can look at or request a copy of the Mount Holyoke College Bloodborne Pathogen Exposure Control Plan and the OSHA Standard by asking my supervisor, Department Head or the Office of Environmental Health and Safety.

Employee Name (print)

Trainer Signature

Department

Date

Employee Signature

Date

HEPTATITIS B VACCINATION STATUS

_____ I have already received the hepatitis B vaccination.

_____ I would like the vaccination and will call the Health Center to schedule an appointment.

_____ I do not want the vaccination at this time and have signed a Declination Statement.

_____ I have not decided.