COLGATE UNIVERSITY

Bloodborne Pathogens Exposure Control Plan

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BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN

STATEMENT OF POLICY

Colgate University is committed to the minimization and prevention of employee occupational exposure to blood or other potentially infectious materials by strict implementation of universal precautions as defined by the Center for Disease Control (CDC) and by providing suitable personal protective equipment (PPE), training, and hepatitis B immunization to affected employees. This plan describes the procedures necessary to comply with the Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogen Standard (29 CFR 1910.1030).

SCOPE

This policy applies to all Colgate University employees whose occupational exposure to blood or other potentially infectious materials in the performance of their regular duties may be reasonably anticipated.

INTRODUCTION

Bloodborne pathogens are infectious microorganisms in blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). To prevent illness, chronic infection, and even death, OSHA developed the Bloodborne Pathogens Standard to protect workers from exposure to blood and other potentially infectious materials (OPIM).

Any exposure to a bloodborne pathogen puts an employee at risk of contracting an infectious diseases. To protect workers and to comply with OSHA's Bloodborne Pathogens Standard, the university has established this Bloodborne Pathogens Exposure Control Plan, the purpose of which is to identify job positions, tasks, and procedures where exposure to bloodborne pathogens may occur and to implement controls that will reduce the risk of infection. This plan also includes provisions for affected employees to receive hepatitis B vaccinations, training, and if necessary confidential medical evaluations.

This plan will be reviewed and updated at least annually by the Director of Environmental Health and Safety. Copies of the plan are available at the Environmental Health and Safety office or can be accessed on the Colgate University website at www.colgate.edu/EHS.

DEFINITIONS

Bloodborne Pathogens: Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and Human Immunodeficiency Virus (HIV).

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

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

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

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

Other Potentially Infectious Materials (OPIM):

(1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid (*joint cavity fluid*), pleural fluid (*chest cavity fluid*), pericardial fluid (*heart cavity fluid*), peritoneal fluid (*abdominal cavity fluid*), amniotic fluid (*fetal sac fluid*), saliva in dental procedures, any body fluid that is visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;

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

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

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

Personal Protective Equipment (PPE): Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (ex. uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard are not considered to be PPE.

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

Universal Precautions: All human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

EXPOSURE DETERMINATION

The Director of Environmental Health and Safety, in consultation with the Department of Human Resources as necessary, will evaluate the duties, tasks, and procedures of all employees in each job classification to determine who may have occupational exposure to bloodborne pathogens as part of their job duties. Exposure determinations will be reviewed and updated at least annually by the Director of Environmental Health and Safety.

Job classifications in which all employees have the potential for occupational exposure:

Athletic Coach
Athletic Facilities Assistant
Athletic Trainer
Campus Safety Officer
Custodian
Environmental Health and Safety
Groundskeeper
Laundry & Gym Attendant
Lifeguard
Nurse Practitioner
Physician
Registered Nurse
Registered Physician's Assistant

Job classifications in which some employees have the potential for occupational exposure:

Carpenter
Electrician
Locksmith
Mason
Millwright
Natural Science Faculty and Staff
Plumber
Painter

HEPATITIS B VACCINATIONS

The hepatitis B vaccination will be made available to each employee who has occupational exposure after the employee has received bloodborne pathogen exposure control training and within ten working days of initial assignment.

Each employee who has occupational exposure is required to sign a Hepatitis B Vaccination Declination / Consent Form, indicating their declination or consent for the vaccination, upon the completion of their initial bloodborne pathogen exposure control training. Employee Hepatitis B Vaccination Declination / Consent Forms will be retained by Environmental Health and Safety. Employees indicating written consent for the hepatitis B vaccination will receive the three shot vaccination series, at no cost to the employee, by appointment at Student Health Services.

Employees who initially decline the hepatitis B vaccination may at any later date accept the hepatitis B vaccination by informing Environmental Health and Safety and signing a consent form.

UNIVERSAL PRECAUTIONS

All employees must observe universal precautions when performing any task which may result in occupational exposure to blood or other potentially infectious materials. Universal precautions treat all human blood and certain body fluids as if they were infected with bloodborne pathogens.

Universal precautions apply to blood, semen, vaginal secretions, cerebrospinal fluids, synovial fluids, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids where it is difficult to differentiate between body fluids. Universal precautions also apply to exposure to unfixed tissues or organs other than intact skin from living or dead humans.

ENGINEERING CONTROLS

Engineering controls are devices that isolate or remove the bloodborne pathogens hazard from the worker. Engineering controls shall be used in preference to other control methods to eliminate or minimize exposure to blood or OPIM. Departments will evaluate the effectiveness of existing controls and review the feasibility of instituting more advanced engineering controls that eliminate or reduce exposure to bloodborne pathogens.

The following engineering controls will be in place in areas of occupational exposure:

- Readily accessible handwashing facilities.
- Antiseptic towelettes or antiseptic hand cleanser and towels in areas where it is not feasible to have handwashing facilities.
- Sharps disposal containers.
- Appropriate containers for storage, transport, or shipment of blood or other potentially infectious materials, regulated waste, and contaminated laundry.

Engineering controls will be examined by the Director of Environmental Health and Safety and the Director of Student Health Services to ensure their effectiveness.

Commercially available, safer medical devices designed to eliminate or reduce occupational exposure will be evaluated by the Director of Environmental Health and Safety and the Director of Student Health Services and implemented if appropriate. Examples include self-sheathing needles, sharps with engineered sharps injury protections and needleless systems. Documentation of this evaluation will be kept by Environmental Health and Safety.

In the evaluation and selection of safer medical devices, input will be solicited from non- managerial employees who are responsible for direct patient care and potentially exposed to contaminated sharps.

PERSONAL PROTECTIVE EQUIPMENT

PPE including, but not limited to, gloves, face masks, and eye protection shall be available and worn by all persons who can reasonably anticipate exposure to blood and other infectious materials during the course of their duties.

- Such PPE is provided, cleaned, and / or replaced as required by the employee's department, at no cost to the employee.
- Employees are required to use appropriate PPE whenever contact with blood or other potentially infectious material is anticipated.
- PPE is considered to be appropriate only if it prevents blood and / or other potentially infectious materials from coming into contact with skin / mucous membranes.

NEEDLESTICK PREVENTION

Devices that are capable of reducing or eliminating the potential for needlestick and other sharp instrument injuries are now available. Examples of such technology include needleless delivery systems, self-sheathing needles and catheters, retractable hypodermic needles, and needle guards and shields. It is vitally important that the use of these devices becomes a standard practice in clinical and research laboratories. They should be used wherever and whenever possible. Those employees who use these devices the most (ie. registered nurses and nurse practioners) will be consulted for input in the type of needlestick prevention equipment purchased.

POST EXPOSURE EVALUATION AND FOLLOW-UP

All exposures to blood or other potentially infectious materials are to be reported to Student Health Services, Environmental Health and Safety, and Human Resources. Following the report of an exposure incident, a confidential medical evaluation, treatment, and follow-up shall be made available within 24 hours. Such services shall be provided at no cost to the employee.

Colgate University Student Health Services is responsible for:

- Determining the required follow-up or treatment to be taken based on the exposure, applicable CDC guidelines, and Student Health Services policies.
- Documenting all exposures and medical actions taken.
- Retaining bloodborne pathogen exposure related correspondence with an exposed employee's attending healthcare provider(s). These records are maintained in accordance with applicable regulations.

Environmental Health and Safety is responsible for evaluating the circumstances surrounding an exposure incident and shall recommend appropriate safety equipment and/or changes in procedure to prevent further exposures.

The Human Resources Department is responsible for ensuring the incident is recorded on the

OSHA Form 300 Work Related Injury Log. Human Resources will also process medical and / or workers compensation claims related to the incident if necessary.

For employees working off-campus, exposures to blood or other potentially infectious material should be evaluated as soon as possible by the nearest health care facility (i.e., local hospital or medical clinic). This evaluation and subsequent medical follow-up should be done as soon as possible after the exposure occurs. This medical evaluation and follow-up shall be provided at no cost to the employee.

Medical Evaluation

Following the report of an exposure incident, Student Health Services shall ensure a confidential medical evaluation and follow-up are made immediately available to an exposed employee, which shall include the following elements:

- Documentation of the route(s) of exposure, and the circumstances under which the exposure occurred.
- Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law.
- The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV, HCV, and HIV infectivity. If consent is not obtained, the employer shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.
- When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.
- Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual within the confines of state and federal law.
- Collection and testing of the exposed individual's blood for HBV and HIV status.
- The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained.
- If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.
- Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service.
- Counseling should occur prior to collection of the blood.
- Evaluation of reported illnesses.

Information provided to the Healthcare Provider

Colgate University shall ensure that the healthcare professional responsible for the employee's hepatitis B vaccination is provided with a copy of OSHA's Bloodborne Pathogens Standard and with the following information:

- A letter of introduction and request for services (Appendix D).
- A description of the exposed employee's duties as they relate to the exposure incident.
- Documentation of the route(s) of exposure and circumstances under which exposure occurred.
- Information regarding the source individual and their blood test results, if available.
- University-maintained medical records relevant to the appropriate treatment of the employee including vaccination status.

Healthcare Professional's Written Opinion

The employer shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. A form is provided to facilitate reporting requirements (Appendix D).

The healthcare professional's written opinion for hepatitis B vaccination shall be limited to whether hepatitis B vaccination is indicated for the employee and if the employee has received such vaccination. The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:

- That the employee has been informed of the results of the evaluation.
- That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.
- All other findings or diagnoses shall remain confidential and shall not be included in the written report.

COMMUNICATION OF HAZARDS

The universal biohazard symbol shall be used across campus to indicate the presence of blood or other potentially infectious materials and shall be affixed to containers of infectious waste, refrigerators and freezers containing these materials, containers used to transport these materials, contaminated equipment, and at the entrances of areas where these materials are used or stored.

Information and Training

All employees who may have occupational exposure to bloodborne pathogens shall be trained on the hazards of working with blood and other potentially infectious materials and the methods used to minimize the risk of exposure. It shall be the responsibility of each department to ensure that their at-risk employees attend the training.

Initial training shall be provided to all employees who may have occupational exposure to bloodborne pathogens or OPIM. Retraining is provided annually or, in the event of employee transfer, training on new tasks or procedures shall be provided at the time of such reassignment.

The training shall include, but shall not be limited to the following:

- A general explanation of the epidemiology and symptoms of bloodborne diseases.
- An explanation of the modes of transmission of bloodborne pathogens.
- An explanation of this plan and the means by which an employee can obtain a copy of the plan.
- An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
- An explanation of the use and limitations of the methods used to prevent or reduce occupational exposure, including appropriate work practices and PPE.
- Information on the types, proper use, location, removal, handling, maintenance (including decontamination), and disposal of PPE.
- Information on the basis for selection of PPE.
- Information on the Hepatitis B vaccination program as described in this document.
- Information on the appropriate actions to be taken and persons to contact in an emergency involving blood or other potentially infectious materials.
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
- An explanation of the pertinent signs and warning labels.
- An opportunity for questions and answers.

Training records shall be maintained by Environmental Health and Safety, as appropriate. Such records shall be retained for a minimum of three years, in accordance with OSHA standards.

ANNUAL REVIEW

The Colgate University Bloodborne Pathogens Exposure Control Plan will be reviewed at a minimum on an annual basis by the Director of Environmental Health and Safety and also updated as necessary to reflect changes in university policies and procedures, as well as any changes indicated or mandated by law.

APPENDIX A

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HEPATITIS B DECLINATION:

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 (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine by Colgate University, at no charge to myself. However, I decline hepatitis B vaccination at this time because I either previously had the vaccination or do not wish to get it at this time. I understand that by declining this vaccine, I may continue to be at risk of acquiring hepatitis B, a serious disease. I understand that if, in the future, I continue to have occupational exposure to blood or other potentially infectious material and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Name (print):_____

Signature: _____ Date: _____

HEPATITIS B VACCINE INFORMATION AND CONSENT:

The hepatitis B vaccine protects again hepatitis B virus (HBV) infection, a contagious disease that damages the liver. Two brands of recombinant hepatitis B vaccine are available: Recombivax HB (Merck & Co) and Engerix-B (GlaxoSmithKline). These are non-infectious subunit viral vaccines derived from hepatitis B surface antigen (HBsAg) cloned into yeast cells. Each vaccine dose contains 10-20 mcg of HBsAg on 0.5 mg aluminum (as aluminum hydroxide), sodium chloride / phosphate buffers, and yeast protein. These vaccines have been extensively tested for safety and efficacy in large scale clinical trials with human subjects. Administration to pregnant or nursing women is likely safe but decisions to vaccinate should be made with the consultation of a physician.

The Hepatitis B vaccination consists of a series of three intramuscular injections. The second injection should be given one month after the first and the third injection six months after the initial dose. More than 90% of those who receive the three injections will develop immunity to the hepatitis B virus. At this point it is unclear how long the immunity lasts, so booster shots may be required in the future. The vaccine causes no harm to those who are already immune or to those who may be HBV carriers. Individuals may opt to submit documentation of previous vaccine administration, or documentation of previous disease, or have blood testing to confirm immunity, rather than receiving the vaccine series.

Contraindications:	Hypersensitivity or allergy to yeast or other vaccine components.
Warnings:	Tip caps and vial stoppers contain natural rubber latex.
Adverse Reactions:	No serious adverse reactions have been reported in clinical trials. Up to 10% of vaccine recipients may have mild reactions such as injection site soreness / redness / swelling, fever, fatigue, headache, or dizziness.

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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 received information about hepatitis B and the hepatitis B vaccine. I have had a chance to ask questions and they have been answered to my satisfaction. I believe I understand the benefits and risks of the hepatitis B vaccine and request that it be administered to me or I shall submit documentation of previous immunity. I shall reaffirm my request to receive the vaccine, by signature, before each of the injections in the multi-dose series of vaccinations. There will be no charge to myself for the vaccinations or for blood testing to confirm previous immunity. If I am no longer an employee of Colgate University before the completion of the vaccination series, I may complete the series at my own cost, payable to Colgate University.

Signature: _____ Date: _____

Last Name (*print*): _____ First: _____ M:_____

Home Address: _____

Home Phone #:_____

Job Title: _____

Allergies: _____

HEPATITIS B VACCINE ADMINISTRATION:

Dose #1: Date:_____ Recipient Signature: _____

Manufacturer:_____Lot #:_____ Exp. Date:_____

Dosage and Method:_____ Site of Injection: Left or Right Arm (circle)

Vaccine Administrator and Title: _____

Dose #2: Date:_____ Recipient Signature: _____

Manufacturer:_____Lot #:_____ Exp. Date:_____

Dosage and Method:_____ Site of Injection: Left or Right Arm (circle)

Vaccine Administrator and Title: _____

Dose #3: Date:_____ Recipient Signature: _____

Manufacturer:_____Lot #:_____ Exp. Date:_____

Dosage and Method:_____ Site of Injection: Left or Right Arm (circle)

Vaccine Administrator and Title: _____

Booster: Date:_____ Recipient Signature: _____

Manufacturer:_____Lot #:_____ Exp. Date:_____

Dosage and Method:_____ Site of Injection: Left or Right Arm (circle)

Vaccine Administrator and Title: _____

APPENDIX B

Hepatitis B Vaccine:
What You Need to Know

Many Vaccine Information Statements are available in Spanish and other languages. See www.immunize.org/vis

Hojas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.immunize.org/vis

1 Why get vaccinated?

Hepatitis B vaccine can prevent **hepatitis B.** Hepatitis B is a liver disease that can cause mild illness lasting a few weeks, or it can lead to a serious, lifelong illness.

- **Acute hepatitis B infection** is a short-term illness that can lead to fever, fatigue, loss of appetite, nausea, vomiting, jaundice (yellow skin or eyes, dark urine, clay-colored bowel movements), and pain in the muscles, joints, and stomach.
- **Chronic hepatitis B infection** is a long-term illness that occurs when the hepatitis B virus remains in a person's body. Most people who go on to develop chronic hepatitis B do not have symptoms, but it is still very serious and can lead to liver damage (cirrhosis), liver cancer, and death. Chronically-infected people can spread hepatitis B virus to others, even if they do not feel or look sick themselves.

Hepatitis B is spread when blood, semen, or other body fluid infected with the hepatitis B virus enters the body of a person who is not infected. People can become infected through:

- Birth (if a mother has hepatitis B, her baby can become infected)
- Sharing items such as razors or toothbrushes with an infected person
- Contact with the blood or open sores of an infected person
- Sex with an infected partner
- Sharing needles, syringes, or other drug-injection equipment
- Exposure to blood from needlesticks or other sharp instruments

Most people who are vaccinated with hepatitis B vaccine are immune for life.

2 Hepatitis B vaccine

Hepatitis B vaccine is usually given as 2, 3, or 4 shots.

Infants should get their first dose of hepatitis B vaccine at birth and will usually complete the series at 6 months of age (sometimes it will take longer than 6 months to complete the series).

Children and adolescents younger than 19 years of age who have not yet gotten the vaccine should also be vaccinated.

Hepatitis B vaccine is also recommended for certain **unvaccinated adults:**

- People whose sex partners have hepatitis B
- Sexually active persons who are not in a long-term monogamous relationship
- Persons seeking evaluation or treatment for a sexually transmitted disease
- Men who have sexual contact with other men
- People who share needles, syringes, or other drug-injection equipment
- People who have household contact with someone infected with the hepatitis B virus
- Health care and public safety workers at risk for exposure to blood or body fluids
- Residents and staff of facilities for developmentally disabled persons
- Persons in correctional facilities
- Victims of sexual assault or abuse
- Travelers to regions with increased rates of hepatitis B
- People with chronic liver disease, kidney disease, HIV infection, infection with hepatitis C, or diabetes
- Anyone who wants to be protected from hepatitis B

Hepatitis B vaccine may be given at the same time as other vaccines.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

3 Talk with your health care provider

Tell your vaccine provider if the person getting the vaccine:

- Has had an **allergic reaction after a previous dose of hepatitis B vaccine**, or has any **severe, life-threatening allergies**.

In some cases, your health care provider may decide to postpone hepatitis B vaccination to a future visit.

People with minor illnesses, such as a cold, may be vaccinated. People who are moderately or severely ill should usually wait until they recover before getting hepatitis B vaccine.

Your health care provider can give you more information.

4 Risks of a vaccine reaction

- Soreness where the shot is given or fever can happen after hepatitis B vaccine.

People sometimes faint after medical procedures, including vaccination. Tell your provider if you feel dizzy or have vision changes or ringing in the ears.

As with any medicine, there is a very remote chance of a vaccine causing a severe allergic reaction, other serious injury, or death.

5 What if there is a serious problem?

An allergic reaction could occur after the vaccinated person leaves the clinic. If you see signs of a severe allergic reaction (hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, or weakness), call **9-1-1** and get the person to the nearest hospital.

For other signs that concern you, call your health care provider.

Adverse reactions should be reported to the Vaccine Adverse Event Reporting System (VAERS). Your health care provider will usually file this report, or you can do it yourself. Visit the VAERS website at **www.vaers.hhs.gov** or call **1-800-822-7967**. *VAERS is only for reporting reactions, and VAERS staff do not give medical advice.*

6 The National Vaccine Injury Compensation Program

The National Vaccine Injury Compensation Program (VICP) is a federal program that was created to compensate people who may have been injured by certain vaccines. Visit the VICP website at **www.hrsa.gov/vaccinecompensation** or call **1-800-338-2382** to learn about the program and about filing a claim. There is a time limit to file a claim for compensation.

7 How can I learn more?

- Ask your healthcare provider.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call **1-800-232-4636** (**1-800-CDC-INFO**) or
  - Visit CDC's **www.cdc.gov/vaccines**