

# **Colgate University**



## **Bloodborne Pathogens Exposure Control Plan**

# **COLGATE UNIVERSITY BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN**

## **I. STATEMENT OF POLICY**

It is the policy of Colgate University (CU) to limit or prevent occupational exposure to blood or other potentially infectious materials by strict adherence to the Center for Disease Control (CDC) defined universal precautions and by providing suitable personal protective equipment (PPE), training, and hepatitis B immunization. This Exposure Control Plan describes the procedures necessary to comply with the Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogen Standard (29CFR1910.1030).

## **II. SCOPE**

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

## **III. INTRODUCTION**

More than 5.6 million workers are exposed to bloodborne pathogens in the performance of their jobs. Bloodborne pathogens are microorganisms in human blood that cause disease in humans. Although approximately a dozen diseases are known, the main concern is from exposure to the hepatitis B & C Viruses (HBV & HCV) and the Human Immunodeficiency Virus (HIV), which causes Acquired Immune Deficiency Syndrome (AIDS). To prevent illness, chronic infection, and even death, OSHA has developed a Bloodborne Pathogen Standard to protect workers from exposure to blood and other potentially infectious body fluids. OSHA estimates that the Standard will prevent more than 200 deaths and 9,200 infections annually.

Employees are at risk of contacting infectious diseases each time they are exposed to bloodborne pathogens. It is the policy of CU to prevent exposure incidents whenever possible. To protect workers and to comply with OSHA's Bloodborne Pathogen Standard, the university has established this Exposure Control Plan. The purpose of the Exposure Control Plan is to identify occupations, tasks, and procedures where exposure to bloodborne pathogens may occur and to implement controls that will reduce the risk of infection. The Exposure Control 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 for Environmental Health and Safety. Copies of the plan are available at the Office of Environmental Health and Safety or can be access via the Colgate University website at the following address: <http://www.colgate.edu/offices/administrative/financeandadministration/environmentalhealthandsafetyoffice.html>.

## IV. 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.

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: (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: An approach to infection control. According to the concept of universal precautions, all human blood and certain human body fluids are treated as if they are infectious for HIV, HBV and other bloodborne pathogens.

## **V. EXPOSURE DETERMINATION**

1. 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. This evaluation and exposure determination will be made without regard to PPE. Exposure determinations will be reviewed and updated at least annually by the Director of Environmental Health and Safety.

2. Job classifications in which ALL employees have occupational exposure:

- Physician
- Registered Nurse
- Nurse Practitioner
- Registered Physicians Assistant
- Campus Safety Officer
- Athletic Trainer
- Athletic Coach
- Laundry & Gym Attendant
- Facilities Assistant
- Emergency Medical Technician
- Lifeguard
- Groundskeeper
- Custodian
- Environmental Health and Safety

3. Job classifications in which SOME employees have occupational exposure:

- Electrician
- Carpenter / Mason
- Millwright
- Plumber
- Painter
- Locksmith
- Lab Technician
- Biology Faculty
- Chemistry Faculty

## **VI. HEPATITIS B VACCINATIONS**

1. 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 10 working days of initial assignment.

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

## **VII. UNIVERSAL PRECAUTIONS**

1. All workers will observe universal precautions when performing any task which may result in occupational exposure to blood or other potentially infectious body fluid. Universal precautions treat all human blood and certain body fluids as if they were infected with bloodborne pathogens.
2. 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 unfixated tissues or organs other than intact skin from living or dead humans.

## **VIII. ENGINEERING CONTROLS**

1. 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 other potentially body fluids. 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.
2. The following engineering controls will be in place in all 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.
3. Engineering controls will be examined by the Director of Environmental Health and Safety and the Director of Student Health Services on an annual basis and either maintained or replaced to ensure their effectiveness.

4. Commercially available safer medical devices designed to eliminate or reduce occupational exposure will be evaluated annually 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 the Department of Environmental Health and Safety.
5. 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.

## **IX. PERSONAL PROTECTIVE EQUIPMENT**

PPE including but not limited to gloves, 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.

1. Such PPE is provided, cleaned, and / or replaced as required by law by the University department where the exposed employee works at no cost to the employee.
2. Employees are required to use appropriate PPE whenever contact with blood or other potentially infectious material is anticipated.
3. 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.

## **X. 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 practitioners) should be consulted for input in the type of needlestick prevention equipment purchased.

## **XI. POST EXPOSURE EVALUATION AND FOLLOW-UP**

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

2. CU Student Health Services Department will determine the required follow-up or treatment to be taken based on the exposure, applicable CDC guidelines, and CU Student Health Services policies.
  - CU Student Health Services Department is responsible for documenting all exposures and medical actions taken.
  - CU Student Health Services Department is responsible for retaining bloodborne pathogen exposure related correspondence (ex. bloodborne pathogen exposure checklist, bloodborne pathogen exposure form, healthcare professional's written opinion, etc) with an exposed employee's attending healthcare provider(s). These records are maintained in accordance with governing law.
3. 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 of this type.
4. The Department of Human Resources is responsible for ensuring the incident is recorded on the OSHA Form 300 Work Related Injury Log. The Department of Human Resources will also process medical and / or workers compensation claims related to the incident if necessary.
5. At the CU off-campus sites, 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.
6. Medical Evaluation – following the report of an exposure incident, CU 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 – done prior to collection of the blood.
  - Evaluation of reported illnesses.
7. Information provided to the Healthcare Provider – the University shall ensure that the healthcare professional responsible for the employee’s hepatitis B vaccination is provided with a copy of this regulation.
- The University shall further ensure that the healthcare professional evaluating an employee after an exposure incident is provided with the following information:
    - a. A description of the exposed employee’s duties as they relate to the exposure incident
    - b. Documentation of the route(s) of exposure and circumstances under which exposure occurred
    - c. Results of the source individual’s blood testing, if available
    - d. Medical records relevant to the appropriate treatment of the employee including vaccination status, which are CU’s responsibility to maintain.
8. 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.

- 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.
  - a. The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:
    - 1) That the employee has been informed of the results of the evaluation
    - 2) 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.
    - 3) All other findings or diagnoses shall remain confidential and shall not be included in the written report.

## **XII. COMMUNICATION OF HAZARDS**

The universal biohazard symbol shall be used throughout CU 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.

### 1. Information and Training

- All employees who may have occupational exposure to bloodborne pathogens shall attend a training program which explains the hazards of working with blood and other potentially infectious materials and the methods of compliance used by CU to minimize this exposure. It shall be the responsibility of the Department Heads to ensure that their at-risk employees attend the training.
- Initial training shall be provided to all at-risk employees. Retraining is provided annually or, in the event of employee reassignment, 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. A copy of the OSHA Bloodborne Pathogen standard and an explanation of its contents.
  - b. A general explanation of the epidemiology and symptoms of bloodborne diseases.
  - c. An explanation of the modes of transmission of bloodborne pathogens.

- d. An explanation of CU's exposure control plan and the means by which an employee can obtain a copy of the plan.
  - e. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials.
  - f. An explanation of the use and limitations of the method that will prevent or reduce exposure, including appropriate work practices and PPE.
  - g. Information on the types, proper use, location, removal, handling, maintenance (including decontamination) and disposal of PPE.
  - h. Information on the basis for selection of PPE.
  - i. Information on the Hepatitis B vaccine as described in section VI of this document.
  - j. Information on the appropriate actions to be taken and persons to contact in an emergency involving blood or other potentially infectious materials.
  - k. An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available.
  - l. An explanation of the pertinent signs and warning labels in use at CU.
  - m. An opportunity for questions and answers.
- Training records shall be maintained by the Office of Environmental Health and Safety, as appropriate. Such records shall be retained for a minimum of three years, in accordance with OSHA standards.

### **XIII. ANNUAL REVIEW**

This CU 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 CU policies and procedures, as well as any changes indicated or mandated by law.