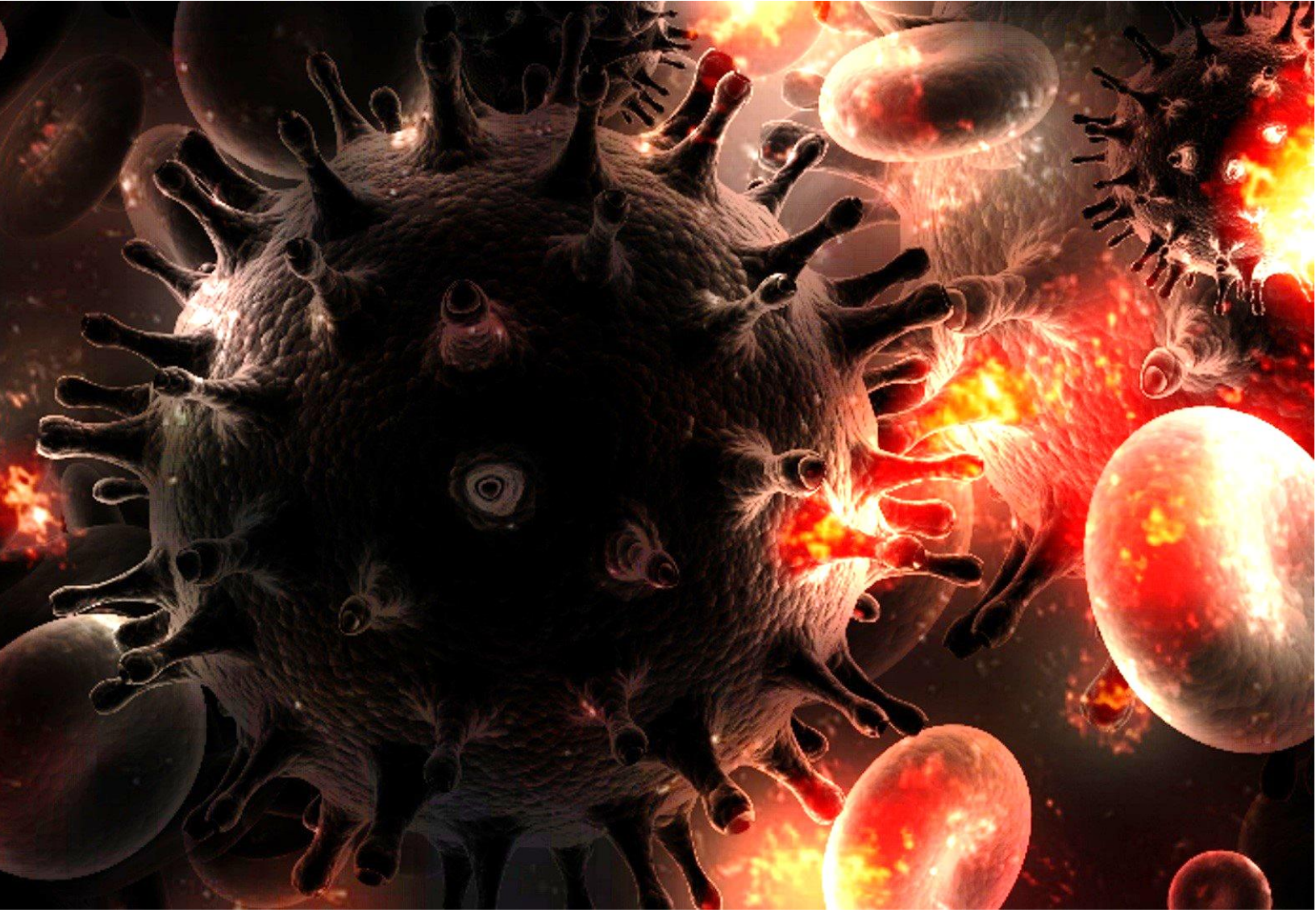

# Bloodborne Pathogens Exposure Control Plan

2023

**University of Illinois Urbana-Champaign**

Office of the Vice Chancellor for Research & Innovation | Division of Research Safety

102 Environmental Health and Safety Building | 101 S. Gregory St., MC-225 | Urbana, IL 61801

drs-bbp@illinois.edu | 217-333-2755 | www.drs.illinois.edu

# Contents

# Introduction

## Occupational Exposure to Bloodborne Pathogens

The Center for Disease Control and Prevention (CDC) estimates more than 5.6 million workers in the health care and public safety industries are potentially exposed to **blood** and **other potentially infectious materials (OPIM)** on the job. The U.S. Occupational Safety and Health Administration (OSHA) established the Occupational Exposure to Bloodborne Pathogens Standard on December 6, 1991, to protect workers against health hazards related to bloodborne pathogens. The regulation can be found in the Federal Register 29 CFR 1910.1030. Illinois OSHA enforces this federal standard at the state level which is a branch of the Illinois Department of Labor (IDOL).

**Blood** –
Human blood, human blood components, and products made from human blood.

**Other Potentially Infectious Materials (OPIM):**

- Any unfixed tissue or organ (other than intact skin) from a human (living or dead).
- The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any bodily fluid that is visibly contaminated with blood, and all bodily fluids in situations where it is difficult or impossible to differentiate between body fluids.
- 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.

Bloodborne pathogens are microorganisms that are present in human blood and can cause disease. These pathogens include but are not limited to hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV) which is the virus that causes acquired immunodeficiency syndrome (AIDS). A single exposure to bloodborne pathogens may result in infection and potentially a life-threatening disease.

Although needle-stick injuries are the most common means of exposure for health care workers, exposure to bloodborne pathogens while working, called occupational exposure, may occur in many ways. Bloodborne pathogens can be transmitted through contact with mucous membranes (eyes, nose, mouth) and non-intact skin.

## Campus Safety Commitment

Illinois is committed to the safety and wellbeing of its students, staff, and the public it serves. The administration, faculty, staff, and students are responsible for promoting health and safety on campus.

The Campus Administrative Manual contains environmental health and safety standards and procedures developed specifically for the University.

Several policies pertinent to implementation of the campuswide Exposure Control Plan (ECP) are contained in the Campus Administrative Manual:

- Campus Environmental Health and Safety. Campus Administrative Manual: Policy Number FO-18. Revised 2015.
- Biological Safety. Campus Administrative Manual: Policy Number RP-02. Revised 2022.

## Campuswide Exposure Control Plan

This campuswide Exposure Control Plan (ECP) outlines Illinois' commitment to comply with the Federal OSHA Bloodborne Pathogens Standard as adopted by the IDOL. The campuswide ECP provides guidance for determining more specific exposure control plans for individual units. The Division of Research Safety (DRS) is available to assist units in providing training to their employees and help select the appropriate engineering controls, work practice controls, and personal protective equipment (PPE) required to comply with this standard. These documents are required to include the determination of which employee job title classifications are occupationally exposed,

the schedule and methodology of implementation for methods of compliance, hepatitis B vaccination and post-exposure evaluation, communication of hazards to employees, relevant recordkeeping, and the procedure for evaluating **exposure incidents**.

**Exposure Incident**- A specific contact with blood or OPIM that results from the performance of an employee's duties. Contact can include eye, mouth, other mucous membrane, non-intact skin, or parenteral.

**Laboratory Safety Plan (LSP)**-Every laboratory group on the Illinois campus is required to have a Laboratory Safety Plan (LSP). The plan must include information relevant to the laboratory's specific hazard and exposure control measures. The plan must be used as a training resource and as a safety reference for laboratory personnel. Therefore, it must always be accessible to all laboratory personnel. Development and implementation of a LSP will fulfill each laboratory's requirement for a Chemical Hygiene Plan (CHP) as specified in the OSHA regulation 29 CFR 1910.1450 (OSHA Lab Standard).

**Institutional Biosafety Committee (IBC)**- Campus advisory committee that oversees the safe handling, transport, use, and disposal of biological materials including human and non-human primate materials, pathogens, biotoxins, and recombinant or synthetic nucleic acid molecules.

## Unit Specific Exposure Control Plan

The campuswide ECP is a general compliance document that is intended to be the first part of your overall plan. The second part of your plan is a document that will contain specific details about how your unit is implementing procedures, what supplies are available and the locations of those supplies, as well as the location of all relevant training and vaccination status documentation. This is called your unit specific Exposure Control Plan (uECP). For laboratory workers, your **laboratory safety plan (LSP)** and an approved **Institutional Biosafety Committee (IBC)** registration will serve as your uECP.

## Availability of This Exposure Control Plan

Each unit head shall ensure that the campus exposure control plan (ECP) is accessible to all employees. The location of the plan may be adapted to the circumstances (e.g., electronically or printed) of a particular workplace, as long as employees can access a copy at the workplace during the work shift.

The ECP can be printed or in an electronic format. Contact the Division of Research Safety to request printed copies.

# Summary of Responsibilities

## University Responsibilities

Illinois shall:

- Ensure full compliance with applicable IDOL and OSHA regulations regarding bloodborne pathogens,
- Establish contracts with healthcare professionals to fulfill the requirements of the Bloodborne Pathogens Standard and the campuswide Bloodborne Pathogens Exposure Control Plan,
- Establish medical recordkeeping in compliance with the Bloodborne Pathogens Standard and the campuswide Bloodborne Pathogens Exposure Control Plan.

## The Division of Research Safety (DRS) Responsibilities

DRS shall:

- Develop this campuswide Exposure Control Plan (ECP) and review this plan annually,
- Assist unit heads with developing unit specific exposure control plans (uECP), and with the annual review of these plans,
- Work with unit heads to assess employee exposure and inclusion in the program,
- Be available to consult with occupationally exposed employees and their unit heads concerning training and understanding the scope of the program,
- Retain all appropriate training records,
- Maintain files of all applicable state and federal regulations and guidelines regarding occupational exposure to bloodborne pathogens,

- Solicit advice from campus users, at least annually, on improvements and changes to the bloodborne pathogens program.

## Deans, Directors, and Department Head Responsibilities

Deans, directors, and department heads shall:

- Assist DRS in identifying units that have occupational exposure to bloodborne pathogens,
- Ensure that this campuswide Exposure Control Plan is implemented within all units under their responsibility where occupational exposure to bloodborne pathogens could occur,
- Provide support to unit heads in retaining unit records as required by this plan,
- Provide budget support for the requirements of this program.

## Unit Head Definition and Responsibilities

**Campus Unit**-
Any person, laboratory, section, center, department, division, or other university representative that employs persons to perform tasks that might have a reasonably anticipated risk of exposure to blood or OPIM.

The unit head is defined as the head of a laboratory, section, center, department, division, or other Illinois **campus unit** that employs persons to perform tasks that are likely to involve exposure to blood or OPIM. The unit head should be the person who has the greatest authority within the campus unit, who has direct knowledge of and control of the employees' day-to-day activities, has knowledge of the unit's procedures, and has hiring and/or firing capabilities.

Unit Heads shall:

- Ensure employees who have job titles identified in their unit specific ECP participate fully in the bloodborne pathogens (BBP) program and adhere to campuswide and unit specific ECPs, including but not limited to annual training, safe work practices, PPE, immunization, and post-exposure follow-up.
- Notify DRS if employees may be subject to the bloodborne pathogens program but are not currently enrolled.
- Ensure this exposure control plan is followed as described. When not specified in the ECP, develop additional work practice procedures as necessary to minimize the risk of exposure to bloodborne pathogens for specific tasks. Train employees in these procedures and maintain documentation of such training and procedures in a unit specific Exposure Control Plan.
- Ensure that appropriate engineering controls are utilized, decontaminated, maintained, and replaced.
- Ensure that work areas are decontaminated and sanitary.
- Ensure that appropriate PPE is freely available and in good working condition for all employees who are at risk of exposure to bloodborne pathogens.
- Ensure that any employee who has experienced an occupational exposure incident to blood or OPIM is offered post-exposure medical services as outlined in this document.
- Assist with post exposure follow-up investigation.
- Purchase, make available, and ensure the use of placards, signs, labels, and sharps and waste collection containers as specified in in this ECP. Ensure all employees have access to campuswide and unit exposure control plans.

## Train the Trainer Program

The purpose of the Train the Trainer program is to enable non-research departments or units at UIUC to designate a person in their department or unit to provide comprehensive training for their employees who are considered to be “Occupationally

Exposed" to bloodborne pathogens. The program was developed and will be administered by the Division of Research Safety (DRS).

What are the advantages of participating in this program?

It is anticipated that the program will facilitate the provision of more comprehensive information to trainees and help increase compliance with Federal and State regulations.

In the past, occupationally exposed employees received basic information on bloodborne pathogens exposure control through attendance at annual training seminars held by DRS. Employees are also expected to review unit-specific information with their Unit Head on a separate occasion. Participation in the program will allow units to incorporate basic information on bloodborne pathogens exposure control and unit-specific exposure control information into a single training session.

The DRS was only able to offer training seminars at set times and locations throughout the semester. Participation in this program provides more flexibility in scheduling both initial training sessions for new employees and annual "refresher" training sessions. Note: employees with computer access also have the option of DRS-provided online refresher training, with approval of their Unit Head followed by additional unit specific training.

**Trainer**-
Any person designated by their unit head to provide comprehensive training for their employees.

Who qualifies to represent specific units as a **Trainer**?

According to the OSHA Regulation Standard 29 CFR Part 1910.1030, *the person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address.*

In addition to meeting this description, individuals will also fulfill the following criteria:

1. Trainers will be a Unit Head or a designee of the Unit Head. (An example of an appropriate designee could be a Unit's safety trainer or safety manager).
2. Trainers must demonstrate adequate knowledge of regulations and campus policies related to bloodborne pathogens.
3. All trainers must receive final approval from the DRS.

What training is required for Trainers?

All Trainers must attend an initial orientation to teach a unit section of "Occupational Exposure to Bloodborne Pathogens" given by the DRS prior to providing training to their department or unit. Trainers will be given Trainer packets which contain all training and informational materials.

After their initial training, Trainers are required to attend an annual Trainer course for "Occupational Exposure to Bloodborne Pathogens" provided by the DRS. These sessions are designed to update Trainers on current regulatory and compliance requirements and provide them with updated training materials. The sessions will also provide an opportunity to ask questions and provide feedback to the DRS on the program, training material etc.

What training materials will be provided?

The following materials will be provided:

- PowerPoint slide presentation
- OSHA Bloodborne Pathogens Standard 29 CFR Part 1910.1030
- U of I Bloodborne Pathogens Exposure Control Plan
- *Hepatitis B Declination or Request* Form
- *Report of Exposure to Blood or OPIM* form
- *First Report of Injury/Illness* Form
- Trainer database instructions
- Unit-specific Exposure Control Plan template

Is a unit-specific Exposure Control Plan required?

Yes, each unit is required to have a unit-specific exposure control plan that outlines procedures and practices that are unique to that unit. It is intended to be used as a supplement to the campus-wide Exposure Control Plan (ECP). DRS will provide a template to trainers and work with them to complete their unit specific ECP so that it is compliant with the OSHA Bloodborne Pathogens Standard and University policy.

What are the record-keeping requirements for Trainers?

All Trainers will be required to keep the following records:

1. A completed Unit Specific Exposure Control Plan along with training records, attached.
2. The Unit Specific ECP must be provided to DRS.
3. All Unit Specific ECPs and training records must be uploaded into the BBP folder in U of I Box.

What if I use online training to supplement my Unit Specific ECP?

You can find a link to the online training here.

## Employee Responsibilities

Employees shall:

- Become familiar with campuswide and unit specific exposure control plans.
- Participate in initial and annual bloodborne pathogens training.
- Opt to receive or decline the HBV vaccination series and/or post vaccination titer check.
- Know which job tasks have the potential for occupational exposure to bloodborne pathogens and adhere to precautions and controls designed to minimize associated risk.
- Use all PPE required for specific tasks.
- Practice good personal hygiene habits (e.g., removing PPE and washing hands after completing tasks).
- Report all occupational exposure incidents and seek medical attention.
- Practice universal precautions: assume that all blood or OPIM contains HIV, HBV, or HCV.

# Who is at risk?

## Occupational Exposure

**Parenteral contact**- To pierce/puncture mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

Occupational exposure is defined as reasonably anticipated skin, eye, mucous membrane, or **parenteral contact** with blood or other potentially infectious material that may result from the performance of an employee's duties. A single exposure to bloodborne pathogens may potentially cause a life-threatening infection.

## Exposure Determination

Each unit head having an employee(s) with a potential for occupational exposure shall prepare an exposure determination. The exposure determination must be made without regard to the use of PPE and contain the following:

- A list of job classifications and tasks in which ***all*** employees have occupational exposure,
- A list of job classifications and tasks in which ***some*** employees have occupational exposure.

## Jobs that Carry Occupational Exposure

Many employees have job duties that could occupationally expose them to bloodborne pathogens. These jobs duties generally include anyone who:

1. provides first aid,
2. cleans up spills of blood or OPIM,
3. conducts research with human materials.

Examples of employees with occupational exposure include but are not limited to healthcare workers, athletic trainers, emergency responders, teachers, building service workers, and researchers.

Each Unit Head will make the determination as to whether their employees are at risk of occupational exposure. Employees can find a complete listing of their unit's job classifications that carry a risk of exposure to blood or OPIM in their department's unit specific ECP. If an employee needs help identifying their Unit Head, they can contact DRS.

# Prevention and Protection

## Determining if Something is Infectious

**Universal Precautions**- An approach to infection control in which all human blood and certain human body fluids are treated as if known to be infectious for bloodborne pathogens.

The infectious potential of blood or other potentially infectious material (OPIM) cannot be determined without a series of medical tests. Many persons infected with HIV, HBV, or HCV do not know that they are infected and can be infectious for a prolonged period of time without showing symptoms, therefore an all-encompassing approach for prevention and protection is needed.

## Universal Precautions

**Universal precautions** is an approach to infection control in which all human blood and certain human bodily fluids are treated as if they are known to be infected with

bloodborne pathogens.

Blood is the single most important source of HIV, HBV, and other bloodborne pathogens in the occupational setting. Cases of occupational transmission of HIV and HBV to health-care workers by blood have been documented for some time. Infection control efforts for HIV, HBV, and other bloodborne pathogens must focus on preventing exposures to blood as well as delivering HBV immunization.

**Contaminated**-
The presence or the reasonably anticipated presence of blood or OPIM on an item or surface.

Therefore, all employees required to perform tasks that may occupationally expose them to human blood or OPIM are considered to be at risk. OPIM includes tissues, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any bodily fluid visibly **contaminated** with blood, and all bodily fluids in situations where it is difficult or impossible to differentiate between body fluids, are at risk.

Handling human blood, tissue, and certain body fluids as if infectious for HIV, HBV, and HCV requires full implementation of university policies described in this campuswide ECP. The unit head is responsible for ensuring that all tasks with a potential for occupational exposure to blood or OPIM are performed in a manner consistent with universal precautions.

**Engineering Controls**-
Controls that isolate or remove the bloodborne pathogens hazard from the workplace (e.g., sharps disposal container, self-sheathing needles, CPR pocket mask, biological safety cabinet).

## Engineering Controls

**Engineering controls** are equipment, devices or supplies that reduce the risk of employee exposure by removing the hazard or isolating the worker from exposure. Examples of engineering controls used at the university include designated sharps disposal containers (SDCs) for disposal of discarded sharps and biological safety cabinets for the isolation of a laboratory worker from infectious aerosols.

Appropriate engineering controls must be used whenever possible to isolate or remove the bloodborne pathogens hazard from the workplace. Engineering controls are to be decontaminated, discarded, or contained immediately when overtly contaminated (e.g., after a spill of blood or OPIM) or as otherwise specified in the campus unit's plan.

The unit head is responsible for identifying and ensuring the use of appropriate engineering controls for each task that could involve exposure to blood or OPIM and for establishing alternative procedures when engineering controls cannot be used. The unit head is responsible for determining an inspection/alternative/maintenance schedule for each engineering control used. This should include designation of a responsible employee (by title), specification of how the replacement or maintenance is to be performed, and the schedule of when the inspection/replacement/maintenance is to be performed.

**Work Practice Controls**-
Controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., proper handwashing, prohibiting the recapping of needles by a two-handed technique).

## Work Practice Controls

**Work practice controls** reduce the likelihood of employee exposure by changing the method in which a task is performed. The protection provided by work practice controls is based on employee behavior and attitude. Examples of work practice controls include proper handling of sharps, handwashing, and attention to safety procedures in work areas with potentially infectious materials.

The unit head is responsible for identifying and assuring the use of appropriate work practice controls for each task involving reasonably anticipated exposure to blood or

OPIM.

Work practice controls ensure that engineering controls and PPE are used effectively and help protect others from exposure to pathogens in the work area or facility. They also reduce cross-contamination and improve work quality. Routine safe work practices provide a margin of safety for unrecognized hazards. For example, a sharps disposal container (engineering control) provides no protection if the employee persists in recapping needles by hand prior to disposal. The work practice control of **not** recapping needles provides a greater margin of safety than just the use of a sharps disposal container alone.

## General Work Practices

In work areas where there is a likelihood of exposure to blood or OPIM, take measures to prevent contact with mucous membranes. Never eat, drink, apply cosmetics or lip balm, or handle contact lenses in the work area. Food and drink must not be stored where blood or OPIM may be present. Mouth pipetting/suctioning is prohibited; mechanical pipetting devices must be provided.

When leaving work areas, all Personal Protective Equipment (PPE) (e.g., gloves, protective clothing) must be removed and hands washed immediately or as soon as feasible.

All procedures involving blood or OPIM shall be performed in a way to minimize aerosol production. When cleaning a blood or OPIM spill, be careful not to splash or splatter the spill or contaminated cleaning solutions.

Specimens of blood or OPIM must be placed in a labeled or color-coded container that prevents leakage during collection, handling, processing, storage, transport, or shipping. If contamination of the primary specimen container occurs, place the primary container within a second container that prevents leakage during handling, processing, storage, transport, or shipping, and is labeled or color-coded as required in the labeling policies contained in this document.

Transporting or shipping certain types of specimens and samples is subject to U.S. Department of Transportation (DOT) regulations. More information regarding collection, handling, processing, storing, transporting, or shipping specimens is available from DRS. Call 217-333-2755 or email drs@illinois.edu for assistance.

**Personal Protective Equipment (PPE)**- Specialized clothing or equipment worn by an employee for protection against a hazard (e.g., gloves, face shield, lab coat). General work clothes (e.g., uniforms, pants, shirts, or blouses) are not intended to function as protection against a hazard and are not considered to be PPE.

**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/item is rendered safe for handling, use, or disposal.

## General Guidelines for Personal Protective Equipment (PPE)

Unit heads are responsible for ensuring that:

- **PPE** is provided at no cost to the employee.
- PPE is cleaned, repaired, discarded, and replaced as necessary to maintain the effectiveness of PPE at no cost to the employee.
- PPE is easily accessible and of the proper size.
- PPE does not permit blood or OPIM to pass through it or to reach the employee's outer or inner clothing (including uniforms), skin, eyes, mouth, or other mucous membranes while used under normal conditions.
- All PPE is removed prior to leaving the work area and hands are washed.
- PPE is placed in a designated area or container for storage, washing, **decontamination**, or disposal.
- When blood or OPIM penetrates PPE, the PPE is removed and replaced

immediately or as soon as feasible.

Find out more about PPE at:
http://www.drs.illinois.edu/SafetyLibrary/PersonalProtectiveEquipment

Disposable PPE may be discarded in the regular trash if it is not contaminated or has been disinfected. If it is contaminated and cannot be disinfected, it is considered regulated waste; refer to the regulated waste section.

## Glove Use

Gloves provide a barrier between infectious agents and the skin. Glove use is essential for preventing bloodborne pathogens transmission as breaks in the hand's skin barrier are common (e.g., damaged cuticles, scrapes, cuts, dermatitis). Gloves must fit properly, be comfortable and be long enough to prevent exposure of the wrist or lower arm.

Alternative types and brands of gloves must be provided to employees who have allergic reactions to the gloves normally provided. DRS can provide information on proper glove selection, hypoallergenic gloves, and other alternatives.

The unit head shall require employees to wear appropriate gloves during any task in which they may come into contact with blood, OPIM, or contaminated items.

Employees must wash their hands as soon as possible after removal of gloves. No glove or barrier is 100% effective, so handwashing following glove removal is especially important.

## Disposable Gloves

Disposable (single use) gloves must be replaced as soon as possible when contaminated or compromised as a barrier. Disposable gloves must not be washed or re-used.

Disposable gloves must not be used if a task requires immersion in liquid (e.g., spill clean-up and other housekeeping procedures). Disposable gloves must not be washed or decontaminated for re-use because disinfecting agents (including ethanol, soap, and water) often cause deterioration of glove material.

## Removing Disposable Gloves

To protect yourself, it is important to properly remove gloves without contaminating your skin. Watch this video or follow these steps to properly remove gloves:

1. With both hands gloved, grasp the outside of one glove at the top of your wrist, being careful not to touch your bare skin.
2. Peel off this first glove, peeling away from your body and from wrist to fingertips, turning the glove inside out.
3. Hold the glove you just removed in your gloved hand.
4. With your ungloved hand, peel off the second glove by inserting your fingers inside the glove at the top of your wrist.
5. Turn the second glove inside out while tilting it away from your body, leaving the first glove inside the second.
6. Dispose of the gloves safely. Do not reuse gloves.
7. Wash your hands immediately or as soon as feasible.

To provide reminders in your work area, consider posting a sign on how to remove gloves. The poster is also found in Appendix E and is available to post or print additional copies within your unit.

## Reusable Utility Gloves

Utility gloves should be used when performing procedures such as cleaning, immersing hands in liquids, and tasks that require sturdier barrier protection. Utility gloves will not protect against injuries from needles or other sharp objects and should never be worn when picking up broken glass.

Utility gloves may be decontaminated for re-use if the integrity of the glove is not compromised. Take care not to contaminate the inside of the glove and avoid grasping the outside of a contaminated glove with bare hands. Utility gloves must be discarded if they are cracked, punctured, discolored, or exhibit other signs of deterioration. Utility gloves may be discarded in the regular trash provided they are not contaminated with blood or OPIM, in which case they must be handled as regulated waste. For more information see the regulated waste section of this document. Employees are required to wash their hands as soon as possible after removal of reusable gloves.

**Handwashing Facilities**- A facility providing an adequate supply of running potable water, soap, and single-use towels or air-drying machines.

## Handwashing

Readily accessible **handwashing facilities** must be provided to all employees. These facilities must include an adequate supply of running potable water, soap, and single-use towels or hot air-drying machines.

If handwashing facilities are not available in the areas where certain tasks are performed, unit heads are responsible for providing either an appropriate antiseptic hand cleaner in conjunction with clean cloth/paper towels or appropriate antiseptic towelettes. Even when these handwashing alternatives are used, employees must wash their hands with soap and running water as soon as feasible.

Unit heads shall ensure that employees wash their hands immediately or as soon as feasible after:

- Removing gloves or other PPE,
- Contact with blood or OPIM.

Handwashing is defined as a vigorous, brief (20 seconds) rubbing together of all surfaces of lathered hands followed by rinsing under a stream of water. Washing minimizes the hazard of infectious agents by physically removing microbes and viruses from body surfaces. For most activities, handwashing with plain soap is sufficient because soap will facilitate the removal of most transient microorganisms and viruses.

Time is critical in the event of an exposure Incident. The sooner the exposed site is washed, the better.

To view proper hand washing, watch this video: https://www.nytimes.com/video/well/100000007053726/wash-your-hands-coronavirus.html.

To provide reminders in your work area, consider posting a sign on how to wash hands. The poster is also found in Appendix F and is available to post or print

additional copies within your unit.

## Face and Eye Protection

The unit head shall ensure that employees wear face and eye protection whenever there is a possibility that OPIM could come in contact with their eyes, nose, or mouth.

Eye protection may be provided by safety glasses, standard glasses fitted with shields, goggles, or face shields. Protection of the nose and mouth may be provided either by surgical masks or face shields. A combination of eye protection and a surgical mask can be worn to provide full face protection.

Neither standard glasses without shields nor contact lenses provide protection and cannot be substituted for eye protection.

## Protective Body Clothing

The unit head is responsible for determining if an employee's task makes necessary the use of protective body clothing (e.g., gowns, coats, aprons). If performing the assigned task might be reasonably anticipated to cause blood or OPIM to contaminate an employee's clothing (including uniforms), protective body clothing is necessary.

Appropriate protective body clothing will not permit blood or OPIM to pass through or to reach the employee's outer or inner clothing under normal conditions. The choice of protective body clothing will depend upon the task and the degree of exposure anticipated. Head covers and/or shoe covers or boots shall be worn in instances when gross contamination is likely to occur.

Long-sleeved garments with snug fitting cuffs are preferred over open or short sleeves. Snug-fitting cuffs prevent splashes and aerosols from making contact with exposed skin or clothing on forearms. Longer gloves can be pulled over snug-fitting cuffs to seal out OPIM.

Plastic, vinyl, or rubber aprons may be worn when extra protection against liquid spills is necessary. Washable protective body clothing may be laundered; refer to the housekeeping section in this document for more information.

## Needles and Syringe Use

The use of needles and syringes or other sharp instruments must be restricted to cases when there is no alternative available.

Use extreme caution when handling needles and syringes. Use needle-locking syringes or disposable syringe-needle units as much as possible. Handle needles and syringes in a manner that prevents needle-stick injuries. Avoid creating aerosol and droplets when expelling the contents of a needle and syringe.

Shearing, bending, or breaking of contaminated needles is prohibited. Always avoid recapping or removing needles from syringe barrels. If a specific procedure requires recapping or removing needles, the unit head is responsible for ensuring that the procedure is accomplished using a mechanical device or a one-handed technique. Individuals who need to recap needles must be trained on the procedure and that training is documented and those records are saved.

## Sharps Disposal

**Sharps must be discarded immediately into a sharps disposal container (SDC).**

Materials that qualify as "sharps" are defined at the state level and shall be disposed of as Potentially Infectious Medical Waste (PIMW). In Illinois, the Illinois Environmental Protection Agency (IEPA) has designated the following material (used or unused) as sharps:

- Any medical needles,
- Syringe barrels (with or without needle),
- Pasteur pipettes (glass),
- Scalpel and razor blades,
- Blood vials,
- Microscope slides and coverslips,
- Glassware contaminated with infectious agents.

SDCs must be puncture-resistant and leak-proof on the sides and bottom. To obtain a free SDC, please call Campus Stores at 217-244-0139. Specific information regarding the Sharps Disposal Program is provided on our webpage: https://www.drs.illinois.edu/Page/RequestAWastePickup

## Containers for Reusable Sharps

Reusable sharps (e.g., scissors, scalpels, suture needles) must be placed in appropriate containers as soon as possible after use. Appropriate containers must:

- Be puncture-resistant,
- Be labeled with the Biohazard symbol,
- Be leak-proof on the sides and bottom.

Employees cannot reach into the container to retrieve reusable sharps by hand, a mechanical means of removal must be used. To avoid exposure to contaminants, reusable sharps should be decontaminated prior to cleaning, either by an appropriate disinfectant, or other method of sterilization (e.g., hot bead sterilizer, sonicator, or autoclave.

## Biological Safety Cabinets

Biological safety cabinets are used to contain aerosols generated from research with blood or OPIM.

Aerosol-generating procedures include but are not limited to decanting, pipetting, centrifuging, vortexing, inoculation of agar surfaces via streaking, and inoculation of animals. Biological safety cabinets must be certified before initial use, must undergo annual recertification, and be recertified if moved.

Contact DRS at 217-333-2755 for information on selecting, installing, using, maintaining, and certifying biological safety cabinets. More information is available at: https://www.drs.illinois.edu/SafetyLibrary/BiologicalSafetyCabinets

# Housekeeping

## Cleaning and Disinfecting

Unit heads shall ensure that the worksite is maintained in a clean and sanitary condition. The unit head determines and implements an appropriate written schedule for cleaning and decontamination based on the location within the facility, type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area.

All contaminated equipment and environmental surfaces must be decontaminated after completing procedures and as soon as possible after any contact with blood or OPIM. If the surface may have been contaminated since the last cleaning, decontaminate at the end of the work shift.

For laboratory workers, protective coverings, such as plastic wrap, aluminum foil, or bench paper, used to cover equipment and surfaces must be removed and replaced as soon as practical when they become overtly contaminated, or at the end of the work shift if they may have become contaminated during the shift.

Reusable receptacles such as bins, pails, and cans that are likely to become contaminated must be inspected and decontaminated on a regular basis. If contamination is visible, workers shall clean and decontaminate the item immediately, or as soon as feasible.

Disinfectant-detergent formulations registered by the U.S. Environmental Protection Agency can be used for environmental surface cleaning. Follow the manufacturer's instructions for appropriate use.

All spills of blood and OPIM should be promptly cleaned in the following manner while wearing appropriate personal protective equipment (PPE):

1. Don gloves, if splashing is anticipated, protective face and eyewear must be worn along with an impervious gown or apron that provides an effective barrier to splashes.
2. Saturate area by applying a solution of freshly made 10% household bleach or other approved chemical disinfectant to the spill for an appropriate contact time (10 minutes for bleach; check label for other products). Use enough absorbent material (e.g., towels, absorbent pads) so that blood or OPIM cannot drip or be squeezed from the toweling. Dispose of towels in the trash.
3. The surface should then be decontaminated with another application of 10% bleach or appropriate chemical disinfectant for an appropriate contact time.
4. Disposable gloves must be removed and immediately discarded in accordance with the regulated waste policies in this document. Reusable PPE should be decontaminated.
5. Hands must be washed with soap after removing gloves.

Contaminated cleaning equipment should be cleaned and decontaminated or placed in an appropriate container and disposed of according to the regulated waste policies below. Plastic bags should be available for removing contaminated items from the spill site.

## Hazards of Disinfectants

Most disinfectants are considered chemical hazards. Safety Data Sheets (SDSs) are written and supplied by manufacturers for each hazardous chemical that is sold. If an employee works with a hazardous material, the SDS must be readily available to all employees.

The disinfectant that you will use can be found in your unit specific exposure control plan or your laboratory safety plan. Contact DRS for more information on Lab Safety Plans, SDSs, and the Hazard Communication Program: http://www.drs.illinois.edu/Programs/HazComProgramInformation.

## Regulated Waste

Under the Bloodborne Pathogens standard, regulated waste is defined as: liquid or semi-liquid blood or other potentially infectious materials (OPIM); contaminated items that would release blood or OPIM in a liquid or semi-liquid state if compressed; items that are caked with dried blood or OPIM and are capable of releasing these materials during handling; sharps (used or unused); and pathological wastes containing blood or OPIM. (29 CFR 1910.1030(b)).

Regulated waste does **not** include:

- tissue or paper towels with spots of blood,
- bandages or wound dressings with spots of blood,
- feminine hygiene products or tampons.

Materials not considered regulated waste can be disposed of in the regular trash. All questions regarding waste should be directed to DRS.

## Disposal of Contaminated Glass

Broken glassware that may be contaminated must not be picked up directly with the hands, use mechanical means such as forceps or a brush and dustpan. Refer to the *Sharps Disposal* section of this document for more information.

## Regulated Waste Disposal (non-sharps)

Regulated waste must be placed in containers that are:

- Lidded (closable),
- Leakproof during handling, storage, transport, or shipping,
- Labeled (biohazard stickers are available from DRS),
- Closed when not in use.

## Decontamination of Regulated Waste (non-sharps)

If regulated waste is not otherwise hazardous (i.e., mixed with hazardous chemicals or radioactivity) it may be decontaminated by autoclaving. Bags containing regulated waste should be opened during autoclaving. Autoclave times should be appropriate for the nature and volume of the waste.

Building service workers have been instructed not to remove or dispose of any bags printed with the international biohazard symbol. To dispose of an autoclaved bag displaying the international biohazard symbol, place it inside a standard opaque trash bag after decontamination. Seal the opaque bag and place it in the regular trash. Over-bagging your waste signifies that the waste has been decontaminated, ensures the decontaminated bag is removed with the regular trash, and prevents rejection of waste at the landfill. For information on autoclaving waste, visit our webpages: https://drs.illinois.edu/Page/Waste/AutoclaveWasteAndValidation

If facilities are not available in your building for decontaminating regulated waste, request a waste pickup on our website at:
https://www.drs.illinois.edu/Page/RequestAWastePickup

### Laundry Procedures

Laundry contaminated with blood or OPIM shall be handled as follows:

1. as little as possible,
2. with a minimum of agitation and
3. with universal precautions.

Such laundry must be placed in appropriately marked bags at the location where it was used. It must not be sorted or rinsed in the area of use. Contaminated laundry must be placed and transported in bags or containers that prevent leakage of fluid and are labeled or color-coded as outlined by the laundry facility.

Employees are never permitted to take contaminated laundry home to launder it. It is the responsibility of the unit head to provide, launder, clean, repair, replace, and dispose of personal protective equipment. If laundry is done on site, then it needs to be washed in water at least 71 °C (160 °F) for 25 minutes. If water temperatures are lower than 71 °C (160 °F) then bleach must be used. You may also autoclave laundry if appropriate. The unit may have an alternative procedure that is outlined in the unit specific ECP or Lab Safety Plan.

## Hazard Communication

### International Biohazard Symbol

### Biohazard Warnings

The international biohazard symbol must be used to signify the actual presence or potential presence of a biohazard and to identify equipment, containers, rooms, materials, experimental animals, or combinations thereof that contain or are contaminated with viable hazardous agents [(29 CFR 1910.145(e)(4)]. A door sign with the biohazard warning should be posted at access points to facilities where the following hazards are present:

1. Organisms requiring biosafety level 2 (BL-2) or higher precautions according to the latest information from the NIH, CDC, and the United States Department of Agriculture.
2. Recombinant DNA molecules classified as requiring BL-2 or above containment

according to the "NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules."

Door signs should be prominently placed so they can be seen easily by anyone entering the facility. Biohazard signs and labels should be used as prescribed for their intended applications. Improperly posted biohazard signs will be removed. Once activities requiring a biohazard warning are completed and the agents are no longer present, the investigator should notify the Division of Research Safety. The Division of Research Safety controls the use of the door sign with the biohazard warning on campus. Requests for new door signs with the biohazard warning should be sent to the Division of Research Safety at: drs@illinois.edu.

### Warning Labels

Bright orange or orange-red warning labels, with the international biohazard symbol, shall be affixed to containers of regulated waste; refrigerators, and freezers containing blood or OPIM; and other containers used to store, transport, or ship blood or OPIM. If labels are not used, red bags or red containers with the biohazard symbol shall be used.

Stickers with the international biohazard symbol and/or information on ordering stickers are available from the Division of Research Safety.

### Door Signs

Door signs with the biohazard warning must be posted at entrances to research laboratories and medical facilities that use blood and OPIM. Because universal precautions require blood and OPIM to be treated as if containing HIV, HBV, and HCV, the laboratory or medical facility shall adhere to Biosafety Level 2 (BL-2) containment practices as described in the current edition of the NIH/CDC publication, "*Biosafety in Microbiological and Biomedical Laboratories.*"

# Training

## Information and Training

The unit head shall ensure that all employees with potential occupational exposure participate in a training program provided at no cost during work hours at the time of initial assignment to tasks with occupational exposure.

Each unit must submit to DRS a unit specific exposure control plan (uECP); which includes the employee job titles; tasks with occupational exposure; PPE selection and reasoning; safety procedures; location of documentation and paperwork; annual review date and signature and a copy of all training records. General BBP training aids are available through DRS.

### Training Content

Training must use vocabulary appropriate to the educational level, literacy, and language of employees and must, at a minimum, include information on:

- Location and explanation of the OSHA standard "Occupational Exposure to Bloodborne Pathogens" (29 CFR 1910.1030).
- General explanation of bloodborne diseases and their symptoms and modes of transmission.
- Discussion of this campuswide ECP, the campus unit exposure control plan

(uECP), and how employees can obtain copies.
- An explanation of methods for recognizing tasks and activities that may involve exposure to blood or OPIM.
- Use and limitations of practices that will prevent or reduce exposure, including appropriate engineering controls, work practice controls, PPE.
- Types, proper use, location, removal, handling, decontamination and/or disposal of PPE.
- An explanation of how to select PPE.
- Procedures to follow if an incident occurs, including how to report the incident and medical follow-up that will be made available.
- Medical counseling that the employer provides for exposed individuals.
- Signs and labels used at the facility.
- Explanation of the hepatitis B vaccination series, including its efficacy, safety, administration, and benefits.

The training must provide an opportunity for trainees to ask questions.

### Annual and Additional Training

Training must be renewed annually.

The unit head shall arrange for additional training when changes such as modification of tasks or procedures affect the employee's occupational exposure. This additional training may be limited to addressing the new exposure issues.

For information regarding annual training, call DRS. Training specific to modified tasks (additional training) may be offered by the unit; however, it is recommended that the unit consult with DRS prior to conducting additional training.

# Hepatitis B Vaccination

### Hepatitis B Vaccination

Hepatitis B vaccination provides the most effective protection from hepatitis B virus. The unit head shall make available, at no charge, the hepatitis B vaccination series and post-vaccination antibody testing to all employees who may be occupationally exposed. The vaccination series must be made available within 10 working days of initial assignment to tasks with occupational exposure. Prior to offering the hepatitis B vaccination series, the employee must have received training as discussed in this document.

The vaccination schedule most often used for adults is a series of three intramuscular injections, the second and third doses administered at 1 and 6 months, respectively, after the first dose. A new formulation is approved for two doses, 1 month apart. McKinley uses the two-dose vaccination schedule. The vaccination may be followed by a post-vaccination blood test to check for immunity.

If, after completing the vaccination series, a healthcare professional determines that the employee has failed to develop sufficient antibody levels, the unit head shall make booster vaccinations available at no charge to the employee for up to three boosters with post-vaccination antibody testing between each booster.

### Receiving the Hepatitis B Vaccination Series

The unit head shall arrange for the hepatitis B vaccination series and post-vaccination antibody testing for all employees who agree to receive it. The employee is responsible for keeping appointments to receive each of the vaccinations in the series and the post-vaccination antibody test.

Employees generally receive the HBV vaccination series and the post-vaccination antibody test through the Immunization and Travel Clinic at the McKinley Health Center. Contact McKinley Health Center, Business Office at 217-333-2719 or online at http://www.mckinley.illinois.edu/Clinics/ITC/ITC.htm for current vaccination prices. To arrange vaccinations for their employees, campus units should do the following:

1. Contact McKinley Health Center, Business Office at 217-333-2719
2. Provide the following information:
    a. Campus unit name, address, telephone number,
    b. Contact person in campus unit,
    c. FOAPAL information,
    d. Type of inoculation (Hepatitis B vaccination series, 3 shots, and a post-vaccination antibody blood test),
    e. Name(s) of employee(s) to be vaccinated,
    f. Employee's University i-Card Number (UIN).
3. After sending in this information, contact the McKinley Health Center Immunization and Travel Clinic (217-244-5661) to enter employee information into the computer system prior to starting the vaccination series.
4. Campus Units are responsible for telling employees to call McKinley Health Center Immunization and Travel Clinic (217-244-5661) to schedule an appointment to receive the first does of the vaccination series. Clinic hours: Monday through Friday, 8 a.m.–5 p.m. (8 a.m. – 4:30 p.m. summer and Winter break). A schedule for the remaining inoculations and the post-vaccination blood test will be made during the initial visit.

### Questions?

For more information concerning the HBV immunization, refer to the CDC's HBV webpage: http://www.cdc.gov/hepatitis/HBV/HBVfaq.htm.

### Documentation of Hepatitis B Vaccination Series Offer

The unit head must document that the employee was offered the HBV immunization and must have on file a completed "Hepatitis B Vaccination Declination or Request" form, found in Appendix A.

An employee must sign the declination form and either decline or request to receive the hepatitis B vaccination series.

The unit head shall also ensure that the hepatitis B vaccination series is made available to any employee who initially declined the vaccination but at a later date decide to accept the vaccination series as long as the employee is still in a position with occupational exposure.

## Exposure Incidents and Post-Exposure Care

### Treating an Exposure Incident

For anyone injured that requires immediate attention, call 911.

An employee who sustains an exposure to blood or OPIM to skin/body, immediately wash the affected area thoroughly with soap and water. If the area is bleeding from a sharps injury such as a needle-stick, dry the area after washing and apply disinfectant such as 70% alcohol or 3% hydrogen peroxide and apply band aid.

For exposures to a mucous membrane (eyes, nose, or mouth) flush the area with water using an eyewash station if available. Flush for 15 minutes or as long as tolerable.

## Reporting

Immediately following washing and/or rinsing the exposed area, the employee shall report the incident to the supervisor and fill out the employee section of the "Report of Exposure to Blood or Other Potentially Infectious Materials" form, Appendix B.

The supervisor shall complete the supervisor section of the "Report of Exposure to Blood or Other Potentially Infectious Materials" form and report the exposure incident to the unit head as soon as possible.

Reporting an exposure incident right away permits immediate medical follow-up. Immediate intervention can prevent HBV or HIV from developing and enables the employer to evaluate the circumstances surrounding the exposure incident to try to find ways to prevent a reoccurrence.

For any work-related exposure or injury, workers may be eligible for workers' compensation benefits. Complete the First Report of Injury form within 24 hours and send to the contacts listed on the form. For more information regarding workers' compensation, please visit the University Office of Risk Management website.

## Referral to Healthcare Professional

The unit head shall ensure that the employee receives a confidential medical evaluation by a healthcare professional immediately following an exposure incident and that the Report of Exposure to Blood and Other Potentially Infectious Materials accompany the employee to the healthcare professional.

The employee should be referred to one of the following healthcare professionals or their own personal physician. These departments will make any necessary referrals.

Hours of operation are as follows:

**Carle Occupational Medicine**
Hours: Monday-Friday 7 am– 5 pm
Location: 810 W. Anthony Drive, Urbana, IL
Phone: 217-383-3077
After hours employees will be seen in the Carle Emergency Room or Convenient Care
Phone: 217-383-3313

**OSF Occupational Medicine**
Hours: Monday-Friday 8 am-4:30 pm
Location: 501 N. Dunlap St., Savoy, IL
Phone: 217-560-6320
After hours employees will be seen in the OSF Emergency Room or Urgent Care

Phone: 217-337-2131

**Safeworks Illinois**
Hours: Monday-Friday 7 am–4:30 pm; Some Saturdays 8 am-12pm
Location: 1806 N. Market St., Champaign, IL
Phone: 217-356-6150

## Source Individual Identification

**Source Individual**-
Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee.

If possible, the unit head should document the identity of the **source individual** and should refer the individual for testing to the healthcare professional that is treating the exposed employee. The source individual's blood must be tested as soon as feasible after consent to determine HIV/HBV/HCV infection status. The unit head shall document any issues related to obtaining consent and note if consent cannot be obtained.

If a source individual can be identified, the supervisor overseeing the exposure shall complete the Source Individual Identification Form, Appendix C. The Source Individual Identification Form shall be transmitted to the healthcare professional as soon as the form is completed. The unit shall forward a copy of the Source Individual Identification Form to DRS. An information sheet discussing HIV/AIDS confidentiality, available in Appendix D, should be given to both the source individual and exposed employee.

## Post-Exposure Medical Evaluation

Illinois shall ensure that confidential post-exposure medical evaluation and follow-up offered to an exposed employee shall include but not be limited to the following steps:

- Testing of source individual if consent is obtained.
- Collecting the exposed employee's blood and testing for HIV and HBV serological 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.
- When medically indicated, advising the exposed employee of post-exposure preventive and protective measures as recommended by the U.S. Public Health Service.
- Providing the exposed employee with appropriate treatment and counseling concerning precautions to take during the period after the exposure incident as well as information about potential illnesses, what to watch for, and what information and related experiences should be reported, and to whom.

## Post-Exposure Report

When an employee is sent to a healthcare professional for medical evaluation following an exposure incident, the unit head shall obtain a written report from the attending healthcare professional stating that:

- The employee was informed of the results of the evaluation.
- The employee was told about any medical conditions resulting from exposure to blood or OPIM that require further evaluation or treatment.
- The employee received the hepatitis B vaccination series, if appropriate, as a part of post-exposure care.

All other findings or diagnoses must remain confidential and must not be included in

the written report. The unit head shall provide the employee with a copy of this written report within 15 days of completion of the evaluation. The unit head retains a copy for the employee's personnel file.

The healthcare professional should complete the Healthcare Professional portion of the "Report of Exposure to Blood or Other Potentially Infectious Materials" and return it to the unit head, who will provide a copy of the report to the exposed employee, to DRS, and keep a copy for the unit's records.

# Recordkeeping

## Unit Records

The unit head ensures that an accurate unit record is established for each employee with occupational exposure and maintained for the duration of employment plus 30 years. A unit record must include the following items:

- A record of the employee's hepatitis B vaccination status:
  - If the employee was vaccinated, a copy of the healthcare professional's hepatitis B vaccination report should be retained.
  - If the employee declined vaccination, a copy of the signed declination form should be included in the record. Records should be established as required by the policies regarding hepatitis B vaccination described in this campuswide ECP.
- Copies of the employee injury reports and/or documentation of the route of exposure and the circumstances under which any exposure incident occurred.
- Any post-exposure written opinions from healthcare professionals, as required by the policies regarding post-exposure follow-up described in this campuswide ECP.

These records must be available upon request for examination and copying to the employee, to anyone having the written consent of the employee, to representatives of Illinois OSHA, and to authorized representatives of the university.

Creation of a unit file for purposes of compliance with the Bloodborne Pathogens Standard does not necessarily mean creating an entirely new file for each employee. Unit heads may keep a file(s) covering all their employees that contains the information listed above. This file may be stored in any area where it is accessible to be inspected and copied (e.g., department office, unit head office).

## Medical Records

Illinois shall ensure that accurate medical records for each employee with occupational exposure are established and maintained in accordance with 29 CFR 1910.20 for at least the duration of employment plus 30 years. This record must include:

- Name and UIN number of the employee.
- A document describing the employee's hepatitis B vaccination history, obtained in accordance with the policies of this campuswide ECP for hepatitis B vaccination. This document should include the dates of all hepatitis B vaccinations and any medical records relative to the employee's ability to receive the hepatitis B vaccination series.
- A copy of any results of examinations, medical testing, and follow-up procedures obtained for post-exposure follow-up as specified in this campuswide ECP.

- The healthcare professional's written assessment related to hepatitis B vaccination and/or post- exposure follow-up obtained in accordance with the policies of this campuswide ECP.
- A copy of information provided to the healthcare professional as part of the post-exposure follow-up, in accordance with the policies of this campuswide ECP.

Employee medical records must be kept confidential and must not be disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by 29 CFR 1910.1030 or as may otherwise be required by law.

These records must be available upon request to the employee, to anyone having the employee's written consent, to representatives of Illinois OHSA and to authorized representatives of the university for examination and copying. Illinois will arrange for each healthcare professional to maintain medical records as described in the above policy.

## Training Records

Accurate training records for each employee with occupational exposure must be established and maintained for at least three years.

The unit head is responsible for providing DRS with the names and job titles of all employees attending the training session. DRS will establish and retain training records that include the following information:

- The dates of the training session.
- The contents or summary of the training session.
- The names and qualifications of the employee conducting the training session.
- The names and job titles of all employees attending the training session.

These records must be available upon request to the employee, to anyone having the written consent of the employee, to representatives of the Illinois OSHA, and to authorized representatives of the university for examination and duplication.

# References

Centers for Disease Control. 1989. Guidelines for the prevention of transmission of human immunodeficiency virus and hepatitis B virus to healthcare workers and public safety workers. DHHS (NIOSH) Publication No. 89-107.

Centers for Disease Control. 2020. Handwashing in Communities: Clean Hands Save Lives website. U.S. Department of Health & Human Services, accessed 7 July 2023, <https://www.cdc.gov/handwashing/campaign.html>

Centers for Disease Control. 2020. Ebola Disease: Infection Prevention and Control website. U.S. Department of Health & Human Services, accessed 7 July 2023, <https://www.cdc.gov/vhf/ebola/resources/posters-and-factsheets.html>

New York Times. 2020. How to wash your hands [Video]. New York Times. <https://www.nytimes.com/video/well/100000007053726/wash-your-hands-coronavirus.html>

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U.S. Department of Labor, Occupational Safety and Health Administration. 1992. Bloodborne pathogens and acute healthcare workers. OSHA Publication No. 3128.

U.S. Department of Labor, Occupational Safety and Health Administration. 1992. Bloodborne pathogens and dental workers. OSHA Publication No. 3129.

U.S. Department of Labor, Occupational Safety and Health Administration. 1992. Bloodborne pathogens and emergency responders. OSHA Publication No. 3130.

U.S. Department of Labor, Occupational Safety and Health Administration. 1992. Bloodborne pathogens and long-term healthcare workers. OSHA Publication No. 3131.

# Appendix A: Hepatitis B Vaccination Declination or Request

**Instructions:** Employee completes Part I and submits to Unit Head.

**Part I**

Employee Name:_____ Date: _____

University Identification Number (UIN): _____

Employee Occupation/Title: _____

Employer Representative (Unit Head): _____

☐ **Decline:**
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 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 series at no charge to me.

**OR**

I have already received the hepatitis B vaccination series.

☐ **Receive:**
I choose to receive the complete hepatitis B vaccination series (total of 3 inoculations and post-vaccination antibody blood test) at no charge to me. For more information on how to receive the immunization on campus please see DRS Bloodborne Pathogens Program page: http://www.drs.illinois.edu/Programs/BBPProgramInformation

Employee Signature:_____ Date: _____

**Part II**

**Instructions:** Unit Head completes Part II and files this form in personnel records or laboratory safety plan.

**Unit Head:** I have been notified of the above employee's choice regarding the HBV immunization.

☐ The employee has declined. I will keep this form on file as a record that the employee was offered the immunization.

☐ The employee has requested vaccination. I have coordinated through my departmental business office with McKinley Health Center to administer the complete hepatitis B vaccination series and post-vaccination antibody blood test to this employee at no charge to them as outlined in the campus ECP. I will keep this form on file.

Unit Head
Signature: _____ Date: _____

# Appendix B: Report of Exposure to Blood or OPIM

*An exposure incident is defined by the OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) as a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral (skin-piercing wound) contact with blood or other potentially infectious materials that results from the performance of an employee's duties. These materials include any bodily fluid containing visible blood, semen, vaginal secretions, fluids surrounding internal organs, unfixed human organs or tissues, and cultures containing HIV, HBV, or HCV.*

*Any employee so exposed must be referred to a healthcare professional for post-exposure care and counseling. Use this form and the Campuswide Exposure Control Plan to ensure post-exposure follow-up and care. Please direct questions to DRS at 217-333-2755.*

**EXPOSED EMPLOYEE**

**1. Wash and treat the exposed area. Use soap for skin; use only water if eyes, nose, or mouth.**
**2. Please provide the following information to the best of your knowledge.**

Name:_____ Title:_____ UIN: _____

Home Address:_____ Home Phone: (_____)_____

City:_____ State:_____ Zip:_____ Work Phone: (_____)_____

Exposure Date and Time:____/____/_____:____ ***AM/PM*** Exposure Location (Bldg/Rm): _____

Specify what you were exposed to (if possible): _____

The material came in contact with my:

**[ ] right / left / both eye(s) [ ] nose [ ] mouth [ ] cut / scratched / punctured skin**

If a sharp was involved, what type was it, include brand/model: _____

Describe employee duties as they relate to this exposure incident: _____

Describe how the exposure occurred. _____

PPE worn at the time: **[ ] gloves [ ] protective clothing [ ] face protection [ ] protective eyewear [ ] no PPE**

Immediately after the exposure:

I washed the exposed area thoroughly. **[ ] Yes [ ] No** I reported the exposure to my supervisor. **[ ] Yes [ ] No**

Have you been vaccinated against the hepatitis B virus? **[ ] Yes [ ] No**

**Signature of Exposed Employee:**_____ **Date:** _____

**3. Give the completed report to your supervisor so they can fill out the next section.**
**4. Promptly report to the healthcare professional referred by your supervisor.**

**SUPERVISOR**

**1. Confirm that the employee has washed the exposed area and has completed their portion of this form.**
**2. Provide the following information. If you have questions, contact your PI or Unit Head.**

Your Name:_____ Title:_____ Phone: (_____)_____

On____/____/_____at_____:_____***AM/PM***, the above-named employee reported this exposure to me.

Has the employee received a complete series of hepatitis B vaccination? **[ ] Yes [ ] No**

Date the employee last received training in Occupational Exposure to Bloodborne Pathogens:____/____/_____ or

Date the employee last received training in Safe Handling of Human materials:____/____/_____

Has the employee signed a Declination of HBV Vaccination Form? **[ ] Yes [ ] No**

Can the identity of the source individual be confirmed? *(If yes, complete step 5.)* **[ ] Yes [ ] No**

The employee will seek follow-up care with the following:

**[ ] Carle Occupational Medicine** (217) 383-3077
**[ ] Carle Emergency** (217) 383-3313
**[ ] Carle Convenient Care**
**[ ] Safeworks Illinois** (217) 356-6150
**[ ] OSF Occupational Medicine** (217) 560-6320
**[ ] OSF Emergency** (217) 337-2131
**[ ] OSF Urgent Care**
**[ ] Employee's personal physician**

**Signature of Supervisor:**_____ **Date:** _____

**3. Fill out the campus unit section on the following page, photocopy this form for your unit's records.**
**4. Send the original form to the healthcare professional.**
**5. If known, complete the Source Individual Identification Form.**

# Report of Exposure to Blood or Other Potentially Infectious Materials

**HEALTHCARE PROFESSIONAL**

**1. Please provide the following information after completing your evaluation of the exposed employee.**

Your Name:_____ Title:_____ Phone: (____)_____

On____/____/____ at____:____ ***AM/PM***, the above-named employee reported this exposure to me:

_____

The employee has been given the **[ ] 1st [ ] 2nd if necessary [ ] 3rd** vaccination in the hepatitis B series as part of post-exposure care. Remaining vaccinations (if applicable) should be arranged through the employee's unit.

*I have evaluated and treated the employee in accordance with U.S. Public Health Service recommendations current at this date. I have informed the employee of the results of my medical evaluation and provided the employee information regarding necessary precautions, further medical evaluations and/or treatment, and potential illnesses that might result from the exposure. All other medical information regarding this exposure incident is confidential and will not be reported to the employer.*

**Signature of Healthcare Professional:**_____ **Date:** _____

**2. Photocopy this completed form and send the copy to the campus unit using the address in the section below.**

**3. Retain the original file in the employee's treatment record.**

**CAMPUS UNIT**

Unit Name:_____ PI or Unit Head/Title: _____

Unit Address *(incl. mail code):*_____ M/C-_____

Unit Head Work Phone: (____)_____ Unit Emergency Phone: (____)_____

On____/____/____, this unit received a completed copy of this form from the healthcare professional listed above.

We provided a copy to the exposed employee on____/____/____ and placed a copy in our unit records.

**Signature of PI/Unit Representative:**_____ **Date:**_____

**Send (1) one copy of the completed form to each of the following:**

- Division of Research Safety, 101 S. Gregory St., Room 102, Urbana, IL 61801 (M/C 225) or email to DRS-BBP@illinois.edu
- Office of Claims Management, 100 Trade Center Dr., Suite 103, Champaign, IL 61820 (M/C 686)

# Appendix C: Occupational Exposure to BBP Source Individual Identification

***SUPERVISOR:*** *Please complete this form to the best of your knowledge if a source individual can be identified in an exposure incident involving human blood or other potentially infectious materials (OPIM). Transmit this form as soon as possible to the occupational medicine department that is treating the exposed employee (phone and fax numbers are provided). For questions, contact your unit head or call the Division of Research Safety at (217) 333-2755.*

**CAMPUS UNIT**

Unit Name:_____ PI or Unit Head/Title: _____

Unit Address *(incl. mail code):*_____ M/C-_____

Unit Head Work Phone:_____ Unit Emergency Phone: _____

**EXPOSED EMPLOYEE**

Name:_____ Title:_____ UIN:_____

Date of Exposure:____/____/_____ Time:____:_____ ***AM/PM*** Location (Bldg & Rm #): _____

**CONFIDENTIALITY STATEMENT**

The State of Illinois "AIDS Confidentiality Act" (410 ILCS 305) and 77 Ill. Adm. Code 697 (AIDS Confidentiality and Testing Code) provide for confidentiality of persons who are tested for HIV infection. The following provisions generally apply:

- No person may order an HIV test without first receiving informed consent (written or verbal) of the subject of the test or the subject's legally authorized representative*.
- Any person upon whom an HIV test is performed shall have the right to request anonymity and to provide informed consent (written or verbal) by using a coded system that does not link individual identity with the request or the result except when informed consent is not required by law.
- No person may disclose or be compelled to disclose the identity of any person upon whom a test is performed, or the results of such a test, in a manner that permits identification of the subject of the test.

*Specific exceptions (e.g., healthcare workers, firefighters, police officers, etc.) to each of these provisions exist and may apply in some cases involving occupational exposure to blood or OPIM. Please refer to the Exposure Control Plan for this information.

# Occupational Exposure to Bloodborne Pathogens
# Source Individual Identification

**SOURCE INDIVIDUAL**

**The human blood or other potentially infectious material involved in the exposure came from the following individual:**

Name:_____ Work Phone: (_____)_____

Home Address:_____ Home Phone: (_____)_____

City:_____ State:_____ Zip Code:_____

**Was the above-named source individual referred to a health care professional for testing? [ ] Yes [ ] No**

- ***If yes, please specify the provider below.***

**[ ] Carle Occupational Medicine** (217) 383-3077
**[ ] Carle Emergency** (217) 383-3313
**[ ] Carle Convenient Care**
**[ ] Safeworks Illinois** (217) 356-6150
**[ ] OSF Occupational Medicine** (217) 560-6320
**[ ] OSF Emergency** (217) 337-2131
**[ ] OSF Urgent Care**
**[ ] Personal physician**

- ***If no, please specify the reason below:***

**[ ] Source individual declined to be tested**
**[ ] Above-named source individual cannot be located**

**Unit Representative Signature:** _____

**Unit Representative** _____ **Date:**_____

# Appendix D: HIV /AIDS Confidentiality Information Sheet

## HIV/AIDS Confidentiality Information Sheet

The State of Illinois "AIDS Confidentiality Act" (410 ILCS 305) and 77 Ill. Adm. Code 697 (AIDS Confidentiality and Testing Code) provide for confidentiality of persons who are tested for HIV infection. Portions of these regulations that are pertinent to occupational exposure to bloodborne pathogens and/or source individual identification and testing are as follows:

## Consent to Test

No person may order an HIV test without first receiving informed consent (written or verbal) of the subject of the test or the subject's legally authorized representative.

## Information about Results and Further Testing or Counseling

No physician may order an HIV test without making information about the meaning of the test results, the availability of additional or confirmatory testing if appropriate, and the availability of referrals for further information or counseling available to the person tested.

## Anonymity

A subject of a test who wishes to remain anonymous shall have the right to do so and to provide written informed consent by using a coded system that does not link individual identity with the request or result, except when informed consent (written or verbal) is not required by law [see below].

## Consent to Test - Exceptions

Written or verbal Informed consent is **not required:**

- When, in a physician's best medical judgment, a healthcare provider or employee of a healthcare facility, a firefighter, or an EMT-A, EMT-I or EMT-P, [defined as the "exposed employee"] is involved in an accidental direct skin or mucous membrane contact with the blood or bodily fluids of an individual in such a manner as may transmit HIV, the source individual's blood should be tested. If the test is positive, the patient and [exposed employee] shall be provided appropriate counseling consistent with [the AIDS Confidentiality Act].
- When, in the best medical judgment of a physician, a law enforcement officer [defined as any person employed by the state, a county, or a municipality as a policeman, peace officer, auxiliary policeman, correctional officer, or in a similar position involving the enforcement of the law and protection of the public interest at the risk of that person's life] is involved in the line of duty in a direct skin or mucous membrane contact with the blood or bodily fluids of an individual that is of a nature that may transmit HIV, the source individual's blood should be tested. If the test is positive, the patient shall be provided appropriate counseling consistent with the AIDS Confidentiality Act.

## Disclosure of Identity of Person Tested

No person may disclose or be compelled to disclose the identity of any person upon whom a test is performed or the results of such a test in a manner that permits identification of the test subject, except to the following persons:

- The subject of the test or the subject's legally authorized representative.
- Any person designated in a legally effective release of the test results by the subject of the test or the subject's legally authorized representative.
- An authorized agent or employee of a health care facility or health care provider who:
    - Is authorized to obtain test results,
    - Is providing patient care or handling/processing specimens of body fluids or tissues,
    - Has a need to know such information. Individuals or agencies that have a need to know such information include:
        - The Illinois Department of Public Health, in accordance with rules for reporting and controlling the spread of disease, as otherwise provided by state law.
        - Health facility staff committees for the purposes of conducting program monitoring, program evaluation, or service reviews.
        - A person allowed access to test results by a court order issued in compliance with the provisions of 410 ILCS 305/9(g).
        - As determined by the best medical judgment of a physician, any healthcare provider or employee of a health care facility, and any firefighter, EMT-A, EMT-I, or EMT-P involved in an accidental direct skin or mucous membrane contact with the blood or bodily fluids of an individual that is of a nature that may transmit HIV.
        - As determined by the best medical judgment of a physician, any law enforcement officer who, in the line of duty, is involved in a direct skin or mucous membrane contact with the blood or bodily fluids of an individual that may transmit HIV. [A law enforcement officer is defined as any person employed by the state, a county, or a municipality as a police officer, peace officer, auxiliary police officer, correctional officer, or in a similar position involving the enforcement of the law and protection of the public interest at the risk of that person's life.]

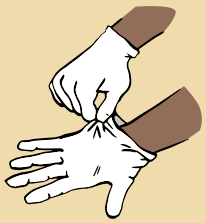
Direct any questions to the Office of University Counsel, 217-333-0560.

## Appendix E: How to Remove Gloves poster

# How to Remove Gloves

To protect yourself, use the following steps to take off gloves

1

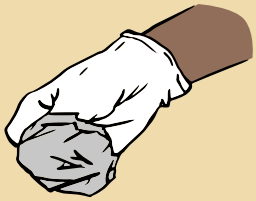


Grasp the outside of one glove at the wrist. Do not touch your bare skin.

2

Peel the glove away from your body, pulling it inside out.

3



Hold the glove you just removed in your gloved hand.

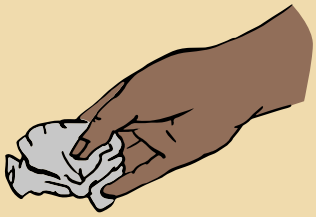
4

Peel off the second glove by putting your fingers inside the glove at the top of your wrist.

5

Turn the second glove inside out while pulling it away from your body, leaving the first glove inside the second.

6



Dispose of the gloves safely. Do not reuse the gloves.

7

Clean your hands immediately after removing gloves.

*Adapted from Workers' Compensation Board of B.C.*

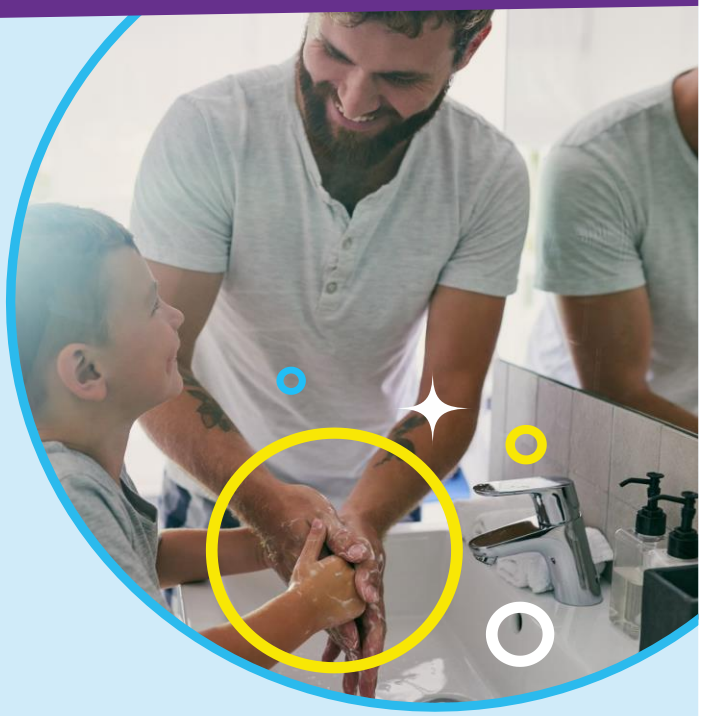
CS 254759-A

# Appendix F: Wash Your Hands poster

## Stop Germs! Wash Your Hands.

### When?

- After using the bathroom
- Before, during, and after preparing food
- Before eating food
- Before and after caring for someone at home who is sick with vomiting or diarrhea
- After changing diapers or cleaning up a child who has used the toilet
- After blowing your nose, coughing, or sneezing
- After touching an animal, animal feed, or animal waste
- After handling pet food or pet treats
- After touching garbage



### How?

**Wet** your hands with clean, running water (warm or cold), turn off the tap, and apply soap.

**Lather** your hands by rubbing them together with the soap. Be sure to lather the backs of your hands, between your fingers, and under your nails.

**Scrub** your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.

**Rinse** hands well under clean, running water.

**Dry** hands using a clean towel or air dry them.

**Keeping hands clean is one of the most important things we can do to stop the spread of germs and stay healthy.**

LIFE IS BETTER WITH CLEAN HANDS

**www.cdc.gov/handwashing**

This material was developed by CDC. The Life is Better with Clean Hands Campaign is made possible by a partnership between the CDC Foundation, GOJO, and Staples. HHS/CDC does not endorse commercial products, services, or companies.

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