UNIVERSITY OF SOUTH ALABAMA

Pat Capps Covey College of Allied Health Professions



Exposure Control Plan (ECP) For Bloodborne Pathogens

Revised: December 2022 Supersedes: December 2020

Table of Contents

Topic	
Program Scope & Responsibilities	
Abbreviations & Glossary Of Terms	4-6
Sections	5-17
A: Occupational Exposure Determination	7
B: Exposure Control Methods	8
C: Hepatitis B Virus (HBV) Vaccination Policy	12
D: Post-Exposure Prophylaxis (PEP) Evaluation and Follow-Up	13
E: Communication of Hazards To Employees And Training	14
F: Record Keeping	16
G: Procedures for Evaluating Circumstances Surrounding Exposure Incidents	17
References	18
Appendices	19-26
A: CAHP Faculty/Staff HBV Vaccination Policy Form	19
B: CAHP HBV Student Vaccination Policy Form	20
C: CAHP Occupational Exposure Risk Determination & Training Form	21
D: Postexposure Prophylaxis (PEP) Program	22
E: Bloodborne Pathogens Training Record Checklist	24
F: Waste Disposal Requirements	25
G: Evaluation of Circumstances Surrounding an Exposure Incident Form	26
Summary of Changes	27
Coordination/Review Page	29

UNIVERSITY OF SOUTH ALABAMA Patsy Capps Covey College of Allied Health Professions

Exposure Control Plan (ECP) For Bloodborne Pathogens

Program Scope:

University of South Alabama College of Allied Health Professions (CAHP) is committed to protecting health and well-being of its students, faculty and/or staff, hereafter referred to as "Personnel", unless individually identified. Pursuant to this goal, an **exposure control plan** (**ECP**) is provided to minimize or altogether eliminate potential occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 *CFR* 1910.1030, "Occupational Exposure to Bloodborne Pathogens."

ECP Elements:

- Determination of employee exposure
- Implementation of various methods of exposure control, including universal precautions, engineering/work practice controls, personal protective equipment, and housekeeping.
- Hepatitis B vaccination
- Post-exposure evaluation and follow-up
- Communication of hazards to employees and training
- Record keeping
- Procedures for evaluating circumstances surrounding exposure incidents

Administration:

Responsible parties and brief discussion* of associated duties are as follows:

- CAHP Dean Responsible for overall program administration.
- CAHP Biosafety Officer (CBO) Assists Dean with developing and maintaining a college-wide ECP. Chairs CAHP Biosafety Committee (CBC).
- CAHP Chairpersons Responsible for ensuring departmental compliance with all ECP components (e.g., exposure determinations, recordkeeping, disciplinary action, etc.).
- CAHP Biosafety Committee Representatives provides assistance to respective chairperson in meeting ECP requirements. Identify changes in occupational exposure risk to CBO.
- CAHP Personnel Become familiar with ECP contents and comply with all prescribed procedures and work practices.

Review & Coordination:

The ECP will be reviewed annually by the CBO or his or her designee. Major revisions will be coordinated with CBC members before suggested changes are adopted. Minor revisions will be made, as needed, by the CBO and will not require review by CBC members. A Summary of Changes page will accompany each annual review.

^{*} see Biosafety Program: Scope & Responsibilities for a complete description.

Abbreviations & Glossary of Terms

Abbreviations:

BBP Bloodborne pathogens

CAHP College of Allied Health Professions

CBC CAHP Biosafety Committee
CBO CAHP Biosafety Officer
CFR Code of Federal Regulations

ECP Exposure control plan
HBV Hepatitis B virus
HCV Hepatitis C virus

HIV Human immunodeficiency virus
OPIM Other potentially infectious materials

OSHA Occupational Safety & Health Administration

PPE Personal protective equipment

UP Universal Precautions

USAMC University of South Alabama Medical Center

Glossary:

Antiseptic - a chemical germicide formulated for use on skin. Antiseptics should not be used as disinfectants.

Biosafety - practice of good procedures for safe handling of infectious or potentially infectious biohazardous materials.

Biohazard - materials capable of potentiating biological harm.

Blood - human blood, human components, and products made from human blood.

Bloodborne Pathogens - infectious microorganisms in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV), per OSHA definition.

Contaminated - presence or the reasonably anticipated presence of blood or potentially infectious materials on an item or surface.

Contaminated Laundry - laundry, which has been soiled with blood or other potentially infectious materials.

Contaminated Sharps - any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

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

Disinfectant - an agent intended to inactivate or destroy specific microbes, irreversibly (not including their spores) on inanimate surfaces (most disinfectants do not effectively sterilize).

Disinfection - a procedure that kills pathogenic microorganisms, but not necessarily their spores. Chemical disinfectants are used on inanimate surfaces (medical devices, bench tops, etc.) and should not be used on skin or tissue.

Engineering Controls - means equipment and/or facilities design features (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazard from the workplace.

Exposure Incident - a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an individual's duties.

Hand washing Facilities - a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

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

Other Potentially Infectious Materials - following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, 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 in situations where it is difficult or impossible to differentiate between body fluids; or any unfixed tissue or organ (other than intact skin) from a human (living or dead).

Parenteral - piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts and abrasions.

Personal Protective Equipment - specialized clothing or equipment (e.g., lab coat, goggles, face shield, etc.). Items are worn by an individual for protection against a particular hazard. General work clothes (e.g., uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard is not considered to be personal protective equipment.

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.

Source Individual - any individual living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the health care worker.

Sanitize - a procedure that reduces the level of microbial contamination so that an item or surface is considered safe.

Sharps - any device having corners, edges, or projections capable of cutting or piercing skin. Examples include needles, needles with syringes, butterfly collection needles, blades (razors, scalpels, etc.). Additional materials are contaminated Pasteur pipettes, glass slides, and broken glassware.

Standard Precautions - infection control program incorporating major features of universal precautions. It is designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection in hospitals. Applies to all patients receiving care in hospitals, regardless of their diagnosis or presumed infection status. Standard precautions were developed for use in hospitals and may not necessarily be indicated in other settings where universal precautions are used, such as childcare settings and schools.

Sterilant - an agent intended to destroy all microorganisms on inanimate surfaces.

Sterilization - a physical or chemical procedure that destroys all microbial life (bacteria, viruses, fungi and parasites) including highly resistant spores.

Sterilize - use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Transmission-based Precautions - infection control program designed for patients documented or suspected to be infected or colonized with highly transmissible or epidemiologically important pathogens for which additional precautions beyond *standard precautions* are needed to interrupt transmission in hospitals. There are three types of transmission-based precautions: *airborne precautions, droplet precautions*, and *contact precautions*.

Universal Precautions - infection control program that applies to blood, other body fluids containing visible blood, semen, and vaginal secretions. Universal precautions also apply to tissues and to the following fluids: cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids. Universal precautions do not apply to feces, nasal secretions, sputum, sweat, tears, urine, and vomitus unless they contain visible blood. Universal precautions do not apply to saliva except when visibly contaminated with blood or in the dental setting where blood contamination of saliva is predictable.

Work Practice Controls - procedural details, policies and practices that isolate or remove the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

SECTION A: Occupational Exposure Determination

Purpose: OSHA *Bloodborne Pathogens Standard (CFR 1910.1030*) requires that each organization assess whether or not employees are subject to occupational exposure. Exposure assessment is made <u>without</u> regard to personal protective clothing and equipment. Standards specify two exposure classification categories.

- *Group 1* includes job classifications in which <u>all</u> employees have occupational exposure. An example would be laboratory personnel, phlebotomists, researchers who work with human blood and blood cells, emergency response personnel, etc. Where all employees have occupational exposure, it is **not** necessary to list specific work tasks.
- *Group 2* includes those classifications in which <u>some</u> employees have occupational exposure. Specific tasks and procedures causing occupational exposure must be listed. An example would be in a laboratory where some of the workers might be assigned the task of handling blood or other potentially infectious materials while other workers would not.

Scope: This standard applies to <u>all</u> employees who have occupational exposure to blood or other potentially infectious materials (OPIM).

Group 1 - Job classification titles for employees where **all** would have occupational exposure.

Department	Job Classification
Condinue animatama Como	Respiratory Therapist (faculty)
Cardiorespiratory Care	Respiratory Therapist (student)
Emanage av Madigal Campings	EMT-Paramedic (faculty)
Emergency Medical Services	EMT-Paramedic (student)
Occupational Thomas	Occupational Therapist (faculty)
Occupational Therapy	Occupational Therapist (student)
Dhysisian Assistant Chydica	Physician Assistant (faculty)
Physician Assistant Studies	Physician Assistant (students)
Dhysical Thomasy	Physical Therapist (faculty)
Physical Therapy	Physical Therapist (student)
	Radiologic Technologist (faculty)
Radiological Sciences	Radiologic Technologist (student)
	Registered Radiographers
	Speech Language Pathologist (faculty)
C 1D (1 1 0 A 1' 1	Speech Language Pathologist (student)
Speech Pathology & Audiology	Audiologist (faculty)
	Audiologist (student)

Group 2 - Job classification titles for employees that have **some** occupational exposure. Also provide a brief description of their tasks/procedures that would result in potential exposure.

None identified.

SECTION B: Exposure Control Methods

Each department chairperson is responsible for implementing specific policies and procedural practices, which serve to reduce or eliminate risk of potential exposure to biohazards in their respective area. These include:

- Universal precautions
- Engineering and work practice controls
- Personal protective equipment (PPE)
- Housekeeping (e.g. biohazard waste removal)

Both general and task-specific requirements addressed in this section apply to all CAHP departments. A copy of CAHP ECP shall be readily accessible in all at risk areas at all times.

Universal Precautions (UP)

UP are designed to prevent transmission of human immunodeficiency virus (HIV), hepatitis B virus (HBV), and other bloodborne pathogens. Blood and certain body fluids are considered potentially infectious for HIV, HBV and other bloodborne pathogens. All listed materials are considered infectious regardless of perceived infectious status of blood/body fluid source individual.

UP are not equally applied to all samples encountered in patient care settings. Exclusions are made for certain sample types (e.g., urine) unless it contains visible blood. Through extensive clinical training entry-level healthcare professionals have gained necessary experience required to make this type of determination. This is not the case with new students placed in academic training environments (e.g., student laboratory) where they will be handling clinically derived samples for the first time. These students have received initial training on dangers associated with bloodborne pathogens but lack practical hands-on application of such training. Therefore, in providing a safe student training environment all of following materials will be treated as potentially infectious regardless of current UP criteria:

- Blood
- Body fluids (cerebrospinal, synovial, pleural, peritoneal, pericardial, & amniotic)
- Feces
- Saliva
- Secretions (nasal & vaginal)
- Semen
- Sputum
- Sweat
- Tears
- Tissues
- Urine
- Vomit

UP procedures are strictly observed for all individuals deemed at risk for accidental occupational exposure to BBP and/or OPIM. Each department will make every attempt to reduce/prevent accidental contact with blood or OPIM.

Engineering and Work Practice Controls

These are utilized at this facility to eliminate or minimize exposure to employees and students. Whenever occupational exposure remains after instituting these controls, personal protective equipment shall also the utilized. All students, faculty and/or staff participating in potential exposure activities will utilize following engineering and work practice controls:

- Hand washing or washing of other affected skin area with copious amounts of soap and water, or flushing mucous membranes with water, immediately following an exposure incident (e.g., blood splash to the eyes or an accidental puncture injury). Additionally, all individuals must wash their hands immediately (or as soon as feasible) after removal of gloves or other personal protective equipment. A disinfectant foam is suitable for use those areas where a sink is not readily accessible.
- Sharps devices shall be disposed of in labeled sharps containers provided at each location where sharps generation is anticipated. Needles should never be recapped, broken or sheared. Housekeeping employees who encounter improperly disposed sharps material (e.g., needles, lancet, etc.) shall notify department supervisory personnel waste
- No eating, drinking, smoking, applying cosmetics or lip products (e.g. Chapstick lip balm, etc.), or contact lenses handling is permitted in a work area where there is a reasonable probability of occupational exposure.
- No food or drinks shall be kept in refrigerators, freezers, cabinets where blood or other potentially infectious materials are present. Additional prohibited areas include shelves, counter tops, or bench tops where infectious materials are handled. Designated food storage areas should be uniquely labeled as such when in an adjacent physical location.
- All individuals must employ use of sufficient barrier devices (e.g. goggles with side shields, acrylic counter top barriers, etc.) when performing procedures involving blood or other potentially infectious materials. Appropriate usage will serve to minimize splashing, spraying, splattering, and generation of droplets of these substances.

Personal Protective Equipment (PPE)

PPE selection is based upon anticipated exposure to blood or other potentially infectious materials. Appropriate use precludes blood or other potentially infectious material contacting individuals clothing, skin, eyes, mouth or other mucous membranes under normal conditions. Afforded PPE protection is only considered effective for a limited duration of time. For example, water resistant gowns or lab coats should be removed and replaced with a clean one soon after soiling. Each department will determine task-specific risk exposure to determine appropriate PPE. Departments shall furnish size, allergen, and task appropriate PPE to all students, faculty & staff. See Table 1 for specific task related PPE information.

Table 1. Appropriate Task-Specific PPE (all departments)

Activity	Hand washing	Gloves*	Lab coat, gown or apron	Eyewear/ face shield**	Mouthpiece or Resuscitation bag
Venipuncture /IV administration	X^1	X	X^2	X^3	
• Transport, handling, processing human samples (e.g., blood)	X	X	X	X^3	
• Newborn delivery (EMS)	X	X	X^2	X	
Handling regulated medical waste, linen, mats, or bandages contaminated with blood or OPIM	X	X	X	X ³	
Handling bacteriologic cultures	X	X^4	X		
Resuscitation	X	X	X	X	X

^{*} See utility glove description listed under "Other important housekeeping procedures include:"

Notes:

Housekeeping

Decontamination of potentially contaminated objects (e.g., work surfaces, instruments, etc.) shall be immediately accomplished or as soon as possible after any spill of blood or other potentially infectious materials. Disinfection shall be accomplished by utilizing following materials:

- Phenolic compounds (e.g. Vesphene, Hil-Phene, Metar) bench tops or other inanimate
 objects. These compounds offer the best overall bactericidal, fungicidal, tuberculocidal
 & virucidal activity and should be used whenever possible. Do not use on acrylic
 materials such as biological safety cabinets or countertop barriers since compound will
 cause crazing.
- Hypochlorite (chlorine bleach of 10% minimum solution) blood or body fluid spills.
 Let solution remain in contact with spill for minimum of 10 minutes for adequate

^{**} Worn when splashes, sprays, spatters, or droplets of blood or other potentially infectious materials pose potential hazard to the eye, nose, or mouth.

¹ Approved alcohol-based disinfectant is to be used when a sink with running water is unavailable.

² Duty uniform is sufficient when operating in a field environment but blood or OPIM contaminated garment(s) must be removed immediately or as soon as feasible.

³ Use protective eyewear or face shield when splashes, sprays, spatters, or droplets of blood or other potentially infectious materials reasonably pose a potential hazard to the eye, nose, or mouth.

⁴ Use gloves if there are any cuts, abrasions, insect bites or dermatitis on hands or wrists.

tuberculocidal activity. Cover with paper towel to prevent drying. Do not use on stainless steel or aluminum metals since exhibits corrosive action.

- 70% Isopropyl alcohol solution initial contaminated instrument cleaning (e.g. surgical instruments).
- Quaternary ammonium compounds (e.g. Roccal, End-Bac, Hi Tor, etc.) are excellent in disinfecting bench tops or other inanimate objects for bacteria but not as effective as phenols for fungal or viral disinfection.

Other important housekeeping procedures include:

- Sweeping or brushing potentially contaminated broken glassware into a dustpan. These materials shall not be picked up directly with hands. They shall be placed in designated sharps containers and not in broken glass cardboard containers.
- Immediately discard known or suspected contaminated material in uniquely labeled, OSHA approved sharps containers. Containers should be located close to contaminated work area and be readily accessible to individuals working with sharps items. Containers will only be filled 2/3 full before sealing. Full sharps containers will be disposed of by a hazardous waste contractor.
- Regulated medical waste (material that has been in contact with blood or body fluids) is discarded in the large red biohazard bags found inside the large red biohazard drums for contractor removal and processing (see Appendix F for specific handling requirements).
- Unregulated or non-sharps waste material is discarded in appropriate containers (see Appendix F for specific handling requirements).
- PPE clothing (e.g. lab coats) potentially contaminated blood or other potentially
 infectious will be handled as little as possible. Contaminated items will not be sorted or
 rinsed in area of use.
- Utility gloves used in field work may be decontaminated for reuse if their integrity is not compromised. Decontamination will consist of washing with of a 10% bleach solution.
 Gloves will be discarded when they show signs of cracking, peeling, tearing, puncturing, or deterioration.

SECTION C: Hepatitis B Virus (HBV) Vaccination Policy

The following HBV policies apply to all CAHP faculty, staff and students. Compliance is mandatory. This process shall be accomplished for each new individual in accordance with their determined exposure potential as defined in SECTION A: Determination of Employee Exposure. Department chairpersons are responsible in ensuring that all new faculty/staff members and newly admitted students are informed of potential occupational risk exposure to HBV. Information shall be provided within first ten days of initial work assignment or training where exposure is reasonably anticipated.

• CAHP Faculty/Staff HBV Vaccination:

Faculty and/or staff shall be strongly encouraged to obtain the entire HBV vaccination series*. It shall be offered at no cost to each to new faculty/staff member. Upon initial appointment, respective department chairperson will accomplish a CAHP Occupational Exposure Risk Determination & Training Form (Appendix C). This form will be signed by both chairperson and faculty/staff member and will be filed in their personnel record maintained in CAHP Dean's Office. Faculty/Staff who have previously received HBV vaccine or have a medically documented HBV history may elect antibody testing to determine current immune status. Such testing is available upon initial employment and every five years thereafter. It is to be provided at no charge to faculty/staff member. If individual test results demonstrate insufficient immunity, the Faculty/Staff member will be offered a booster injection at no charge.

Faculty/Staff acknowledgment of an offer for HBV immunization and/or testing is outlined on Appendix A - CAHP Faculty/Staff Hepatitis B Virus (HBV) Vaccination Policy Form. A form must be completed for all determined at-risk individuals for exposure to bloodborne pathogens. Completed forms are to be retained in individual personnel file indefinitely. Vaccine administration is to be performed by a licensed health care provider of faculty/staff's choice. Reimbursement of vaccination and/and or immune status testing charges shall be coordinated between originating department and CAHP Dean's Office. Payment for HBV vaccination for faculty/staff on research grants will be responsibility of principal investigator.

• CAHP Students in Professional Program Component HBV Vaccination:

Students in health care professions are required to obtain protection from infectious hepatitis B virus (HBV) as a condition of enrollment. This vaccination is in addition to any other University immunization requirements. Individuals with a history of hepatitis B infection, previous HBV vaccination series, or with a current immune status determination can be exempted by providing health care provider (e.g., physician, student health nurse, etc.) documentation. Students who decline vaccination shall be reminded that clinical affiliates may refuse to allow their participation in educational activities. Declination may result in an inability to complete all degree requirements. All information regarding health status will remain confidential. Student acknowledgment of HBV immunization options is outlined in Appendix B - CAHP Hepatitis B Virus (HBV) Vaccination Policy for Students Entering Professional Programs.

* A combination hepatitis A and B vaccine (Twinrix) is recommended.

SECTION D: Post-Exposure Prophylaxis (PEP) Evaluation and Follow-Up

CAHP personnel who are deemed at risk for BBP and/or OPIM fall under this policy.

A. Post-Exposure Evaluation Policy:

CAHP faculty/staff and students shall immediately report any potential exposure event to human blood or body fluids to supervisory personnel. On-site supervisory training personnel shall ensure that appropriate first aid was completed. Additionally, he or she shall ensure that a confidential medical evaluation takes place as soon as possible following the reported e (See Appendix D).

Department chairpersons are charged to convey to their faculty/staff and students the following essential program information:

- Student and employee post-exposure laboratory testing and provider evaluation are mandatory program elements.
- PEP drug therapy is voluntary to take PEP for an exposure to blood or body fluids from a known HIV infected person as soon as it is offered.
- Students and employees will carry a wallet-sized PEP card (See Appendix D) with procedures to follow in event of a training-related blood/body fluids exposure.

B. Treatment Centers:

Faculty/staff members and students will report to USAMC Employee Health Office Monday through Friday 8:00 A.M. to 4:30 P.M. They will report USAMC Emergency Room after 4:30 P.M. weekdays, weekends and on holidays.

Students performing clinical rotations outside Mobile area shall be evaluated and/or offered PEP in accordance with local facility policy. Students shall adhere to CAHP PEP requirements in situations where such a policy is unavailable. It is the responsibility of the associated clinical training site to ensure that a potentially exposed student receives required medical evaluation in a timely manner.

C. Treatment Costs:

Medical services shall be provided by a licensed health care professional and at no cost to CAHP faculty/staff members.

Expenses incurred for PEP medical evaluation, medication, and/or specialty care follow up are the sole responsibility of the CAHP student. As such, it is required that each student have adequate health insurance to cover any and all associated medical costs.

D. Follow-up/Evaluation:

Department chairpersons are required to evaluate conditions that resulted in an accidental exposure and suggest preventative measures. In doing so, an *Evaluation of Circumstances Surrounding an Exposure Incident Form* (Appendix G) shall be completed. Refer to Section G for instruction on completing this form.

SECTION E: Communication of Hazards to Employees and Training

CAHP Biosafety Training Program:

CAHP departmental chairpersons shall ensure that their faculty, staff, and students with potential occupational exposure to bloodborne pathogens meet all specifications of CAHP biosafety training program. All individuals shall receive initial bloodborne pathogens training prior to engaging in any task carrying potential exposure risk (see Table 1). Any additional department task-specific exposure reduction training shall be provided. Students will not be allowed to participate in any exposure-related training until all initial training requirements are met. Similarly, faculty and/or staff are subject to same above-mentioned restriction in performance of his or her respective duties. Occupational tuberculosis (TB) exposure training is separately addressed in CAHP Tuberculosis (TB) Screening Program.

Training Materials:

Bloodborne pathogens training shall include a review of the current year CAHP BBP web-based training module and successful completion of the associated quiz. Training materials are located on-line and can only be accessed through prior web site registration. Registration instructions are available at the CAHP Biosafety web site. Biosafety topics covered include, but are not limited to, the following:

- OSHA Bloodborne Pathogens Standard
- Epidemiology and symptomatology of bloodborne diseases.
- Modes of bloodborne pathogen transmission.
- Specific procedures carrying risk exposure to blood or other potentially infectious materials.
- Salient points of CAHP ECP (e.g. lines of responsibility, how implemented).
- Exposure control methods
- Available PPE and its use.
- Hepatitis A/B vaccination.
- Post exposure prophylaxis (PEP)/follow-up procedures (including exposure incident reporting).

Training Requirements:

Initial training shall be accomplished for all students, faculty and/or staff deemed with potential occupational exposure prior to engaging in any risk activities (e.g. phlebotomy training, field training, etc.). This training shall take place before the individual enters an at-risk training environment. Similarly, all at risk individuals shall perform annual refresher training using the aforementioned web-based training module. A score of 80% (16/20) is considered passing on the accompanying post-test assessment.

Table 1. Bloodborne Pathogens Training Requirements for CAHP Departments

Department	Job Classification	Training Required?
Biomedical Sciences	None	No No
	Respiratory Therapist (faculty)	Yes
Cardiorespiratory Care	Respiratory Therapist (student)	Yes
Emanganay Madigal Carriaga	EMT-Paramedic (faculty)	Yes
Emergency Medical Services	EMT-Paramedic (student)	Yes
Occupational Thomas	Occupational Therapist (faculty	Yes
Occupational Therapy	Occupational Therapist (student)	Yes
Dhysician Assistant Studies	Physician Assistant (faculty)	Yes
Physician Assistant Studies	Physician Assistant (students)	Yes
Dhysical Thomasy	Physical Therapist (faculty)	Yes
Physical Therapy	Physical Therapist (student)	Yes
	Radiologic Technologist (faculty)	Yes
Radiological Sciences	Radiologic Technologist (student)	Yes
	Registered Radiographers	Yes
	Speech Language Pathologist (faculty)	Yes
Smarch Dathalagy & Audialagy	Speech Language Pathologist (student)	Yes
Speech Pathology & Audiology	Audiologist (faculty)	Yes
	Audiologist (student)	Yes

Remedial training will be given by the CBO to any faculty/staff or student failing to meet the minimum 80% post-test assessment score after three attempts.

Training Documentation:

Department chairpersons shall be responsible for maintaining documentation of initial and/or annual refresher training for their students, faculty and/or staff. Initial training shall be documented on the Initial CAHP Occupational Exposure Risk Determination & Training Form (see Appendix C). Completed student forms shall become part of his or her permanent student record to be kept in department files. Initial Faculty/Staff forms will be forwarded CAHP Dean's Office for inclusion in their individual CAHP personnel file. Evidence of annual refresher training will be documented and locally maintained by each department.

SECTION F: Record Keeping

Records for all faculty/staff and students who were deemed at risk of exposure (see Section A) shall be kept in accordance with policies outlined below. Department chairpersons shall establish and maintain accurate records for each faculty/staff or student with potential occupational exposure. Additionally, he or she shall ensure that these records are available for examination upon request by either CAHP Dean or CBO. Department chairpersons shall be responsible for ensuring that retained information is kept confidential and is neither reported, nor disclosed without faculty/staff or student's expressed written consent.

A. Training Records:

Training records shall be maintained for a minimum of three years from date on which training occurred and shall include following information:

- Name and JAG#.
- The dates of each training session.
- The contents, summary or description of the training session.
- The names and qualifications of persons conducting the session.

B. Vaccination Records:

Vaccination documents shall be retained for duration of individual's time at university and shall include following information:

- Name and JAG #.
- HBV Acceptance/Declination Form.
- Copy of hepatitis B vaccination status, including dates of vaccinations, boosters, and immune status testing.
- Any other record relating to individual's continued ability to receive vaccination.

C. Incident Forms Retention:

A copy of the USA Report of Accident/Incident Form is not retained by the department. Instead, the completed *Evaluation of Circumstances Surrounding an Exposure Incident Form* becomes part of the student or faculty/staff's permanent record. This record is kept for duration of individual's time at university, plus 30 years in accordance with 29 CFR 1910.20.

SECTION G: Procedures for Evaluating Circumstances Surrounding Exposure Incidents

All exposure incidents shall be well-documented. Preventative measures to preclude incident type recurrence shall be instituted as they are determined. Completed forms shall be forwarded to the indicated review authorities.

A. USA Incident Report:

A Report or Accident/Incident Form (USAPUB 4417) shall be initiated for each exposure incident. It is the department chairperson's responsibility to ensure that this action is taken the following workday. This form is to be completed the **day of the incident** and immediately forwarded to the appropriate department chairperson for his or her review the **next working day.** Attach a *College of Allied Health Professions Student/employee Incident Report Routing Form* and send it to CAHP Dean's Office within two working days. These forms are available at the CAHP Biosafety web site.

The following information shall be indicated on this form or on an attached sheet:

- Name of exposed individual (including contact information)
- Type of first aid rendered to exposed individual.
- Location of incident (O.R., E.R., patient room, etc.).
- Affected body site (e.g. puncture area, including left or right side, if applicable).
- Route of exposure and how exposure occurred.
- Identify of exposure source (patient, student, etc.).
- On-site training supervisor initiating PEP protocol.
- Medical personnel contacted during PEP initiation (name, date, time, etc.).

B. Internal Investigation Report:

An "Evaluation of Circumstances Surrounding an Exposure Incident Form" (APPENDIX G) shall be filled out for each reported incident. This is an additional requirement to completing a USA incident report.

The following information shall be indicated on this form or on an attached sheet:

- Procedure being performed when incident occurred.
- Description of device being used at time of incident.
- Work practices followed.
- Personal protective equipment or clothing used at time of exposure.
- Engineering controls in use at time of exposure.
- Suggested changes to prevent a reoccurrence.
- Verification that PEP was offered.
- Hepatitis B vaccination status.
- Confirmation that BBP/TB training was current.

Note: No patient source information is documented on this form. This information is only documented it on the USA Report of Accident/Incident Form

Review is accomplished by the program clinical director/coordinator and department chairperson Send a coordination copy to the CAHP Biosafety officer.

References:

- 1. Occupational Exposure to Bloodborne Pathogens, Final Rule. 29 CFR Part 1910:1030, Department of Labor, OSHA, 12/6/91. Federal Register 56(235): 64175-64182.
- 2. Guidelines for prevention of transmission of human immunodeficiency virus and hepatitis B virus to health-care and public-safety workers. Centers for Disease Control and Prevention (CDC). Morbidity and Mortality Weekly Report (MMWR). R 1989;38(S-6):1-36.
- 3. Recommendations for Preventing Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Patients During Exposure-Prone Invasive Procedures. Recommendations and Reports MMWR. CDC, July 12, 1991 / 40(RR08);1-9.
- 4. Model Plans and Programs for the OSHA Bloodborne Pathogens and Hazard Communications Standards. U.S. Department of Labor, Occupational Safety & Health Administration http://www.osha.gov/sites/default/files/publications/osha3186.pdf. Accessed 25 September 2006.
- 5. USA College of Medicine Biosafety Manual and Exposure Control Plan (revised 10/2011).

Appendix A:

CAHP Faculty/Staff HBV Vaccination Policy Form

(To be completed and retained in departmental personnel files)

Name	Jag #
• • •	nay pose an occupational exposure risk to blood-borne ered HBV vaccination and have been informed that it is
Previous HBV Vaccination:	
shots. I have also been notified that compalways result in a protective immunity to	HBV vaccination series consisting of all three series pleting the entire HBV vaccination series does not HBV. I accept/decline (circle one) a CAHP offer of g. I have been informed that this testing is a
No Previous HBV Vaccination*	
I accept/decline (circle one) CAHP offer	of HBV vaccination.
supervisor when first available. I have als	vaccination series completion to my immediate o been advised that an HBsAg titer would need to be on of the last dose of the vaccine to prove immunity to
recommends this vaccination series to all pathogen HBV. Additionally, I was notifi	at I have been informed that CAHP strongly faculty/staff with potential exposure to the blood-borne ied that this testing is a reimbursable expense. I also on at a later date although unnecessary delays in
, , ,	I understand the information contained within this ortunity to ask questions concerning HBV vaccination
Faculty/Staff Signature:	JAG#
Date: Witness:	

^{*} Includes individuals starting but not completing entire three shot HBV vaccination series.

Appendix B:

CAHP Hepatitis B Virus (HBV) Student Vaccination Policy Form

(to be distributed to students at acceptance into their professional program) Name JAG#

I understand that as a College of Allied Health Professions (CAHP) student that I may have occupational exposure to blood-borne pathogens such as HBV during my training program. I have been advised by CAHP that I am required to complete a three shot HBV vaccination series as a condition of program entry. I also understand that proof of HBV vaccination needs to be submitted to my program director when first available. I acknowledge that completing the entire HBV vaccination series does not always result in a protective immunity to HBV. Consequently, I have been instructed to have an HBsAg titer performed 1-2 months after administration of the last dose of the vaccine to prove my immunity to HBV. I further understand that a titer is required if I had the complete series but did not have the specified 1-2 month follow up titer testing. Initials:

Vaccination exemptions:

I request an exemption from HBV vaccination due to a documented reason. I have been notified that granting of a HBV vaccination exemption may place me at risk of not completing all academic program requirements. I also understand that an affiliated training site may require proof of HBV vaccination prior to my entry into a clinical component. I have been advised that my inability to complete any or all required clinical component(s) will prevent program degree award. Initials:

Medical Exemption:

I have been advised to seek additional medical advice on the benefits & risks of HBV vaccination for my particular medical condition from an Infectious Disease specialist. I also understand that potential HBV exposure may be occur on a routine basis. Initials:

Personal Exemption:

I have been advised that granting of a HBV exemption (religious or other grounds) does not excuse me from performing required techniques and/or manipulations involving potential HBV exposure. I also understand that potential HBV exposure may be occur on a routine basis during my training program. *Initials:*

By signing below, I acknowledge that I understand the information contained within this document. I also acknowledged that I was given an opportunity to ask questions concerning HBV vaccination.

Student Signature:	Date:
Witnesses Signature (also print name):	

Notes:

- 1. All information regarding my health status will remain confidential.
- 2. HBV vaccine/titer testing is available from USA Student Health Services, family physician office, Public Health Department.

Appendix C:

Initial CAHP Occupational Exposure Risk Determination & Training Form

I have been informed that my job classification or training activities does/does not (circle one) involve potential exposure to bloodborne pathogens and other potentially infectious body fluids. If my position/training does involve such activities, I acknowledge that I have been informed of my exposure risk. I also understand that my department will provide initial occupational exposure training within first ten days of my employment/training start date. I further understand that I will be tested on these training materials must achieve an acceptable passing score.

I shall adhere to all applicable biosafety practices set forth in the CAHP Exposure Control Plan (ECP) in performance of my duties/training. I have been informed of department specific task(s), which may involve potential exposure to these infectious agents. I understand that my department shall provide me with appropriate task specific personnel protective equipment (PPE) and explicit instructions for its correct use. I acknowledge that I have also been informed that any changes in my duties/training resulting in increased exposure risk will require a reassessment of my PPE usage. I have also been shown where CAHP ECP is kept in my department.

I understand critical nature of these biosafety procedures and their application to my work duties/training. I have been given an opportunity to ask questions of my department chairperson concerning my work assignments/training activities. I also understand that my compliance with all biosafety program directives will help ensure a productive and safe working/training environment for my fellow students, faculty and/or staff in my department. Finally, I will immediately identify any noncompliant items to my department chairperson/instructor.

Name(print)	ID number:(JAG#)
Signature	Date
Department Chairperson	Date

File copy (maintained in):

Faculty/staff - CAHP personnel folder Students - department student file

Appendix D:

Postexposure Prophylaxis (PEP) Program

Scope & Responsibility:

Each CAHP department chairperson is responsible for ensuring that their faculty, staff, or students undergo a medical evaluation when an exposure incident to HIV, HBV, or HCV has occurred during training. This procedure applies to both academic laboratory and clinical environments when exposure to these agents is reasonably anticipated.

PEP Cards:

A wallet size Postexposure Prophylaxis (PEP) Program is given to each faculty, staff or student entering an at risk facility. This card is to be kept readily available during the entire rotation period. Upon request, students shall be required to present it to training personnel. An inability to produce this card will be reported to their clinical coordinator. The PEP wallet card contains information on:

- First aid
- Instructor response
- Department response
- Contact information
- Follow-up procedures

PEP Procedure:

Post-exposure Procedure:

Student/Employee:

Immediately wash needle stick injuries, cuts, or splashed area with copious amounts of soap and water (first aid). Eyes should be rinsed with water/saline.

- 1. Report <u>any</u> potential exposure to your training supervisor immediately after administering yourself first aid.
- 2. Mandatory requirements include student or employee blood work and an initial exposure evaluation by a PEP-trained provider, as is outlined below. Accepting PEP drug therapy is voluntary. However, you are strongly encouraged to take PEP for an exposure to blood or body fluids from a known HIV infected person as soon as it is offered.
- 3. Baseline student/employee laboratory work should include a complete blood count (CBC), renal and hepatic function tests, pregnancy test (if appropriate), Hepatitis B surface antibody (IgG), Hepatitis B core antibody (total), Hepatitis C antibody (total), and serum HIV screening test with reflex to confirmation.
- 4. Report incident and action taken to your academic department as soon as possible.
- 5. Medical questions, or concerns (e.g. treatment delay) not fully addressed by training site personnel can be discussed directly with on-call Infectious Disease (ID) physician specialist at USA by calling 251-471-7895 (Monday through Friday, 8 am 5 pm). After hours, call the USAMC operator at 251-471-7000. Identify yourself as an Allied Health Student with a training-incurred HIV exposure, your location, and the phone number at which you can be immediately reached by ID personnel.

Site Training Supervisor:

- 1. Initiate appropriate on-site PEP procedure. Procedural specifications are usually found in workplace Exposure Control Plan or Employee Health Plan. Currently recommended drugs for PEP are Combivir one po BID, and Isentress 400 mg one po BID. If there are questions at the local site about the appropriateness of PEP for an exposure, or if the above regimen is not available, please contact the USA ID physician specialist, as detailed above.
- 2. Students performing practicums within 2 hours travel time to USAMC should report directly Employee Health Monday through Friday between 7:30 am 3:30 pm and to the ER after hours and on weekends/holidays. If the student is more than 2 hours travel time from USAMC, students should be referred to affiliated institution's Employee Health Nurse, Trauma Care provider, or Infectious Disease specialist if practicum site is at a physician office or/clinic where on-site PEP is not available. Antiretroviral drugs should be administered with 4-hours post-exposure.
- 3. The following tests should be drawn on the SOURCE PATIENT: Hepatitis B surface antigen, Hepatitis B core IgM, Hepatitis C total antibody, and serum HIV screening test with reflex to confirmation.
- 4. Coordination of PEP with on-call University of South Alabama (USA) Infectious Disease Specialists is possible by calling the telephone numbers listed in Post-exposure Procedure *paragraph 6 above and Post-exposure Follow-up Program below*.

Post-exposure Follow-up Program:

If you believe that the clinical site is not initiating a PEP evaluation in a timely fashion you should call 251-471-7895 (Monday through Friday, 8 am - 5 pm). After hours, call the USAMC operator at 251-471-7000. Identify yourself to the on-call ID specialist as a USA Allied Health student with a training-incurred potential HIV exposure. The on-call USAMC ID Specialist can order an "exposure prophylaxis kit", which provides a 72-hour regimen of antiretroviral drugs. The kit enables a timely start of PEP so that need for continuing PEP can then be assessed. The student/employee should also notify his or her USA academic department that he/she has entered the USAMC follow-up program.

Contact Information:

Day time and after-hours department contacts and phone numbers are listed on the wallet card. All information is updated annually.

Appendix E:

Bloodborne Pathogens Training Record Checklist

I have received an explanation of:

Item	Statement	Yes	No
1.	CAHP exposure control plan (ECP) and where to locate a copy.		
2.	Department-specific tasks/activities that may result in potential exposure to blood and other OPIM*.		
3.	My potential for exposure to bloodborne pathogens (BBP).		
4.	Use and limitations of available engineering controls and work practices.		
5.	Department-specific PPE types, uses, location and task-specific PPE selection.		
6.	Procedures for removal, handling, decontamination, and disposal of biological waste.		
7.	CAHP hepatitis B vaccination policy and possible consequence of declining vaccination (students only).		
8.	Incident reporting method and suggested medical follow-up.		
9.	Department-specific warning signs and/or labels designating at-risk exposure areas.		
10.	Requirement to complete the CAHP bloodborne pathogens on-line training module with a minimum score of 80%.		

By signing below, I also acknowledge that I have been given an opportunity to discuss any question concerning these materials with my trainer.			
Faculty/Staff or Student Signature	Date		
Instructor Signature	Date		
* OPIM = other potentially infectious materials			

Appendix F:Waste Disposal Requirements

Waste Containers/Sample Type	Sharps container	Biohazard labeled bags	Autoclave bags (non-biohazard marked)	Regular waste bags (non- biohazard marked)	Broken glass container
Disposal Method	Hazardous waste removal pickup	Hazardous waste removal pickup	Autoclave then regular waste bags for housekeeping pickup	Transfer to Regular waste bags for housekeeping pickup	Housekeeping pickup
Biohazard materials:					
Blood, blood elements, vials of blood, and any fluids containing blood.		X			
Tubes, slides, biological reagents, pipette tips and any other materials, if visibly contaminated with blood.		X			
CSF, synovial, pleural, pericardial, amniotic fluid containers, if visibly contaminated with blood.		X			
Needles, catheters (IV), sharp metal objects.	X				
Phlebotomy/IV materials - gauze, wipes, syringe units.		X			
Used gloves, disposable aprons, masks, shoe covers, if visibly contaminated with blood.		X			
Non-biohazard materials:					
 Uncontaminated glass and plastic, stained glass slides, reagent vials and broken glassware (caustic materials must be rinsed off). 					X
Uncontaminated materials including paper towels, wipes, computer paper and miscellaneous packing and trash materials.				X	
Paper towels for hand washing.				X	

Appendix G:

Evaluation of Circumstances Surrounding an Exposure Incident Form

Name: (student, employee)	Department:
Incident location: (facility name, address)	Incident date:
Procedure being performed:	<u>'</u>
Description of device being used (including type/ brand):	
Work practices followed: (see ECP p.9.)	
PPE or clothing in use: (gloves, eye shields, etc.)	
Engineering controls in use: (see ECP p.9.)	
Suggested changes to prevent reoccurrence? (list procedural changes that will decrease risk)	
PEP verification: (explain any No responses on reverse of form)	Yes No
 Was an exposure risk determination performed? Were baseline labs drawn on exposed individual? Was PEP offered by the training facility? 	
HBV vaccination status:	
Vaccine series completed? (yes) (no) or Titer completed: BBP/TB training confirmation:	onfirmed (yes) (no)
(date completed) BBP training date TB	B training date
Person completing form:	
Printed name:	Title:
Signature:	Date:
Reviewed by:	
Clinical Director/Coordinator:	(Date)
Department Chairperson (Signature)	· · · ·
(Signature) Send a copy to CAHP Biosafety Officer	(Date)

26

Summary of Changes

Date	Area/Section	Change
11/14/07	Appendix D: Postexposure Prophylaxis (PEP) Program/ Departmental Points of Contact:	Section re-designated as "Postexposure Notification Contacts". Notification process & dept. responsibilities delineated. Table containing specific department contact points removed & will only appear in wallet PEP card.
08/01/08	Sections A & E (Table 1.)	Department of Emergency Medical Services was added.
09/22/08	Abbreviations & Glossary Of Terms	Areas were moved to the front of the document.
12/01/09	Sections A & E (Table 1.)	Department of Clinical Laboratory Sciences was deleted (effective 12/31/09)
12/03/09	Appendix D	Postexposure Prophylaxis (PEP) wallet card information was removed from ECP and posted at CAHP Biosafety website.
11/30/10	 Program Scope & Responsibilities Appendix E SECTION C: Hepatitis B Virus (HBV) Vaccination Policy 	 College title change reflected. Consolidated and/or removed duplicate task list items. Mentioned Twinrix, a combination hepatitis A and B vaccine.
12/11/11	 Section D (Required documentation, p. 14) SECTION E: Communication Of Hazards To Employees And Training Appendix C SECTION G: Procedures for Evaluating Circumstances Surrounding Exposure Incidents Appendix F PPE - Table 1. Appropriate Task-Specific PPE (all departments) Appendix G 	 Hyperlink to Employee Accident/Incident Report Form (USAPUB 4417) included. Extensively revised to indicate conversion to web-based training. Title changed to "Initial CAHP Occupational Exposure Risk Determination & Training Form" Revised to indicate coordination route of supplemental PEP incident information (Appendix G). Removed blood culture, sputum, & urine samples from Waste Disposal Requirements. Modified to include basic EMS-PPE requirements Evaluation of Circumstances Surrounding an Exposure Incident form added.
11/29/12	Table 1. Appropriate Task-Specific PPE (all departments)	Newborn delivery added to PPE list
11/29/12	SECTION E: Communication Of Hazards To Employees And Training	Remedial training was addressed.

Date	Area/Section	Change
11/29/12	SECTION G: Procedures for Evaluating Circumstances Surrounding Exposure Incidents	USA Incident Report information was moved from SECTION D (PEP) to consolidate with requirement for an Evaluation of Circumstances Surrounding an Exposure Incident Form.
11/29/12	Appendix E: Bloodborne Pathogens Training Record Checklist	Completely revised.
11/21/13	SECTION D: Post-Exposure Prophylaxis (PEP) Evaluation and Follow-Up	Consolidated faculty/staff & student requirements in section A. Moved cost & treatment information into new sections B & C.
11/21/13	SECTION F: Record Keeping	Incident Form Retention area added to specify required actions.
11/21/13	Appendix G: Evaluation of Circumstances Surrounding an Exposure Incident Form	Suggested changes to prevent reoccurrence, PEP verification, and BBP/TB training confirmation areas were added. Signature blocks were also added.
11/22/13	SECTION G: Procedures for Evaluating Circumstances Surrounding Exposure Incidents	Procedures for handling USA Incident/Accident Report and Internal Investigation Report delineated.
12/13/13	Appendix D: Post-exposure Prophylaxis (PEP) Program	New mandatory post-exposure lab testing and provider evaluation elements were added.
12/09/14	Table 1. Appropriate Task-Specific PPE (all departments)	Gown was added to "Lab coat or apron heading".
12/09/14	Appendix F: Waste Disposal Requirements	Empty urine sample cups & Microbiologic cultures, used culture plates and disposable kits/tubes bullets were deleted.
12/17/15	Appendix B: CAHP Hepatitis B Virus (HBV) Student Vaccination Policy Form	Added requirement for an HBsAg titer performed 1-2 months after administration of the last dose of the vaccine to prove student immunity to HBV.
12/17/15	Appendix D: Postexposure Prophylaxis (PEP) Program	Program information updated to current 2015-16 academic year.
12/09/16	Glossary	Bloodborne pathogens definition expanded to include hepatitis C (HCV).
12/09/16	Appendix D: Post-exposure Prophylaxis (PEP) Program	HIV confirmatory testing by ELISA with Western blot confirmation changed to "serum HIV screening test with reflex to confirmation".
12/13/17	No changes required.	N/A
12/14/18	No changes required.	N/A
12/19/19 12/16/20	No changes required. Group 1 - Job Classification (page 7).	N/A Cardiorespiratory Care was removed from Group 1 due to department closure.

Coordination/Review Page

Coordination:

- Accepted by CAHP Biosafety Committee 23 October, 2006
- Accepted by CAHP Dean 31 October, 2006

Note: File copy is signed & dated.

Annual Review (CAHP Biosafety Office	cer)
Signature	Date
Signature	Date