Carroll College PA Program
Environmental and Infectious Exposure Policy

Overview
Physician Assistant (PA) students may be exposed to various environmental and infectious hazards in clinical and academic settings. These may include exposure to bloodborne pathogens, airborne or droplet-transmitted diseases, hazardous chemicals, sharps injuries, and other occupational health risks

Purpose
This policy outlines the procedures and responsibilities for managing environmental and infectious disease exposures during clinical and educational activities. It is intended to promote student safety, ensure timely and appropriate medical evaluation and follow-up, and meet institutional, legal, and accreditation requirements.

Scope
This policy applies to all Physician Assistant (PA) students participating in educational activities, including classroom, laboratory, simulation, and clinical settings. It is the policy of the Carroll College PA program that all exposures are to be handled according to CDC and OSHA recommended guidelines (see Appendices 1 and 2 at the end of this document).

1. Exposure Expectations
Students are expected to behave in a professional, safety-conscious manner throughout the program. Situations that may pose an exposure risk include participation in physical examination labs, laboratory sessions involving bodily fluids, simulation activities, and all clinical rotations.

Program Responsibilities
To promote student safety and compliance, the PA Program will provide students with orientation and education regarding prevention and management of exposures.

a. All PA students will receive OSHA-based training during new student orientation and prior to going out on clinical rotations. This training will include:
- Bloodborne pathogens
- Standard and transmission-based precautions
- Personal protective equipment (PPE)
- Needlestick and sharps safety
- Hand hygiene and infection control

b. Additional site-specific training may be required before or during clinical rotations.

c. Assist the student in navigating post-exposure follow-up, when needed.

d. Maintain documentation of the incident and ensure compliance with follow-up procedures.

e. Respect the student's privacy and maintain confidentiality in accordance with FERPA and HIPAA.

Student Responsibilities

To ensure the safety of students and patients, all students must:

a. Adhere to standard precautions and all infection prevention protocols.

b. Comply with all site-specific infection control policies and procedures, including the use of personal protective equipment (PPE).

c. Follow all safety procedures required by the PA Program and clinical sites.

d. Promptly report all incidents involving environmental or infectious exposure.

e. Maintain up-to-date immunizations and screenings, including those required by clinical sites (e.g., Hepatitis B, TB screening, Influenza, COVID-19).

f. Maintain active health and liability insurance throughout enrollment.

Failure to comply with safety protocols may result in disciplinary action, up to and including removal from the clinical site or delay in program progression.

2. Incident Response Policy

Definition of Exposure

An environmental or infectious exposure includes, but is not limited to:

- Needle sticks or sharps injuries
- Contact with blood, body fluids, or other potentially infectious materials
- Exposure to airborne or droplet-transmitted pathogens (e.g., TB, COVID-19)
- Exposure to hazardous chemicals or radiation in clinical or laboratory settings

Immediate Actions Following Exposure (See more details under Prevention and Care)

Any student on clinical rotations subject to an exposure at the clinical site (i.e., via blood or body fluid exposure, or needle stick) should do the following:

1. **Perform first aid** (e.g., wash area with soap and water, flush eyes).
2. **Notify the clinical preceptor and site supervisor** immediately. If the incident takes place during the didactic year, notify the course director immediately.
3. **Follow the site's exposure response protocol**, which may include:
    - Medical evaluation
    - Baseline and follow-up laboratory testing
    - Post-exposure prophylaxis (PEP), if indicated
4. **Contact the PA Program** as soon as safely possible (within 24 hours) to report the exposure and begin institutional reporting procedures.
5. The program will ensure the student is appropriately informed and receives appropriate CDC recommendation guideline care, but the student is responsible for setting up follow-up appointments/care.

Costs and Insurance

- The student is responsible for all costs associated with evaluation, treatment, and follow-up of exposure incidents.
- Students must carry **health insurance** throughout the program. Students are responsible for all costs related to any exposures.
- The PA Program and its affiliated sites are not responsible for covering these medical costs

Return to Participation

Clearance to return to clinical duties must be obtained from the treating provider, in coordination with the clinical site and the PA Program. Modifications to the student's schedule or placement may be made based on medical recommendations or public health concerns.

Appendix 1 Prevention and Post exposure Care

Hepatitis B

The three-dose HepB vaccine series produces a protective antibody response (anti-HBs > 10 ml/U/mL) in > 90% of healthy adults < 40 years-old. Factors such as smoking, obesity, aging, chronic medical conditions, drug use, diabetes, male sex, genetic factors, and immune suppression contribute to a decreased response to the HepB vaccine.

All PA Students are required to complete the HepB vaccine series**. Students must provide proof of HepB vaccination and proof of immunity with a qualitative or** 60 **quantitative anti-HBs titer prior to matriculation**.

Any PA Program student with an occupational exposure is required to seek medical attention immediately to prevent delays in treatment. The management of a healthcare worker with an occupational exposure to HBV depends on the anti-HBs status of the healthcare worker and the HBsAg status of the source patient. The healthcare worker should be tested for anti-HBs and the source patient (if known) should be tested for HBsAg as soon as possible after the exposure. More detailed management recommendations are listed in "Table 1".

Hepatitis C Virus (HCV)

Healthcare workers can acquire HCV infection through needle stick injuries or other occupational exposures. Needle stick injuries in the healthcare setting result in a 3% risk of HCV transmission. Symptoms of acute HCV infection, such as arthralgias, myalgias, pruritis, paresthesia, can occur within six months after exposure to HCV. Most people with acute HCV infection develop chronic HCV infection.

Transfusion of blood contaminated with HCV was the leading mode of transmission prior to screening of donated blood for HCV antibody beginning in 1992. More advanced screening tests for HCV have reduced the risk of HCV transmission through blood transfusion to less than one per two million units transfused. People who inject illicit drugs with nonsterile needles are at the highest risk for HCV infection. HCV may also be transmitted via sexual contact, tattooing, sharing razors, and acupuncture. HCV transmission may occur during the birth process, but breastfeeding is not associated with HCV transmission.

It is the policy of the PA Program to follow CDC and OSHA guidelines to prevent transmission of HCV in the healthcare setting. PA Program students are to follow standard precautions and assume that all blood or body fluids are potentially infectious. These guidelines include the following:

- Routine use of personal protective equipment (such as gloves, face and eye shields, and gowns) when anticipating contact with blood or body fluids.
- Immediately washing of hands and other skin surfaces after contact with blood or body fluids.
- Careful handling and disposal of sharp instruments during and after use.
- Careful use of safety devices developed to help prevent needlestick injuries.

Any PA student with an occupational exposure is required to seek medical attention immediately to prevent delays in treatment. HCV can be detected in the blood within one to three weeks after exposure. There is currently no vaccine to prevent HCV. Treatment of acute HCV can reduce the risk of progression to chronic HCV. Recommendations for pharmacologic therapy vary and management by a specialist is recommended.

Hepatitis D Virus (HDV)
HDV can be transmitted via percutaneous or mucosal contact with HDV-infected blood. Any PA Program student with an occupational exposure is required to seek medical attention immediately to prevent delays in treatment. There is no vaccine for HDV but HepB vaccination can prevent HDV infection.

HIV
It is the policy of the PA Program to follow CDC and OSHA guidelines to prevent transmission of HIV in the healthcare setting. PA Program students must follow standard precautions and assume that all blood or body fluids are potentially infectious. These guidelines include the following:

- Routine use of personal protective equipment (such as gloves, face and eye shields, and gowns) when anticipating contact with blood or body fluids.
- Immediately washing of hands and other skin surfaces after contact with blood or body fluids.
- Careful handling and disposal of sharp instruments during and after use.
- Careful use of safety devices is developed to help prevent needle stick injuries.

Needlestick and Bloodborne Pathogen Risk Factors

(Protocol for Needlesticks Bloodborne Infectious Disease Risk Factors | Healthcare Workers | CDC)

Healthcare workers can be exposed to Hepatitis B, Hepatitis C and HIV. Exposures can occur by: a needlestick puncture, another type of sharps injury or contact with the patient's blood or body fluids.

Prevention

Personal protective equipment

Administrative and engineering controls are preferred methods of protecting healthcare workers. However, using personal protective equipment (PPE) such as gloves are a part of routine care with patients. When protecting against bloodborne pathogens, PPE includes:

- Facial protection
  - Masks or face shields
  - Respirators
- Eye protection
  - Goggles or glasses with side protection
- Gloves
- Gowns and other protective clothing

Utilize sharps-free equipment to prevent exposures such as sharps injury protection devices which include needles that retract or covered by a shield.

Treatment per CDC guidelines

Wash puncture wounds, blood, or other bodily fluids with soap and water.
Provide immediate care after exposure by taking the following steps:

- Wash needlestick or sharp punctures and cuts with soap and water.
- Flush splashes to the nose, mouth, or skin with water.
- Irrigate eyes with clean water, saline, or sterile irrigants.
- Report the incident to your course director/preceptor

Immediately seek medical care to determine risk associated with the exposure.

Post-exposure prophylaxis

Healthcare providers or workers should deliver post-exposure prophylaxis (PEP) for exposures posing infection transmission risks.

- **HBV**
  - Give PEP as soon as possible, preferably within 24 hours.
  - PEP can be given to pregnant women.
- **HCV** – PEP is not recommended for HCV.
- **HIV**
  - Initiate PEP as soon as possible, within hours of exposure.
  - Offer pregnancy testing to all women of childbearing age even if they are not known to be pregnant.
  - Seek expert consultation if viral resistance is suspected.
  - Administer PEP for 4 weeks if tolerated.

Perform follow-up testing and provide counseling.

- **HBV exposures**
  - Test for anti-HB 1 to 2 months after the last dose of the vaccine if only a vaccine is given.
  - Follow-up is not needed if the exposed person is immune to HBV or has received hepatitis B immune globulin PEP.
- **HCV exposures**
  - Perform testing for anti-HCV and alanine transaminase 4 to 6 months after exposure.
  - Perform HCV RNA testing at 4 to 6 weeks if an earlier diagnosis of HCV infection is desired.
  - Confirm repeatedly reactive anti-HCV enzyme immunoassays with supplemental tests.
- **HIV exposures**

- Evaluate exposed persons taking PEP within 72 hours after exposure and monitor them for drug toxicity for at least 2 weeks.
- Perform HIV antibody testing for at least 6 months post-exposure (e.g., at baselines of 6 weeks, 3 months, and 6 months).
- Perform HIV antibody testing for illness compatible with an acute retroviral syndrome.
- Advise using precautions to prevent secondary transmission during the follow-up period.

Contagious Illnesses

- Always exercise universal precautions with all patients.
- If any contagious pathogen is identified at the facility where you are being precepted, contact the Director of Clinical Education for further directions to determine the safety risk and necessary actions to maintain your safety. The Director of Clinical Education will guide you through CDC/OSHA recommendations for such exposure. If the exposure occurs during the didactic phase, contact the Program Director, who will guide you through the process.
- In the event of your exposure to a contagious pathogen, notify your preceptor at once. Follow the hospital's exposure protocols.
- A student may be excused from didactic classes or a SCPE to minimize exposure to others. The Program Director (Didactic Phase) or the Director of Clinical Education, Clinical Site and/or Clinical Preceptor (Clinical Phase) will discuss an appropriate date of return to class/SCPE with the student. All time away from the Didactic Phase or Clinical Phase of your education must be made up, which may cause a delay in graduation or exceed the maximum 54 months required for completion of training.
- All students are to obtain and provide proof of an annual Flu vaccine which is to be done by October 15 of the clinical year. COVID-19 boosters should be completed prior to going out on clinical rotations.
- Any student displaying "Flu-like," or COVID-19 symptoms should notify their preceptor, and Director of Clinical Education. They should not enter the facility or office. To minimize viral spread and to promote the health and the well-being of the student. Students with COVID-like illness will temporarily stop all clinical activities until symptoms are resolved. The exact timeframe of return to clinical activities will be determined by collaborative communication with the student, the Director of Clinical Education and the preceptor.
- Tuberculosis: All students are to have an annual negative PPD screening within 3 months are starting clinical rotations. Students with known TB exposure during a clinical rotation are to follow the office/hospital protocol for reporting the exposure and are to contact the Director of Clinical Education for guidance on exposure recommendations.

Latex

A latex allergy can develop from wearing latex gloves frequently. Latex proteins become fastened to the lubricant powder in the gloves. When gloves are changed, the protein/powder particles become airborne and can be inhaled. The most common reaction to latex products is

irritant contact dermatitis. Other symptoms of latex allergy include itchy eyes, rhinorrhea, sore throat, respiratory symptoms, and rarely, shock.

Prevention
Latex allergy: a prevention guide

Appropriate barrier protection is necessary when exposure to bloodborne pathogens or other infectious agents is anticipated. The use of powder-free gloves with reduced protein content will reduce exposure, and subsequent sensitization, to latex. After removing latex gloves, wash hands with mild soap and dry thoroughly. “Hypoallergenic” latex gloves may reduce reactions to the chemical additives in the latex. When wearing latex gloves, do not use oil-based hand creams or lotions (which can cause glove deterioration). Practice good housekeeping: frequently clean areas and equipment contaminated with latex-containing dust.

If any student develops a latex allergy, they should seek medical attention.

Appendix 2

ACCIDENT REPORT FORM

(To be completed by the student immediately following the incident and submitted within 48 hours)

Student Information

Student Name: _____ Faculty Notified: _____

Incident Details

Date of Incident: _____ Time of Incident: _____

Exact Location of Incident: _____

Description of Incident

(Provide a detailed, objective account of the incident. Include events leading up to the incident, what occurred, and immediate aftermath.)

Individuals Involved

(List all individuals present and/or involved at the time of the incident, including faculty, preceptors, clinical staff, and patients.)

Patient Involvement (if applicable)

Reason the patient was receiving care at the time of the incident:

Immediate Actions Taken

(Describe all steps taken immediately after the incident, including first aid, notifications, or protective actions.)

Medical Evaluation / Treatment

Name(s) of provider(s) consulted: _____

Treatment provided and/or planned: _____

Facility Reporting

Was a facility incident report completed? ☐ Yes ☐ No

If yes, where was it filed? _____

Planned Follow-Up

(Outline any follow-up care, evaluations, or additional reporting required.)

Acknowledgement

Name of Preceptor (Printed): _____Date: _____

Signature of Clinical Instructor / Preceptor: _____

Table 1

HCP status	Post-exposure testing		Post-exposure prophylaxis		Post-vaccination serologic testing
	Source patient	**HCP testing**	**HBIG**	**Vaccination**	
Documented responder after complete series	No action needed				
Documented non-responder after two complete series	Positive/unknown				
	—	HBIG x2 separated by 1 month	—	n/a	
	Negative	No action needed			
Response unknown after complete series	Positive/unknown	<10 mIU/mL	HBIG x1	Initiate revaccination	Yes
	Negative	<10 mIU/mL	—	Initiate revaccination	Yes
	Any result	≥10 mIU/mL	—	—	—
Unvaccinated/incompletely vaccinated or vaccine refusers	Positive/unknown	—	HBIG x1	Complete vaccination	Yes
	Negative	—	None	Complete vaccination	Yes