

Office of Research Operations, Integrity, and Compliance

Research Laboratory Emergency Response Procedures

Office of Research Operations, Integrity, and Compliance 3200 Cold Spring Rd, Marian Hall 210 Indianapolis, IN, 46222 Phone: 317-955-6521 Email: research@marian.edu Dear Research Laboratory User,

This document is written and intended to provide instructions on what to in case of emergency while in Marian University's research labs. It is written to both complement and bolster the emergency procedures outlined by Marian University's Campus Safety department. During major emergencies, dial 317-955-6789 or 911 first, prior to following any other steps. During a campus-wide emergency, Campus Safety will provide notification by building coordinator, campus voice mail, campus e-mail, and/or text message.

This manual contains procedures specific to the research laboratories, which are currently limited to Marian University's Indianapolis campus. For general emergency procedures on Marian University's Indianapolis campus, please follow the procedures outlined in the Emergency Procedures Handbook, available on the Marian University Campus Safety webpage. For Marian University's Ancilla College, please see the Emergency Procedures linked here.

It is the goal of the Research and Scholarship Administration (RSA) team through the Office of Research Operations, Integrity, and Compliance to ensure the safety of all faculty, staff and students while in the research and instructional laboratory spaces. To avoid emergency situations, please ensure to follow all provided standard operating procedures while in the laboratories. If any incidents outlined in these procedures should occur, please fill out an incident report to the Research and Scholarship Administration as soon as possible after the risk and emergency have been mitigated.

Sincerely,

Director of Research Safety & Risk Management

Director of Research Operations & Compliance

On behalf of the Research & Scholarship Administration:

Assistant Provost for Research & Scholarship

On behalf of the Division of Academic Affairs:

<u>Ulan J. July</u> Executive Vice President & Provost

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Fire Alarm Policy

Introduction:

For a fire to occur, there must be three elements present. These three things are: oxygen, heat, and fuel. Fires are extinguished by removing one of these three elements of the fire triangle.

There are four types of fires:

- a. Class A- ordinary combustibles: wood, paper, cloth, trash, plastics
- b. Class B- flammable liquids (and gasses): gasoline, oil, grease, acetone
- c. Class C- electrical fires: energized electrical equipment (unplugged equipment falls into class A)
- d. Class D- metals: sodium, potassium, magnesium, alkali metals, metallic hydrides, etc.

Not all fire extinguishers are the same. The fire extinguisher used should be determined based on the type of fire. There are five types of fire extinguishers:

- a. Air Pressurized Water (APW) Extinguishers- is for Class A fires only
- b. Carbon Dioxide (CO2) Extinguishers- is designed for Class B and Class C fires
- c. Dry Chemical Extinguishers- have several types, including: DC short for "dry chem," ABC, which extinguishes Class A, B and C fires, and BC indicating that they are designed to extinguish only Class B and C fires.
- d. Class D Extinguishers- for the Class D fires of burning metals.
- e. Class K Extinguishers- for use in kitchens on fires that were started from cooking oils or fats.

All Marian University research laboratories will be equipped with a Dry Chemical ABC fire extinguisher secured next to each emergency exit. User must know and be able to locate where these fire extinguishers and fire alarms are within each laboratory space during your lab safety tour.

For individuals with disabilities or physical limitations that are either temporary or permanent, please follow the <u>evacuation procedures for disabled persons</u> on the Marian University Campus Safety website.

Procedure:

If there is a fire in the laboratory or building, please follow the following steps:

- 1. Activate the building fire alarm and call 317-955-6789 or 911. If you are unable to call 911, designate someone to do so.
- 2. If your person is in immediate danger, use fire extinguisher to clear a pathway to the emergency exit if necessary, and get out of the laboratory and building. Evacuate the building and go to the fountain at the center of campus.
- 3. If your person is not in immediate danger, assist any person in immediate danger to safety *if* it can be accomplished without risk to yourself.

- 4. Use a fire extinguisher to put the fire out <u>only if</u> the fire is small, minor, and you feel it can be controlled without endangering others. If the fire has been extinguished and campus police were not called call 317-955-6789 at that time. Do not attempt to put out the fire with a fire extinguisher if you have not been trained. Untrained users can use a fire extinguisher to <u>clear an escape path</u>. Untrained individuals *cannot* use a fire extinguisher to <u>fight</u> a fire.
- 5. Do not use the elevators in the building while the fire alarm is sounding.

How to use a fire extinguisher with the "PASS" method:

- 1. Pull the pin
- 2. Aim at the base of the fire
- 3. Squeeze the top handle or lever
- 4. Sweep from side to side to clear an escape path

If clothing is on fire, use the stop, drop, and roll method:

- 1. Stop moving
- 2. Drop onto the floor
- 3. Roll on the floor to smother the flame
- 4. If the fire is a Class A fire, drench with water in an emergency shower or hose
- 5. Seek medical attention if necessary

To reference Marian University Campus Safety's Emergency Fire Procedures, please visit this <u>link</u>.

Emergency Evacuation Routes

For Marian University – Indianapolis evacuation procedures, please visit the link <u>here</u>. The Marian University Campus Map (2023-2024) is linked <u>here</u>.

Michael A. Evan's Center 320 Lab:

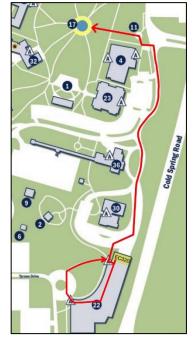
- In accordance with Marian University Campus Safety's evacuation policy, the route(s) depicted to the right can be used to evacuate from the Evan's Center 320 laboratory.
- If evacuation of the lab is required, exit the laboratory through the emergency exit.
- If building evacuation is necessary, activate the fire alarm to alert other occupants in the building to evacuate.
- Use the nearest stairwell beside the elevator at the East end of the building to evacuate the building. If these stairs are blocked, use the staircase in the center of the Evan's Center building. Do not use the elevators.
- Once outside of the building, use the escape route to meet at the fountain in the center of campus.
- Once at the fountain, perform a head count of all laboratory members to ensure everyone is accounted for.

Marian Hall 151 Lab:

- In accordance with Marian University Campus Safety's evacuation policy, the route(s) depicted to the right can be used to evacuate from the Marian Hall 151 laboratory.
- If evacuation of the lab is required, exit the laboratory through the emergency exits.
- If building evacuation is necessary, activate the fire alarm to alert other occupants in the building to evacuate.
- Use the nearest stairwell on the West side of the building, next to the E.S. Witchger School of Engineering Center, or the stairwell next to the chapel to exit the building.
- Once outside of the building, use the escape route to meet at the fountain in the center of campus.
- Once at the fountain, perform a head count of all laboratory members to ensure everyone is accounted for.

Prior to an emergency evacuation, all laboratory personnel should be knowledgeable of:

- Two escape routes out of the building
- The nearest fire extinguishers





- The closest fire alarm(s)
- Where the post-evacuation destination is
- The nearest emergency shower(s), eyewash station(s), and automated external defibrillator are.

Engineering Controls Emergency Safety Equipment

Biosafety Cabinets:

A biosafety cabinet (BSC) is a means of primary containment to prevent the user from coming into contact with infectious microorganisms. There are three levels of biosafety cabinets in the United States. Most class II and III biosafety cabinets utilize high efficiency particular air (HEPA) filters. The most common biosafety cabinet used in laboratories is a Class II cabinet. There are several different types of Class II biosafety cabinets: Type A1, A2, B1, B2, and C1. For differences between types, please visit the Biosafety in Microbiological and Biomedical Laboratories (BMBL) 6th Edition, Appendix A.

To safely operate a biosafety cabinet:

- 1. Start Up:
 - a. Ensure that the proper personal protective equipment is worn at all times while using the biosafety cabinet. This may be dependent on the type of hazards present, but should include gloves, laboratory coats, and eye protection.
 - b. Before beginning work, inspect the biosafety cabinet for any indications of visible damage or contamination. Check that all alarms and indicators are working properly.
 - c. Clean and disinfect the work surface and interior of the biosafety cabinet using an appropriate disinfectant, following disinfecting standard operating procedures. If needed, please reference the <u>Laboratory Equipment Decontamination SOP</u>.
 - d. Turn the UV light off (if used), and turn the fluorescent light on.
 - e. Turn the cabinet on, and allow it to run at least 10-15 minutes for optimum airflow and cleanliness. Some cabinets may alarm until this purge of particulates has been completed.
 - f. Verify that the sash does not exceed the recommended height, and ensure that the sash alarm is on.
 - g. Verify that the drain valve underneath the cabinet is closed.
 - h. Ensure that the cabinet's certification has been inspected within the last year.
 - i. If present, note the pressure differential gauge reading, and compare it against the calibration set point. Verify that inward flow is occurring with a tissue test or smoke pencil.
 - j. Maintain a clutter-free space when working within the biosafety cabinet, and ensure that arms and elbows remain clear of the vents as to not disturb the laminar airflow.
- 2. Safe Usage:
 - a. Wipe the external surfaces of equipment and supplies that are needed to be placed in the BSC.
 - b. Place materials as far back in the cabinet as practical without blocking any vents or rear grilles.
 - c. Separate clean and sterile items from dirty or potentially contaminated items, and work from clean to dirty to minimize cross-contamination.
 - d. One person at a time should be utilizing the cabinet. If two people need to work in the BSC, use a 6-foot cabinet and document the protocol-driven need that required two people when a risk assessment is being performed.

- e. Move slowly in and out of the BSC, in best efforts not to disturb the airflow.
- f. Protect the vacuum with a filter if using the vacuum filtration.
- g. Ensure that the stool and bench height is appropriate to ensure the face is above the bottom of the sash, and arms enter the cabinet at 90-degree angles. Armpits should be level with the bottom of the sash. Use a foot rest if necessary to ensure that both feet are grounded.
- h. Discard all waste into a biohazard bag inside of the BSC.
- 3. Shut-down Procedures:
 - a. Do not turn the cabinet off while removing items and decontaminating the cabinet.
 - b. Decontaminate the exterior surfaces of biohazardous waste bags, containers, and lab materials prior to removal.
 - c. Clean and decontaminate the surfaces within the cabinet, including the sidewalls, back wall, inside of sash and work surface.
 - d. Remove gloves that were in use, and dispose of them in accordance with the biohazardous waste management program.
 - e. Turn the fluorescent light and blower motor switches off.
 - f. Turn the UV light on, and close the sash while the UV light is on. Do not leave the light on longer than 15 minutes, as this could cause the bulb to burn out much more quickly.
 - g. Wash hands after cleaning up, and before exiting the laboratory.

➢ Fume Hoods:

A fume hood is a ventilated enclosure that keeps gasses, vapors, and fumes and other volatile fumes, to prevent these compounds away from the user's face, and prevents these fumes from escaping into the rest of the laboratory. The chemical fume hood is one of the most useful engineering controls in reducing the exposure to hazardous materials.

To safely operate a chemical fume hood:

- 1. Prior to beginning work:
 - a. Ensure the chemical fume hood has passed inspection, and that the inspection is not expired.
 - b. Check the air flow of the fume hood after turning it on with an indicator or tag, to ensure the air flow is moving inwards properly.
 - c. Work at an appropriate sash height. Always work with the smallest sash height possible, and prevent sudden movements that could cause turbulence.
 - d. If there is not adequate air flow, close the sash all of the way, and hit the "emergency purge" button on the flow meter. This should increase the airflow about two to three times than the current flow rate.
- 2. Avoid crowding the fume hood with items while in use. Avoid storing items that could block the vents or the airflow.
- 3. All work should be done at least 6 inches inside the hood. Items too close to the sash can cause turbulence.
- 4. Leave the chemical fume hood on after completing work to prevent the exposure of chemical fumes into the laboratory. Leave running for at least 2 hours after use to ensure

all of the fumes have exited the laboratory. When finished working, close the sash to the fume hood all of the way while it is still running.

- 5. The sash does not substitute for appropriate PPE while using the fume hood. Wear appropriate face protection as required.
- Emergency Safety Stations:

Each research laboratory is equipped with an emergency eyewash and shower. Do not store any items inside the yellow and black striped caution tape. Ensure the pathway is clear at all times from benches, biosafety cabinets, and other areas to the emergency safety station. The first 10-15 seconds after exposure to a hazardous product are critical, especially a corrosive product, so do not delay if you had exposure with a hazardous substance. Move as quickly as you can to the nearest safety station.

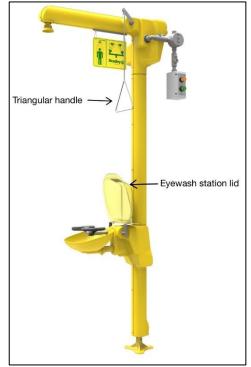
Follow the Emergency Eyewash and Shower Maintenance SOP on the Research and Scholarship Administration canvas page if maintenance is needed (linked <u>here</u>).

Michael A. Evan's Center 320 Lab:

In Evan's Center 320 Lab, there is a Bradley Emergency Safety Station (featured in the image to the right). Do not store any items inside the yellow and black striped caution tape. Ensure the pathway is clear at all times from benches, Biosafety cabinets, and other areas to the emergency safety station. The first 10-15 seconds after exposure to a hazardous product are critical, especially a corrosive product, so do not delay if you had exposure with a hazardous substance. Move as quickly as you can to the nearest safety station.

To use the Bradley Emergency Safety Shower:

- 1. Pull the metal triangular handle down hard
- Remove all affected articles of clothing, including your lab coat, and any other articles that may have been affected by a spill (put modesty aside). If someone is present, allow them to help you get these articles off quickly.



3. The time frame spent rinsing is dependent on the type of substance that you were exposed. The Safety Data Sheet (SDS) should provide this information should an exposure occur. In general, these are estimated time frames for rinsing: if an exposure occurred with a non-irritant or mild irritant, rinse in the safety shower for approximately 5 minutes. If the spill was a moderate to severe irritant, and for chemicals that cause acute toxicity through the skin, remain in the safety shower for 15-20 minutes. For strong alkalis such as: sodium, potassium, or calcium hydroxide, remain in the safety shower

for at least 60 minutes. If the nature of the hazard is unknown, rinse for at least 20 minutes.

- 4. After rinsing is completed, if irritation is still persisting, repeat the rinsing process.
- 5. To stop the shower, push the triangular handle bar up until the water ceases flow.
- 6. Once completed, seek medical attention as soon as possible. Have the SDS sheet available for the physician providing treatment if the exposure of the hazard is known.
- 7. Have another individual alert maintenance that the emergency shower was activated.

To use the Bradley Eyewash Station in the Evans Center 320 lab:

- 1. If you are unable to get to the eyewash station by yourself, ask for someone to guide you to it.
- 2. Open the lid completely.
- 3. Pry open eyelids and flush the eyeballs, moving them from side to side and top to bottom to flush around the entire eye. Flush for a minimum of 15 minutes, or as indicated on the SDS of the exposed substance.
- 4. After flushing is completed, if irritation is still persisting, repeat the flushing process.
- 5. Close the lid to the eyewash station completely.
- 6. Once completed, seek medical attention as soon as possible. Have the SDS sheet available for the physician providing treatment.
- 7. Have another individual alert maintenance that the emergency eyewash was activated.

Marian Hall 151 Lab:

The Marian Hall 151 Lab has a Speakman Emergency Safety Station (featured in the image to the right).

To use the Speakman Safety Shower:

- 1. Pull the metal triangular handle down hard
- 2. Remove all affected articles of clothing, including your lab coat, and any other articles that may have been affected by a spill (put modesty aside). If someone is present, allow them to help you get these articles off quickly.
- 3. The time frame spent rinsing is dependent on the type of substance that you were exposed. The Safety Data Sheet (SDS) should provide this information should an exposure occur. In general, these are estimated time frames for rinsing: if an exposure occurred with a non-irritant or mild irritant, stan, rinse in the safety shower for approximately 5

Triangular handle

minutes. If the spill was a moderate to severe irritant, and for chemicals that cause acute toxicity through the skin, remain in the safety shower for 15-20 minutes. For strong alkalis such as: sodium, potassium, or calcium hydroxide, remain in the safety shower for at least 60 minutes. If the nature of the hazard is unknown, rinse for at least 20 minutes.

4. After the rinsing is completed, if irritation is still persisting, repeat the rinsing process.

- 5. To stop the shower, push the triangular handle bar up until the water ceases flow.
- 6. Once completed, seek medical attention as soon as possible. Have the SDS sheet available for the physician providing treatment if the exposure of the hazard is known.
- 7. Have another individual alert maintenance that the emergency shower was activated.

To use the Speakman Eyewash Station:

- 1. If you are unable to get to the eyewash station by yourself, ask for someone to guide you to it.
- 2. Push the eyewash valve activator to the horizontal position to activate the eyewash. In the vertical position, the valve is closed.
- 3. Pry open eyelids and flush the eyeballs, moving them from side to side and top to bottom to flush around the entire eye. Flush for a minimum of 15 minutes, or as indicated on the SDS of the exposed substance.
- 4. After flushing is completed, if irritation is still persisting, repeat the flushing process.
- 5. Return the valve activator to the vertical position to stop the flow of water.
- 6. Once completed, seek medical attention as soon as possible. Have the SDS sheet available for the physician providing treatment.
- 7. Have another individual alert maintenance that the emergency eyewash was activated.

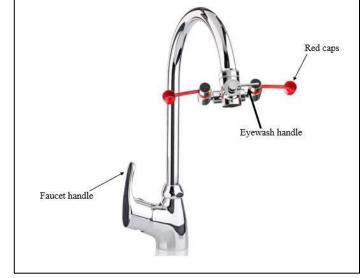
Emergency Sink-Mounted Eyewash Stations

Marian Hall 151 Lab:

The Marian Hall 151 lab has several sinkmounted eyewash stations that attach directly to the faucet of the sink. These stations are considered supplemental units under ANSI standards, and do not meet the criteria by OSHA to be used as the primary eyewash station, but can be added as additional units for increased safety.

To use and activate the sink-mounted eye wash stations:

1. If you are unable to get to the eyewash station by yourself, ask for someone to guide you to it.



- 2. Turn the handle on the sink faucet handle to "on" to initiate the flow of water.
- 3. Manually open the red caps that fit over top of the eyewash.
- 4. Turn the eyewash handle to "on" to allow the water to run through the eyewash.
- 5. Pry open eyelids and flush the eyeballs, moving them from side to side and top to bottom to flush around the entire eye. Flush for a minimum of 15 minutes, or as indicated on the SDS of the exposed substance.
- 6. After flushing is completed, if irritation is still persisting, repeat the flushing process.
- 7. Turn the sink faucet handle to the "off" position to cease the flow of water.

- 8. Once completed, seek medical attention as soon as possible. Have the SDS sheet available for the physician providing treatment.
- 9. Have another individual turn the eyewash handle to the "off" position and close the red caps. This person should alert maintenance that the emergency eyewash was activated.
- Personal Protective Equipment:

Personal protective equipment (PPE) is for your safety and what is being done in the laboratory may dictate the type of PPE that is required. Know the location and operation of all personal protective equipment in the space you are working in.

Lab coats are required in all research laboratories when hazards are present. Some research spaces may be subject to the <u>Bloodborne Pathogen Exposure Control Plan</u> (BBP ECP) and laboratory coats are required to be worn as described.

- 1. Select an appropriate laboratory safety coat for the type of hazards that you are working with. If you need assistance selecting an appropriate laboratory safety coat, please visit the <u>laboratory coat selection guide</u> in the BBP ECP.
- 2. Wear your lab coat appropriately. The sleeves of your laboratory coat should cover your arms and wrists. The coat should be buttoned while working, and cover most of your legs. If there are parts of your leg that are exposed, pants should be worn at all times while in the laboratory.
- 3. Discard your coat as outlined by the laundering standard operating procedures (please see this <u>link</u>) and if an exposure to any hazardous materials has come into contact with the lab coat.

Goggles are required as outlined in the BBP ECP, and should be worn during any time there is a potential spill, splash, or aerosol risk when working with hazardous substances.

- 1. Select ANSI-approved eyewear that meets the standard Z87.1 standard while in the laboratories.
- 2. Wear goggles or safety glasses when there is risk for a spill, splash, or aerosol.
- 3. Goggles should form a seal around your face, and should not allow for major gaps. Safety glasses should fit appropriately, and not slide off of the face.
- 4. Discard goggles and safety glasses for cleaning after they have been exposed to hazardous materials, or after several uses.

Gloves should be worn at all times while working within the laboratories.

- 1. Select the appropriate glove for use dependent on the hazard one is working with. If assistance is needed to select the appropriate glove, please visit the <u>glove selection guide</u> in the BBP ECP.
- 2. Ensure the integrity of the glove prior to use. Inspect the gloves to ensure there are no holes or tears in the gloves prior to use.
- 3. Remove gloves and get a new pair at any point that the integrity of the glove is no longer maintained.

- 4. Remove gloves prior to leaving the laboratory, and discard in the biohazardous waste containers containing the biohazard symbol.
- 5. Wash your hands prior to leaving the laboratory.

➢ First Aid Kits and Health Emergencies:

There is a first aid kit available to in every laboratory. The first aid kit should be appropriately stocked, accessible, and visible. Use first aid kits available in the laboratories for minor injuries. If there is a major injury, campus police at 317-955-6789 or 911 and seek medical attention.

For urgent care facilities accessible to Marian University faculty, staff, and students, the designated medical service provider is the Marian University Student Health Center on campus:

 Address: 3200 Cold Spring Rd., Clare Hall, Room 126, Indianapolis IN, 46222 Phone: (317) 955-6154 Fax: (317) 955-6133 Email: <u>StudentHealthCenterIndianapolisCampus@marian.edu</u>

For after-hours incidents and non-life-threatening situations, Marian University faculty, staff, and students should go to Concentra Urgent Care Facility.

Address: Concentra Urgent Care, 7301 Georgetown Rd, Suites 109,111, Indianapolis, IN 46268
 Phone: 317-875-9584
 Fax: 317.872.2850

For emergency situations, Marian University faculty, staff, and students should go to the nearest Emergency Room. The closest contacts for emergency care are:

- Sidney & Lois Eskenazi Hospital Address: 720 Eskenazi Avenue, Indianapolis, Indiana 46202 Phone: (317) 880-0000
- IU Methodist Hospital Address: 1701 North Senate Boulevard, Indianapolis, Indiana 46202 Phone: (317) 962-2000
- Franciscan St. Francis Health Address: 8111 South Emerson Avenue, Indianapolis, Indiana 46237 Phone: (317) 528-5000
- Community Hospital North Address: 7250 Clearvista Drive, Indianapolis, Indiana 46256 Phone: (317) 621-5053
- St. Vincent Hospital Address: 2001 West 86th Street, Indianapolis, Indiana Phone: (317) 338-2345

Accidental Spill Procedures:

Introduction:

Despite our best efforts to be safe and incident-free in the laboratories, accidents still occur. For this reason, it is imperative that all researchers are trained and familiar with the procedures described below.

Procedure for Chemical Spills:

The following procedure should be used to clean up small amounts of hazardous chemicals. If the chemical is flammable, easily combustible, or a extremely hazardous substance, please do not attempt to clean it by yourself, and contact the emergency contacts.

For minor spills that are smaller than 100 ml or 4 oz:

- Contact the Research and Scholarship Administration (<u>research@marian.edu</u> or 317-955-6521) team prior to attempting spill cleanup. If the situation is urgent, isolate the area and remove all hazards before contacting the RSA.
- Wear appropriate gloves and protective eyewear for the spill cleanup.
- Isolate the area, remove sources of ignition, and provide exhaust ventilation as you are able.
- If there is any broken glass, use mechanical means to assist with the cleanup, such as forceps or tongs. Broken glass should never be picked up with hands.
- Use chemical spill kits available in each of the laboratories when possible.
- Use an appropriate neutralizer or absorbent to absorb the spilled chemical. Add appropriate diluted disinfectant to allow for decontamination and let it sit for 10-15 minutes.
- Sweep all hazardous chemical waste into a container or bag to be discarded according to all local, state, and federal requirements. Label the container or bag that they chemicals are contained within.
- Discard single use PPE as required.
- Wash hands with soap and water.
- Report all spills via the <u>incident reporting form</u>.

For major spills of hazardous chemicals of quantity that pose an immediate threat to health or the environment, follow the following procedures:

- Exit the area as soon as possible. If able, and the spill is not blocking access to a chemical fume hood, lift the sash to allow for increased airflow.
- Close the door to the laboratory to prevent the fumes from spreading elsewhere in the building. Most laboratories are negative pressure, which should provide airflow into the laboratory, preventing hazardous fumes to spread outside of the laboratory.

- Call 911 or Marian University Campus Police phone number 6789 from a university phone. Provide the following information:
 - Building name
 - Room number
 - Type of incident
 - Name of chemical spilled if known, if unknown, provide a description of the smell
 - Estimate the quantity spilled
- Assess the situation to see if it is Immediately Dangerous to Life or Health (IDLH), which would pose significant and immediate threat to other occupants in the building. These instances are very rare, but if this is the case, activate the fire alarm to evacuate the building. If the situation is not IDLH, then wait for assistance outside of the laboratory door.
- Exit the building as soon as possible if the fire alarm was activated.

Procedure for Bloodborne Pathogen or Other Potentially Infectious Materials Spills:

The following procedure should be used to clean up small spills of blood or bodily fluids that may contain Other Potentially Infectious Materials (OPIM). *Note: additional and/or specialized spill procedures may be required by your institutional research protocol. Individual spill requirements outlined in approve protocols should be followed.*

For minor spills that are smaller than 100 ml or 4 oz:

- Contact the Research and Scholarship Administration (<u>research@marian.edu</u> or 317-955-6521) team prior to attempting spill cleanup. If the situation is urgent, isolate the area and remove all hazards before contacting the RSA.
- Wear appropriate gloves and protective eyewear for the spill cleanup.
- Isolate the area
- If there is any broken glass, use mechanical means to assist with the cleanup, such as forceps or tongs. Broken glass should never be picked up with hands.
- Use bloodborne pathogens spill kits available in each of the laboratories when possible.
- Absorb blood with paper towels or other absorbent. Add appropriate diluted disinfectant to allow for decontamination and let it sit for 10-15 minutes.
- Using a detergent solution, clean the spill site of all visible contamination.
- Discard all materials into biohazardous waste container if infectious with BBP or OPIM.
- Discard single use PPE as required.
- Wash hands with soap and water.
- Report all spills via the <u>incident reporting form</u>.

For spills larger than 100 ml or 4 oz, it should be reported to the Office of Research Operations, Integrity and Compliance (<u>research@marian.edu</u> or 317-955-6521)) for cleanup and documentation. In these cases, make sure the area is isolated to prevent further contamination to other areas. If exposure or injury occurred from infectious BBP or OPIM, follow the procedures outlined in Section 3.11 of the <u>BBP ECP</u>.

How to use the Bloodborne Pathogen and Bodily Fluid Cleanup Kits (available within the research laboratories):

- 1. Put on protective gloves and all other protective apparel before proceeding.
- 2. Completely cover the spill with absorbent granules from the fluid solidifier packer=t. This compound instantly binds vomit, urine, feces, blood, and other body fluids.
- 3. When a semi-solid forms, use the scraper and scoop to gather congealed fluid and either
 - a. Dispose into the red biohazard waste bag if the spill is considered infectious, or
 - b. Dispose into the clear plastic bag if the spill is not deemed infectious.
- 4. The absorbent towels may also be used to contain remaining fluid from the spill and then discard in the red biohazardous waste bag or the clear plastic bag as required.
- 5. Thoroughly wipe down contaminated area with a germicidal wipe. If not already used in step above, use towel to wipe dry.
- 6. When spill is cleaned up, dispose of germicidal wipe/cloth, absorbent towel(s), scoop, scraper, gloves, and any contaminated clothing in the red biohazard waste bag if the spill is considered infectious, or into the clear plastic bag if the spill is not deemed infectious.
- 7. Use the twist tie(s) to close bag(s) securely.
- 8. Clean your hands with the antiseptic towelettes when finished.
- 9. For proper disposal of the bag:
 - a. Dispose of the red biohazard bag into the Stericycle bins, or a biohazardous waste drum in the laboratory labeled with a biohazard symbol on it. If the infectious material has separate spill procedures according to the PI's protocol, please follow the disposal outlined in the protocol.
 - b. Dispose of the clear bag containing non-infectious waste in the usual manner of disposing waste.

Accidental Exposure Procedures

- Hazardous Chemical Exposure:
 - For incidents of accidental exposure involving hazardous chemicals, please reference the Marian University's Chemical Hygiene Plan for instructions on post exposure steps, medical evaluations, recordkeeping, and exposure monitoring.
- Bloodborne Pathogen or Other Potentially Infectious Materials Exposure:
 - For incidents involving BBP or OPIM exposure, please site Section 3.11 of <u>Marian</u> <u>University's Bloodborne Pathogen Exposure Control Plan</u> for instruction on immediate action, evaluation, and follow up procedures.
 - For reporting of BBP or OPIM exposure, please see Section 2.2 of <u>Marian University's</u> <u>Bloodborne Pathogen Exposure Control Plan</u>.