

EXPOSURE CONTROL PLAN

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Xiaoxuan Fan (Manager)/Thomas Rogers (Director)
Department: Fels Institute
Building: MRB Lab #: 547B (Influx Sorter Room)

Project Title(s)
CELL ANALYSIS AND SORTING USING INFLUX CELL SORTER IN THE FLOW
CYTOMETRY FACILITY
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EXPOSURE CONTROL PLAN

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Statement of Purpose

This exposure control plan has been prepared to minimize or eliminate employee exposure to bloodborne pathogens. This plan was developed in accordance with the *OSHA "Occupational Exposure to Bloodborne Pathogens; Final Rule"* contained in 29 CFR Part 1910.1030.

Universal/Standard Precautions

All employees will utilize universal precautions.

Annual Review

Employees covered by the bloodborne pathogen standard receive an explanation of this ECP during their initial training and prior to working with any Bloodborne Pathogens (BBP) or Other Potentially Infectious Materials. It will also be reviewed during their annual refresher training. All employees can review this plan at any time during their work shift by contacting Dr. Xiaoxuan Fan/Dr. Thomas Rogers. If requested, a copy of the ECP will be provided to the employee free of charge and within 15 days of the request.

Dr. Xiaoxuan Fan/Dr. Thomas Rogers are responsible for reviewing and updating the ECP annually or more frequently if necessary to reflect any new or modified task and procedures that affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

Exposure Determination

The Standard requires that each organization to assess whether or not employees are subject to occupational exposure to blood associated pathogenic microorganisms without regard to personal protective clothing and equipment.

The exposure determination is made by reviewing job classifications within the work environment, and listing exposures into 2 groups. The first group includes job classifications in which all of the employees have occupational exposure, such as occupational health nurses, 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. The second group includes those classifications in which some of the 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.

JOB CLASSIFICATIONS

SPECIFIC TASKS & PROCEDURES

Please list all employees and provide a brief description of their tasks/procedures.

Name	Job Title	Location	Task/Procedure
Xiaoxuan Fan	Manager	MRB-547	Flow cytometry analysis and cell sorting. Samples include live human cells and other potentially infectious cells.

Occupational Exposure: Reasonably anticipated skin, eye, mucous membrane, or parental contact (i.e. needle stick) with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Responsibilities

Supervisors are to ensure that the provisions of this plan are followed by all employees with occupational exposure. This includes providing a copy of this exposure control plan to employees, enforcing compliance with this plan, ensuring new employees are properly trained, ensuring all employees attend an annual training session, and performing follow-up procedures for all exposure incidents.

Employees are to perform tasks and procedures in a manner that minimizes or eliminates employee exposure and perform duties as established in this exposure control plan and as trained.

EHRs provides the OSHA-mandated bloodborne pathogen information and training sessions at least annually to each supervisor and employee with occupational exposure. Please visit the EHRs webpage at www.temple.edu/ehs for training information.

Methods of Compliance

General

Universal Precautions are observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids are considered potentially infectious materials.

Engineering and Work Practice Controls

Engineering and work practice controls are to be used to eliminate or minimize employee exposure for each task within the work area. Where occupational exposure remains after institution of these controls, personal protective equipment is used. Engineering controls are used where there is a reasonable likelihood of occupational exposure.

Please list engineering controls utilized such as sharps containers, biosafety cabinets, etc.

Engineering Controls

1. Cell sorter is located in a lockable room dedicated for BSL-1 and BSL-2 work.
2. Cell sorter is confined in the HEPA filtered enclosure designed for personnel protection.
3. The sorting chamber is equipped with smoke evacuation system.
4. Cell sorter is equipped with a UV light for decontamination.
5. There is a sharps container in the room for pipette tips.
6. Infectious waste container is available in the room.

Engineering controls are examined and maintained or replaced on a regular schedule by the supervisor and employee to ensure their effectiveness.

Please list the schedule for examining and maintaining these controls such as daily, once weekly, etc., and who is responsible for reviewing the effectiveness of these controls (supervisors, etc.).

Evaluation:

1. HEPA filtered enclosure is certified annually by Technical Safety Services.
2. The function of the smoke evacuation system is checked monthly by Xiaoxuan Fan.
3. The containment of the HEPA filtered enclosure and the smoke evacuation system is checked by Xiaoxuan Fan using Glo-Germ method before each sorting of BSL-2 agents (detailed method see SOP).
4. The function of UV light is checked weekly by Xiaoxuan Fan.

The following minimum requirements are followed:

Hands are washed immediately or as soon as feasible after removal of gloves or other personal protective equipment.

Following contact with blood or other potentially infectious materials, hands and any other skin will be washed with soap and water. Hand washing must be conducted with soap and water for a minimum of 10 seconds. Care should be taken to wash to entire hand including between fingers. Mucous membranes are flushed with water. List the locations of hand washing facilities.

Locations of hand washing facilities:

1. Sinks are in room 547.

List the location and who is responsible for ensuring maintenance and accessibility of these alternatives.

List

1. Eye wash station is located at the sink facing the main entrance of MRB 547. It is tested weekly by Xiaoxuan Fan.
2. Shower station is located in the hallway.

Sharps and needles are prohibited in this room.

Eating (chewing gum, use of throat lozenges) drinking, smoking, applying facial cosmetics (including lip balm) and handling contact lenses are prohibited in all work areas. Prior to the

consumption of any food after handling potentially infectious materials, employees will remove potentially contaminated PPE, wash hands, and exit the work area.

Food and drink are prohibited from lab or work areas, (i.e., refrigerators, freezers, shelves, cabinets, on counter tops or bench tops where blood or other potentially infectious materials are present).

All procedures involving blood or other potentially infectious materials are performed in a manner that minimizes splashing, spraying, splattering, and generation of droplets of these substances.

List methods used to minimize splashing, spraying, splattering and generation of droplets of blood or other potentially infectious materials (centrifuge covers, benchtop safety shields, etc.).

List:

1. The flow cytometry analysis and cell sorting are conducted in the HEPA filtered enclosure.
2. The smoke evacuation system is to remove the aerosol generated during the sort.
3. Samples are filtered to reduce the risk of clogging.
4. Workers wear full-face protection when working with blood, blood cells or other materials of human origin.

Mouth pipetting/suctioning is prohibited.

Specimens of blood or other potentially infectious materials are placed in a container which prevents leakage during collection, handling, processing, storage, transport or shipping. The container is closed prior to storing, transporting or shipping. The outside surface of the primary container is disinfected before removing from lab. Specimens are labeled when leaving the facility. The standard provides for an exemption to this requirement, provided that the facility utilizes universal precautions in the handling of all specimens and the containers are recognizable as containing specimens. The exemption applies only when specimens remain in the facility.

If an exemption is claimed, it must be stated here.

1. None

If outside contamination of the primary container occurs then the primary container is placed within a secondary container which prevents leakage during handling, processing, storage, transport or shipping. If a specimen could puncture the primary container, the primary container is then placed within a secondary puncture-resistant container.

Specify how the use of secondary specimen containers will be carried out, which specimens, if any, could puncture a primary container, which containers can be used as secondary containers and where the secondary containers are located at the facility.

List:

1. All human samples must be transported in an approved secondary container. The Nalgene® BioTransport Carrier (Nalgene No. 7135) is recommended. This carrier meets

OSHA Standard 29 CFR Part 1910.1030.

2. All contaminated materials which could puncture a primary waste container (trash liners, biowaste bags, etc. are placed in a puncture resistant cardboard (burn box).
3. Such containers are in MRB 547B.

Equipment which may become contaminated with blood or other potentially infectious materials is examined by the employee prior to servicing or shipping and will be decontaminated as necessary, unless demonstrated that decontamination of the equipment or portions of such equipment is not feasible. A readily observable label with the Universal Biohazard symbol is attached to the equipment stating which portions remain contaminated. This information is conveyed to all affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so that appropriate precautions are taken.

Standard cleaning, disinfection and sterilization procedures currently recommended in a variety of Health Care settings are adequate to clean, disinfect or sterilize instruments, devices or other items contaminated with body fluids. Medical devices or instrument that requires disinfection or sterilization must be thoroughly cleaned before being exposed to the germicide and the manufacturer's instructions for the use of the germicide will be followed. Instruments or devices that are used on sterile tissue of any patient shall be sterilized or receive high level disinfection.

List any equipment which cannot be decontaminated prior to servicing or shipping.

N/A

This facility identifies the need for changes in engineering controls and work practices through:

List how changes are identified.

1. Review of OSHA records
2. Committee activities
3. Employee interviews

This lab evaluates new procedures and new products regularly by:

Describe the process

1. literature reviewed
2. Supplier information
3. Communication with other flow cytometry facilities
4. Information from conferences/meetings

Both front-line workers and managements officials are involved in this process in the following manner:

Xiaoxuan Fan / Thomas Rogers evaluate the new procedures every 3 months.

Xiaoxuan Fan / Thomas Rogers are responsible for ensuring that these recommendations are

implemented.

The Manager must include non-managerial staff in their evaluation.

The use of a needle-less sharps or otherwise altered with built in feature or mechanism that effectively reduces the risk of an exposure incident must be used. If the use of an engineered sharp device is not possible or warranted for a specific application, the PI, Manager, or Supervisor must:

1. Document which devices have been evaluated, the extent of the evaluation and identify which employee performed the evaluation.
2. Document the rationale for not utilizing an engineered sharps device. This rationale is only acceptable if it demonstrates the device is medically contraindicated for the human research subject, is unreliable in operation or is incompatible with other essential components of the research.

The Safer Sharps Device Evaluation Form may be used to assist you in your evaluation process.

Personal Protective Equipment (PPE)

Personal protective equipment is provided by the supervisor, at no cost to the employee, when there is a chance of occupational exposure.

Appropriate personal protective equipment may consist of, but is not limited to, gloves, gowns, lab coats, face shields, masks, eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. PPE is considered appropriate if it does not permit blood or other potentially infectious material to pass through to the employee's work clothes, street clothes or undergarments, skin, eyes, or other mucous membranes under normal working conditions and for the duration of time that PPE shall be used. All personal protective equipment is to be readily accessible and in the appropriate sizes. It is the employee's responsibility, when there is occupational exposure, to use the appropriate personal protective equipment.

Please specify how protective clothing will be provided to employee's (who is responsible for distribution, etc.) and list which procedures would require the protective clothing and type of protection required.

1. Everyone who works in the laboratory must wear a laboratory coat and gloves.
2. When the red "Human Specimen or Potential Infectious Materials" sign is displayed at the door, persons inside the room should wear seamless-front gown with cuffs and double gloves.
3. Face shields are worn whenever there is a risk of splashes to the face or when large volumes of potentially hazardous fluids are handled.
4. Xiaoxuan Fan is responsible for ordering replacement materials whenever the supplies are running low.

All personnel wearing PPE will wash their hands immediately or as soon as feasible whenever PPE or gloves are removed.

Personal protective garments that are contaminated are to be removed immediately, or as soon as feasible, and prior to leaving the work area. When removed, garments are to be bagged and placed in the appropriately designated containers for decontamination (autoclaving) and/or disposal.

Please list procedures and where employees are expected to place the personal protective equipment prior to leaving the work area.

1. When leaving the laboratory, workers remove their gloves and wash their hands with soap and water.
2. Lab coats are hung on the coat rack and goggles are placed on the shelf beside the coat rack.
3. In the event that the lab coat is visibly contaminated, the coat is placed in the laundry bin located next to the coat rack before the gloves are removed.
4. After removal of the gloves hands are then washed with soap and water.

Gloves are worn when it can be reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures and when handling or touching contaminated items or surfaces.

Hypoallergenic gloves, glove liners, and similar alternatives are available to employees who have documented allergy to the gloves that are usually supplied to their work area.

Please specify the location and/or person who will be responsible for glove distribution.

Boxes of gloves (small, medium and large) are kept on lab bench.
Xiaoxuan Fan checks these boxes each morning and reorders supplies when low.

List procedures where gloves will be used.

Double gloves are worn whenever live human samples or BSL-2 agents are present in the room.

Disposable gloves are being replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured or when their ability to function as a barrier is compromised.

Disposable gloves are not washed or decontaminated for re-use. Utility gloves (i.e., rubber household gloves) for housekeeping chores involving potential blood contact and for instrument cleaning and decontamination procedures can be used. Utility gloves may be decontaminated and reused, but should be discarded if they are peeling, cracked, or discolored, or if they have punctures, tears or other evidence of deterioration or their ability to function as a barrier is compromised.

Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields, are worn whenever splashes, spray, spatter or droplets of blood or other potentially infectious materials may be generated and eye, nose or mouth

contamination can be reasonably anticipated.

Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments are worn in occupational exposure situations.

Housekeeping

The work site is maintained in a clean and sanitary condition according to a written schedule for cleaning and method(s) of decontamination. The schedule is based upon the location within the facility, type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area.

Please provide a written schedule.

List:

1. Lab benches are cleaned by the lab staff upon completion of their work.
2. Once a month the laboratory floors are washed.
3. Once a day all waste is autoclaved or placed in burn boxes, prior to disposal.

All equipment and working surfaces are to be cleaned and decontaminated after contact with blood or other potentially infectious materials. Contaminated work surfaces are to be decontaminated with an appropriate disinfectant after completion of procedures, immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials and at the end of the work day.

Protective coverings (plastic wrap, aluminum foil, bench paper, etc.) used to cover equipment and surfaces are to be removed and replaced as soon as feasible when they become contaminated. Provide information about any coverings used.

All reusable bins, pails, cans and similar receptacles which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials are to be inspected and decontaminated on a regular basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

Please list frequency of inspection and decontamination and who performs these tasks.

1. Lab Manager inspects the lab at least monthly
2. EHRS inspects the lab at least annually.
3. The Laboratory would be decontaminated following a major spill.

Broken glassware will not be picked up directly with the hands. Mechanical means, such as tongs, forceps, or a dustpan will be utilized.

Please describe procedures and identify where to find spill clean-up materials, (tongs, etc.) for picking up broken contaminated glassware.

1. All workers in the lab have been advised that they must use tongs or an autoclavable dust pan and brush to pick up broken glass.

2. Tongs, dust pan, and brush are located on the right shelf.
3. In the event that the area around the broken glass is contaminated, then the area is to be flooded with the 1/20 dilution of bleach and allowed to stand for 10-15 minutes prior to clean up.

Contaminated sharps are discarded immediately or as soon as feasible in covered, puncture-resistant, leak proof, labeled containers (extras located where: under the nearest sink). These containers are accessible to personnel and located as close as is feasible to the immediate area where sharps are used. Containers will not be allowed to overfill. Containers are replaced when they are 2/3 full.

Regulated waste (Medical and Sharps) is to be placed in covered leak proof, labeled containers that are closed prior to removal. If outside contamination of the container occurs, it is placed in a second container which is also leakproof, labeled and closed prior to removal. Specify locations of infectious waste containers.

List:

1. Right corner of MRB 547B.

When moving containers of contaminated sharps from the area of use, the containers will be closed prior to removal and placed in a secondary container if leakage is possible. The secondary container will be covered, labeled and constructed to contain all contents and prevent leakage during handling, storage, transport or shipping.

Disposal of all regulated waste is in accordance with all Federal, State and Local regulations. Please visit the EHRS handbook on [Waste](#) or the EHRS [Waste Guide](#) for additional guidance on the proper disposal of regulated waste. Please consult your Departments for additional site specific policies on the proper disposal of regulated waste.

List the following: facility area, surface or equipment to clean and/or decontaminate procedure for cleaning and/or decontaminating and the frequency the cleaning agent and/or disinfectant is to be used.

List:

1. All benches and work surfaces are washed down with disinfectant after completion of work procedures.

Please describe procedures for disposal of potentially infectious materials.

List:

1. All potentially infectious wastes are disposed of in accordance with Temple and Department specific policies.

Contaminated laundry (i.e., lab coats, bedding and linens) is to be bagged or placed in a leak proof, labeled, container at the location where it was used and will not be sorted or rinsed in the location of use. Employees who have contact with contaminated laundry will wear gloves and other appropriate PPE.

Please specify where laundry will be cleaned and note if it will be sent off-site.

List:

1. Laboratory coats that are to be laundered are placed in a bin located next to the exit door from laboratory.
2. Coats are picked up once a month and laundered by contract agency.

Contaminated laundry shipped off-site to another facility is placed in bags or containers labeled with the Universal Biohazard symbol.

Labels

The following labeling methods are used in this area:

Equipment to be labeled	Label Type
Specimens	The red bag must have a biohazard symbol. The red bag must have either the markings of ASTM D 1709 for impact resistance and ASTM D 1922 for tear resistance or the certification letter from manufacturer for the standards.

Xiaoxuan Fan/Thomas Rogers are responsible for ensuring that warning labels are affixed or red bags are used as required if regulated waste or contaminated equipment is brought into this facility. Employees are to notify Xiaoxuan Fan/Thomas Rogers if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc. without proper labels.

HIV and HBV Research Laboratories (omit if not relevant to your work.)

These are the minimum requirements that apply in addition to the other requirements of the standard. These additional requirements apply to research laboratories and production facilities engaged in the culture, production, concentration, experimentation and manipulation of HIV and HBV. These requirements do not apply to clinical and diagnostic labs.

All regulated waste is incinerated or autoclaved.

Laboratory doors are kept closed when work involving HIV or HBV is in progress.

Contaminated materials that are to be decontaminated at a site away from the work area are placed in a durable, leak proof, labeled container that is closed before removal from the work area.

Access to the work area is limited to authorized persons. Written policies and procedures are established whereby only persons who have been advised of the potential biohazard, who meet any specific entry requirements and who comply with all entry and exit procedures are allowed to enter the work areas and animal rooms.

Please specify procedures.

List:

1. When the red “Human Specimen or Potential Infectious Materials” sign is on, only authorized personnel or end users who have been through the training by Xiaoxuan Fan can enter the room.

All access doors to the work area or containment module are posted with a hazard warning sign which includes the Universal Biohazard symbol.

No work will be conducted on the open bench. All activities involving other potentially infectious materials are conducted in HEPA filtered enclosure.

Lab coats, gowns, uniforms, or other appropriate protective clothing are worn in the work area and animal rooms. Protective clothing is not to be worn outside of the work area and will be decontaminated before being laundered.

Gloves are worn when handling infected animals and when making hand contact with other potentially infectious materials is unavoidable.

Vacuum lines are protected with liquid disinfectant traps and HEPA filters which are checked routinely and maintained or replaced as necessary.

Needle usage is prohibited.

All spills are immediately contained and cleaned up by properly trained personnel equipped to work with potentially infectious materials.

Please outline spill containment and clean-up procedures and specify persons properly trained and equipped to carry-out clean-up.

1. Alert people in the immediate area that a spill has occurred.
2. Remove contaminated personal protective equipment.
3. If eyes are exposed, flush them with the eyewash. Wash any potentially exposed skin with soap and water. Provide any necessary first aid to injured personnel.
4. Put on clean personal protective equipment.
5. Clean area of all visible fluids with detergent (soap/water)
6. Cover the spill with paper towels or other absorbent material.
7. Prepare a fresh 1:10 dilution of household bleach.
8. Pour the 1:10 bleach around the edges of the spill, then onto the spill, avoiding splashes.
9. Allow a 20-minute contact time, then use the absorbent material to wipe up the spill, working from the outer edges to the center.
10. Clean the spill area again with fresh absorbent material soaked with 1:10 bleach.
11. Discard these materials in an autoclave bag for decontamination by autoclaving.

A spill or accident that results in an exposure incident is immediately reported to the laboratory director or other responsible person. Anyone who has a potential exposure must report to Employee Health/ED. In addition, EHRS must be notified and an incident report must be

completed and submitted by the PI.

Please identify person(s) to be notified.

1. Manager, Xiaoxuan Fan, 2-7709, cell phone: 908-938-8116
2. Director, Thomas Rogers, 2-3215
3. Senior Biosafety Officer, Su H. Hung-Cunliffe, 2-5748
1. Anyone who has a potential exposure must report to Occupational Health Department at Temple Hospital, basement of Rock pavilion M-F, 7:30 AM to 5:30 PM Tel: 215-707-4455. After hours: Emergency Department at Temple Hospital

HEPA filtered enclosure are certified when installed, whenever they are moved, and at least annually.

Please specify frequency of certification.

1. HEPA filtered enclosure is certified annually.
2. Smoke evacuation system is checked monthly by Xiaoxuan Fan.

Attach one copy of the biosafety manual (Safety SOP) which was prepared for this facility.

Please list location of hand wash sink and eye wash facility and specify whether sink is floor, elbow or automatically operated.

1. One hand wash sink facing the main entrance of MRB 547, the other one is outside of the Influx sorting room. Elbow operated.
2. Eye wash station is located at the sink facing the main entrance of MRB 547. It is elbow operated.

Please specify mechanism and frequency by which proper direction of facility airflow is verified.

N/A

Please describe procedure(s) to advise personnel on potential hazards and means of assessing compliance with instructions on practices and procedures.

1. When the red “Human Specimen or Potential Infectious Materials” sign is displayed on the door, only authorized personnel or end users trained by Xiaoxuan Fan on biosafety issue of cell sorting of BSL-2 agents can enter the room.
2. End users can prepare the samples under Xiaoxuan Fan’s supervision. End users should not operate the cell sorter.

Hepatitis B Vaccination & Post-Exposure Evaluation/Follow-Up

Occupational Health makes available the Hepatitis B Vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure incident.

All medical evaluations and procedures including the hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up, including prophylaxis, are made available at no cost

to the employee.

Please list the location of your Occupational Health Department. Please include hours of normal operation and instructions on where to go outside of normal business hours.

1. Hepatitis B vaccination is offered at main campus Employee Health Services.
2. Occupational Health Department at Temple Hospital, basement of Rock pavilion M-F, 7:30 AM to 5:30 PM Tel: 215-707-4455
3. After hours: Emergency Department at Temple Hospital

Hepatitis B Vaccination

Hepatitis B vaccination is made available to the employee after his or her attendance at a bloodborne pathogen training and information session, conducted by EHRS. The vaccine is made available to all employees with occupational exposure unless the employee has previously received the complete hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons, or the individual declines. The vaccine will be provided according to current recommendations of the U.S. Public Health Service. There is no current recommendation for booster doses. Pre-screening before receiving the hepatitis B vaccination is not routinely performed at Temple.

All employees who decline to accept hepatitis B vaccination offered by Temple will be required to sign a [Hepatitis B Vaccine Declination Form](#) . If an employee decides to accept the vaccination at a later date, Temple University will make available hepatitis B vaccination at that time.

Declination forms are kept on file with Occupational Health.

To receive the hepatitis B vaccine and vaccination series, contact Occupational Health.

Post-exposure Evaluation and Follow-up

Occupational Health will initiate a confidential medical evaluation and follow-up to an employee, following a report of an exposure incident. Employees with an exposure incident will report to the Occupational Health.

Please list the location of your Occupational Health Department. Please include hours of normal operation and instructions on where to go outside of normal business hours.

2. Occupational Health Department at Temple Hospital, basement of Rock pavilion M-F, 7:30 AM to 5:30 PM Tel: 215-707-4455
3. After hours: Emergency Department at Temple Hospital

For all exposure incidents, the route(s) of exposure and the circumstances under which the exposure incident occurred (to include details of the use or non-use of engineering controls, work practice controls or PPE) are documented. The source individual is identified and documented, unless identification is not feasible or prohibited by state or local law. After consent is obtained,

the source individual's blood is tested for HBV and HIV status. If the exposed employee gives consent, a baseline blood sample is collected immediately following the incident with subsequent periodic samples taken at a later date. Results of the source individual's testing will be made available to the exposed employee and the employee will be informed of laws/regulations regarding the privacy rights of the source individual. The results of the source individual's blood test and employee's blood test are confidential and will be known only to the exposure Nurse/Physician and the exposed employee. Counseling and other features of post exposure evaluation will be offered whether or not the employee elects to have baseline HIV/HBV serological testing.

Administration of Post-Exposure Evaluation and Follow-Up

Xiaoxuan Fan/Thomas Rogers ensure that the health care professionals responsible for employee's hepatitis vaccination and post exposure evaluation and follow up are given a copy of the OSHA's bloodborne pathogen standard.

Xiaoxuan Fan/Thomas Rogers ensure that the health care professional evaluating an employee after an exposure incident receives the following:

- A description of the employee's job duties relevant to the exposure incident
- Route(s) of exposure
- Circumstances of exposure
- If possible, results of the source individuals blood test
- Relevant medical records, including vaccination status

Xiaoxuan Fan/Thomas Rogers ensure that the employee is provided with a copy of the evaluating health care professional's written opinion within 15 days after completion of the evaluation.

Procedures for Evaluating the Circumstances Surrounding an Exposure Incident

Xiaoxuan Fan/Thomas Rogers ensure that an incident report is provided and a review of the circumstances of all exposure incidents is conducted to determine:

- Engineering controls in use at the time
- Work practices followed
- A description of the device being used (including type and brand)
- Protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shields, etc...)
- Location of the incident (lab, etc...)
- Procedures being performed when the incident occurred
- Employees training

Occupational Health will record all percutaneous injuries from contaminated sharps in a Sharps Injury Log.

If revision to this ECP are necessary, Xiaoxuan Fan/Thomas Rogers will ensure that appropriate changes are made (Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

Communication of Hazards to Employees

Information and Training

Supervisors are to ensure that employees with occupational exposure participate in a training program, provided at no cost to the employee by EHRS. Employees are to complete training at the time of initial assignment to tasks where occupational exposure may take place and at least annually thereafter.

Elements of the bloodborne pathogen training program are listed [here](#).

Training aids utilized by EHRS include videotapes, written materials and slides. Additional training requirements apply to employees in HIV and HBV laboratories and production facilities. The supervisor assures that employees demonstrate proficiency in standard microbiological practices and operations specific to the facility before being allowed to work with HIV or HBV, and have prior experience in the handling of human pathogens or tissue culture. The supervisor provides appropriate training and assures that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.

If you would like to schedule a training session please contact EHRS at 215-707-2520.

Record keeping

Training Records

Xiaoxuan Fan/Thomas Rogers are responsible for ensuring that all training records and medical records required by the standard are performed and that all appropriate employee health and OSHA records are maintained.

Training records are kept by EHRS (conducted by EHRS) for at least 3 years from the date on which the training occurred. Function specific training is maintained by Xiaoxuan Fan/Thomas Rogers. All training sessions are documented in writing, with records kept by EHRS. The training record includes:

- Dates of training sessions
- Contents of training sessions
- Names/qualifications of persons conducting training
- Names/job titles of all persons attending training sessions

All training records conducted by EHRS are available for review upon request by an employee or employees authorized representative within 15 working days.

Medical Records

Confidential medical records for employees with occupational exposure are kept by the Occupational Health for the duration of employment plus 30 years.

Medical records include:

- Employee's name and social security number
- Employee's hepatitis B vaccination status including vaccination dates and any medical records related to the employee's ability to receive vaccinations
- Results of examinations, medical testing, post-exposure evaluation and follow-up
- Procedures
- Health care professional's written opinion
- A copy of the information provided to the health care professional

Occupational Health will ensure that employee medical records are kept confidential and are not disclosed or reported without the employee's written consent to any person within or outside the workplace except as required by this Standard and by law. Medical records are retained and coordinated by Occupational Health. Employee health records are maintained for the duration of employment plus 30 years.