Clinic Safety Plan

I. General principles for work in clinic areas

This Clinic Safety Plan (CSP) applies to the clinic or clinical laboratory located in

**Building: ____________________________, Room(s): ____________________________**.

On-site clinics are located on the Washington University School of Medicine (WUSM)/Barnes-Jewish Hospital (BJH) campus and are supported by Washington University in St. Louis. These include, but are not limited to, the Center for Advanced Medicine (CAM) and St. Louis Children’s Hospital (SLCH).

Off-site clinics are located outside the WUSM/BJH campus and are supported by Washington University.

The elements of this Clinic Safety Plan are designed to protect employees, patients, visitors, and the environment. Clinic personnel must comply with these precautions and rules at all times.

A. Minimize all biological and chemical exposures. Inhalation, ingestion, and skin contact with biological or chemical materials should be avoided.

B. Avoid underestimation of risk. Minimize exposures even of substances of no known significant hazard. Use special precautions for work with substances that present special hazards.

C. Use available references to assess the risk of hazardous materials. The Occupational Safety and Health Administration (OSHA) has provided a list of permissible exposure limits (PELs) for a number of chemicals. The American Conference of Governmental Industrial Hygienists (ACGIH) has provided Threshold Limit Values for many chemicals. Additionally, the National Institute for Occupational Safety and Health (NIOSH) has published an alert on preventing occupational exposure to antineoplastic and other hazardous drugs in health care settings.

II. Clinic safety responsibilities

Responsibility for this CSP is assigned to the following individuals:

A. **Dr. ____________________________, Chair of the Department/Division of ____________________________**, is responsible for clinic safety in this Department/Division.

B. **__________________________, Clinic Administrator**, is required to:

1. Develop, implement, and revise this CSP, as well as policies, procedures, and practices.
2. Maintain an awareness of current requirements concerning clinic safety compliance issues.
3. Monitor purchasing, use, and disposal of hazardous materials used in this clinic or clinical laboratory.
4. Ensure appropriate records are maintained for training, audit reports, injury reports, etc.
5. Ensure that faculty, staff, fellows, and students know and follow the CSP guidelines.
6. Complete regular, informal safety and housekeeping inspections, including inspections of any emergency equipment for this clinic or clinical laboratory.
7. Determine the required and appropriate levels of personal protective equipment (PPE).
8. Ensure PPE is available, in working order, used properly, and that adequate training is provided for its use.
9. Ensure that facilities and training for use of any new materials or devices are adequate.
10. Seek ways to improve clinic safety.

C. All clinic faculty, staff, fellows, and students are required to:
   1. Plan and conduct clinic procedures in accordance with all applicable policies and procedures.
   2. Develop and practice safe standard operating procedures.

III. The clinic facility

A. Clinic design must be in accordance with all federal, state, and local regulations. No room shall be converted into a clinic or clinical laboratory for patient care or for the use of chemical or biological materials until reviewed by Washington University (WU) Environmental Health & Safety (EHS), Infection Prevention, and Capital Projects.

B. Means of egress: Do not use stairways and hallways for storage. Never block access to exits, emergency equipment, and utility control panels. For more information on egress corridors and fire safety, visit the EHS website.

IV. Components of the CSP: The following general principles should be used for all clinical work with biological and chemical materials.

A. Accidents, injuries, and illnesses
   1. All clinic staff shall follow the detailed injury/illness procedures posted near the clinic phone(s).
   2. Immediately report all injuries and illnesses to one’s supervisor and seek medical attention at a designated medical treatment facility. Supervisors should call the WU
Worker’s Compensation Office at (314) 935-5547 for permission to treat the employee.

3. Supervisors should submit a completed “Report of Injury or Illness” form (available in the EHS Blue Book or on the EHS website, ehs.wustl.edu) to the WU Worker’s Compensation Office, and retain a copy for department records.

4. Life-threatening injuries and illnesses
   a. On-site clinics: Immediately contact WUSM Protective Services at (314) 362-HELP (362-4357) or BJH Security at (314) 362-0911 for transportation to the BJH Emergency Department.
   b. Off-site clinics: Immediately call __________ for transportation to the nearest emergency department.
   c. Chemical exposures: Immediately seek medical attention
      i. Eye: Promptly flush eyes with water for a minimum of 15 minutes.
      ii. Ingestion: Follow directions for accidental ingestion found on the Safety Data Sheet (SDS).
      iii. Skin: Promptly flush the affected area with water for a minimum of fifteen minutes and remove any contaminated clothing.

5. Blood and other potentially infectious materials (OPIM) exposure: Contact the Infectious Disease 24-hour hotline at (314) 747-3535. Follow the instructions for WU employees. An evaluation for post-exposure prophylaxis should be done within two hours of exposure.
   a. Eye or mucous membrane: Flush the affected area with water for a minimum of fifteen minutes.
   b. Needlestick or puncture wound: Promptly wash the affected area with soap and water.

B. Hazardous material spills
   1. Chemicals, including mercury
      a. On-site clinics: Contact WUSM Protective Services at (314) 362-HELP (362-4357) for emergency spill response.
      b. Off-site clinics: Contact the landlord of the building or the local emergency response team for spill remediation.
   2. Blood and OPIM
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a. On-site clinics: Small spills can be cleaned by clinic personnel trained in bloodborne pathogens spill procedures. Contact custodial services at ____________ for larger blood spill response.

b. Off-site clinics: Contact the landlord of the building or the local emergency response team for spill remediation.

C. Planning: Seek information and advice about hazards before starting any procedure. Some examples include: determine appropriate PPE, arrange for proper disposal of hazardous wastes produced, and establish the proper positioning of equipment before beginning any new operation.

D. Exposure control

1. Bloodborne Pathogens
   a. For complete details on preventing exposures to bloodborne pathogens (BBP), see Section 3 of the Blue Book, “Bloodborne Pathogens Exposure Control Plan.” BBP are pathogenic microorganisms that may be present in human blood and other potentially infectious materials, and can cause disease in humans. These pathogens include, but are not limited to, Hepatitis B virus (HBV), Hepatitis C virus (HCV), and Human Immunodeficiency virus (HIV).

   b. Universal precautions: All employees will use universal precautions. Universal precautions are designed to reduce the risk of transmission of pathogens. All blood and potentially infectious materials must be treated as if they are known to contain HBV, HCV, HIV, and other BBP. Protection can be achieved through work practices that minimize or eliminate exposure, and through the use of PPE such as gloves, masks, or protective clothing to provide a barrier between the worker and exposure source.

2. Sharps safety:
   a. Approved sharps containers should be wall-mounted or placed in a kick-proof, tip-proof frame. All sharps must be disposed of in an approved sharps container.

   b. Sharps containers must not be over two-thirds full. Once sharps containers are two-thirds full, they must be closed and disposed of properly. Safety sharps must be available for use.

   c. Recapping needles or removing needles is not recommended. When recapping or needle removal is required, it shall be performed using a mechanical device or one-handed technique (e.g. using forceps, a recapping device, or a one-handed scoop technique). Recapping or removing
contaminated needles should only be performed when there is no feasible alternative or when required by a specific procedure.

d. Chemical and chemotherapeutic substances: Develop and practice safe habits that avoid unnecessary exposure to chemicals by any route.

3. Personal hygiene: Food, drink, and similar substances that provide potential hand-to-mouth contact are prohibited in technical work areas. Specimens (e.g. blood, urine, feces, sputum) containing a variety of pathogens are handled daily in technical work areas and are stored in clinic refrigerators, providing a potential source of contamination.
   a. Eating, drinking, smoking, handling contact lenses, and applying cosmetics are strictly prohibited in areas where hazardous materials are used or intended for use.
   b. Storage of food and beverages in containers or areas that are designed or used for storage of hazardous materials is prohibited. Staff beverages must be stored in a designated and labeled clean area. All staff beverages must be covered at all times.
   c. Do not deliberately smell or taste any chemicals or drugs.
   d. Avoid practical jokes or other behavior that might confuse, startle, or distract another worker.
   e. Be alert to unsafe conditions and see that they are corrected.

4. Hand hygiene: The purpose of hand hygiene is to reduce the spread of microorganisms to patients and healthcare workers. Hand hygiene is the single most important means for preventing the spread of microorganisms. See additional resources in Section 6.
   a. Handwashing: When hands are visibly soiled, dirty or contaminated with blood or other body fluids or after using the restroom, hands will be washed with antimicrobial soap and water.
   b. Hand sanitizer: If hands are not visibly soiled, hand sanitizer may be used.
   c. Five moments for hand hygiene: Healthcare workers should clean their hands
      i. Before touching a patient
      ii. Before clean/aseptic procedures
      iii. After body fluid exposure/risk
      iv. After touching a patient
      v. After touching patient surroundings
5. Personal Protective Equipment: The following items are necessary Personal Protective Equipment (PPE) when working with hazardous materials:
   a. Eye and face protection: Wear goggles, face shields, or safety glasses when performing activities during which a splash is likely.
   b. Gloves: Wear appropriate gloves when working with hazardous materials.
      i. Chemical protection: Refer to the glove manufacturer’s selection guide or the SDS for the chemical to determine appropriate glove material. If the chemical is not listed in the reference guide, contact EHS for assistance.
      ii. BBP protection: Latex is best for potentially infectious materials. However, nitrile or vinyl are also acceptable, and must be available in the clinic or clinical laboratory. If you suspect you have a latex allergy, see the additional resources provided in Section 6, and contact EHS.
      iii. Powdered gloves: The Food and Drug Administration has banned powdered surgeon's gloves, powdered patient examination gloves, and absorbable powder for lubricating a surgeon's glove, as these devices present an unreasonable and substantial risk of illness or injury.
   c. Lab coats or gowns: Wear fluid-resistant or water-resistant lab coats or gowns when performing activities during which a splash is likely.
   d. Shoes: Shoes should be comfortable, slip resistant, and cover the entire foot. Leather or synthetic, fluid-impermeable materials are preferred. Disposable, fluid-resistant shoe covers may be worn when splashes are expected.
   e. Respirators: EHS will assist in determining whether respiratory protection is required.
      i. Staff members who are potentially exposed to aerosolized pathogens (e.g. tuberculosis patients) or certain aerosolized drugs are required to wear N95 respirators (not surgical masks).
      ii. Annual respiratory fit testing is required before use of any respirator.
      iii. Respirators shall be regularly inspected by the user.
      iv. For more information, refer to additional resources in Section 6.
   f. Other: Use any other protective equipment as appropriate.

6. Cleaning, sterilization and high-level disinfection: Refer to additional resources available in Section 6 of this Blue Book. To develop or implement specific sterilization and high-level disinfection procedures, contact your Infection Prevention specialist.
a. **Choice of disinfectants:** Contact your Infection Prevention specialist at (314) 454-7383 for advice on purchasing disinfectants. Only EPA-registered disinfectants may be used in clinics and clinical laboratories.

b. **Employees working with high-level disinfectant solutions or sterilizing instruments using an autoclave must be trained in their proper and safe handling and use.**

c. **EHS recommends the use of glutaraldehyde-alternative disinfectant solutions.**

d. **Appropriate PPE for those working with high-level disinfectant solutions includes gowns, eye protection, splash protection, and nitrile gloves.**

7. **Waste disposal:** For each clinical operation, develop a plan for waste disposal in accordance with EHS policies. All hazardous material waste must be collected separately from non-hazardous waste.

   a. Place sharps in an approved sharps container. Never recap, remove, break, bend, shear, or otherwise manipulate the sharp before disposal.

   b. Soiled patient linen should be placed in a covered soiled linen hamper. Non-reusable or highly contaminated PPE should be placed in biohazard waste containers.

   c. For chemical waste disposal, contact ________________.

      i. Do not pour chemicals down the drain.

      ii. Hazardous chemicals and expired medications and supplies must be disposed of properly.

      iii. Segregate chemical waste by hazard class and store within secondary containment.

      iv. Off-campus clinics should call the campus Environmental Manager (314-362-6930) for specific instructions for disposal of hazardous materials.

      v. On-campus clinics must completely fill out hazardous waste labels, provided by EHS, including contents, clinic administrator and location, start date (month/day/year). Submit an electronic chemical request for pick-up (RFP) when the waste container is 2/3 full or within 11 months of starting this particular waste stream.

   d. For biohazardous waste and sharps container disposal, contact ________________.

      i. All Regulated Biological Waste must be packaged in the containers and red bags provided by the vendor or EH&S.

      ii. Containers shall be clearly marked with the universal biohazard symbol, and labeled “infectious waste” or “biohazard waste.”
iii. The boxes must be right side up, and the bottom of the box must be taped using the tape provided by the vendor or EH&S.

iv. Prior to disposal through the vendor or EH&S, all Regulated Biological Waste must be separated into two (2) waste streams, which must be packaged separately.

v. Waste for incineration: When packaging this material the word “Incineration” must be written on the container. These wastes include:
   (a). Trace chemotherapy contaminated waste (that is covered under the Resource Conservation and Recovery Act (RCRA), such as empty drug vials, syringes and needles, spill kits, tubing and bags, contaminated gloves and gowns).
   (b). Human or animal parts, organs, tissues and surgical specimens (decanted of formaldehyde).
   (c). Pharmaceuticals that are not regulated under RCRA or are not DEA Controlled Substances. For additional information, see EH&S policy, “Pharmaceutical and drug disposal guidance.”
   (d). Any material required to be incinerated as a condition of a Centers for Disease Control and Prevention (CDC), United States Department of Agriculture (USDA), U.S. Fish & Wildlife Service, or other agency permit.

vi. All other Regulated Biological Waste can be autoclaved, including human and animal blood, blood products, and cells.

e. Radioactive waste shall be disposed of in accordance with the policies of Radiation Safety (314) 362-3476.

8. Environmental monitoring: Ensure adequate ventilation prior to working with chemicals, including solutions used in high-level disinfection of medical instruments. Clinic administrators may request EH&S assess the need for environmental monitoring of those spaces where formaldehyde, glutaraldehyde, and other chemicals of concern are used.

9. Signs and labels
   a. Emergency telephone numbers shall be posted prominently.
   b. Biohazard waste containers and sharps disposal containers shall be labeled using the universal biohazard symbol.
   c. The original manufacturer’s label shall be retained, without alteration or mutilation, on chemical containers, or replaced with an appropriate label if the
contents are changed. Items, including medications and supplies, shall be disposed of by their expiration dates.

d. Good clinical practice requires that all chemical and medication containers be dated upon opening. Multi-dose vials shall be dated when opened and discarded within 28 days of opening.

e. See the EH&S clinical inspection comment sheet for detailed requirements regarding signs and labels.

10. Housekeeping, maintenance, and inspections

a. Housekeeping practices must include appropriate procedures for regularly cleaning and disinfecting equipment and work surfaces, and for immediate cleaning of areas with gross contamination.

b. Countertops and exam tables should be cleaned daily using an EPA-registered disinfectant.

c. EH&S shall conduct semiannual inspections in all clinical areas except those making a 100% score on their inspection, which shall be inspected annually. These inspections should be supplemented by periodic inspections by the clinic administrator.

d. Clinic administrators shall assign the responsibility to inspect eyewash fountains and to document that inspection.

e. Name ________________________ is assigned responsibility to test the eyewash fountain(s) located in: Building ______________________, Room(s) ______________________.

11. Safe Procedures for Preparing and Administering Cytotoxic Drugs

a. All procedures involved in the preparation of cytotoxic drugs should be performed in a Class II biological safety cabinet (BSC).

b. Cover the work surface of the BSC with a plastic-backed sterile absorbent pad to absorb any liquid contamination that may occur during handling, reduce the potential for dispersion of droplets and spills, and to facilitate cleanup. The absorbent pad should be changed after 3.5 hours of continuous work or for a new batch of preparations (for example, a set of vials of a given drug) or in the event of a spill or contamination.

c. A protective disposable gown, double gloves, face protection, cap, and shoe covers should be worn while preparing drugs.

d. Disposable gloves, gown, and face protection should be worn while administering cytotoxic drugs.
e. Cytotoxic waste, including but not limited to contaminated needles, syringes, and infusion therapy supplies should be disposed of, intact, into a labeled, puncture-resistant chemotherapy waste container to minimize aerosol generation and risk of injury.

f. Exposure incidents

i. If a cytotoxic drug comes into contact with a worker’s skin or clothing, the worker should immediately remove the contaminated clothing, thoroughly wash the skin of the affected area with soap and water, and continue to rinse for 15 minutes. If appropriate, the contaminated worker should take a shower. A deluge shower should be made available in the vicinity. All contaminated clothing should be discarded as cytotoxic waste.

ii. If a cytotoxic drug comes into contact with a worker’s eyes, the worker should flush their eyes at an eyewash station. Alternatively, workers can use an isotonic solution (for example, sterile NaCl 0.9%) to flush their eyes. Eyes should be flushed for at least 15 minutes.

iii. In the event of a needlestick or sharps injury, let the wound bleed freely. Under running water, gently and thoroughly wash the area with soap.

iv. Follow procedures for chemical or body fluid exposure, as necessary.

g. For more information on handling and preparing cytotoxic drugs, refer to additional resources in Section 6 or contact EHS.

V. Safety Training

A. All WU employees should annually complete the Compliance Profile Questionnaire found in Learn@Work (https://learnatwork.wustl.edu). This allows Learn@Work to assign the correct training modules for each individual. Assigned training is available through the Learn@Work Me page.

B. Clinic personnel with patient contact must complete annual EH&S Clinic Safety Training, Bloodborne Pathogens review, and clinic-specific safety training.

C. An outline of clinic-specific safety training shall be developed by the Clinic Administrator, reviewed annually, and revised as needed. The completed clinic-specific outline (Appendix 3: Clinic-specific Safety Training) shall be kept in Section 2 of the Clinic Safety Plan. The outline shall serve as the basis for clinic employees’ annual clinic-specific safety training.

D. The Clinic Administrator shall ensure staff have received all required training and retain documentation of that training in Section 2 of the Clinic Safety Plan, “Appendix 2: Employee Training Records.”
E. Clinic personnel who sign DOT manifests for biohazardous waste disposal must have additional training which is available through Learn@Work. Individuals without this training must not sign DOT manifests for biohazardous waste.

For more Clinic Safety and Infection Prevention information, access the WU EH&S website (ehs.wustl.edu), or contact the offices listed below.

Washington University
Environmental Health & Safety
Campus Box 8229
Phone: (314) 362-6816
Fax: (314) 362-1995

Division of Comparative Medicine
Infection Prevention
Campus Box 8051
Phone: (314) 454-738