BLOODBORNE PATHOGEN EXPOSURE CONTROL PLAN

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

Provided by:

Environmental Health & Safety Department

Revised: November 2005

EXECUTIVE SUMMARY

The University of Texas Health Science Center at San Antonio (UTHSCSA) is committed to providing a workplace free of recognized hazards that is conducive to education, patient care, and research. In the pursuit of these endeavors, occupational exposure to potentially infectious agents may be required for some employees. This Exposure Control Plan (ECP) contains guidelines and procedures that should be used in conjunction with standard healthcare or research techniques to minimize exposure to bloodborne pathogens.

This plan should not be construed as a limitation on the use of infectious materials in the course of UTHSCSA education, patient care, or research goals. However, this plan should be used by supervisors to develop receipt, use, handling, and disposal procedures to minimize the potential for exposure to bloodborne pathogens. This manual is intended to assist all levels of management in implementing effective policies for the safe use of blood or other potentially infectious materials during the course of employment at UTHSCSA.

The ECP is not intended to be an exhaustive or fully comprehensive reference on this subject, but rather a guide for use by technically qualified healthcare workers and researchers. Further advice concerning hazards associated with specific biological agents, recombinant DNA, and the development of new or unfamiliar activities should be obtained through consultation with the Institutional Biosafety Committee, the Infection Policy and Education Committee or the Environmental Health & Safety Department.

All UTHSCSA personnel employing biological agents and recombinant DNA with significant potential for exposure to bloodborne pathogens must be familiar with the requirements set forth in this plan and applicable guidelines of the CDC and NIH, and must conduct their operations in accordance with them.

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Note: Executive summary prepared August 2001 - Signatures on File

ANNUAL REVIEW & SUMMARY OF CHANGES

November 2005: Summary of Document Changes

The major changes to the Exposure Control Plan for this year are:

1. Chapter X: Added reference, *Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis,* Vol 54, No RR-9, September 30, 2005.
2. Chapter XI: (1) The Basic Biosafety and Bloodborne Pathogens class has been separated into two distinct classes, Basic Bloodborne Pathogens Safety Awareness and Basic Biological Safety. (6) Fulfilling the Training Requirements: Changes in the training course titles.
3. Appendix C: incorporates a revised *New Employee Exposure Assessment* form.

All document changes have been highlighted for easy reference.

Reviewed by: *Signature on file* **Date: 12/1/2005**

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CHAPTER I

PURPOSE

The University of Texas Health Science Center at San Antonio (UTHSCSA) is committed to providing a safe and healthful work environment for our entire staff and students. In pursuit of this endeavor, this Exposure Control Plan (ECP) provides guidelines and procedures to avoid or minimize occupational exposure to bloodborne pathogens and implement procedures and processes for exposure management.

CHAPTER II

SCOPE AND REVIEW

This plan is an institution-wide plan. The ECP applies to all Health Care Personnel (HCP) and employees at the university. It includes clinical laboratories, research laboratories, dental clinics, and other health care clinics and facilities operated by UTHSCSA faculty and staff. UTHSCSA faculty advisors should also use the ECP to ensure that students and Non-Employees (as defined in the UTHSCSA's Handbook of Operating Procedures, HOP4.5.15) under their charge, exposed to blood or other potentially infectious materials, adhere to the guiding principles and policies of the ECP. This Exposure Control Plan will be reviewed and updated on an annual basis, or whenever necessary, by Environmental Health & Safety (567-2955) in consultation with the Institutional Biosafety and Infection Policy and Education Committees.

CHAPTER III

BACKGROUND

In September 1986, the Occupational Safety and Health Administration (OSHA) was petitioned by various unions representing health care employees to develop a standard to protect workers from occupational exposure to bloodborne diseases. OSHA responded by issuing a proposed standard, 29 CFR 1910.1030, to reduce occupational exposure to Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV) and other bloodborne pathogens. This standard became effective on March 6, 1992. Generally, the standard reflects published guidelines from the Centers for Disease Control and Prevention (CDC), which include the guidelines for Standard Blood & Body Fluid Precautions, or Universal Precautions. On September 1, 2000, The Texas Department of Health (TDH) also issued rules on Bloodborne Pathogen Control, which became effective January 1, 2001 for governmental units. As a state institution, UTHSCSA intends to comply with these recognized standards of health care. All UTHSCSA employees, who are required in the normal course of their work to contact human blood or other potentially infectious materials, will adhere to the published Texas Department of State Health Services (Texas DSHS) regulations (25 TAC Part 1, Chapter 96.101-96.601).

CHAPTER IV

EMPLOYEE EXPOSURE ASSESSMENT

An exposure assessment will be conducted by qualified personnel at UTHSCSA to determine whether or not each employee is potentially exposed to blood or other potentially infectious materials in the normal course of their job duties.

1. Appendix B contains a list of job classifications in which employees have the risk of occupational exposure to bloodborne pathogens in the normal course of their duties.
2. Other job classifications in which some, but not all, employees may be exposed to blood or other potentially infectious materials are also listed in Appendix B.
3. All new employees, in conjunction with their supervisor, will complete a "New Employee Exposure Assessment" form at the new employee orientation to help in their evaluation of potential occupational exposure to hazards including bloodborne pathogens. This hazard assessment will help in the determination of the risk of exposure and the training required. Refer to Appendix C for a copy of the form.
4. Current UTHSCSA laboratories and clinics exposures will be reevaluated during annual laboratory safety evaluations performed by Environmental Health & Safety staff.
5. The principal investigator, clinical director, or laboratory technical director is required to perform an additional exposure assessment in the event of new or revised protocols.

CHAPTER V

GENERAL METHODS FOR MINIMIZING BLOODBORNE PATHOGEN EXPOSURE

This section outlines guidelines or practices that may reduce the risk of exposure to bloodborne pathogens or other potentially infectious materials.

1. **STANDARD (UNIVERSAL) PRECAUTIONS:** Since medical history and examination cannot reliably identify all patients infected with bloodborne pathogens, blood and body fluid precautions shall be consistently used for all patients. This approach outlined in 25 TAC Part 1, Chapter 96 shall be used in the care of all patients and some animals and in the handling of any tissues, blood or body fluids from these sources.
   a. Standard or universal precautions shall be observed to prevent contact with blood and other potentially infectious materials, unless those precautions would interfere with the proper delivery of health care in a particular circumstance or would create a significant risk to the employee.
   b. If differentiation between body fluid types is not possible, all body fluids shall be considered infectious.
2. **WORK AREA RESTRICTIONS:** In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, individuals:
   a. Will not eat, drink, apply cosmetics, lip balm, smoke, or handle contact lenses.
   b. Will not store food and beverages in refrigerators, freezers, incubators, shelves, cabinets, or on counter / bench tops where blood or other potentially infectious materials are present.
   c. Will not pipette or suction blood or other potentially infectious materials by mouth.
   d. Will not conduct procedures in a manner that will contribute to splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials.
3. **PRIMARY CONTAINMENT BARRIERS:** All UTHSCSA employees shall routinely use appropriate barrier precautions to prevent skin and mucous-membrane exposure when contact with blood, body fluids or other infectious material is anticipated. Primary barriers include personal protective equipment (PPE) such as gloves, gowns, and masks, as well as containment equipment such as animal isolators and biological safety cabinets (BSCs). Additional information regarding primary containment barriers is located in the UTHSCSA *Biological Safety Handbook.*
4. **SHARPS AND REGULATED MEDICAL WASTE:** UTHSCSA shall provide readily-available puncture resistant sharps containers, waste boxes and liners compliant with local, state, and federal regulations for disposal of needles, razors, scalpels, etc., and regulated medical waste. For additional information, refer to Chapter VII.
5. **PREGNANT HEALTH-CARE WORKERS;** Pregnant health-care workers are not known to be at greater risk of contracting HBV or HIV infection than health-care workers who are not pregnant; however, if a health-care worker develops HBV, HIV infection during pregnancy, the infant is at risk of infection resulting from perinatal transmission. The pregnant health care worker should discuss with the medical provider the benefits and risks of receiving the HBV vaccine during pregnancy.

CHAPTER VI

ENGINEERED AND WORK PRACTICE CONTROLS

This section outlines work practices and engineered controls that may reduce the risk of exposure to bloodborne pathogens or other potentially infectious materials.

1. **HAND WASHING:** UTHSCSA provides readily accessible hand washing facilities in areas where blood or other potentially infectious materials are handled. Hands and other body surfaces shall be washed immediately and thoroughly if contaminated with blood or other body fluids.
   a. After removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water.
   b. When hand washing facilities are not immediately available, such as at health fairs, UTHSCSA will provide either antiseptic cleanser in conjunction with clean cloth/paper towels, antiseptic towelettes, or waterless disinfectant such as alcohol based gels. If these alternatives are used, then the employees shall wash their hands with soap and running water as soon as feasible. More information on hand washing can be found on the CDC website at www.cdc.gov/handhygiene
2. **SHARPS INJURY PREVENTION:** UTHSCSA employees shall take precautions to prevent injuries during the use or disposal of needles, scalpels, broken glass, dental wires and other sharp instruments.
   a. To prevent needle stick injuries, needles shall not be recapped / resheathed by hand, purposely bent or broken by hand, clipped, sheared, removed from disposable syringes, or otherwise, manipulated by hand. Used needles shall not be removed from disposable syringes, unless no feasible alternative can be demonstrated. In these instances where nondisposable syringes are used, needle removal must be accomplished through the use of a mechanical device or a one-handed technique.
   b. Used, disposable syringes with needles, needles from evacuated blood collection systems, scalpel blades, and other sharp items shall be placed in puncture-resistant containers for disposal; the puncture-resistant containers shall be located as close as practical to the work area. Large-bore reusable needles shall be placed in a puncture-resistant container for transport to the reprocessing area.
   c. Broken glassware, which may be contaminated, shall not be picked up directly with the hands. It shall be picked up using mechanical means such as a brush and dustpan, tongs, cotton swabs or forceps.
   d. Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are closeable, puncture resistant, leak proof on sides and bottom, and labeled or color coded in accordance with Chapter VIII of this ECP. Sharps disposal containers should be examined at least monthly to ensure proper function. Sharps containers are provided at no charge by the UTHSCSA.
   e. During use, containers for contaminated sharps shall be: easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries); maintained upright throughout use; and replaced routinely and not be allowed to overfill. Fill only _ full prior to closing container.
   f. When moving containers of contaminated sharps from the area of use, the containers shall be: Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport or shipping; placed in a secondary container if leakage is possible. The second container shall be closeable; constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and labeled or color coded according to the requirements listed in Chapter VIII.

g. Once sharps containers containing contaminated waste have been closed, they should be placed in a medical waste box for disposal.

3. **FOOD AND DRINK:** Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses is prohibited in areas where there is reasonable likelihood persons will be subjected to occupational exposure.
   a. Food and drink shall not be stored in refrigerators, freezers, or cabinets where blood or other potentially infectious materials are stored or in other areas of possible contamination.

4. **SPECIMEN HANDLING AND PROCESSING:** All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, and aerosolization of these substances.
   a. Mouth pipetting/suctioning is prohibited.
   b. When working with open specimen containers, or a risk of aerosolization, spraying or splashing is present (such as when removing or replacing specimen containers toppers or snap lids), facial mucous membrane protection shall be used as described in section VI (5)(c) – *Facial Mucous Membrane Protection*.
      i. Perform these procedures in a Class I, II, or III, biological safety cabinet whenever possible.
      ii. Use gauze or absorbent tissues to minimize spraying when opening potentially infectious specimen tube tops.
   c. Specimens of blood or other potentially infectious materials shall be placed in a closeable, leak-resistant container that is appropriately labeled as per Chapter VIII of this ECP prior to being stored or transported. Each individual specimen container need not be labeled with the biohazard symbol or color coded as long as it is recognizable as a specimen, and standard or universal precautions are in effect within the immediate processing area.
      i. If outside contamination of the primary container is likely, then a second leak-resistant container that is labeled shall be placed over the outside of the first and closed to prevent leakage during handling, processing, storage, or transport.
      ii. If puncture of the primary container is likely, it shall be placed within a leak-resistant, puncture-resistant secondary container.
   d. Centrifuges will have closable lids and rotor specimen cups must have lids to prevent aerosolization during centrifugation. Label as per ECP, Chapter VIII.

5. **PERSONAL PROTECTIVE EQUIPMENT (PPE):** PPE is provided by each UTHSCSA department at no cost to the employee, and shall be used to minimize potential exposure of exposed skin, mucous membranes, and street clothes to blood or body fluids. Shorts, sandals, or other open sided shoes shall not be worn when working with blood or other potentially infectious materials. Responsibility of ensuring proper training and wearing of PPE rests with the Principal Investigator or immediate supervisor. The Principal Investigator or supervisor must ensure that PPE in suitable sizes is readily available to employees. Repair and replacement of contaminated PPE shall be provided by the department at no cost to the employee. PPE includes, but is not limited to:
   a. **Gloves -** gloves shall be worn when touching, or working with, blood and body fluids, mucous membranes, or non-intact skin of all patients, for handling items or surfaces soiled with blood or body fluids, and for performing venipuncture and other vascular access procedures. Gloves shall be changed after contact with each patient, as soon as practical when contaminated with blood or body fluids, or when damaged.
      i. Non-powdered latex examination or utility gloves are recommended.
      ii. Non-latex gloves such as chloroprene, or nitrile gloves may be used if contact dermatitis or allergic reaction occurs with latex. Disposable vinyl gloves are not recommended due to the loose-fitting nature.
      iii. Disposable gloves shall not be washed, reused, or used for touching "clean" surfaces (keyboards, telephones, etc.)

iv. Gloves that are cracked, peeling, torn, punctured, or show other signs of deterioration, shall be discarded.

v. Gloves shall be removed prior to leaving the work area and shall not be worn in public areas.

More information on glove use can be found on the Environmental Health and Safety website at http://www.uthscsa.edu/safety/gloves.html

b. **Latex Allergy / Sensitivity** – workers wearing natural rubber latex gloves who notice redness, itching, hives, or experience allergy-like symptoms (watery eyes, runny nose, etc.), should notify their supervisor immediately and follow the National Institute of Occupational Safety & Health (NIOSH) recommendations located in Appendix H: *Latex Allergy, A Prevention Guide*, of this ECP.

i. Severe allergic reactions may require medical attention. In those cases, follow UTHSCSA WCI employer's first report of injury or illness procedures.

ii. Employees who know they have latex allergy should report this to their supervisor as soon as known, and wear an identification bracelet or tag.

iii. Contact the Environmental Health & Safety office for assistance with latex allergy / sensitivity issues.

c. **Facial Mucous Membrane Protection -** masks and protective eyewear, or chin length face shields shall be worn during procedures that are likely to cause splashing, spattering, spraying or generate aerosols of blood or other body fluids (i.e. pipetting, vortexing), or when working with open specimen containers, to prevent accidental bloodborne pathogen exposure to the mucous membranes of the mouth, nose, and eyes.

i. Tabletop clear acrylic or plastic shields may also be used for facial protection during bench top procedures.

ii. A Class II Biological Safety Cabinet, with the sash at proper opening height, is preferred for handling specimens and performing procedures with blood or other potentially infectious materials where aerosolization may occur.

d. **Outer Protective Garments –** The employer will provide appropriate protective clothing such as fluid resistant gowns, labcoats, or aprons for body areas not shielded by gloves and face protection. These protective garments shall be worn during procedures that are likely to generate splashes of blood or other body fluids. For example, laboratory coats or gowns with long sleeves would be required when exposure of the employee's forearms to blood or OPIM may reasonably be anticipated.

i. Cloth material provides adequate resistance for minor sprays or aerosols, but a more resistant plastic, vinyl, or other suitable material should be used when larger quantities of blood or body fluids are being handled.

ii. Booties or shoe covers, bouffant or surgical caps, hoods, or full body suits may be appropriate if gross contamination is expected.

iii. All personal protective equipment shall be removed immediately upon leaving the work area, or as soon as possible if overtly contaminated with blood or body fluids, and placed in an appropriately labeled designated area, or container, for storage, washing, decontamination or disposal.

e. **Laundering Procedures for Contaminated Laundry -** any garment that has been penetrated by blood or other potentially infectious materials (OPIM) shall be removed immediately, or as soon as feasible, and handled as little as possible, using gloves and any other appropriate universal precautions. Contaminated laundry shall be bagged or containerized at the location where it was used and placed in an appropriately labeled (biohazard symbol) container or leak proof bag prior to laundering. **Do not take contaminated clothing, PPE, or linen home to wash.**

i. Contaminated linen shall have all autoclave tape removed and shall be placed in an appropriately labeled bag or container (leak proof if wet) prior to being given to Linen Services for laundering. Contaminated laundry is serviced by Texas Linen Company, San Antonio, TX.

6. **NEEDLELESS SYSTEMS**: All supervisors are required to evaluate the use of engineered sharps protection or needleless delivery systems in areas where bloodborne pathogen exposure may occur.

CHAPTER VII

GENERAL HOUSEKEEPING, DECONTAMINATION, & WASTE DISPOSAL

This section outlines procedures necessary to keep UTHSCSA facilities maintained in a clean and sanitary condition. Employees are responsible for cleaning and decontaminating all laboratory equipment, other surfaces, and ensuring proper waste disposal.

1. **CONTAMINATED WORK SURFACES:** All equipment, environmental, and working surfaces contaminated with blood or other potentially infectious materials shall be periodically decontaminated with an appropriate, Environmental Protection Agency (EPA) registered anti-microbial product (i.e. Lysol, Amphyl, Wex-Cide, etc.), or a 1:100 to 1:10 dilution of household bleach (5.25% – 6.00% sodium hypochlorite), as recommended by the Centers for Disease Control and Prevention (CDC). OSHA requires that an EPA-registered tuberculocidal product (**http://www.epa.gov/oppad001/chemregindex.htm**), or 1:100 to 1:10 dilution of household bleach, made fresh daily, be used to disinfect any blood spills. In general, a 1:100 dilution of household bleach (500 ppm Chlorine) is used for general cleaning of non-porous environmental surfaces and a 1:10 dilution (5000 ppm Chlorine) is used for decontamination when a spill of blood or OPIM occurs. Refer to the UTHSCSA *Biological Safety Handbook* section on *Disinfections and Sterilization* for additional information.
   a. **Bench/countertops** – Clean and decontaminate:
      i. immediately, if there is a spill of blood or OPIM;
      ii. after the completion of a procedure;
      iii. at the end of each work shift, if the surface may have become contaminated since the last cleaning.
   b. **Floors/walls** – decontaminate those surfaces exposed to blood or other potentially infectious materials whenever visibly contaminated, but at least once per month.
   c. **Laboratory Equipment -**
      i. All bins, pails, cans (i.e. for medical waste), specimen racks and similar receptacles intended for reuse, which have a potential for becoming contaminated with blood or other potentially infectious materials, shall be inspected, decontaminated, and cleaned on a regularly scheduled basis, but at least once per month, and cleaned and disinfected immediately or as soon as possible upon visible contamination.
      ii. Reusable items contaminated with blood or other potentially infectious materials, such as surgical instruments, forceps, tongs, etc., shall be decontaminated prior to washing and/or reprocessing.
      iii. Protective coverings such as plastic wrap, aluminum foil, or imperviously backed absorbent paper (diaper pads), shall be removed and replaced as soon as possible when visibly contaminated with blood or other potentially infectious materials, or by the end of the workshift, if contaminated during that shift.
      iv. Automated analyzers, refrigerators, freezers, and specimen processing equipment such as centrifuges, shakers, blenders, etc. used with blood or other potentially infectious materials shall have all surfaces and parts that come into contact with contaminated materials decontaminated on a periodic basis or whenever overtly contaminated. The biohazard label shall also be posted on this equipment as per Chapter VIII of this ECP.
      v. Prior to removal from the laboratory testing area for transfer, shipment, or maintenance, laboratory personnel are to decontaminate the items and label them as such. Contact Environmental Health & Safety (567-2955) for assistance in the decontamination of laboratory equipment. If the equipment has surfaces or internal parts that cannot be adequately decontaminated, then the instrument shall be tagged with the biohazard

label, plus the agent used, and any parts not decontaminated clearly posted on the outside of the instrument.

vi. Large potentially contaminated equipment such as refrigeration units and incubators that require outside assistance in moving, must be inspected, cleared, and tagged as such by Environmental Health & Safety staff prior to moving to a new location.

2. **SURGICAL INSTRUMENTS:** Decontaminate used, reusable, surgical instruments with an appropriate disinfecting agent prior to cleaning and final sterilization.

3. **MEDICAL WASTE MANAGEMENT:** Items for disposal in research, diagnostic, and clinical settings are to be properly segregated according to waste stream. The Texas Commission on Environmental Quality (TCEQ - formerly the TNRCC) under 30 TAC §330 regulates waste disposal in Texas. Supervisors are responsible for the safe and appropriate disposal of their waste materials in the proper receptacle.

   a. **Municipal Solid Waste (non-hazardous) -** this is what most individuals consider, "regular trash". Paper, plastic, wood, hair (from non-infective sources), and food items fall in this category. All employees are prohibited from disposing of hazardous wastes via municipal solid wastes.

   b. **Municipal Solid Waste - Hazardous –** this includes special wastes such as hazardous chemical waste, radioactive material waste, and medical (biohazardous) and pathological waste. Hazardous chemical waste (i.e. dental amalgam) is not to be placed into the regulated medical waste boxes. For mixed biological/chemical or biological/radioactive wastes, contact Environmental Health & Safety's Environmental Protection Division (210-567-2955) for proper waste disposal procedures.

   c. **Animal Waste –** Dispose of animal carcasses & body parts as per Laboratory Animal Resources procedures – DO NOT PLACE IN THE MEDICAL WASTE BOX, or regular non-hazardous trash.

   d. **Sharps –** Dispose of contaminated sharps as listed in section VI (2) of this ECP.

   e. **Human cadavers –** Cadavers (anatomical remains) donated to the university for educational and research purposes are not considered potentially infectious after the embalming / fixative process. These remains have special interment procedures that must be followed as per the state's Anatomical Board. Contact the UTHSCSA Willed Body Program (567-3900) for further information.

   f. **Regulated Medical Waste –** commonly referred to as "biohazard waste", this includes untreated special waste from health care related facilities such as discarded blood, tissues, microbiological waste, pathological waste and other potentially infectious materials (as defined in Appendix A) and sharps.

      1. Regulated medical waste, other than contaminated sharps or animal waste, is to be placed in containers that are:
         i. Closeable
         ii. Leak resistant
         iii. Labeled with the biohazard symbol. Note that red to red-orange bags or containers may be substituted for labels, and these can then be placed into the labeled medical waste box.
         iv. Closed prior to removal from the immediate work area.
         v. Labeled with the room (lab) number, Principal Investigator or supervisor, and phone extension on the box. **Note: Human tissues (cytological, histological, and pathological waste) are to be incinerated. Contact Environmental Health & Safety for special "Incinerate chemo/path" stickers to place on box.**
         vi. Left inside the room for Custodial Services to pick up – DO NOT LEAVE BOXES IN GENERAL USE HALLWAYS.
      2. Regulated medical waste offered to our contractor (Stericycle) for transport to an off-site treatment, storage and disposal facility shall be

shipped in containers complying with current regulatory construction and labeling requirements, including caution wording in English and Spanish.

3. Boxes / containers shall be inspected for compliance by Environmental Health & Safety personnel, or qualified UTHSCSA staff prior to shipment.

g. **Medical Waste Containers (Distribution/Pickup) –** Medical waste boxes, liners, and sharps containers are available for distribution to UTHSCSA facilities at specified locations on campus. Contact Environmental Health & Safety @ (210) 567-2955, or obtain a list of locations on-line at http://www.uthscsa.edu/safety/reply3/index.html .

i. To arrange pickup of medical waste boxes from an off-campus location, contact the Environmental Health and Safety, Environmental Protection Division at (210) 567-2955.

CHAPTER VIII

POSTING AND LABELING REQUIREMENTS

Areas of the facility where blood or other potentially infectious materials are handled, processed, or stored shall have the biohazard label posted at the entrance and the agent(s) being used listed. Additionally, labels shall be affixed to equipment and containers used with these potentially infectious materials as listed below.

1. **BIOHAZARD WARNING LABELS:** These shall be affixed to containers of potentially infectious waste; refrigerators, and freezers containing blood and other potentially infectious materials; and other containers used to store or transport blood or other potentially infectious materials.
   a. Labels required by this section shall include the biohazard symbol and the word "Biohazard." These labels shall be fluorescent orange or orange-red, or predominantly so, with lettering and biohazard symbol in a contrasting color. Written wording shall be provided in English, and also in Spanish where required [i.e. – medical waste containers as per 30 TAC Part 1, Subchapter Y 330.1004(i)(4)].
   b. Labels shall either be an integral part of the container or shall be affixed as close as safely possible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.
   c. Labels required for contaminated equipment shall be in accordance with this paragraph and shall also state which portions of the equipment remain contaminated.
   d. Regulated medical waste that has been properly decontaminated (i.e. autoclaved, sterilized, etc.) must have any biohazard labels defaced, covered, or removed prior to disposal. The waste must be labeled as "treated medical waste" in accordance with the provisions of 25 TAC §1.136(a).

CHAPTER IX

HIV & HBV RESEARCH LABORATORIES

Research laboratories and production facilities engaged in the culture, production, concentration, experimentation, and manipulation of human immunodeficiency virus (HIV) or hepatitis B virus (HBV) must adhere to additional precautions equivalent to a Biosafety Level 3 containment levelas outlined in the UTHSCSA *Biological Safety Handbook,* CDC / NIH publication *Biosafety in Microbiological and Biomedical Laboratories, 4th Edition,* and 29 CFR §1910.1030 (e). These additional requirements do not apply to laboratories solely engaged in the analysis of blood, tissues, or organs.

1. **PRINCIPAL INVESTIGATOR RESPONSIBILITY:** It is the investigator's responsibility to inform the Environmental Health & Safety Department and the Institutional Biosafety Committee (IBC) before work begins with HIV or HBV production or research. The IBC will assign a containment level. All laboratories conducting HIV or HBV research should be working at least at a Biosafety Level 2, using Biosafety Level 3 procedures.
2. **STANDARD MICROBIOLOGICAL PRACTICES:** All personnel working in these areas will follow standard microbiological practices.
3. **DECONTAMINATION:** All infectious liquid or solid waste shall either be incinerated or decontaminated by a method known to effectively destroy bloodborne pathogens before being disposed of into the proper waste receptacle.
4. **SPECIAL PRACTICES:**
    a. Laboratory doors shall be kept closed when work involving HIV or HBV is in progress.
    b. Contaminated materials that are to be decontaminated at a site away from the work area shall be placed in a durable, leak proof, labeled or color-coded container that is closed before being removed from the work area.
    c. Access to the work area shall be limited to authorized personnel only. Written policies and procedures shall be 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 shall be allowed to enter the work areas and animal rooms.
    d. When potentially infectious materials or infected animals are present in the work area or containment module, a hazard warning sign incorporating the biohazard label shall be posted on all access doors. Information to be posted includes:
        i. The agent(s) in use
        ii. The biosafety level (2 or 3)
        iii. The investigator's name and emergency telephone number
        iv. Any required immunizations (i.e. – HBV Vaccine), PPE to be worn, and exit procedures.
    e. All activities involving potentially infectious materials shall be conducted in biological safety cabinets or other physical containment devices within the containment module. No HIV/HBV work shall be conducted in open vessels on the open bench.
    f. An autoclave for decontamination of infectious laboratory waste shall be available.

5. **PERSONAL PROTECTIVE EQUIPMENT (PPE):**
   a. Laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing shall be not be worn outside of the work area and shall be decontaminated before being laundered or placed in a biohazard bag and delivered to the UTHSCSA Linen Services laundry.
   b. Special care shall be taken to avoid skin contamination with potentially infectious materials. Gloves shall be worn when handling all animals and when making hand contact with potentially infectious materials is unavoidable. Gloves are to be removed prior to leaving the laboratory.
6. **WASTE DISPOSAL:** All waste from work areas shall be incinerated or appropriately decontaminated prior to disposal. Refer to the UTHSCSA *Biological Safety Handbook* for appropriate decontamination procedures.
7. **VACUUM LINES:** Vacuum lines shall be protected with suction flask containing liquid disinfectant, an overflow flask, and an in-line HEPA filter.
8. **SYRINGE & NEEDLE USE:** Hypodermic needles and syringes shall be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe-needle units (i.e., the needle is integral to the syringe) shall be used for the injection or aspiration of potentially infectious fluids. Extreme caution shall be used when handling needles and syringes to avoid autoinoculation and the generation of aerosols during use and disposal. A needle shall not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe shall be promptly placed in a puncture-resistant container and decontaminated, preferably by autoclaving, before being discarded or reused.
9. **SPILL CONTROL:** All spills shall be immediately contained and cleaned up by appropriate professional staff or others properly trained and equipped to work with potentially concentrated infectious materials. Spills and accidents that result in overt exposures of employees to potentially infectious materials shall be immediately reported to the laboratory director or other responsible person.
10. **CONTAINMENT EQUIPMENT:** Certified biological safety cabinets (Class I, II, or III) or other appropriate combinations of personal protection or physical containment devices, such as special protective clothing, respirators, centrifuge safety cups, sealed centrifuge rotors, and containment caging for animals shall be used for all activities with potentially infectious materials that pose a threat of exposure to droplets, splashes, spills, or aerosols. Biological safety cabinets shall be certified by accredited individuals to meet ANSI/NSF-49 operation standards at initial installation, following a relocation or repair, and annually thereafter.
11. **ROOM EXHAUST:** A ducted exhaust-air ventilation system shall be provided. It shall be designed to maintain directional airflow from outside the work area, into the work area. The exhaust air shall not be recirculated to any other area of the building and shall be directed away from occupied areas and air intakes. Proper direction of airflow shall be verified.
12. **HAND WASHING AND EYEWASH FACILITIES:** Each laboratory shall contain a sink for hand washing which is readily available within the work area and an area eye wash facility (flushed monthly) shall be readily available.

CHAPTER X

HEPATITIS B VACCINATION & POST-EXPOSURE FOLLOW-UP

HBV vaccination shall be offered at no cost to all employees occupationally exposed to blood or other potentially infectious materials in the normal course of their duties. Each UTHSCSA department is responsible for establishing a funded account to pay for required medical surveillance of their employees, and this account number must be given to the designated healthcare provider on request for billing purposes. It shall be made available after the required training and within 10 working days of initial assignment to job duties that put the employee at risk of exposure to a bloodborne pathogen. UTHSCSA shall not make participation in a prescreening program a prerequisite for receiving the hepatitis B virus vaccine.

1. **VACCINE ACCEPTANCE:** Employees at UTHSCSA who accept to receive the hepatitis B vaccine shall be sent to a designated healthcare provider within 10 working days of their acceptance in writing. Recommended providers in San Antonio are:
   a. University Physician's Group, UPG Diagnostic Pavilion, 4647 Medical Drive in San Antonio, call 592-0150
   b. Concentra Medical Clinics, West: 1904 Grandstand Dr., San Antonio, TX 78238, call 520-8070 (other San Antonio locations available)
   c. Texas MedClinics. IH10 @ Wurzbach, San Antonio, TX 78230, call 696-5599 (other San Antonio locations available)

   The form shown in Appendix D of this ECP, or a similar form, may be used for this purpose. Remote UTHSCSA locations must make alternate arrangements with a local medical provider.
2. **VACCINE DECLINATION:** UTHSCSA management shall assure that employees, who decline to accept hepatitis B vaccination offered by the employer, sign the declination statement as worded in the example in Appendix D of this ECP. Employees who initially decline the vaccine but who later elect to receive it may then have the vaccine provided at no cost. The employee shall complete a new form in Appendix D, sign the "Acceptance" portion of the form, and follow the "Vaccine Acceptance" procedures. Copies of the Acceptance/Declination form should be kept on file as a confidential medical record by the department or supervisor.
3. **HEALTHCARE PROFESSIONAL'S WRITTEN OPINION – HBV VACCINE:** The employee's supervisor shall obtain and provide to the employee, a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation. This opinion shall be limited to the following information:
   a. Whether or not the HBV vaccine is indicated; and
   b. If the employee has received the initial inoculation of vaccine.
4. **POST EXPOSURE EVALUATION AND FOLLOW-UP:** In the event of a bloodborne pathogen exposure or suspected exposure, the individual (Employee, Student or Non-employees as defined in this ECP) should immediately notify his/her supervisor or Department official of the incident. The CDC recommends that the exposed individual seek treatment within 1-2 hours after initial exposure, especially if the HIV status of source individual is unknown. Because timely treatment is essential, the provider should be called ahead of time to be advised of the employee's emergent condition. All bloodborne pathogen exposures are to be reported to the Environmental Health and Safety office at 210-567-2955 so that an incident report can be completed.

Employees:

1. The supervisor, in conjunction with the employee, should then complete:
   i. *Employer's First Report of Injury or Illness* form (available on the UTHSCSA Human Resources website). Send the completed form to Workers'Compensation, Office of Human Resources within 24 hours from the time of the injury and follow normal Human Resources WCI reporting procedures.
   ii. If time permits, the *Notification of On the Job Injury* form (OHR-26) should be provided to the employee to submit to the medical provider.
   iii. *Employee Exposure Notification and Medical Evaluation Option Form* (Appendix G of this ECP) is to be completed and the employee's choices for treatment noted on the form.
2. Sharps injury: If the exposure occurred as a result of contact with a contaminated sharp (needlestick, scalpel cut, etc.), then the employee and the supervisor must also complete:
   i. *Contaminated Sharps Injury Reporting Form* - Appendix E of this ECP. This form should be forwarded as soon as possible to the Environmental Health & Safety office (1.343T DTL) for recording in the sharps injury log and transmittal to the Texas DSHS regional office if applicable.
   ii. *Sharps Injury Survey Form*, Appendix F of this ECP should also be completed by the employee and forwarded as above.
3. For work related exposures, the employee may seek treatment with any state licensed healthcare provider. The employee, Department Supervisor, or Department of Human Resources shall provide the following information to the evaluating physician, or at the physician's request.
   i. A description of the affected employee's duties as they relate to the employee's exposure incident.
   ii. Documentation of the route(s) of exposure and circumstances under which exposure occurred.
   iii. Results of the source individual's blood testing, if available
   iv. And a copy of this plan. **Note: The ECP is also available from the Environmental Health & Safety website address: http://www.uthscsa.edu/safety/ .**
4. Blood from the exposed employee should be collected as soon as possible after the exposure incident for the determination of baseline HIV, HBV, or HCV status. If the employee consents to baseline blood collections, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.
   i. Any blood sample taken must maintain the confidentiality of the employee's identity. A unique alphanumeric identifier, and not the employee's name, is recommended to be placed on the sample tube.
5. Employees who decline treatment: Supervisors must ensure that employees who do not wish to seek treatment for a potential bloodborne pathogen exposure sign a statement to that effect. Employees who decline treatment have 2 options:
   i. That they do not wish to seek medical treatment or consultation and they do not consent to have a sample of their blood drawn and held, or tested at this time.
   ii. That they do not wish to seek medical treatment or consultation, but theywish to have a blood sample drawn and the serum held for 90 days.
   They may not have this sample tested unless they seek medical consultation.
6. Follow-up of the exposed employee should include antibody or antigen testing, counseling, illness reporting, and safe and effective post-exposure prophylaxis according to current U.S. Public Health Service recommendations for medical practice. Refer to MMWR, Vol. 50, No. RR-11, *Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for*

Post Exposure Prophylaxis, Vol. 50, No RR11;1 June 29, 2001, http://www.cdc.gov/mmwr/ and *Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis,* Vol 54, No RR-9, September 30, 2005. http://www.ucsf.edu/hivcntr/Clinical_Resources/Guidelines/PDFs/rr5409.pdf

7. The source individual's blood should be tested as soon as feasible. If the worksite already has a sample specimen of the source individual, then the state of Texas does not require the source individual's consent prior to testing. If a specimen must be obtained from the source individual, then an informed consent form must be obtained.
   i. Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.
   ii. When the source is already known to be infected with HBV, HIV, or HCV, then testing for the source individual's known HBV, HIV, or HCV status need not be repeated.
8. HEALTHCARE PROFESSIONAL'S WRITTEN OPINION – POST EXPOSURE: For each evaluation under this section, the employing department shall obtain and provide to the exposed employee a copy of the evaluating healthcare professional's written opinion within 15 days of receipt. The written opinion shall be limited to the following information.
   i. Whether the hepatitis B virus vaccination is indicated for an employee, and if the employee has received such vaccination.
   ii. A statement that the employee has been informed of the results of the medical evaluation and that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.
   iii. Any other findings and diagnoses shall remain confidential, and shall not be included in the written opinion report.
   iv. The treating healthcare professional shall provide this written opinion report at the request of an authorized UTHSCSA representative.

Students:

Students who have had significant contact from a contaminated needle or who have had contamination to an open wound or mucous membrane are to follow the specific guidelines and procedures for students as outlined in the Needlestick Policy provided by Student Services, Health Care and Counseling.

More information may be found at the following web address.

http://studentservices.uthscsa.edu/healthcare&counseling/needlestick.html

Students should also complete the *Sharps Injury Survey Form* – Appendix F of this ECP and return the form to the Environmental Health and Safety office, 1.343T.

Non-Employees:

Non-employees may choose their medical provider for post-exposure evaluation although the University Hospital Emergency Center (telephone: 210-358-2488) is available for initial evaluation and treatment. Non-employees should report the exposure to their own institution or employer for reimbursement according to the policies and procedures of their institution.

The sponsoring UTHSCSA department will report all incidents involving sharps or suspected bloodborne pathogen exposures sustained by persons to the Environmental Health and Safety office.

Completion of the *Contaminated Sharps Injury Reporting Form* – Appendix E of this ECP is required. This form should be forwarded as soon as possible to the Environmental Health & Safety office (1.343T DTL) for recording in the sharps injury log and transmittal to the Texas DSHS regional office if applicable. Also, the *Sharps Injury Survey Form*, Appendix F of this ECP should be completed by the individual and forwarded as above.

CHAPTER XI

INFORMATION & TRAINING

Each department shall ensure that all individuals with occupational exposure participate in a training program for prevention of bloodborne pathogen exposure. Those individuals include: research personnel, clinicians, custodial services personnel, UT Police department personnel, students, residents, physicians, or any other persons working within the institution. UTHSCSA employees are required to attend the Bloodborne Pathogen Safety Awareness course offered by the Environmental Health & Safety Department or take the web-based course:

1. **BLOODBORNE PATHOGENS SAFETY AWARENESS**: This course covers the required content for compliance with the Texas DSHS and OSHA Bloodborne Pathogen Standard. (Research personnel are also required to attend the Basic Biological Safety course.)
2. **TRAINING FREQUENCY:** Training shall be provided at the time of initial assignment to tasks where occupational exposure may take place and annual refresher training is to be taken within 1 year of the employee's previous training.
   a. UTHSCSA shall provide additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.
3. **TRAINING CONTENT:** Material appropriate in content and vocabulary to educational level, literacy, and language background of employees shall contain the following elements:
   a. A summary of this Exposure Control Plan and explanation of its contents and where to obtain an accessible copy of this plan, as well as awareness of Texas DSHS and OSHA regulations;
   b. A general explanation of the epidemiology and symptoms of bloodborne diseases;
   c. An explanation of the modes of transmission of bloodborne pathogens;
   d. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials;
   e. An explanation of the use and limitations of practices that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;
   f. Information on the types, proper use, locations, removal, handling, decontamination and/or disposal of personal protective equipment;
   g. An explanation of the basis for selection of personal protective equipment;
   h. Information on the Hepatitis B vaccine, including information on its efficacy, safety, method of administration and the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;
   i. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
   j. An explanation of the procedure to follow if an exposure incident occurs including the method of reporting the incident and the medical follow-up that will be made available. Also information on the post exposure evaluation and follow-up that the institution is providing for exposed individuals; and
   k. An explanation of the signs and labels and/or color-coding.
4. **ADDITIONAL TRAINING FOR EMPLOYEES IN HIV OR HBV RESEARCH LABORATORIES:** Employees in HIV or HBV research laboratories shall receive the following training in addition to the above training requirements:
   a. The principal investigator or supervisor shall ensure that employees demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with HIV or HBV.
   b. Department supervisors shall assure that employees have experience in the handling of human pathogens or tissue cultures prior to working with HIV or HBV.

c. A training program shall be provided to employees with no prior experience in handling human pathogens, before handling any infectious agents.

i. Additional requirements for training may be found in the latest edition of *Biosafety in Microbiological and Biomedical Laboratories, 4th Edition* (Health and Human Services, Publication no. 93-8395).

6. **FULFILLING THE TRAINING REQUIREMENTS:** Health care personnel, clinical, or research employees with likely occupational exposure to bloodborne pathogens may fulfill the training requirements as follows (BBPC = Basic Bloodborne Pathogens Course):

Employee Type	Potential Exposure	Appropriate Training Course
Research	Medium	Bloodborne Pathogens Safety, Basic Biological Safety
Clinical/Dental	Medium	Bloodborne Pathogens Safety
Ancillary	Low	Bloodborne Pathogens Safety
Laboratory Animal Resources	Medium	Bloodborne Pathogens Safety Basic Biological Safety
Safety Specialist / Manager	Medium	Bloodborne Pathogens Safety, Basic Biological Safety

7. **ALTERNATIVE TRAINING:** Training provided by groups outside of Environmental Health & Safety is acceptable if the specifications noted below are fulfilled:

a. Only training that is provided by a U.S. institution and meets the curriculum requirements outlined in section 4 of this chapter is acceptable.

b. Copies of this Exposure Control Plan must be made available for review during alternative training.

c. Documentation of alternative training must be maintained by the requesting department. Training records must meet the requirements outlined in Chap. XII.

CHAPTER XII

RECORDKEEPING

The following records shall be maintained and retained on file as listed below:

1. **MEDICAL RECORDS:** Each department shall maintain or have access to medical records for each employee with an occupational exposure for at least the duration of employment plus 30 years. These records shall include:
   a. The name and Social Security Number of the employee.
   b. The employee's Hepatitis B vaccination status including the dates of all the Hepatitis B vaccinations and medical records relative to the employee's ability to receive vaccination or the circumstances of an exposure incident.
   c. A copy of all results of physical examinations, medical testing, and follow-up procedures as they relate to the employee's ability to receive vaccination or to post exposure evaluation following an exposure incident in accordance with OSHA 29 CFR 1910.1020, *Access to Employee Exposure and Medical Records.*
   d. A copy of the healthcare professional's written opinion form**.**
2. **AVAILABILITY**: Medical records are made available to the subject employee or anyone with written consent of the employee.
3. **CONFIDENTIALITY**:
   a. The employer department(s) maintaining medical records activity shall ensure that employee medical records:
      i. Are secured from authorized use and maintained confidential.
      ii. Are not disclosed or reported to any person within or outside the workplace except as required by this section or as may be required by law.
      iii. Meet the UTHSCSA health information records storage requirements.
   b. Records need not be retained for employees with less than 1 year of employment _if the records are returned to them at the time of termination.
4. **TRAINING RECORDS:** Records of training performed by Environmental Health & Safety will be retained in the Environmental Health & Safety Department for at least 3 years.
   a. The training records shall include the following:
      i. Dates of the training sessions;
      ii. The contents or summary of the training sessions;
      iii. The names and job titles of all persons conducting the training session;
      iv. The names and job titles of all persons attending the training session.
   b. Employee training records are provided to the employee or their supervisor within 15 working days of a written request.
5. **MONITORING EMPLOYEE COMPLIANCE:**
   a. Each department shall establish a mechanism to monitor employee compliance with Standard or Universal Precautions based on the level of exposure.
   b. Each department shall define a system of disciplinary action for employee noncompliance with the requirements set forth in this ECP. Accurate written records of any disciplinary action shall be maintained in the employee's file following the guidelines provided in the UTHSCSA *Handbook of Operating Procedures*.

APPENDIX A

DEFINITIONS OF TERMS USED

Blood: Human blood, human blood components and products made from human blood.

Bloodborne pathogens: Pathogenic microorganisms that are present in human blood, and can cause disease in humans. These pathogens include, but are not limited to agents such as, human Immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV), syphilis, and *Plasmodium malariae*.

Clinical laboratory: A workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

Contaminated: The presence, or the reasonably anticipated presence, of blood or other potentially infectious materials on an item or surface.

Contaminated sharps: Any contaminated object that can be reasonably anticipated to penetrate the skin or any other part of the body and result in an exposure incident and includes, but is not limited to, needles, scalpels, lancets, broken glass, broken capillary tubes, the exposed ends of dental wires, dental knives, drills or burs.

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

Disinfection: A process by physical or chemical means that eliminates many or all pathogenic microorganisms on inanimate objects with the exception of resistant bacterial spores.

Employee: Any individual employed by the UTHSCSA to perform work for the Health Science Center compensated by wages or salary paid through the University payroll system and who is subject to UTHSCSA policies and procedures.

Engineering controls: Means of control (e.g., sharps disposal containers, self sheathing needles, biological safety cabinets, etc.) that isolate or remove the hazard from the workplace.

Exposure incident: A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that occurs during the performance of an employee's duties.

Hand washing facilities: A facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

HBV: means Hepatitis B virus.

HCV*:* means Hepatitis C virus.

HCP*:* means Health Care Personnel.

Health Care Personnel: An individual employed by UTHSCSA, or a non-compensated volunteer on UTHSCSA premises, assisting in patient care or testing. Students are excluded from this definition.

HIV: means human immunodeficiency virus.

Licensed healthcare professional: Is a person whose legally permitted scope of practice allows them to independently evaluate an employee and determine appropriate interventions such as hepatitis B vaccination and post-exposure evaluation and follow-up.

Medical waste: See, "Regulated Medical Waste".

Occupational exposure: Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Non-Employee: Volunteers, stipend-paid persons, visiting students, visiting postgraduate students, visiting physicians (including residents in training who are employees of other institutions and not of UTHSCSA), consultants acting in the course and scope of institution-sanctioned activities and other persons as defined in the "Non-Employee Service" policy in the Handbook of Operating Procedures (HOP 4.5.15).

Other Potentially Infectious Materials (OPIM):

1. The following body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, and any body fluid that is visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;
2. Any unfixed tissue or organ (other than intact skin from a human -- living or dead); and,
3. HIV or HBV containing cells or tissue cultures, organ cultures, and culture medium or other solutions; and blood, organs or other tissues from experimental animals infected with HIV or HBV.

Parenteral: Exposure occurring as a result of piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts and abrasions.

Personal protective equipment (PPE): Specialized clothing or equipment worn by an employee to protect him/her from a hazard. Such equipment does not permit blood or other potentially infectious materials to pass through to clothes, skin, eyes, and mouth. General work clothes (e.g., uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

Production facility: A facility engaged in industrial scale, large volume, or high concentration production of HIV or HBV.

Regulated medical waste: Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials. See TCEQ (TNRCC) regulations in 30 TAC §330.

Research laboratory: A laboratory producing or using research-laboratory scale amounts of HIV or HBV. Research laboratories may produce the high concentrations of HIV or HBV, but not the volume found in a production facility.

Sharps: Any object that can reasonably be anticipated to penetrate the skin or any other body part and to result in an exposure incident and includes but is not limited to: needle devices;

scalpels; lancets; a piece of broken glass; a broken capillary tube; an exposed end of a dental wire; or a dental knife, drill, or bur.

Source individual*:* Any individual, living or dead, whose blood, or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients, clients in institutions for the developmentally disabled trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains prior to embalming; and individuals who donate or sell blood or blood components.

Student: Any person registered in a program of study in any of the schools at the UTHSCSA as defined in the UTHSCSA – HOP 10.1.1.

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

Standard Microbiological Practices*:* Controls and laboratory practices to follow that reduce occupational and environmental exposure to microorganisms. These practices are outlined in the publication *Biosafety in Microbiological and Biomedical Laboratories,* published by the U.S. Public Health Service, publication # 93-8395.

Standard Precautions*:* Controls that reduce the likelihood of exposure by altering the manner in which a task is performed. Every specimen is treated as if it contains potentially infectious agents to humans or animals.

Universal Precautions: See "Standard Precautions".

WCI: Means Workers Compensation Insurance.

APPENDIX B

UTHSCSA EMPLOYEE EXPOSURE ASSESSMENT BY JOB CLASSIFICATION

1. UTHSCSA job titles that require exposure to materials containing potential bloodborne pathogens as a normal job duty:

JOB TITLE	DEPARTMENT/LOCATION
➢ Physicians and Dentists	Medical or Dental School (with patient contact)
➢ Nursing Personnel	Nursing School (with patient contact)
➢ Physician Assistants	Medical School (with patient contact)
➢ Dental Technologists	Dental School (contact with patient samples)
➢ Dental Assistants	Dental School (with patient contact)
➢ Phlebotomists	Allied Health School, Clinical and Research labs
➢ Medical Technologists	Allied Health School, Clinical and Research labs
➢ Histological & Cytogenic Techs.	Allied Health School, Clinical and Research labs
➢ Laboratory Technicians	Various departments (with body fluid contact)
➢ Laboratory Animal Resources	Veterinarians, caretakers (with body fluid contact)
➢ Safety Specialists & Managers	Environmental Health & Safety Department

2. UTHSCSA departments/positions in which some, but not all, employees may have occasional or ancillary exposure to materials containing bloodborne pathogens as a required job duty:

DEPARTMENT	JOB TITLE	TASK/PROCEDURE
Facilities Mgmt	Bldg. Attendant/Housekeeper	Handling medical waste boxes and cleaning laboratories
	Plumber	Plumbing in Dental bays and laboratories
	Carpenter	Some repair/remodeling jobs
Instrumentation	Medical Repair Technician	Repair of some equipment/dental bays
Ophthalmology	Ophthalmic Tech	Some duties may require potential exposure
Research Imaging	Nuclear Medicine Tech	Some medical procedures
UTHSCSA Police	Officer	Situations involving injured persons and emergency response
General Services	Linen Services employee	Linen collection from departments and laboratories

APPENDIX C:

The University of Texas Health Science Center at San Antonio
Environmental Health & Safety Department

New Employee Exposure Assessment

Welcome! The University of Texas Health Science Center at San Antonio (UTHSCSA) is committed to providing a workplace free of recognized hazards that is conducive to world-class education, research, and patient care. An important part of a model health and safety program is appropriate training regarding the potential hazards you may encounter in the course of your employment.

PURPOSE: The purpose of this assessment is to determine your required health & safety training by evaluating your use of and exposure to potentially hazardous agents in your workplace.

INSTRUCTION: Please indicate your general employment responsibilities:

☐ **Laboratory** ☐ **Hospital/Dental Clinic/Patient Care** ☐ **Administrative/Service/Other**
Room #: _____

Complete the hazard assessment sheet by indicating which materials will be used in the course of your employment. If you answer "Yes" to any of the assessment questions, Environmental Health & Safety will inform you and your supervisor of any additional safety training requirements. Contact Environmental Health & Safety at (210) 567-2955 (www.uthscsa.edu/safety) with questions.

Workplace Exposure Hazard	Yes	No	Additional Required Safety Training
Hazardous chemicals in a laboratory	☐	☐	Lab Safety & Hazardous Waste Generator's Course
Human blood, tissues, medical waste	☐	☐	Safety - Basic Bloodborne Pathogens Course (available as web-based course)
Potentially infectious agents, rDNA	☐	☐	Safety - Basic Biological Safety Course
Biosafety Level 3: Select Agent or Toxin	☐	☐	BSL-3/2: Select Agent & Toxins
Shipping Hazardous Materials	☐	☐	Shipping of Dangerous Goods
Radioactive materials	☐	☐	Basic Radiation Safety Course
X-ray or other radiation producing devices	☐	☐	Basic X-ray Safety Course
Instruments, equipment utilizing lasers	☐	☐	Basic Laser Safety Course

ACKNOWLEDGMENT:
I have read and understood the exposure assessment and training requirements provided to me. I understand that if my employment status or job duties change, I will contact the Environmental Health & Safety Department and/or my supervisor to arrange the appropriate safety training.

All my initial questions pertaining to the topics were answered to my satisfaction and I understand I may contact my supervisor or the Environmental Health and Safety office for further questions or clarification.

Employee Name (print):_____ Date: _____

Signature:_____ HSC Badge # _____

Department/Campus: _____ Work Phone: _____

Job Title:_____ Supervisor/PI: _____

APPENDIX D

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO
Revision November 2004

HEPATITIS B VIRUS ACCEPTANCE OR DECLINATION FORM

Acceptance Statement

I, the undersigned, acknowledge that my employer, The University of Texas Health Science Center at San Antonio, has offered the hepatitis B virus (HBV) vaccine to me at no cost. I have been informed of the biological hazards that exist in my workplace, and I understand the risks of exposure to blood or other potentially infectious materials involved with my job. **I wish to receive the hepatitis B virus vaccine.**

Employee's name (printed)	Employee's signature	HSC Badge Number
Department	Supervisor / Witness signature	Date

NOTE: If you accept to receive the hepatitis B vaccine, you must report to the designated medical provider within 10 working days of signing this form.

Declination Statement

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine at no charge to myself. However, **I decline hepatitis B vaccination at this time.** I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

All my questions regarding the risk of acquiring hepatitis B virus, and the hepatitis B virus vaccination process, have been answered to my satisfaction.

Employee's name (printed)	Employee's signature	HSC Badge Number
Department	Supervisor / Witness signature	Date

Retain a copy of this document in Employee's medical record for 30 years after termination of employment

APPENDIX E

Texas Department of State Health Services
Infectious Disease Control
Contaminated Sharps Injury Reporting Form **Pub No EF59-10666 (04/04)**

The facility where the injury occurred should complete the form and submit it to the local health authority where the facility is located. If no local health authority is

appointed for this jurisdiction, submit to the regional director of the Texas Department of State Health Services (DSHS) regional office in which the facility is located. Address information for regional directors can be obtained on the Internet at http://www.tdh.state.tx.us/brlho/regions.htm. The local health authority, acting as an agent for the Texas Department of State Health Services will receive and review the report for completeness, and submit the report to: IDEAS, Texas DSHS, 1100 West 49th Street, T-801, Austin, Texas 78756-3199. Copies of the Contaminated Sharps Injury Reporting Form can be obtained on the Internet at http://www.tdh.state.tx.us/ideas/bloodborne_pathogens/reporting or from Texas Department of State Health Services regional offices.

Please complete a form for each exposure incident involving a sharp.
NOTE: If injury occurred BEFORE the sharp was used for its original intended purpose, *do not* submit this form.

Facility (agency/institution) where injury occurred:

Street address (no Post Office Box):

City: | **County:** | **Zip Code:**

Street address of reporter if different from facility where injury occurred (no Post Office Box):

Date filled out (mm/dd/yy): | **Reporter's Name:** | **Phone:**

Reporter's Email:

1. Date of injury(mm/dd/yy): | **Time of injury:** ☐ am ☐ pm | **Age of injured:** | **Sex of injured:** ☐ M ☐ F

2. Type and Brand of Sharp Involved (*Check one box*)

List Brand Name of Sharp:

Needles

- ☐ Arterial Catheter Introducer Needle
- ☐ Blood Gas Syringe
- ☐ Central Line Catheter Needle (cardiac, etc.)
- *Disposable Syringe*
- ☐ Insulin
- ☐ 20-gauge needle
- ☐ 21-gauge needle
- ☐ 22-gauge needle
- ☐ 23-gauge needle
- ☐ 24/25-gauge needle
- ☐ Tuberculin
- ☐ Drum Catheter Needle
- ☐ IV Catheter Stylet
- ☐ Needle on IV Line (includes piggybacks & IV line connectors)
- ☐ Needle, not sure what kind
- ☐ Pre-filled Cartridge Syringe
- ☐ Spinal or Epidural Needle
- ☐ Suture Needle
- ☐ Syringe, other type
- ☐ Unattached Hypodermic Needle
- ☐ Vacuum Tube Blood Collection Holder/Needle
- ☐ Winged Steel Needle (includes butterfly, winged-set type devices)

Other

- ☐ Other Vascular Catheter Needle (cardiac, etc.)
- ☐ Other Non-vascular Catheter Needle (ophthalmology, etc.)
- ☐ Other Nonsuture

Surgical Instruments (or other sharp items)

- ☐ Bone Chip/Chipped Tooth
- ☐ Bone Cutter
- ☐ Drill Bit/Bur
- ☐ Electro-cautery Device
- ☐ Fingernails/Teeth
- ☐ Huber Needle
- ☐ Lancet (finger or heel stick)
- ☐ Microtome Blade
- ☐ Pickups/Forceps/ Hemostats/Clamps
- ☐ Pin (fixation, guide pin)
- ☐ Pipette (plastic)
- ☐ Razor
- ☐ Retractors, Skin/Bone Hooks
- ☐ Scalpel, disposable
- ☐ Scalpel, reusable
- ☐ Scissors
- ☐ Sharp Item, not sure what kind
- ☐ Specimen/Test Tube (plastic)
- ☐ Staples/Steel Sutures
- ☐ Towel Clip
- ☐ Trocar
- ☐ Vacuum Tube (plastic)
- ☐ Wire (suture/fixation/guide wire)
- ☐ Other Sharp

Glass

- ☐ Capillary Tube
- ☐ Glass Slide
- ☐ Glass Item, not sure what kind
- ☐ MedicationAmpule/ Vial/IV Bottle
- ☐ Pipette
- ☐ Specimen/Test Tube
- ☐ Vacuum Tube
- ☐ Other Glass Item:

TEXAS Department of State Health Services

Contaminated Sharps Injury Reporting Form, continued

3. Original Intended Use of Sharp (*check one box*)

☐ Connect IV Line (intermittent IV/piggyback/IV infusion/other IV line connection
☐ Contain a Specimen or Pharmaceutical (glass item)
☐ Cutting
☐ Dental ☐ Extraction ☐ Hygiene ☐ Orthodontic ☐ Periodontal ☐ Restorative ☐ Root Canal
☐ Dialysis
☐ Draw Arterial Blood Sample…if used to draw blood was it ☐ direct stick or ☐ drawn from a line
☐ Draw Venous Blood Sample
☐ Drilling
☐ Electrocautery
☐ Finger Stick/Heel Stick
☐ Heparin or Saline Flush
☐ Injection, Intra-Muscular/Subcutaneous/Intra-dermal, or other injection through the skin (syringe)
☐ Obtain a Body Fluid or Tissue Sample (urine/CSF/amniotic fluid/other fluid, biopsy)
☐ Other Injection into (or aspiration from) IV Injection Site or IV Port (syringe)
☐ Remove Central Line/Porta Catheter
☐ Start IV or Set Up Heparin Lock (IV catheter or winged set-type needle)
☐ Suturing ☐ Deep ☐ Skin
☐ Tattoo
☐ Unknown/Not Applicable
☐ Wiring
☐ Other

4. When and How Injury Occurred…

☐ before (DO NOT report to DSHS) ☐ during ☐ after the sharp was used for its intended purpose.

If the exposure occurred during or after the sharp was used, was it (*check one box)*

☐ Activating Safety Device
☐ Between Steps of a Multistep Procedure (carrying, handling, passing/receiving syringe/instrument, etc.)
☐ Device Malfunctioned
☐ Device Pierced the Side of the Disposal Container
☐ Disassembling Device or Equipment
☐ Found in an Inappropriate Place (eg. table, bed, linen, floor, trash)
☐ Interaction with Another Person
☐ Laboratory Procedure/Process
☐ Patient Moved During the Procedure
☐ Preparation for Reuse of Instrument (cleaning, sorting, disinfecting, sterilizing, etc.)
☐ Recapping
☐ Suturing
☐ Use of Sharps Container
☐ Unsafe Practice
☐ Use of IV/Central Line
☐ Other

TEXAS Department of State Health Services

Contaminated Sharps Injury Reporting Form, continued

5. Did the device being used have engineered sharps injury protection? ☐ yes ☐ no ☐ don't know

A. Was the protective mechanism activated? ☐ yes ☐ no ☐ don't know

B. Did the exposure incident occur… ☐ before ☐ during ☐ after activation of the protective mechanism?

6. Was the injured person wearing gloves? ☐ yes ☐ no

7. Had the injured person completed a hepatitis B vaccination series? ☐ yes ☐ no ☐ don't know

8. Was there a sharps container readily available for disposal of the sharp? ☐ yes ☐ no
Did the sharps container provide a clear view of the level of contaminated sharps? ☐ yes ☐ no

9. Had the injured person received training on the exposure control plan in the 12 months prior to the incident? ☐ yes ☐ no

10. Involved body part *(check one box)* ☐ Hand ☐ Arm ☐ Leg/Foot ☐ Face/Head/Neck ☐ Torso (front or back)

11. Job Classification of Injured Person *(check one box)*

- ☐ Aide (eg. CAN, HHA, orderly)
- ☐ Attending Physician (MD/DO)
- ☐ Central Supply
- ☐ Chiropractor
- ☐ Clerical/Administrative
- ☐ Clinical Lab Technician
- ☐ Counselor/Social Worker
- ☐ CRNA/NP
- ☐ Dentist
- ☐ Dental Assistant/Technician
- ☐ Dental Hygienist
- ☐ Dental Student
- ☐ Dietician
- ☐ EMT/Paramedic
- ☐ Fellow
- ☐ Firefighter
- ☐ Food Service
- ☐ Hemodialysis Technician
- ☐ Housekeeper/Laundry
- ☐ Intern/Resident
- ☐ Law Enforcement Officer
- ☐ Licensed Vocational Nurse
- ☐ Maintenance Staff
- ☐ Morgue Tech/Autopsy Technician
- ☐ Medical Student
- ☐ Nurse Midwife
- ☐ Nursing Student
- ☐ OR/Surgical Technician
- ☐ Pharmacist
- ☐ Phlebotomist/Venipuncture/IV Team
- ☐ Physician Assistant
- ☐ Physical Therapist
- ☐ Psychiatric Technician
- ☐ Public Health Worker
- ☐ Radiologic Technician
- ☐ Registered Nurse
- ☐ Researcher
- ☐ Respiratory Therapist/Technician
- ☐ Safety/Security
- ☐ School Personnel (not nurse)
- ☐ Transport/Messenger
- ☐ Volunteer
- ☐ Other _ _ _ _ _

TEXAS Department of State Health Services

Contaminated Sharps Injury Reporting Form, continued

12. Employment Status of Injured Person *(check one box)*

☐ Employee ☐ Student ☐ Contractor/Contract Employee ☐ Volunteer ☐ Other _____	If not directly employed by reporter, name of employer/service/agency/school: _____

13. Location/Facility/Agency in Which Sharps Injury Occurred ***(check one box)***

☐ Blood Bank/Center/Mobile ☐ Clinic ☐ Correctional Facility ☐ Dental Facility ☐ EMS/Fire/Police ☐ Home Health	☐ Hospital ☐ Laboratory (freestanding) ☐ Medical Examiner Office/Morgue ☐ Outpatient treatment (eg. dialysis, infusion therapy) ☐ Residential Facility (eg. MHMR, shelter) ☐ School/College ☐ Other

14. Work Area Where Sharps Injury Occurred ***(check one box)***

☐ Ambulance ☐ Autopsy/Pathology ☐ Blood Bank Center/Mobile ☐ Central Supply ☐ Critical Care Unit ☐ Dental Clinic ☐ Dialysis Room/Center ☐ Emergency Department ☐ Endoscopy/Bronchoscopy/Cystoscopy ☐ Field (non EMS) ☐ Floor, not Patient Room ☐ Home ☐ Infirmary ☐ Jail Unit ☐ Laboratory	☐ L & D/Gynecology Unit ☐ Medical/Outpatient Clinic ☐ Medical/Surgical Unit ☐ Nursery ☐ Patient/Resident Room ☐ Pediatrics ☐ Pre-op or PACU ☐ Procedure Room ☐ Rescue Setting (non ER) ☐ Radiology Department ☐ Seclusion Room/Psychiatric Unit ☐ Service/Utility Area (eg. laundry) ☐ Surgery/Operating Room ☐ Other _____

COMMENTS:

Return completed form to Environmental Health & Safety, Room 1.343T DTL

APPENDIX F

SHARPS INJURY SURVEY FORM **Date: _____**

Purpose: This survey tool will be used to evaluate factors contributing to or leading to injuries with sharp objects or needles that could possibly result in infection. Any identifying information will remain confidential. The aggregate data will be used to evaluate hazards and formulate injury prevention initiatives.

Scope: This survey tool should be completed by any person experiencing a sharps injury (employees, students, and volunteers) occurring on UTHSCSA property.

Directions: Mark the response that most accurately reflects your sharps injury. This survey should take less than 5 minutes to complete. Return via campus mail to: **Environmental Health & Safety Department, Mail code 7928.**

1. Indicate your employment type:
- ❑ Student
- ❑ Resident
- ❑ Employee / Faculty
- ❑ Volunteer
- ❑ Other _____

2. Indicate the number of years of experience you've had using the sharp or needle involved in this injury:
- ❑ 1st year of experience
- ❑ 2nd year of experience
- ❑ 2-5 years of experience
- ❑ More than 5 years of experience

3. Which activity best describes the task you were performing when the percutaneous injury occurred?
- ❑ Clinical patient care
- ❑ Research not involving patient care
- ❑ Waste disposal / sharps disposal
- ❑ Other: _____

4. Where were you physically located when this injury occurred?
- ❑ Dental School
- ❑ Medical School
- ❑ Nursing School
- ❑ Allied Health
- ❑ Graduate School / Basic Science Building
- ❑ Other: _____

5. Have you received safety training within the previous 12 months on the safe use and disposal of sharp objects?
- ❑ YES
- ❑ NO
- ❑ I don't remember

6. In your opinion, which factor most likely contributed to your percutaneous injury?
- ❑ Lack of experience
- ❑ Lack of familiarity with the device or needle
- ❑ Lack of safety training
- ❑ Lack of "needleless devices" or "engineered sharps"
- ❑ Clinical problems (e.g. difficult patient or inability to see manipulation
- ❑ Inaccessibility of convenient sharps disposal containers
- ❑ Other: _____

7. In your opinion, which initiative would be most effective at preventing future sharps injuries?
- ❑ No initiative would have effectively prevented this injury
- ❑ Enhanced curriculum on safe handling of these devices
- ❑ Substitution with "needleless" devices or "engineered sharps"
- ❑ Additional time observing others handling these devices
- ❑ Other: _____

8. Did you have access to, or was an acceptable needless system available as, a substitute for this task or activity?
- ❑ YES
- ❑ NO
- ❑ Not sure

Please provide any additional input on effective engineering or work practice controls:

_____

APPENDIX G

EMPLOYEE EXPOSURE NOTIFICATION AND MEDICAL EVALUATION OPTION FORM

This form is to be completed jointly by the exposed employee and their supervisor / principal investigator.

I (print name)_____ experienced a blood, body fluid, or other potentially infectious material contaminated sharps injury, mucous membrane exposure, or non-intact skin exposure during my employment with The University of Texas Health Science Center at San Antonio (UTHSCSA) on (date: mm/dd/yyyy) _____/_____/_____. I have been notified that I may seek examination and treatment with any state licensed physician or health care provider, and may be tested for the presence of antibodies for hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV) free of charge to myself. This evaluation may also include treatment for HBV infection.

The physician authorizing this testing will be, or has been, informed of the latest U.S. Public Health Service guidelines for treatment of a potential bloodborne pathogen exposure including HBV, HCV, and HIV antibody testing, recommended prophylactic treatment, as well as the OSHA bloodborne pathogens standard (29 CFR 1910.1030) and Texas DSHS bloodborne pathogens control rules (25 TAC Chapter 96.101-96.601). These guidelines are listed in MMWR June 29, 2001 / 50(RR11); 1-42, *Updated U.S. Public health Service Guidelines for the Management of Occupational Exposure to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis* (or most current guidelines as listed on the CDC website; www.cdc.gov/mmwr/). The physician or authorized licensed health care professional performing the evaluation, may upon examination, order testing on a sample of my (exposed employee) blood drawn initially after the exposure for HBV/HCV/HIV antibody testing.. If I do not wish to have antibody testing performed on the blood specimen drawn initially, I understand that I may have it tested for HIV up to 90 days following the date of exposure as per 29 CFR 1910.1030 (f)(3)(iii)(b).

All test results will be forwarded to the authorized treating physician confidentially, and they will be communicated to me by the physician to ensure confidentiality.

I have decided for the following post exposure option (mark one box):

☐ I have decided to receive a confidential medical evaluation and consent to have a serum (blood) specimen drawn for antibody testing for HBV, HCV, and HIV.

☐ I have decided to receive a confidential medical evaluation, but do not wish to have antibody testing for the presence of HBV, HCV, and HIV performed at this time. I do consent to have a blood specimen drawn and held for possible HIV testing done at a later date, up to 90 days following my date of exposure.

☐ I do not wish to receive a medical evaluation, and do not wish to have testing for the presence of HBV, HCV, and HIV antibodies at this time. I do consent to have a blood specimen drawn for possible HIV testing at a later date, up to 90 days following my initial exposure.

☐ I do not wish to receive a medical evaluation – I do not wish to have antibody testing for HBV, HCV, and HIV – and finally, I do not consent to have a blood specimen drawn for possible testing at a later date.

_____ _____

Employee's Signature **Date**

_____ _____

PI / Supervisor's Signature **Date**

If employee is to see a physician, list physician's name and address here:

For questions concerning UTHSCSA WCI coverage:
Tel. (210) 567-2595 of FAX (210) 567-6790

Original: UTHSCSA HR – WCI **Copies:** Treating physician/health care provider; employee

APPENDIX H

NIOSH

Latex Allergy A Prevention Guide

Latex gloves have proved effective in preventing transmission of many infectious diseases to health care workers. But for some workers, exposures to latex may result in allergic reactions. Reports of such reactions have increased in recent years--especially among health care workers.

What is latex?

In this pamphlet, the term "latex" refers to natural rubber latex, the product manufactured from a milky fluid derived from the rubber tree, *Hevea brasiliensis*. Several types of synthetic rubber are also referred to as "latex," but these do not release the proteins that cause allergic reactions.

What is latex allergy?

Latex allergy is a reaction to certain proteins in latex rubber. The amount of latex exposure needed to produce sensitization or an allergic reaction is unknown. Increasing the exposure to latex proteins increases the risk of developing allergic symptoms. In sensitized persons, symptoms usually begin within minutes of exposure; but they can occur hours later and can be quite varied. Mild reactions to latex involve skin redness, rash, hives, or itching. More severe reactions may involve respiratory symptoms such as runny nose, sneezing, itchy eyes, scratchy throat, and asthma (difficult breathing, coughing spells, and wheezing). Rarely, shock may occur; however, a life-threatening reaction is seldom the first sign of latex allergy.

Who is at risk of developing latex allergy?

Health care workers are at risk of developing latex allergy because they use latex gloves frequently. Workers with less glove use (such as housekeepers, hairdressers, and workers in industries that manufacture latex products) are also at risk.

Is skin contact the only type of latex exposure?

No. Latex proteins become fastened to the lubricant powder used in some gloves. When workers change gloves, the protein/powder particles become airborne and can be inhaled.

How is latex allergy treated?

Detecting symptoms early, reducing exposure to latex, and obtaining medical advice are important to prevent long-term health effects. Once a worker becomes allergic to latex, special precautions are needed to prevent exposures. Certain medications may reduce the allergy symptoms; but complete latex avoidance, though quite difficult, is the most effective approach.

Are there other types of reactions to latex besides latex allergy?

Yes. The most common reaction to latex products is ***irritant contact dermatitis***- the development of dry, itchy, irritated areas on the skin, usually the hands. This reaction is caused by irritation from wearing gloves and by exposure to the powders added to them. Irritant contact dermatitis is not a true allergy. ***Allergic contact dermatitis*** (sometimes called chemical sensitivity dermatitis) results from the chemicals added to latex during harvesting, processing, or manufacturing. These chemicals can cause a skin rash similar to that of poison ivy. Neither irritant contact dermatitis nor chemical sensitivity dermatitis is a true allergy.

How can I protect myself from latex allergy?

Take the following steps to protect yourself from latex exposure and allergy in the workplace:

1. Use nonlatex gloves for activities that are not likely to involve contact with infectious materials (food preparation, routine housekeeping, general maintenance, etc.).

2. Appropriate barrier protection is necessary when handling infectious materials. If you choose latex gloves, use powder-free gloves with reduced protein content.

    - Such gloves reduce exposures to latex protein and thus reduce the risk of latex allergy.
    - So-called hypoallergenic latex gloves do not reduce the risk of latex allergy. However, they may reduce reactions to chemical additives in the latex (allergic contact dermatitis).

3. Use appropriate work practices to reduce the chance of reactions to latex.

    - When wearing latex gloves, do not use oil-based hand creams or lotions (which can cause glove deterioration).
    - After removing latex gloves, wash hands with a mild soap and dry thoroughly.
    - Practice good housekeeping: frequently clean areas and equipment contaminated with latex-containing dust.

4. Take advantage of all latex allergy education and training provided by your employer and become familiar with procedures for preventing latex allergy.

5. Learn to recognize the symptoms of latex allergy: skin rash; hives; flushing; itching; nasal, eye, or sinus symptoms; asthma; and (rarely) shock.

What if I think I have latex allergy?

If you develop symptoms of latex allergy, avoid direct contact with latex gloves and other latex-containing products until you can see a physician experienced in treating latex allergy.

If you have latex allergy, consult your physician regarding the following precautions:

- Avoid contact with latex gloves and products.
- Avoid areas where you might inhale the powder from latex gloves worn by other workers.
- Tell your employer and health care providers (physicians, nurses, dentists, etc.) that you have latex allergy.
- Wear a medical alert bracelet.

ADDITIONAL INFORMATION

For additional information about latex allergy, or to request a copy of NIOSH Alert No. 97-135, *Preventing Allergic Reactions to Natural Rubber Latex in the Workplace*, call 1-800-35-NIOSH (1-800-356-4674)

You may also visit the NIOSH Homepage on the World Wide Web at http://www.cdc.gov/niosh

To access latex allergy websites, select *Latex Allergy* through the NIOSH Homepage, or access the websites directly at the following locations:

- http:// www.anesth.com/lair/lair.htm
- http://www.familyvillage.wisc.edu/lib_latx.htm

Second printing, with minor changes for clarity.

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