ALHAMBRA
Medical University
School of Acupuncture and Oriental Medicine

# AMU Clinic

# 2013

# OSHA/Exposure Control Plan

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OSHA/ Exposure Control Plan

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**Preface**

AMU has identified and classified all employees and students into one of the three exposure categories. Classification is based on the routine work performed by the individual and how much the performance of these tasks involve the potential exposure to blood and body fluids.

**Exposure Categories:**

| Category | Job Description | Employees/students |
|---|---|---|
| I | All procedures or other job-related tasks that involve an inherent potential for mucous membrane or skin contact with blood, body fluids, or tissues, or a potential for spills or splashes of them. | Clinic supervisors, interns, observation students, faculty for acupuncture techniques courses, and students for acupuncture techniques courses, janitorial services. |
| II | Work routine does not normally include tasks that involve exposure to blood, body fluids, or tissues, but whose employment may require performing unplanned Category I tasks. | Front desk personnel, massage technicians, dispensary students. |
| III | Routine work does not include tasks that involve exposure to blood, body fluids, or tissues. These individuals are NOT called upon as part of their employment to perform or assist in emergency medical care or first aid, or to be potentially exposed in some other way. | All administration staff outside the clinic, faculty and students who are not involved in the clinic or techniques classes. |

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# I. PURPOSE

## A. AMU Blood-Borne Pathogen Exposure Control Plan

AMU clinic employees and students anticipate the risk of exposure to human blood and other potentially infectious materials when performing their required job duties. As such, AMU must have an exposure control plan in accordance with California OSHA's Blood-Borne Infectious Disease standard. This plan is an administrative document that outlines the manner in which this occupational exposure risk will be controlled through the use of administrative controls, engineering controls, work practice controls, and personal protective equipment.

## B. AMU *Exposure Control Plan* (ECP)

This ECP has been developed and implemented to comply with Cal-OSHA's Blood-Borne Infectious Diseases Standard. OSHA (Occupational Safety & Health Administration) requires training for any US employee whose job duties potentially involve the handling of blood and body fluids. Compliance with the Blood-Borne Infectious Disease Standard reduces occupational exposure to blood and other potentially infectious materials, including human immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV), and other blood-borne pathogens.

The primary purposes for this Exposure Control Plan are:

A. To eliminate or minimize the occupational exposure of interns, clinic supervisors and clinic employees to blood or other potentially infectious materials (OPIM)
B. To provide training and information to interns, clinic supervisors and clinic employees who are at risk from occupational exposure to blood or OPIM.
C. To comply with OSHA Blood-Borne Pathogen Standard 29 CFR 1910.1030

All interns, clinic supervisors and clinic employees are expected to follow these guidelines at all times for the protection of themselves, their fellow workers, their families, and their patients. It is the responsibility of AMU to provide a safe work environment. It is the responsibility of those in the clinic to follow these guidelines.

## C. Information & Training

AMU ensures that all employees and students with occupational exposure participate in a training program. Training is provided at the time of initial assignment to tasks where occupational exposure may take place (i.e. Clinic Orientation) and at least annually thereafter,[1] within one year of the previous training using materials appropriate in content and vocabulary to the educational level, literacy and languages of the employees and students. AMU will provide additional training when changes, such as modifications of tasks, changes in procedures, or institution of new tasks or procedures affect the employees' or students' risk of occupational exposure. The additional training will be limited to addressing the new exposures created.

# II. EXPOSURE & RISK

## A. Definitions

***Blood-borne pathogens*** are disease-causing microorganisms that are present in blood. In other words, blood-borne pathogens are diseases that can be transferred by blood. Examples include hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

***OPIM*** (Other Potentially Infectious Materials) are materials that include the following human body fluids: semen, vaginal secretions, cerebrospinal, synovial, pleural, pericardial, peritoneal, amniotic fluid, and saliva or any body fluid that is visibly contaminated with blood.

***Exposure Incident***: A situation in which an employee or intern has contact with blood or other potentially infectious materials as a result of his or her duties. This contact includes eye, mouth, any other mucous membrane, non-intact skin or parenteral contact (for example, needle stick accident).

[1] OSHA blood-borne pathogen training is provided by our waste management corporation, Stericycle.

***Occupational Exposure**:* Reasonably anticipated student or employee contact with blood or other potentially infectious materials what may result from performance of duties. This contact includes eye, mouth, any other mucous membranes, non-intact skin or parenteral contact.

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

***Source Individual:*** Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to an employee or student.

***Clinic worker***: Hereafter in this document, the term *clinic worker* refers to all clinic employees and students. It can also be applied to faculty and students in acupuncture techniques classes.

## B. Transmission of Diseases in the Clinic

Many diseases, including HBV, HCV, HAV (Hepatitis A virus) and HIV, are easily transmitted in a variety of clinic settings.

- HBV has been found in blood, semen, urine, cerebrospinal fluid, saliva, tissue and blood products. All of these sources have been implicated in laboratory transmission of HBV.
- HCV has been found in blood and is believed to have the same distribution and share routes of infection with HBV.
- Blood-borne transmission of HAV in laboratory personnel has also been reported.
- HIV has been isolated from blood, semen, vaginal secretions, saliva, tears, breast milk, cerebrospinal fluid, amniotic fluid, alveolar fluid, and urine. However, only blood and body fluids have been implicated in laboratory transmission of HIV to date.

**Routes of Transmission**

**a. Direct Contact:** HBV and HIV (and presumably HCV) may be transmitted in the clinic directly by these routes:

1) Percutaneous: Parenteral inoculation of infected blood, plasma, serum, or body fluids can occur through accidental needle sticks, scalpel cuts, etc., as well as through transfusion of infected blood or blood products.
2) Non-intact Skin: Transfer of infectious blood, plasma, serum, or body fluids in the absence of an overt puncture of the skin, through the contamination of pre-existing cuts (even minute ones), scratches, abrasions, burns, weeping or exudative skin lesions, etc.
3) Mucous Membrane: Contamination of mucosal surfaces with infected blood, plasma, serum, or body fluids may occur with splashes or splattering onto the oral or nasal mucosa or conjunctiva.

**b. Indirect Contact:**

HBV can be transmitted indirectly from such common environmental surfaces as telephones, biohazard boxes, pens, and other surfaces contaminated with infected blood or body fluids. These can then be transferred to the skin or mucous membranes by hand contact. No environmentally mediated transmission of HIV or HCV has been documented.

Nail-biting, smoking, eating, contact lens manipulation, and other hand-to-nose, hand-to-mouth or hand-to-eye actions may contribute to indirect transmission and must not be done in the clinic.

Fecal-oral transmission or air-borne transmission of HBV or HIV has not been documented. Fecal-oral transmission of HAV is possible. Turberculosis and other pathogens can be transmitted by air-borne droplets.

## C. Identify the Risk in the Acupuncture Clinic

Clinic workers are a high-risk group for exposure to hepatitis B virus (HBV), hepatitis C virus, and HIV.

Transmission in the acupuncture clinic may occur directly and indirectly. Direct transmission can occur through percutaneous (through the skin) contact with blood or other body fluids, either through needle-stick (parenteral) or contact with open wounds or severely chapped hands. Other routes of infection can occur when mucosal surfaces are

exposed to contaminated liquids (i.e. during bloodletting). Indirect transmission occurs most often when universal precautions are not followed. Therefore, all clinic workers at AMU must consider themselves exposed to an environment of blood-borne pathogens and must practice universal precautions.

**Acupuncture tasks that are reasonably likely to result in exposure**

**Needle Removal:** When a needle is withdrawn from the body, there is the chance that bleeding may occur at the needling site. Scalp and auricular (ear) acupuncture are more likely to result in bleeding.

**Bloodletting:** Therapeutic bleeding of an acumoxa point will, by definition, result in the production of several drops of blood.

**Plum Blossom (Seven-Star Needle) Technique**: Tapping the skin with a Plum Blossom (or Seven-Star) needle which is rarely applied often produces bleeding. It is also likely to create splashes or droplets of blood. Droplets of blood generated by this technique which are fine particles and can result in splashing onto the hands or face of the acupuncturist and possibly the assisting interns and observers. Nearby surfaces such as the treatment table, walls and treatment cart are likely to become contaminated.

**Bloodletting with Cupping:** Bloodletting followed by application of cupping produces the largest volume of blood likely to be present in the acupuncture setting. The cupping procedure produces a vacuum, and when the vacuum is broken to remove the cup, blood in the cup must be contained by absorbent materials. Secondly, as the vacuum is broken it is possible that tiny droplets will be produced. In this case, blood may splash the hands, face and clothing of the person performing the treatment as well as anyone assisting with the procedure. Environmental splattering may also occur. In the AMU clinic, after bleeding, only cupping with plastic cups and the pump is allowed. A disposable cup liner must be used.

**Disposal of Sharps (needles, lancets):** Placing sharps in sharps container has the risk of a needle stick. Acupuncture needles are very flexible. It is possible to catch the needle when inserting it into the sharps container, causing the needle to bend or spring in such a way that a puncture occurs. (Never fill the hazardous container above ¾ full.) The container should not be held by another person when sharps are being placed inside. Nor should two people be placing sharps in the container at the same time. In either case, it would be easy of a needle stick accident to occur to the second party's hands.

**Gua Sha** (scraping, coining): During the practice of Gua Sha, it is reasonable to expect that an abrasion of the skin may produce small amounts of blood or tissue fluids.

**Cleaning Reusable Equipment**: If reusable equipment is not fully decontaminated, an exposure incident is likely. Follow the directions for decontamination given in Section V. of this document.

# III. GENERAL PROGRAM MANAGEMENT

## A. Areas of Responsibility

Five areas of responsibility are central to the implementation of the Exposure Control Plan at AMU and they include:

1. *Safety Operations Committee*: The committee includes the clinic director, senior vice-president, front office manager, and full-time supervisors.
2. *Exposure Control Officer*: The Exposure Control Officer is responsible for management and support of the Blood-borne Pathogens Compliance Program. The Clinic Director serves as AMU's Exposure Control Officer. The Health and Safety Operations Committee and front office manager assist the Exposure Control Officer. Activities delegated to the Exposure Control Officer include:
    - Overseeing implementation of the Exposure Control Plan,
    - Developing, in cooperation with the Safety Operations Committee, any additional blood-borne pathogen-related policies and practices needed to support effective implementation,
    - Revising, updating, and improving the Exposure Control Plan when necessary,

- Collecting and maintaining a suitable reference library related to blood-borne pathogens,
- Understanding current legal requirements concerning blood-borne pathogens,
- Conducting periodic organizational audits to maintain an up-to-date Exposure Control Plan.

3. *Supervisory Personnel*: Supervisory personnel include the front office manager and clinic supervisors. Supervisory personnel are responsible for compliance in their areas. Activities delegated to the supervisory personnel include:
   - Assuring that clinic workers who are at risk of exposure to blood-borne pathogens receive initial training and annual retraining,
   - Assuring that all clinic workers receive on-site training regarding engineering controls, work practice controls, personal protective equipment, compliance with safer sharps devices, and proper procedures to follow after an exposure incident,
   - Assuring that proper exposure control procedures are followed as outlined in the "Methods of Compliance" section of this document,
   - Assuring that appropriate personal protective equipment is available and in good working condition for anyone at risk of exposure to blood-borne pathogens,
   - Assuring that any clinic worker who experiences an occupational exposure incident to blood or other potentially infectious materials is provided with post-exposure medical services as outlined in the "Post-exposure evaluation and follow up" section,
   - Maintain appropriate training records.
4. *Education and Training Coordinators and Instructors*: The Education and Training Instructors provide information and training to all clinic workers who have an anticipated risk of exposure to blood-borne pathogens. The AMU clinical orientation faculty serves as the Education and Training instructor.
   The instructor:
   - Maintains a list of AMU students that have taken the required initial training,
   - Develops suitable education and training programs for students,
   - Schedules periodic training seminars for students,
   - Periodically reviews the training programs and revises them with appropriate new information
5. *Employees and Students*: The employees and students are responsible for following procedures and practices as outlined in the Exposure Control Plan. This includes but is not limited to:
   - Attending the blood-borne pathogens initial training session and annual retaining sessions,
   - Demonstrating an understanding of which tasks risk potential occupational exposure to blood-borne pathogens,
   - Conducting all operations in accordance with established work practice controls,
   - Following universal precautions,
   - Developing and maintaining good personal hygiene habits,
   - Reporting all occupational exposure incidents.

## B. Availability of the Exposure Control Plan to Clinic Workers

The Exposure Control Plan is readily available to all clinic workers through the clinic front desk manager or the Clinic Director. The Steri-Safe OSHA program consists of a quarterly audio safety meeting on CD-Rom and information is also available on its website to research up-to-date information. All forms necessary for incident reporting are available at the front desk as well as in the Steri-Safe folder.

## C. Review and Update of the Plan

The AMU Exposure Control Plan is reviewed and updated:

- Annually
- When new or modified tasks and procedures are implemented which affect occupational exposure of clinic workers
- When new functional positions are established that may involve exposure to blood-borne pathogens; and
- To reflect changes in technology which eliminates or reduces exposure to blood-borne pathogens.

# IV. COMPLIANCE METHODS

## A. Universal Precautions

Universal precautions are an approach to infection control that requires employers and clinic workers to assume that all human blood and specified bodily fluids are infectious for HIV, HBV, and other blood-borne pathogens. Where differentiation of body fluids is difficult, all body fluids are considered to be potentially infectious.

## B. Engineering Controls

Engineering Controls are physical or mechanical devices that isolate or remove health hazards from the workplace. AMU Clinic uses engineering controls to eliminate or minimize the risk of occupational exposure. In each treatment room, we have red biohazardous waste containers and sharps containers. We also use pre-sterilized disposable (single-use) acupuncture needles.

- Hand-washing facilities: There are hand-washing facilities with hot and cold running water in or nearby each of the treatment rooms.
- Eye-washing facility: There is an eye wash facility in treatment room #3 attached to the hand washing facility.
- Sharps Containers: In each treatment room, we have a biohazardous sharps container. These containers are leak-proof, puncture resistant and easily accessible to clinic workers. Please follow these rules when using the sharps containers.
    1. Do not overfill the sharps containers. They should not be filled above the full line (3/4 full).
    2. Do not attempt to remove any object from the sharps container.
    3. Do not attempt to remove the lid from a sharps container. If the container lid has been removed from the container, get a new container and alert the supervisor or clinic director.
    4. Do not attempt to transfer used needles from one sharps container to another
    5. Contaminated sharps may not be left on top of the container or sticking out of the top of the container. In fact they should not be placed anywhere except directly inside the sharps container. Do not place used needles in a tray, on a counter, on a treatment table, or stick them into a pillow.
    6. Only sharps (needles and lancets) may be disposed of in the sharps containers. No gloves, trash, or cotton-balls should be placed inside. Bloody gloves or cotton balls go in the red-bad trash container.
- Disposable Acupuncture Needles: AMU Clinic only uses pre-sterilized single-use, one needle per packet, disposable needles.

## C. Work Practice Controls

Work practice controls means controls that reduce the likelihood of exposure by defining the manner in which a task is performed. AMU has established work practice controls in the clinic. These controls are designed to reduce or eliminate the risk of exposure to blood-borne pathogens during procedures where the likelihood of bleeding or other exposure exists. Such procedures include:

***1. Treatment procedures***

**a. Bleeding an Acupoint:** When a clinic worker at AMU clinic anticipates pricking an acupuncture point to let blood, universal precautions dictate that s/he always treats the blood as if it is known to be infected. Before beginning the procedure, the clinic worker must put on latex or other surgical gloves (provided by AMU clinic). The gloves must be worn throughout the procedure, from the initial pricking and letting of blood to the completion of clean-up. Since this method of bleeding does not result in blood spraying or spattering and small quantities of blood are expected, the use of mask, goggles or protective gowns (other than the lab coat) is not required.

**b. Scalp & Auricle Acupuncture:** When needling the scalp or the ear, bleeding is occasionally encountered during withdrawal of the needles. Before removing needles from the scalp or ear, the practitioner must don latex or other surgical gloves. In addition, have 2 or 3 clean cotton balls on hand to absorb any bleeding from the points. Since only a few drops of blood commonly emerge and there is no risk of blood spraying or spattering, masks, goggles, and protective gowns (other than the lab coat) are not required.

**c. Regular Acupuncture on Body Points:** With regular acupuncture on body points, bleeding is a minor but occasional risk during withdrawal of the needles. In such instances, bleeding is usually light, only one or two drops. Acupuncture standards of practice and state law do not require that acupuncturists routinely wear surgical gloves when needling or removing needles. Consequently, AMU does not require gloving during the needling of acupuncture points. When withdrawing needles, however, at least 2 or 3 cotton balls should be on hand to respond to any bleeding that does occur.

**d. Bloodletting with Cupping:** Cupping may be done after bloodletting or after the expression of other body fluids. When cupping is performed after use of a lancet or plum blossom (or seven-star) needling, the risk of bleeding is significantly increased. Therefore, when combining cupping with these procedures that cause bleeding, the clinic worker must wear latex or other surgical gloves before starting the procedure. Since spraying or spattering of blood might occur when the vacuum is released, as long as blood is visible, a mask or goggles and splash gown are required when the cups are removed.

**e. Disposal of Sharps:** Each treatment room at the AMU Clinic has a portable sharps container that can be easily accessed by clinic workers. After withdrawal, a contaminated acupuncture needle must immediately be placed in the sharps container before withdrawing the next needle. Only one contaminated needle should be handled at a time. The portable sharps container may be placed on or near the treatment table on a stable surface or the treatment cart may be placed near the treatment table to facilitate immediate and safe disposal. Contaminated needles may not be placed anywhere but in the sharps container. Do not put them in a tray or on a surface.

**f. Disposal of contaminated cotton balls and other non-sharps:** Cotton balls that are contaminated with blood or OPIMs must be discarded in the waste container marked Biohazard (red-bag trash container) if the amount absorbed is sufficient to be able to squeeze out droplets of blood or if, when dry, blood flakes may be shed. Otherwise, cotton balls contaminated with less blood may be disposed of in a non-biohazard waste receptacle. Use the same logic for gloves, paper towels, table paper, etc.

**g. Disposing of plum blossom (seven star) needle heads:** When disposing of seven-star or plum blossom needle heads, the used needle head must be carefully removed from the handle using a cotton ball or dry towel to prevent a needle stick accident for the clinic worker. The head must then be placed in the sharps container immediately. The cotton ball should be disposed of in the regular trash.

***2. Handling Sharps:*** Contaminated needles and other sharps must be handled carefully to avoid puncture wounds. Puncture wounds from contaminated sharps can transmit infection. To prevent injury and transmission of infection, observe the following rules:

- Immediately discard used needles in nearby sharps containers,
- Be sure to replace sharps containers before they become overfilled. Let your supervisor or the clinic coordinator know when it is filling up. Supervisor/front desk staff will replace the sharps container.
- Never try to insert used needles back in the guide tube or manipulate used needles in any way.
- Do not hand used-needles to anyone else. Put them directly in the sharps container.

***3. Hand Washing:*** Hand washing should include a vigorous rubbing together of well-lathered hands for at least 10-15 seconds, under warm running water. Rings should be removed. Fingernails should be short and clean. Use anti-bacterial soap or detergent in the soap dispenser.

Frequent hand washing is an important safety precaution that should be practiced before and after contract with patients, before and after needling, and after cleaning up the treatment room.

The hands or other areas of the skin should be thoroughly washed immediately after skin contact with blood or body fluids. If contact occurs through breaks in gloves, the gloves should immediately be removed and the hands should be thoroughly washed.

Hands MUST be washed between every patient contact, or:

- Before needling a patient or removing the needles
- After needling a patient or removing the needles
- After clean up of a treatment room or after taking laundry to laundry bag
- Whenever there is visible contamination with blood or body fluids
- Before and after making up an herbal formula
- After removing gloves or lab coat
- After completion of work and before leaving the clinic
- Before eating, drinking, smoking, applying make-up, changing contact lenses, and after using the lavatory.
- Before all other activities which entail hand contact with mucous membranes, eyes, or breaks in the skin.

After washing hands, you should turn off the faucet with a paper towel to avoid re-contaminating your hands with the same pathogens you were trying to remove. In the bathrooms you can open the door and turn off the lights with this same paper towel.

## D. Personal Protective Equipment (PPE)

Personal protective equipment is clothing or equipment that protects an individual from contact with blood or other potentially infectious materials.

PPE (except lab coat) is provided at no cost to AMU clinic workers. PPE is readily accessible in the clinic. PPE includes the following:

1. *Gloves:* Protective gloves should be worn whenever there is danger of touching or handling blood or other potentially infectious body fluids. But keep in mind that gloves are a barrier to fluids, not a guarantee of protection. They will not stop a needle-stick accident.

   *Examination Gloves*: Examination gloves are available in the towel cabinet. AMU highly recommends using examination gloves for patient-care procedures such as removing needles or cupping. They are disposable and should be discarded after use with one patient. Do not wear gloves during the needle insertion if you feel that gloves make handling the needles more difficult.

   The gloves MUST be worn in the clinic when performing the following tasks:
   - When handling biohazardous material and visibly contaminated items or linen. This includes the clean up of spilled used needles.
   - When you have cuts or lesions or any kind of broken skin on your hands.
   - When examining or treating areas on patients that have cuts, lesions, rashes, or any kind of broken skin.
   - When examining or treating around the mucous membranes of your patient (includes mouth, anal and genital region).
   - When using a lancet or three-edged needle for bloodletting or when using a seven-star or plum blossom needle if bleeding might occur.
   - When performing bloodletting with cupping or gua sha (scraping, coining) to cause bleeding.

   Gloves are not required for taking blood pressure, measuring temperature or taking pulse.

   Guidelines for using Protective Gloves:
   - Wash and dry your hands before and after using protective gloves. And remember to remove all hand jewelry to prevent tearing of the glove.
   - Select gloves that are the correct size and make sure they are free of holes and tears.
   - Remember to change gloves as soon as is practical if they become contaminated or are no longer effective due to sweat from your hands or if they have holes or tears. Be sure to wash your hands before putting on new gloves.
   - If you accidentally get blood on your hands, wash them immediately.
   - When removing gloves, avoid skin contact with the outside of the gloves. First grasp one glove by the cuff and pull the glove off inside out (being careful not to touch your skin). Ball the glove up in the palm of the hand that still wears a glove. Pull off the second glove by the cuff in the same manner, never touching the outside of the gloves with your skin. The first glove is now inside the second glove and both are inside out. Dispose of them appropriately (in the biohazardous trash if contaminated with blood, in the regular trash if not).

   *Utility Gloves*: Utility gloves are more tear- and puncture-resistant than examination gloves. General purpose utility gloves are required for cleaning procedures, such as decontaminating the treatment room between patients, washing the cups, changing the sheets. Utility gloves may be decontaminated and reused, but discard them if they have holes, or crack, peel, or fade. Also remember that even heavy utility gloves cannot protect you from needle-stick injuries. Utility gloves can be found under the sinks.

*2. Face Masks & Protective Eyewear*: Face masks and protective eyewear are used to protect the mucous membranes of the eyes, nose and mouth. They should be worn whenever there is a chance that blood or other potentially infectious material will splash, spatter, or spray.

**Face masks** are disposable and should be discarded after use with each patient. They should also be replaced if they become wet during long procedures.

Masks should be worn:

- Any time you have an upper respiratory tract infection and are treating patients. If you have a more serious infection, you should refrain from treating patients.
- Any time your patient has a persistent cough, especially when they also have fatigue, weakness, anorexia, weight loss, night sweats, low grade fever, hemoptysis (coughing blood) and chest pain. These are signs and symptoms of pulmonary tuberculosis, which is on the increase among AIDS patients and in the immigrant community.

Guidelines for removing a face masks

- First wash your hands
- Handle the face mask by the ties or strings and discard it in the appropriate container.

**Eyewear**: Protective eyewear is usually not disposable. Clinic workers are required to use eye protection when it is reasonably anticipated that blood or OPIM could make contact with the mucous membranes of the eye. Handle the eyewear by the arms and decontaminate it before working with the next patient, if needed. Request this equipment from the front desk.

*3. Occlusive Dressings*: All skin defects (e.g. exudative lesions, dermatitis, cuts or abrasions) located on exposed parts of the body should be covered with a water-impermeable occlusive bandage or otherwise shielded. This includes defects of the arms, face and neck. The fingers and hands are best protected by gloves. An occlusive dressing for other skin areas may be fashioned by cutting a portion of a latex glove large enough to cover the skin defect. The skin defect should be covered with gauze and then the latex covering should be taped to the skin, taking care to seal the edges of the dressing.

*4. Lab Coats*: Lab coats must be worn at all times while on duty in the clinic. Coats should be buttoned at all times. Coats used when treating or examining patients must NOT be worn outside the clinic (including the classrooms, dining room, office). Obtaining a lab coat is the responsibility of each AMU clinic worker. It is also the clinic worker's responsibility to launder the lab coat weekly to insure cleanliness. Before leaving the work area (AMU Clinic), remove all PPE, lab coat, gloves, masks, etc. All PPE provided by AMU is inspected monthly to check that it is intact and can function properly. Equipment is replaced as needed.

## D. Hepatitis B Vaccine

The hepatitis B vaccine is safe and it is effective for 92-96% of those vaccinated. It is administered in three injections given over a six month period. Blood tests can be used to determine if your vaccination has been effective and if a booster injection is needed.

AMU clinic very strongly recommends that clinic workers have the Hepatitis B vaccine before they enter the clinic. A person who is allergic to yeast may not be able to receive the vaccine. These individuals should check with their personal physicians. Allergies to other components can occur. Students and employees must sign a statement that they have been informed of the risks and benefits of the hepatitis B vaccine.

# V. DECONTAMINATION PROCEDURES

## A. Definitions

***Sterilization***: The use of procedures that destroy all microbial life, including viruses. This is a rigid, uncompromising term. There is no such thing as partial sterility. In acupuncture, sterilization is required for all instruments that pierce the skin (needles, plum-blossom needles, etc.).

***Decontamination*** means the use of physical or chemical means to remove, inactivate, or destroy blood-borne 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.

***Antiseptic***: Products designed to reduce microbial life on living tissue, particularly on the skin of the patient or practitioner.

***Disinfection***: The use of chemicals and procedures designed to destroy or reduce the number of pathogens on inanimate objects such as work surfaces. It must be recognized that some bacteria, spores, and viruses may resist the otherwise lethal effects of many chemicals.

**Disinfectants**: The chemicals employed in disinfection. They should only be used on inanimate objects, and are not to be confused with antiseptics which are applied to the body.

## B. Procedures

You should wear utility gloves when doing the following decontamination procedures:

*(1) Patient care Area:*

A disinfectant (1:10 dilution of household bleach) and paper towels should be used to clean all treatment room countertops and treatment tables. This procedure should be repeated after treating any patient with oozing skin lesions, persistent cough or other problems that might cause contamination of these surfaces. This type of procedure should also be done before any severely immuno-compromised patient enters the room. A bleach solution diluted between 1:10 and 1:100 with water is acceptable for disinfection of environmental surfaces, according to the CDC and OSHA.

A spray bottle with a 1:10 dilution of bleach or a commercial cleaner containing bleach is kept in the cabinet under the bathroom sink. This solution must be replaced periodically.

*(2) Equipment and Instruments:*
**Cups**:

- Plastic cups:
    - We stock disposable cup liners for use with plastic cups (the type used with the pump) when bleeding is used along with cupping. The liner should be disposed of in the biohazardous (red-bag) trash container. If a plastic cup is visually contaminated with blood, it should also be put into the biohazardous (red-bag) trash container. However, if the cup liner is used, the cup should not have blood on it. It can be washed and re-used. Plastic cups cannot be soaked in disinfectant as they will deteriorate.
    - Plastic cups should be washed with soap and water and put away after they are dry.
- Glass cups are reusable and should be taken to the sink after each usage.
    - After use, they should first be washed with soap and water.
    - Glass cups cannot be used with bleeding. If contaminated with blood (this should not occur), they should be handled with gloves and rinsed in the sink, without touching the contaminated area. Then the cups should be soaked in high-level disinfectant (Germicidal Solution) for at least 10 minutes. After that the intern should wash them in soap and water. They should not be left soaking overnight.
    - After washing, glass cups should be placed in the UV Towel Warmer for 20 minutes and then removed. They should not be left in for extended periods of time.

- After removal from the UV warmer, the cups should be put away.

**Tweezers and forceps:** Tweezers and forceps that are used on the body should be sterilized in an autoclave at 1.5 atmospheric pressure and 125 degrees Celsius for 30 minutes at least once a week. If tweezers are contaminated with blood or body fluids, they should be soaked in high-level disinfectant (Germicidal Solution) for at least 10 minutes and then washed with soap and water. Tweezers that are used in moxibustion, cupping, or ear seed placement should be washed with soap and water after use.

**Gowns, table paper, and paper pillow case**s: Paper gowns and table paper are used one time and then disposed of in the trash unless they are contaminated with blood or OPIMs. In that case, they go in the red-bad trash. Pillow cases should be changed every day. They need not be changed with every patient if they are placed under table paper. But when you find them contaminated with blood or body fluids, or they have significant contact with the patient's skin or if they are visibly dirty, change them right away.

**Cloth Towels**: Used laundry that is not heavily contaminated by infectious material (such as blood) is to be placed into the dirty laundry containers in the linen storage areas. Blood stained linens are to be double-bagged in tightly sealed plastic bags that are clearly labeled as infectious and given directly to the front desk manager. Do not place blood-stained linen in the laundry containers. Request plastic bags from the front desk.

**Lab Coat:** Lab coats should be washed when they get dirty or contaminated with blood or body fluids, but at least once a week, in any case.

*(3) Disposing of Waste*

**Needles:** Immediately discard used needles in the sharps containers that are found in every treatment room. Once in the sharps container, the used needles must remain there and not be transferred to any other container.

**Cotton Balls**: Cotton balls heavy with blood or other potentially infectious body fluids must be placed in biohazardous (red-bag) trash separate from the other trash. If not heavy with potentially infectious body fluids, they may be deposited into the regular trash.

**Table paper**: Same as for cotton balls.

**Gloves**: If gloves are contaminated with blood or other potentially infectious body fluids, rinse them with water before throwing them into the biohazardous (red-bag) trash.

*(4) Cleaning and Decontaminating a Blood Spill*

Proper decontamination of blood spills protects you and others

a. Always wear gloves
b. First wipe up the spill with paper towels and dispose of the towels in the biohazardous (red-bag) trash.
c. Apply a high-level germicidal solution or bleach solution until the contaminated surface is glistening wet. Keep it moist for the manufacture's recommended exposure time, usually 5 to 10 minutes.
d. Allow the surface to air dry completely.

## C. Personal Health and Hygiene

1. Do not eat, drink, smoke, apply cosmetics, or handle contact lenses in the work area.
2. Take great care to maintain the cleanliness of your hands, keeping the nails short.
3. Hair styles that touch the patient or contaminate the clean field must be avoided.
4. Wash your hands thoroughly with soap and warm water for 10-15 seconds after contact with each patient. Do this even if you wore gloves during the patient contact.

5. Immediately wash any body parts that have been exposed to blood or other potentially infectious materials. Remember to report incidents of exposure as soon as possible to your supervisor or the clinic director.
6. Pregnant students are not at greater risk of contracting HIV infection, however, if a person develops HIV infection during pregnancy, the infant is also at risk of infection resulting from perinatal transmission. Because of this risk, pregnant students should be especially familiar with and strictly adhere to precautions to minimize the risk of HIV transmission.
7. If you have an oozing wound or sore, or if medications have weakened your immune system, consult the clinic director. Special precautions may be necessary.

## VI. EXPOSURE INCIDENT PROTOCOL

### A. Student/Employees Response

If students or employees suffer a puncture wound with a used needle or other sharps, or if they have broken skin or mucous membrane contact with potentially infectious body fluids, do the following:

- Wash the exposed area immediately with soap and warm water. Flush splashes to the nose, mouth or skin with water. Irrigate eyes with clean water, saline or sterile irrigants. This may help prevent the pathogens from entering your body. If there was a cut or puncture, allow it to bleed freely for a few moments.
- Apply a disinfectant such as 70% isopropyl alcohol, iodine, Betadine or other provadyne solution to clean the exposed area. Do not use an ethanol swab.
- File an exposure incident report with clinic director or supervisor and consult a doctor.
- Go immediately to Alhambra Medical Hospital's Occupational Health Center for evaluation and possible treatment:

  Alhambra Medical Occupational Center
  100 S. Raymond Avenue, Alhambra, California 91801
  Tel: 626-570-1606 ext 3488 Tel: 626-458-4764
- Do not delay treatment for any reason.

### B. Follow-up

1. *Exposure to blood that does or might contain HBV*
   - Unvaccinated person: Should receive the vaccine series. A single dose of hepatitis B immunoglobulin (HBIG) is also recommended, if this can be given within 7 days of exposure.
   - Previously vaccinated person: Should be tested to insure that HbsAb is still present.
     i. If the antibody level is adequate, no treatment is needed.
     ii. If antibody level is not adequate, follow with a hepatitis B vaccine dose as a booster.
     iii. A few individuals do not develop antibodies in response to the vaccine. If these individual are exposed, they should have two doses of HBIGX.
2. *Exposure to blood that does or might contain HIV*

   The intern should be evaluated clinically and serologically for evidence of HIV infection as soon as possible after exposure.
   - The clinic worker should be advised to seek medical evaluation for any acute febrile disease that occurs within 12 weeks of exposure. Such an illness, especially if characterized by fever, rash, or lymphadenopathy, may be indicative of recent HIV exposure.
   - Following an initial test at the time of exposure, a seronegative person should be retested at 6 weeks, 12 weeks, and 6 months after exposure to determine whether transmission has occurred.
   - During this time (when most infected persons are expected to seroconvert), the student should follow recommendations for preventing transmission of HIV, including safer sex.
   - AZT (zidovudine) is sometimes used for treatment and prophylaxis after a needle-stick accident.

   Whether or not you are infected, AMU will keep your condition and medical records confidential.

**Statistics:**

**HBV** The annual number of occupational infections has decreased 95% since the hepatitis B vaccine became available in 1982, from >10,000 in 1983 to <400 in 2001 (CDCP, unpublished data).

**HCV** There are no exact estimates on the number of healthcare personnel occupationally infected with HCV. However, studies have shown that 1% of hospital healthcare personnel have evidence of HCV infection (about 3% of the U.S. population has evidence of infection). The number of these workers who may have been infected through an occupational exposure is unknown.

**HIV** As of December 2001, the CDCP had received reports of 57 documented cases and 138 possible cases of occupationally acquired HIV infection among healthcare personnel in the United States since reporting began in 1985.

## C. Post-Exposure Response for Employers **(administration)**

- Ask an exposed clinic worker to file an exposure incident report with the clinic director.
- Data is collected so that the medical care provider is given all the necessary details.
- Document the route and the circumstances of the exposure.
- Test the source for HBV and HIV as soon as possible. If the HBV or HIV status of the source is known, this information must be sent with the clinic worker to the medical care provider.
- Arrange for medical serological testing.
- Give a copy of the evaluation from the medical care provider to the clinic worker within 15 days of completion of the evaluation.
- Places the evaluation in the clinic worker's confidential folder.
- Make a copy of the Post Exposure Follow Up to be sure that all requirements are met
- Provide counseling to the clinic worker and evaluation of any reported illnesses. This is not dependent on the clinic worker electing to have baseline HBV and HIV serological testing.

The employer/administration does not have a specific right to know the actual results of the source individual's blood tests, but must ensure that the information is provided to the evaluating health care professional.

Note that the report given to the medical care provider is confidential and will go into a confidential file that is not accessible to others in the work place. It is only accessible with the clinic worker's written permission, or as required by law.

## D. Record Keeping

AMU is responsible for establishing and maintaining an accurate record for each clinic worker with occupational exposure, to include.

1. The name and social security number of the clinic worker,
2. A copy of the clinic worker's hepatitis B vaccination status, including the dates of all the Hepatitis B vaccinations and any medical records relative to the clinic worker's ability to receive the vaccination.
3. A copy of all results of examinations, medical testing, and follow-up procedures
4. AMU's copy of the healthcare professional's written opinion.
5. A copy of all information provided to the healthcare professional.

The facility will ensure that the clinic worker's medical records are kept confidential and are not disclosed or reported without the clinic worker's express written consent to any person within or outside the workplace except as required by law. The facility will maintain the records for clinic workers with occupational exposure for at least the duration of employment PLUS an additional 30 years. Clinic worker medical records shall be provided upon request to the clinic worker, to anyone having written consent of the clinic worker or to others as required by law for examination and copying.

## REFERENCES

*Clean Needle Technique Manual for Acupuncture*: *Guidelines and Standards for the Clean and Safe Clinical Practice of Acupuncture*: Fifth Edition. National Acupuncture Foundation

*Acupuncture Risk Management: The Essential Practice Standards & Regulatory Compliance*

**Regulations**
Needlestick Safety and Prevention Act (H.R. 5178). Public Law 106-430-Signed 11/6/2000: http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi/dbname-106 cong bills & docid.txt.pdf.

OSHA. Blood-borne Pathogens Web site
http://www.osha-slc.gov/SLTC/blood-bornepathogens/index.html

OSHA.Needlestick Injuries Web Site
http://www.osha-slc.gtov/SLTC/needlestick/index.html

California Division of Occupational Safety and Health
http://www.dir.ca.gov/dosh/dosh1.html

Centers for Disease Control and Prevention
http://www.cdc.gov/

**Blood-borne Disease Information**
Information about HIV/AIDS:
http://www.cdc.gov/hiv/pubs/faqs.htm

Information about Hepatitis B:
http://www.cdc.gov/ncidod/disease/hepatitis/b/index.htm

Information about Hepatitis C:
http://www.cdc.gov/ncidod/disease/hepatitis/c/index.htm

**Safer Sharps Devices Information**
OSHA. Needlestick Injuries Web Site
http://www.osha-slc.gov/SLTC/needlestick/index.html

OSHA booklet on How to Prevent Needlestick Injuries
http://www.osha-slc.gov/Publications/osha3161.pdf

Preventing Needlestick Injuries in Health care Settings (National Institute of Occupational Safety and Health Alert):
http://www.cdc.gtov/niosh/2000-108 .html

Extensive lists of available Safer Sharps Devices:
http://www.med.Virginia.EDU/medcntr/centers/epinet/products.html