

MEDICAL UNIVERSITY OF SOUTH CAROLINA (MUSC)
STATEMENT OF POLICY REGARDING BLOODBORNE PATHOGENS

Revised: 8/2003

TABLE OF CONTENTS

<u>Section Title</u>	<u>Page</u>
A. MUSC Bloodborne Pathogen Committee	1
B. Definitions	2
C. Introduction	2
D. Education Concerning Bloodborne Pathogens	3
E. Care Considerations for Patients Infected with Bloodborne Pathogens	4
F. Consent for Bloodborne Pathogen Testing	6
G. Testing and Counseling	9
H. Confidentiality and Duty to Warn	11
I. Precautions for Clinical and Research Laboratory Workers	14
J. Exposure to Bloodborne Pathogens	20
K. Healthcare Workers Infected with Bloodborne Pathogens	21

MUSC BLOODBORNE PATHOGENS COMMITTEE
Membership List

Prabhakar K. Baliga, M.D., Assistant Professor of Surgery

Benjamin H. E. Breitzkreuz, Ph.D., Director, MUH Division of Pastoral Care and Education

Victor E. Del Bene, MD, Professor of Medicine and Associate Dean, College of Medicine

Edwin A. Brown, MD, Assistant Professor of Medicine

Joseph C. Good, Jr., JD, General Counsel to the University

Edward E. Herschaft, DDS, Professor of Oral Pathology

Bruce Ribner, MD, MPH, Associate Professor of Medicine and Hospital Epidemiologist, MUH

Robert Sade, MD, Professor of Surgery

Margaret P. Schachte, MBA, Director of Research Administrative Services and Planning

Ronald B. Turner, MD, Professor of Pediatrics and Laboratory Medicine (Chair)

Karen Weaver, RN, MA, Director of Surgery, Women's and Infant's Services, MUH

Allen Wutzdorff, Executive Director, Low Country AIDS Services

Laurie Zone-Smith, RN, MSN, Nurse Manager Employee Health Services, MUH

DEFINITIONS

Bloodborne Pathogens: For purpose of this policy bloodborne pathogens are defined as the Human Immunodeficiency (HIV), Hepatitis B Virus (HBV), and Hepatitis C Virus (HCV).

Healthcare Workers: Any person, including students and trainees, whose activities involve contact with patients or with blood or other body fluids from patients. Specifically included are employees of other agencies who function as healthcare workers in facilities administered by MUSC.

INTRODUCTION

The MUSC Statement of Policy with Regard to HIV Infection and AIDS was developed and approved by the MUSC Board of Trustees in August of 1992. This policy was a response to federal and state mandates that health care institutions adopt policies designed to prevent transmission of HIV infection from health care workers to patients. The revision of this policy was undertaken to insure that the MUSC policy continues to be consistent with current medical knowledge and established national norms. The title of the policy has been changed to reflect the inclusion of both hepatitis B and HIV in the relevant federal and state regulation.

There have been substantial advances in the medical care available to patients with HIV infections since the original policy was developed. Most health care workers at MUSC have had the opportunity to care for patients with this infection. The effect of these changes has been that HIV infection has become less likely to be considered an unusual or remarkable infection in the healthcare setting. While deliberating the revision of the MUSC HIV policy, the committee considered the competing goals of continuing this trend within the University community while at the same time acknowledging that patients continue to require special protection against discrimination in the lay community.

EDUCATION CONCERNING BLOODBORNE PATHOGEN INFECTION

Statement of Philosophy

A primary role of the Medical University of South Carolina is health education. Education regarding bloodborne pathogens and the diseases they produce is of major concern to the institution. It is essential that the institution provide the means for levels of education appropriate to the broad constituency of the university.

Mechanisms for Education

Each college will assure that its curriculum includes acceptable content for bloodborne pathogen education at a level and depth appropriate to the degree programs of the students.

The bloodborne pathogen education curriculum must meet the requirements of regulatory and accrediting bodies and must be presented in an appropriate and timely fashion. Provision must be made to document mastery of content and proficiency with practical aspects of bloodborne pathogen education.

Faculty is required to become knowledgeable about bloodborne pathogens in general and are responsible for making certain that each student acquires a minimal level of content expertise and knowledge of practical skills.

Faculty should be conversant with the policies and procedures of the university, college and medical center regarding patients infected by bloodborne pathogens and potential risks to healthcare givers, and be available to advise students. In order to validate students' knowledge and skill, faculty or professional staff should directly supervise students when they are first assigned to care for patients in the clinical areas or to work with human materials or products. Faculty members have the responsibility of assuring ongoing supervision of students exposed to bloodborne pathogens, appropriate to the students' level of knowledge and skill.

Members of the MUSC faculty and the administration have the obligation to plan and execute educational programs for healthcare workers and to certify an appropriate standard of understanding and practice regarding bloodborne pathogen disease. This educational effort should be timely, appropriate to the various functions of the groups, ongoing and monitored for outcomes.

Education of the university faculty and staff should result in a basic level of understanding of the overall problem of bloodborne pathogen disease as well as in-depth education for those persons with a need for a more concentrated experience. General educational programs for non-patient care staff will be the responsibility of the Human Resources training division. More specific and rigorous educational programs for persons with greater potential for contact and the monitoring of educational outcomes are the responsibility of the respective departments or administrative units. Faculty is expected to provide the expertise necessary to produce or obtain appropriate educational materials for use in education of university staff.

As South Carolina's primary academic health sciences center, the Medical University should take the lead in providing education on bloodborne pathogen disease to the general public by encouraging professional personnel to be available and willing to answer questions, to publish and to speak about the subject when requested.

**CARE CONSIDERATIONS FOR PATIENTS
INFECTED WITH BLOODBORNE PATHOGEN**

1. All patients' rights as specified in the MUSC Medical Center Policy Manual as "Rights and Responsibilities of Patients" will be accorded to patients infected with bloodborne pathogens. No patient will be denied healthcare services or be referred based on bloodborne pathogen status. A reasonable effort will be made to insure that patients discharged from care at MUSC understand the need for and have access to appropriate follow-up care.

2. Patient confidentiality shall be maintained according to applicable MUSC Medical Center Policy. Information on HIV, Hepatitis B and C status and disease progression will be included in the medical record.
3. No member of the health care team has the right to refuse care for a patient infected with a bloodborne pathogen because of concern about transmission of infection. All healthcare workers (HCWs) should be educated about bloodborne pathogens with an emphasis on appropriate precautions for prevention of transmission. The policy and procedure for protecting the right of healthcare providers at MUSC to avoid participating in care that violates their personal ethical or religious beliefs will be defined by the MUSC Medical Center policy.
4. Appropriate precautions for the prevention of transmission of bloodborne pathogens will be defined by the MUSC Medical Center Infection Control Committee. Use of appropriate supplies and techniques for prevention of exposure should be explained to the patient in a manner to educate and reassure the patient. The use of precautions other than those defined by the Infection Control Committee is inappropriate.
5. Routine screening of patients for bloodborne pathogens is inappropriate. Diagnostic testing for the bloodborne pathogens should in all cases be done solely for the benefit of the patient. Any diagnostic testing for bloodborne pathogens that is not specifically for the benefits of the patient is considered research and requires review by the MUSC IRB and specific written informed consent. The single exception is those cases involving potential exposure of a healthcare worker (see Section J, page 25).

**INFORMED CONSENT FOR DIAGNOSTIC TESTING
FOR BLOODBORNE PATHOGENS**

1. The diagnosis of infection with bloodborne pathogens allows patients to seek appropriate healthcare and is an important step in limiting the spread of infection by education of the infected person on how to reduce possible transmission and by contact tracing through the health department. The diagnosis of infection with a bloodborne pathogen also has potential negative social and economic impact on the individual as sometimes seen in other disease (e.g., Alzheimer's disease and schizophrenia). Confidentiality is the cornerstone of reducing this risk to the patient.
2. Mandatory or routine testing of patients cared for at MUSC for infection with bloodborne pathogen will not be done. Diagnostic testing for the bloodborne pathogens should in all cases be done solely for the benefit of the patient.
3. A specific written informed consent is not required for diagnostic testing for bloodborne pathogens. Patients should receive appropriate pre and post test counseling whenever reasonably possible. Any diagnostic testing for bloodborne pathogens that is not specifically for the benefit of the patient is considered research and requires review by the MUSC IRB for Human Resources and specific written informed consent. The single exception is those cases involving potential exposure of a healthcare worker (see section J, Page 24).
4. The general consent for treatment at MUSC will include a statement regarding the possibility for testing for HIV and viral hepatitis. A patient may refuse to sign the consent at the time of admission or later withdraw consent by notifying the attending physician. If a general consent for treatment has not been signed, it should be noted during pretest counseling and signed by the patient prior to testing.

TESTING AND COUNSELING

Definitions:

Pretest counseling: This term encompasses an explanation of the need for the testing to be conducted, how the specimen will be collected, an explanation of the meaning of a negative or positive test result, an explanation of how the results will be utilized and maintained, confidentiality requirements regarding the identity of the individual being tested and the test results, including the fact that all positive results are required by SC law to be reported to DHEC, and the consequences of refusing testing. An explanation of the measure for the potential of transmission and exposure to bloodborne pathogens should be offered.

Posttest counseling: This term encompasses an explanation of the results of the test, an explanation of the meaning and significance of the test results, and explanation of how the bloodborne pathogen is transmitted and how to prevent transmission, and information regarding additional medical and social services if needed. Posttest counseling should also include the benefits of locating and counseling any previous persons by whom the infected individual may have been exposed and who may have been exposed by the infected person, and the availability of DHEC services to aid with this in a confidential manner.

1. Pre and posttest counseling should be performed as a routine function of bloodborne pathogen testing. Exceptions for patients cared for at the MUSC Medical Center might be as follows:
 - a. If the subject of the test is incapable of consent (e.g., unconscious or legally incompetent) and the testing must be performed as part of the medical diagnosis, care and treatment of the patient.
 - b. If the subject refuses testing (and counseling) and a court order is obtained for such testing or as otherwise provided by state law.

- c. If the subject is not available and it is necessary to test the subject's specimen due to accidental exposure or similar circumstance.
2. Pretest counseling should be performed by a qualified person with education and training to provide the defined information in a meaningful manner for the individual.
3. Pretest counseling should be performed at the time of testing (except as contraindicated above). The general consent signed at the time of admission should not be construed to constitute pretest counseling.
4. Pretest counseling should be documented in the medical record. Any difficulties encountered (language barriers, unconscious patients, etc.) should also be documented.
5. Employees who undergo HIV testing, as part of an exposure workup should receive pretest counseling.
6. Posttest counseling should be offered on an immediate face-to-face basis at the time that confirmed test results are related to the subject. Both positive and negative test results should be accompanied by posttest counseling. Positive results should be confirmed by Western Blot (or equivalent) techniques before they are revealed to the subject.
7. Posttest counseling should be offered in all cases except as when rendered impossible by such constraints as listed above in item 1. When the subject becomes available (is located, regains consciousness, etc.), posttest counseling should be performed as soon as possible.
8. Posttest counseling should be performed by persons educated and trained to provide the information as defined above. This counseling should be provided in a manner understandable to the patient, taking into account the educational level and potential language barriers. Consideration should be given to obtaining standardized informational materials on the meaning of positive bloodborne pathogen test results as an adjunct to verbal counseling.

9. Training for pre and post test counseling should be part of the curriculum for all medical students and housestaff as well as nursing students and staff. Both pre and posttest counseling should be the ultimate responsibility of the attending physician at the time the test is performed.
10. Posttest counseling should be well documented in the medical record. Any difficulties in accomplishing this should be delineated. Standardization of the process of initiating posttest counseling should be attempted with appropriate hospital policies addressing the content and format.
11. In cases where the subject has returned to the care of his local physician, the test results and request for performance of posttest counseling may be referred to that local physician with documentation of such referral made in the medial record.
12. Appropriate referral for further concerns about the implications of the test results may be made to other health professionals (e.g., the case manager, infection control nurse, psychiatric liaison nurse, and infectious disease specialist), if the subject requires or requests further counseling.
13. Guidelines for pre and posttest counseling are attached as an appendix to this section.

APPENDIX:

GUIDELINES FOR PRE AND POST TEST COUNSELING

Pre-Test:

This document is to provide information about the test for antibody to HIV (Human Immunodeficiency Virus). HIV is the virus that causes AIDS (Acquired Immune Deficiency Syndrome). Not everyone who tests positive for HIV has yet developed AIDS. Your physician will tell you why this test has been ordered for you. You will be asked to read and sign a document to indicate that you understand this information and have had an opportunity to ask questions.

HIV INFORMATION: HIV is spread through contact with certain body fluids from an infected person. This can occur during sexual intercourse, by sharing needles for intravenous injection, during the birth process, receiving infected blood products, or other exposure to blood and infectious body fluids. HIV is known to be spread by other contact, and infections can be prevented by avoiding the contact described above

TEST INFORMATION: This test is done on a sample of your blood. The purpose is to look for the presence of antibodies to HIV. Antibodies are produced in the blood in response to infection. Most people will develop antibodies to HIV within six months of infection.

CONFIDENTIALITY: The HIV test results will be considered confidential and release only to the health professionals who have responsibility for your care and the SC Department of Health and Environmental Control (DHEC), as required by state law. Information about this test may not be released to any other persons without your written approval except by a valid court order or subpoena.

NEGATIVE TEST RESULTS: A negative results means that no antibodies were detected. On rare occasions, this can occur if you are infected by have not yet developed antibodies to HIV. Your physician will discuss with you any need for further evaluation.

POSITIVE TEST RESULTS: A positive result means you are infected with HIV. A positive result does not always mean that you have already developed AIDS. Your physician will discuss with you the need for further testing. Counseling will be provided to you at the time you receive your test results.

Post-Test:

You have been tested for antibodies to the Human Immunodeficiency Virus (HIV) and your physician wishes for you to understand some facts about HIV and your test results.

Some activities are “high risk” for spreading HIV infection. HIV is spread through the following ways: unprotected sexual contact and intercourse; sharing needles for intravenous injection, from a mother to her baby before or during the birth process; contact with blood, semen, vaginal secretions and other internal body fluids of an infected persons; and by receiving blood or organs from an infected person.

Test Results

1. If you have risk factors for HIV, a negative test does not always mean that you are not infected. Further testing should be considered. Avoiding high-risk behaviors is advisable to prevent infection.
2. A positive test result does not always mean that you have already developed AIDS.
3. A positive test result means that you are potentially infectious to others. If you engage in high-risk behaviors, you must tell others that you are infectious.
4. Since it is not clear when you became infected, recent high-risk contacts should be notified. The Public Health Department can help you do this without revealing your identity.
5. A majority of HIV injected individuals will develop AIDS. Your physician will discuss possible measures, which may help maintain you health and delay the onset of AIDS.

CONFIDENTIALITY AND DUTY TO WARN

I. Confidentiality

The confidentiality of all patients and patient related information at MUSC will be governed by MUSC Medical Center Policy.

II. Duty to Warn

The principle of confidentiality of patient information is an ethical and legal standard of such force that any exception must be justified. Two exceptions that are arguably justifiable are

evoked by the “duty to warn”: the duty to protect public health, and the duty to protect individuals from grave harm.

1. The duty to protect public health justifies a breach in patient confidentiality when there is evidence that reporting the names of persons who are found to have certain infectious disease is crucial to the effectiveness of measures to stop the spread of those diseases. Anyone who diagnosis or treats a patient with infection due to bloodborne pathogens is required by law to report the patient’s name to the Department of Health and Environmental Control.
2. The duty to warn individuals who are believe to be places at risk because of sexual contact or other high-risk behavior with a person infected with a bloodborne pathogen is supported by the reasoning of the benchmark case *Tarasoff v. Regents of the State of California* (1976). The judgment in this case held psychotherapist liable for failure to give adequate warning to a third party of his patient’s intention to murder her. Earlier courts stated that a physician has a duty to warn specific individual of the foreseeable danger of contracting an infectious disease from the physician’s patient. A specific grave danger to an individual places the professional under obligation to warn that individual, and this obligation superseded the duty to keep information confidential. The notion of grave danger is related both to the probability of transmission of the infectious agent and to the seriousness of the consequences of infection should it occur. The duty to warn is clear for HIV or HBV-infected persons, but is ambiguous for those infected with HCV. It is ethically permissible, though not required, for clinicians to warn third parties that are in danger of contracting hepatitis from the patient.

From the perspective of rights, persons own themselves and have a right to be free from intentional harm by others. To act autonomously, they have a right to information that will enable them to avoid such harm. The right of unsuspecting sexual partners to know that a person has a transmissible bloodborne pathogen is strengthened by the possibility that the disease can be prevented or its progress slowed. This is certainly true of HIV and HBV, and may also be true of HCV. In other words, if knowledge that a sexual partner has a bloodborne pathogen makes possible prevention or effective treatment of a life threatening disease, an exception to the rule of confidentiality is established.

The obligation to warn individuals at risk, in the absence of statutory reporting requirements, may further clarified:

1. Spouse or other sexual partner(s)

The attending physician should try to convince patients infected with transmissible bloodborne pathogens of their ethical and legal obligations to warn sexual partners of the danger of infection.

If unsuccessful, the physician should seek the intervention of public health officials to warn sexual contacts of their danger.

If public health officials are unwilling or unable to assume responsibility for notifying sexual partners, then it is ethical for the physician to warn identified partners. Judgment whether to warn will take into account such factors as assessment of degree of risk to the partner, situational features of the physician-patient relationship, and the ability to locate and communicate with identifiable partners. In the event that a physician does notify the spouse or partner, the physician is not liable for damages resulting from the disclosure (SC Code Section 44-29-146 [Supp. 1989]). Any disclosure should be fully documented in the patient's medical record.

2. Needle-sharing partners

For the same reasons, it is permissible for the physician to inform needle-sharing partners of an infected patient. The ethical impetus here may not be as strong as it is for sexual partners because participants in this activity have presumably been previously warned not to engage in such high-risk behaviors.

3. Medical or other personnel

The physician or hospital should warn healthcare workers only in extraordinary situations when it is judged that particular personnel are performing procedures that place them at such risk of exchange of body fluids with the infected patient that usual precautions may not provide adequate protection.

PRECAUTIONS FOR CLINICAL AND RESEARCH

LABORATORY WORKERS

Laboratory Hazards

Bloodborne pathogens HIV, HBV and HCV have been isolated or detected in blood, semen, saliva, tears, urine, cerebrospinal fluid, amniotic fluid, breast mil, cervical secretion, and tissue from infected persons and experimentally infected nonhuman primates. In the laboratory, virus should be presumed to be present in the above body fluids, in HIV, HBV an HCV cultures, in all materials derived from these cultures, and in/on equipment and devices coming into direct contact with these materials.

In the laboratory, the skin (especially when scratches, cuts, abrasions, dermatitis, or other lesions are present) and mucous membranes of the eye, nose, and mouth should be considered as potential pathways for viral entry. Needles, sharp instruments, broken glass, and other sharp objects

must be carefully handled and properly discarded. Care must be taken to avoid spilling and splashing infected cell-cultured liquid and other virus-containing materials.

Good laboratory procedures must always be practices in any laboratory, which handles specimens of human or animal origin. In the research laboratory setting where concentrated stocks of HIV, HBV or HCV may be present; it is absolutely imperative that the applicable standards of safety be practiced.

Recommended Precautions for Routine Clinical and Research Laboratories

1. BSL 2 standards and special practices, containment equipment and facilities as described in HHS Publication No. (NIH) 88-8395, Biosafety in Microbiological and Biomedical Laboratories (“Guidelines”), are recommended for activities involving all clinical specimens, body fluids, and tissues from humans or from infected or inoculated laboratory animals. These are same standards and practices recommended for handling all clinical specimens. For example, and for emphasis:
 - a. Use of syringes, needles, and other sharp instruments should be avoided, if possible. Used needles and disposable cutting instruments should be discarded in a puncture-resistant container with a lid. Needles should not be re-capped, bent, broken, removed from disposable syringes, or otherwise manipulated by hand.
 - b. Protective gloves must be worn by all personnel engaged in activities that may involve direct contact of skin with potentially infectious specimens, cultures, or tissues. Gloves should be carefully removed and changed with they are visibly contaminated. Personnel who have dermatitis or other lesions on the hands and who may have indirect contact with potentially infectious material should double-glove. Hand washing with soap and water should be a routine practice immediately

after infectious materials are handled and after work is completed-EVEN WHEN GLOVES HAVE BEEN WORN.

- c. Generation of aerosols, droplets, splashes and spills should be avoided. A biological safety cabinet should be used for all procedures (e.g., vortexing, centrifuging) that might generate aerosols or droplets and for all infected cell-culture manipulations.

The Guidelines contain additional precautions for operating at BSL 2.

2. All laboratory glassware, disposable material, and waste material suspected of known to contain HIV, HBV, HCV should be decontaminated, preferably by autoclaving, before it is washed, discarded, etc. An alternate method of disposing of solid wastes is incineration. All radioactive HIV, HBV and HCV contaminated waste must be handled on a case-by-case basis by Radiation Safety.
3. Laboratory workers are required to wear appropriate personal protective equipment, e.g., laboratory coats, gowns, or uniforms when working with HIV, HBV, HCV, or with material known or suspected to contain these agents. There is no evidence that laboratory clothing poses a risk for HIV, HBV or HCV preparations should be decontaminated before being laundered or discarded. Laboratory personnel must remove laboratory clothing before going to nonlaboratory areas.
4. Work surfaces must be decontaminated with an appropriate chemical germicide after procedures are completed, when surfaces are overtly contaminated, and at the end of each workday. Many commercially available chemical disinfectants can be used for decontaminating laboratory work surfaces, for some laboratory instruments, for spot cleaning of contaminated laboratory clothing, and for spills of infectious materials. Prompt decontamination of spills should be standard practice.

5. Standard precautions are required for handling all human blood specimens for hematologic, microbiologic, chemical, and serologic testing; these are same precautions for preventing transmission of all bloodborne infections. It is not certain how effective 56°C-60° heat is in destroying HIV in serum, but heating small volumes of serum for 30 minutes at 56°C before serologic testing reduces residual infectivity to below detectable levels. Such treatment causes some false-positive results in HIV enzyme immunoassays and may also affect some biochemical assays performed on serum.
6. Human serum from any source that is used as a control or reagent in a test procedure must be handled at BSL 2 (Guidelines).
7. If a laboratory worker has parenteral or mucous-membrane exposure to blood, body fluid, or other specimen from a patient, the worker should report the exposure to his/her supervisor immediately for management in accordance with the institutional policy on exposure to blood and body fluids (see Section J). The same procedure should be followed if a laboratory worker has a parenteral or mucous membrane exposure to viral culture material known to be infected with a bloodborne pathogen.
8. Other primary and opportunistic pathogenic agents may be present in the body fluids and tissues of persons infected with HIV, HBV and HCV. Laboratory workers must follow accepted biosafety practices to ensure maximum protection against inadvertent laboratory exposure to agents that may also be present in clinical specimens.
9. The laboratory director (or designated laboratory supervisor) is responsible for carrying out the biosafety program in the laboratory. In this regard, the laboratory director or designated supervisor should establish the biosafety level for each component of work to be done and should ensure that facilities and equipment are adequate and in good working order, that

appropriate initial and periodic training is provided to the laboratory staff, and that recommended practices and procedures are strictly followed.

10. In addition to these recommended precautions, persons working with HIV or other bloodborne pathogens should consult the OSHA Bloodborne Pathogen Standard (Occupational Exposure to Bloodborne Pathogens, Final Rule, and Fed. Register 56:64175-64182).

Recommended Precautions for Laboratories Handling Concentrated HIV, HBV and HCV

All the recommended precautions that pertain to the worker in a routine laboratory setting also apply to the research worker who by the very nature of his or her duties must take extra care to avoid material heavily laden with HIV, HBV and HCV.

1. Activities such as producing research laboratory-scale amounts of HIV, HBV and HCV, manipulating concentrated virus preparations, and conducting procedures that may produce aerosols or droplets must be performed in a BSL 2 facility with the additional practices and containment equipment recommended for BSL 3 (Guidelines).
2. Activities involving industrial-scale, large-volume production of high concentration and manipulation of concentrated HIV, HBV and HCV must be conducted in a BSL 3 facility using BSL 3 practices and equipment.
3. BSL 2 practices, containment equipment, and facilities for animals are recommended for activities involving nonhuman primates and any animals experimentally infected or inoculated with HIV, HBV and HCV. Because laboratory animals may bite, throw feces or urine, or expectorate at humans, animal-care personnel, investigators, technical staff, and other persons who enter the animal rooms must wear protective clothing (e.g., coats, gloves, coveralls or uniforms) and, as appropriate, face shield or surgical masks and eye shields to protect the skin and mucous membrane of the eyes, nose, and mouth.

4. Laboratories working with activated or concentrated HIV, HBV, and HCV must autoclave waste before disposal.
5. If a laboratory worker has a parenteral or mucous-membrane exposure to blood, body fluid, or other specimen from a patient, the worker should report the exposure to his/her supervisor immediately for management in accordance with the institutional policy on exposure to blood and body fluids (see Section J). The same procedure should be followed if a laboratory worker has a parenteral or mucous membrane exposure to viral culture material known to be infected with a bloodborne pathogen.
6. Medical surveillance programs should be in place in all laboratories that handle concentrated quantities of HIV, HBV and HCV. The nature and scope of a surveillance program will vary according to institutional policy and applicable local, state, and Federal regulations.
 - a. Research laboratories handling concentrated stocks of HIV, HBV and HCV must have prior approval by the Institutional Biosafety Committee (IBC) for this purpose. The IBC will monitor research laboratories for compliance and failure to maintain adequate precautions and safe laboratory practices may lead to withdrawal of IBC approval. Issues pertaining to acceptable safety precautions may be referred to the University Safety Committee.
 - b. It is the responsibility of the laboratory director (or designated laboratory supervisor) to inform laboratory staff of the availability of voluntary, periodic HIV, HBV and/or HCV testing of healthcare workers. Included should be strong recommendation that all staff involved in replicating or otherwise handling concentrated stocks of HIV, HBV or HCV should be tested prior to initiating work and every six months thereafter or until such time as the hazards associated with handling this material

have ceased. Once notified, the IBC will assume the responsibility to implement and supervise this surveillance program of research workers.

EXPOSURE TO BLOOD AND BODY FLUIDS

1. MUSC will make state of the art intervention available to all healthcare workers to prevent infection in the case of occupational exposure to bloodborne pathogens. All percutaneous and mucous membrane exposures to blood or potentially infectious body fluids must be reported promptly to Employee/Student Health Services. During hours when these services are not available, a Hospital Services Coordinator (HSC) in the Medical University Hospital or the House Manager at the Charleston Memorial Hospital should be contacted.
2. The specific protocol for intervention following exposure will be developed and maintained by the Infection Control Committee and the Employee Health Service of the MUSC Medical Center.
3. All healthcare workers must report any accidental percutaneous or mucous membrane exposure of patients to blood or potentially infectious body fluids immediately. A healthcare worker who exposes a patient to blood or other hazardous body fluid during the performance of their duties is ethically obligated to undergo testing for infection with bloodborne pathogens. Healthcare workers who refuse testing following such an exposure should not be allowed to continue to perform duties where the potential for such exposure exists.
4. South Carolina State Law (44-29-230) provides that testing for HIV and HBV may be done without the consent of the patient if a physician, epidemiologist or infection control practitioner has cause to believe that an exposure to bloodborne pathogens has occurred that poses a significant risk to a healthcare worker.

HEALTHCARE WORKERS INFECTED WITH HIV, HEPATITIS B, OR HEPATITIS C

1. The purpose of this policy is:
 - a) To ensure that appropriate precautions are taken to prevent transmission of bloodborne pathogens from infected healthcare workers at MUSC.
 - b) To avoid infringement on the individual rights or unnecessary curtailment of professional activities of healthcare workers infected with bloodborne pathogens, and
 - c) To comply with applicable federal and state laws.
2. Definitions:

Invasive procedures are defined as surgical entry into tissues, cavities, or organs or repair of major traumatic injuries associated with any of the following:

 - a) an operating or delivery room, emergency department, or outpatient setting, including both physicians' and dentists' offices;
 - b) cardiac catheterization and angiographic procedures
 - c) a vaginal or caesarian delivery or other invasive obstetric procedure during which bleeding may occur, or
 - d) the manipulation cutting, or removal of any oral or perioral tissues, including tooth structure, during which bleeding occurs or the potential for bleeding exists.
3. No individual who complies with the policies of MUSC will be discharged from employment or training as a result of infection with a bloodborne pathogen. MUSC will endeavor to continue to treat infected individuals as regular employees and members of the university community in good standing. If lawful restrictions are placed upon the professional activities of an infected healthcare worker, MUSC will make every reasonable effort to assist the individual in finding appropriate alternative responsibilities. Every reasonable effort will

also be made to secure any and all benefits and compensation assured by the State of South Carolina.

4. Testing of healthcare workers for bloodborne pathogens is not mandatory; however, all healthcare workers who perform invasive procedures have an obligation to know if they are infected with a bloodborne pathogen. Healthcare workers who adhere to universal precautions and who do not perform invasive procedures pose no risk for transmission of bloodborne pathogens to patients or co-workers.
5. MUSC will establish and maintain a Bloodborne Pathogens Expert Review Panel consistent with South Carolina State law and CDC and DHEC regulations. This panel will be administered by the Office of the Vice President for Clinical Operations.
6. Healthcare workers who perform invasive procedures and who are found to be infected with a bloodborne pathogen are required to disclose their infection to a member of the MUSC Bloodborne Pathogens Expert Review Panel prior to performance of further invasive procedures. Furthermore, the healthcare worker should perform no further invasive procedures until the Expert Review Panel has made a determination whether any modification of their practice is necessary.
7. If the Bloodborne Pathogen Expert Review Panel determines that a healthcare worker infected with a bloodborne pathogen has performed procedures with the potential for transmission of infection to patients or co-workers, appropriate public health officials will be notified by the chair of the Expert Review Panel.

REFERENCES

Centers for Disease Control. Recommendations for Prevention of HIV transmission in Healthcare Settings. *Mortality and Morbidity Weekly Report* 1987:36 (suppl.no.2S).

Centers for Disease Control. Recommendations for Preventing Transmission of Human Immunodeficiency Virus and Hepatitis B Virus to Patients during Exposure-Prone Invasive Procedures. *Mortality and Morbidity Weekly Report* 1991(No. RR-8).

HHS Publication No (NIH) 88-8395 *Biosafety in microbiological and biomedical laboratories*. 2ⁿd ed., May 1988, Washington: U.S. Government Printing Office.