



## UNIVERSITY POLICY

<b>SUBJECT:</b>	HEALTH AND SAFETY	<b>TITLE:</b>	HIV, HBV and HCV		
<b>CATEGORY:</b> <i>(Check One)</i>	<b>Board of Trustees</b> <input type="checkbox"/>	<b>Presidential</b> <input checked="" type="checkbox"/>	<b>Functional</b> <input type="checkbox"/>	<b>School/Unit</b> <input type="checkbox"/>	
<b>Responsible Executive:</b>	Vice President for Academic Affairs		<b>Responsible Office:</b>	Office of Academic Affairs	
<b>CODING:</b>	00-01-45-52:00	<b>ADOPTED:</b>	12/01/88	<b>AMENDED:</b>	02/19/13
					<b>LAST REVIEWED:</b> 02/19/13

**I. PURPOSE**

To set University requirements for Human Immunodeficiency Virus, Hepatitis B Virus and Hepatitis C Virus (HIV, HBV and HCV) testing, evaluation immunization, and impact on the allowed clinical activities of UMDNJ employees, faculty, housestaff and students who have or will have patient contact, contact with research subjects, or contact with potentially infectious materials during their employment or studies at UMDNJ.

**II. ACCOUNTABILITY**

Under the President, the Executive Vice President for Academic and Clinical Affairs shall ensure compliance with this policy. The Deans and the Presidents/CEOs of the patient-care units shall implement this policy.

**III. DEFINITIONS**

- A. "Bloodborne viral hepatitis/hepatitides" shall mean those systemic viral infections primarily involving the liver which have a high potential for transmission via blood or body fluids, such as hepatitis B and hepatitis C.
- B. "Category I procedures" shall mean the Category I procedures listed in "Updated CDC Recommendations for the Management of Hepatitis B Virus-Infected Health-Care Providers and Students" (EXHIBIT A). Category I procedures are listed by the Centers for Disease Control and Prevention (CDC) if they are known or likely to pose an increased risk of percutaneous injury to a health-care provider that have resulted in provider-to-patient transmission of HBV.
- C. "Category II procedures" shall mean the Category II procedures listed in "Updated CDC Recommendations for the Management of Hepatitis B Virus-Infected Health-Care Providers and Students" (EXHIBIT A). Category II procedures include all invasive and noninvasive procedures that are not included in Category I, as they are deemed by the CDC to pose low or no risk for percutaneous injury to a health-care provider, or, if a percutaneous injury occurs, it usually happens outside a patient's body and generally does not pose a risk for provider-to-patient blood exposure.
- D. "Standard Precautions" is a group of infection prevention practices that apply to all patients, regardless of suspected or confirmed diagnosis or presumed infection status. Standard Precautions is a combination and expansion of Universal Precautions and Body Substance Isolation. Standard Precautions is based on the principle that all blood, body fluids, secretions, excretions (except sweat), nonintact skin, and mucous membranes may contain transmissible infectious agents.

Standard Precautions includes hand hygiene, and depending on the anticipated exposure, use of gloves, gown, mask, eye protection, or face shield. Also, equipment or items in the patient environment likely to have been contaminated with infectious fluids must be handled in a manner to prevent transmission of infectious agents (e.g., wear gloves for handling, contain heavily soiled equipment, and properly clean and disinfect or sterilize reusable equipment before use on another patient).

- E. “UMDNJ HBV Committee” is a group of designated individuals, who may include the campus Occupational Medicine/Employee Health Service directors, campus Student Health Directors and representatives from Legal Management, Human Resources, infectious disease experts and hepatology experts, along with representatives of the relevant School or clinical unit with knowledge of the essential functions of the position or program of study in question.
- F. “UMDNJ Individuals” shall mean all UMDNJ employees, faculty, housestaff and students.

#### IV. REFERENCES

- A. Disabilities and UMDNJ Students/Applicants 00-01-20-91:00
- B. Student Essential Functions 00-01-20-96:00
- C. Student Immunizations & Health Requirements 00-01-25-40:00
- D. Management of Potential Occupational/Educational Exposures to HIV, HBV and HCV 00-01-40-40:10
- E. Housestaff Immunizations and Health Requirements 00-01-40-45:00
- F. Bloodborne Pathogens 00-01-45-50:00
- G. Updated CDC Recommendations for the Management of Hepatitis B Virus-Infected Health-Care Providers and Students, MMWR July 6, 2012; Vol. 61/No.3
- H. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HIV and recommendations for postexposure prophylaxis. MMWR September 30, 2005;54 (RR-9).
- I. CDC. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. MMWR October 16, 1998;47(RR-19).

#### V. POLICY

- A. All UMDNJ Individuals shall comply with the infection control policies and procedures of their respective Schools or patient-care units, with the training requirements described in University policy, Bloodborne Pathogens, 00-01-45-50:00, with the Standard Precautions guidelines established by the Centers for Disease Control and Prevention (CDC), with the New Jersey Department of Health and Senior Services infection control standards for hospitals (N.J.A.C. 8:43G-14.1(b) 2), and with the Occupational Safety and Health Administration’s (OSHA) “Bloodborne Pathogens Standard” (29 CFR 1910.1030) as promulgated by the New Jersey Public Employees Occupational Safety and Health Act (PEOSHA). Continued clinical privileges will be dependent upon full compliance with all appropriate infection control procedures.
- B. UMDNJ Individuals and accepted applicants who have HBV, HCV or HIV may not, by reason of such disability, be excluded from participation in or be denied the benefits of UMDNJ’s services, programs or activities, except as provided in this policy.

#### VI. HBV

- A. **Pre-placement Testing and Immunizations**

1. Newly hired and newly accepted UMDNJ individuals who may have patient contact or contact with blood or other potentially infectious body fluids or laboratory material shall undergo testing for HBV infection and immunity post-offer of employment or acceptance but, prior to participation in education programs and prior to patient contact or contact with blood or other potentially infectious body fluids or materials. These tests should ordinarily consist of hepatitis B surface antigen (HBsAg), antibody to HBsAg (HBsAb) and antibody to hepatitis B core antigen (HBcAb), followed by additional tests, including HBV DNA levels, as deemed appropriate by the campus Occupational Medicine/Employee Health Service or campus Student Health Service.
2. UMDNJ Individuals who test negative for HBV infection and have inadequate levels of antibody to hepatitis B shall be immunized as appropriate. UMDNJ individuals who still do not respond with antibody production following a second series of immunizations (for a total of six doses) are considered susceptible to HBV infection, and shall be counseled regarding precautions to prevent HBV and the need to obtain hepatitis B immune globulin (HBIG) prophylaxis for any known or probable significant exposure to HbsAg-positive blood.
3. In all instances, current CDC recommendations should be consulted regarding initial HBV immunization, post-immunization antibody titers, re-immunization or booster doses for inadequate antibody titers, and post-exposure immunoglobulin prophylaxis for non-responders.

**B. If Category I procedures ARE REQUIRED**

1. If DNA levels are **1,000 IU/ml (5,000 GE/ml) or higher**, a determination shall be made as to whether the requirements of the position or program include participation in Category I procedures (EXHIBIT A). If the requirements of the position or program include participation in Category I procedures, a determination will be made as to whether reasonable modifications are available to restrict the individual from participating in Category I procedures without fundamentally altering the nature of the position or program. If Category I procedures are required, and no reasonable modifications are available, the offer of employment or acceptance to an education program may be rescinded. These evaluations shall be made by the UMDNJ HBV Committee.
2. UMDNJ Individuals with HBV infection whose HBV DNA levels are **below 1,000 IU/ml (5,000 GE/ml)** are permitted to participate in Category I procedures (EXHIBIT A), and shall be required to abide by the UMDNJ HBV Committee determinations regarding the scope of acceptable practice and monitoring of HBV DNA levels. Ordinarily, these individuals will be tested every six months, unless higher levels require more frequent testing to determine if elevations are transient. Spontaneous fluctuations of HBV DNA levels may result in a determination by the monitoring office (Occupational Medicine/Employee Health Service or Student Health Services) or by the UMDNJ HBV Committee that the individual be required by his/her supervisors to abstain from participating in Category I procedures, while subsequent retesting occurs and, if needed, other reasonable measures to protect the health of patients, or that the UMDNJ HBV Committee should review the testing results to determine the scope of acceptable practice and whether restrictions should be in place.

**C. If Category I procedures are NOT REQUIRED, but ARE REASONABLY EXPECTED**

In some cases, the requirements of a position or program do not require participation in Category I procedures, but the UMDNJ Individual or his/her supervisor reasonably expects the individual to participate in Category I procedures in the course of employment or matriculation. This situation is common in health professions education, where students benefit from the broadest possible experience in clinical care. In order to assure patient safety, the following standards shall be applied.

1. If the HBV DNA levels are **equal to or greater than 1,000IU/ml (5,000GE/ml)**, such UMDNJ individuals shall be restricted from participating in Category I procedures and shall be subject to review by the UMDNJ HBV Committee regarding the scope of acceptable practice.
2. If the HBV DNA levels are **below 1,000IU/ml (5,000GE/ml)**, such UMDNJ individuals shall not be subject to review by the UMDNJ HBV Committee and shall not be restricted from participating in Category I procedures, but shall be required to be monitored by their campus Occupational Medicine/Employee Health Service or Student Health Service. Ordinarily, these individuals will be tested every six months. Spontaneous fluctuations of HBV DNA levels may result in a determination by the monitoring office (Occupational Medicine/Employee Health Service or Student Health Services) that the individual be required by his/her supervisors to abstain from participating in Category I procedures, while subsequent retesting occurs and, if needed, other reasonable measures be undertaken to protect the health of patients, or that the UMDNJ HBV Committee should review the testing results to determine whether restrictions should be in place. Such individuals shall be counseled concerning the need for Standard Precautions, any appropriate alternate procedures (e.g. double gloving, regular glove changes, use of blunt surgical needles), and appropriate implications concerning career path choices, along with information concerning availability of medical care. For students, such counseling shall also include a recommendation that the individual consult his/her school Office of Student Affairs to discuss implications concerning career path choices. Confirmation of such counseling shall be transmitted in writing (See EXHIBIT C)

**D. If Category I procedures NOT REQUIRED and NOT REASONABLY EXPECTED**

UMDNJ individuals who are HBsAg-positive upon initial testing, and who are neither required nor reasonably expected to participate in Category I procedures, shall not be subject to clinical restrictions or subsequent testing or ongoing review by the UMDNJ HBV Committee, unless their activities change to include Category I procedures. (See EXHIBITS A and B)

- E. To the extent a student's participation in Category I procedures is restricted under this policy, the UMDNJ HBV Committee shall promptly provide notice of such restrictions (without disclosing the nature of the student's medical condition) to the Dean or his/her designee of the School in which the student is enrolled. The Dean or his/her designee shall then promptly notify all supervising and attending physicians and staff, and anyone else who the Dean or his/her designee reasonably believes, in his or her judgment, should be made aware of the student's restrictions. The Dean or his/her designee shall also inform all supervising and attending physicians (and any other recipients of notice under this paragraph) that such restrictions shall not adversely affect the student's grade or evaluation of their academic or clinical performance. UMDNJ shall follow CDC recommendations regarding notification to patients about a student's Hepatitis B status (see EXHIBIT D).
- F. To the extent an employee, faculty or housestaff's participation in Category I procedures is restricted under this policy, the UMDNJ HBV Committee shall promptly provide notice of such restrictions (without disclosing the nature of the individual's medical condition) to the Director or other appropriate manager of the Department in which the individual is employed. The Department Director or manager shall then promptly notify all supervising and attending physicians and staff, and anyone else, who UMDNJ reasonably believes, in its judgment, should be made aware of the individual's restrictions. UMDNJ shall inform all supervising and attending physicians (and any other recipients of notice under this paragraph) that such restrictions shall not adversely affect the individual's employment.
- G. Monitoring of UMDNJ Individuals with HBV infection shall be at the direction of the Directors of the Occupational Medicine/Employee Health Service or Student Health Service, as applicable, and shall ordinarily not exceed semiannual frequency, unless otherwise indicated as necessary and appropriate for patient protection.

VII. **HIV, HBV or HCV**

- A. As recommended for all health-care workers, UMDNJ Individuals who are infected with HIV and/or HCV should follow strict aseptic technique and Standard Precautions including, but not limited to, appropriate hand washing frequencies and techniques; protective barriers; and appropriate use of sharps disposal containers, sharps with engineered sharps injury protections, and other safer medical devices, as required by the PEOSHA/OSHA Bloodborne Pathogens standard and University policy, Bloodborne Pathogens.
- B. UMDNJ Individuals must be provided with explicit procedures to be followed in the event of a potential exposure, in accordance with University policy, Management of Potential Occupational/Educational Exposures to HIV, HBV, and HCV, 00-01-40-40:10.
- C. UMDNJ Individuals who have reason to believe they may be infected with HIV, HBV and/or HCV because of occupational exposure or non-occupational high risk activities have a duty to periodically determine their serostatus as frequently as is indicated by the nature of their risk. If found to be infected with HIV, HBV and/or HCV, these individuals shall consult with their Student Health Service director or Occupational Medicine/Employee Health Service director. Such directors shall refer all such matters to the HBV Committee for appropriate review in accordance with this policy.
- D. In accordance with University policy, Disabilities and UMDNJ Students/Applicants, 00-01-20-91:00, Schools shall not make any inquiries of applicants for admission regarding the existence, nature or severity of disabilities prior to acceptance, but may inquire about the ability of applicants to meet the published Essential Functions of the educational program, with or without reasonable accommodations. In evaluating applicants to UMDNJ educational programs, an applicant's limitations or impairments due to HIV, HBV and/or HCV infection may be considered on a case-by-case basis, as with other medical illnesses and disabling conditions, to determine the applicant's ability to perform the Essential Functions and curricular requirements of the academic program. In no case shall information or inference about HIV, HBV or HCV status be used as the basis for denying an applicant full and complete consideration in the admissions process. Evaluation for admission should focus on whether the individual in his or her current state of health, with reasonable accommodation by the University, will be able to successfully complete the Essential Functions and curricular requirements of the academic program.

VII. **EXHIBITS**

- A. July 6, 2012 Updated CDC Recommendations for the Management of Hepatitis B Virus-Infected Health-Care Providers and Students, MMWR Vol. 61/No.3 (CDC Classification of exposure-prone patient care procedures).
- B. Table: Follow-up Plan for UMDNJ individuals with Hepatitis B Virus Infection
- C. Example Student Health/Occupational Medicine counseling letter for HBV positive UMDNJ individuals receiving no HBV Committee review (HBV<1,000 IU/ml, and Category I procedures not required, but reasonable expected. See EXHIBIT B)
- D. CDC Recommendation - Notification of Patients of HBV-Infected Health-Care Providers

By Direction of the President:

**SIGNATURE ON FILE**

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Vice President for Academic Affairs

## EXHIBIT A

### **BOX. CDC classification of exposure-prone patient care procedures**

#### **Category I. Procedures known or likely to pose an increased risk of percutaneous injury to a health-care provider that have resulted in provider-to-patient transmission of hepatitis B virus (HBV)**

These procedures are limited to major abdominal, cardiothoracic, and orthopedic surgery, repair of major traumatic injuries, abdominal and vaginal hysterectomy, caesarean section, vaginal deliveries, and major oral or maxillofacial surgery (e.g., fracture reductions). Techniques that have been demonstrated to increase the risk for health-care provider percutaneous injury and provider-to-patient blood exposure include

- digital palpation of a needle tip in a body cavity and/or
- the simultaneous presence of a health care provider's fingers and a needle or other sharp instrument or object (e.g., bone spicule) in a poorly visualized or highly confined anatomic site.

Category I procedures, especially those that have been implicated in HBV transmission, are not ordinarily performed by students fulfilling the essential functions of a medical or dental school education.

#### **Category II. All other invasive and noninvasive procedures**

These and similar procedures are not included in Category I as they pose low or no risk for percutaneous injury to a health-care provider or, if a percutaneous injury occurs, it usually happens outside a patient's body and generally does not pose a risk for provider-to-patient blood exposure. These include

- surgical and obstetrical/gynecologic procedures that do not involve the techniques listed for Category I;
- the use of needles or other sharp devices when the health-care provider's hands are outside a body cavity (e.g., phlebotomy, placing and maintaining peripheral and central intravascular lines, administering medication by injection, performing needle biopsies, or lumbar puncture);
- dental procedures other than major oral or maxillofacial surgery;
- insertion of tubes (e.g., nasogastric, endotracheal, rectal, or urinary catheters);
- endoscopic or bronchoscopic procedures;
- internal examination with a gloved hand that does not involve the use of sharp devices (e.g., vaginal, oral, and rectal examination; and
- procedures that involve external physical touch (e.g., general physical or eye examinations or blood pressure checks).

**Nota Bene: The CDC guidance also includes the following statement: “Given the variety of procedures, practices, and providers, each HBV-infected health-care provider performing potentially exposure-prone procedures will need individual consideration. However, this evaluation should not define exposure-prone procedures too broadly; the great majority of surgical and dental procedures have not been associated with the transmission of HBV.”**

**EXHIBIT B**

Table: Follow-up Plan for UMDNJ Individuals with Hepatitis B Virus Infection

Category I procedures	Hepatitis B Virus Viral Load	
	<1,000 IU/ml or 5,000 GE/ml	≥1,000 IU/ml or 5,000 GE/ml
<b>Required</b>	No restrictions Semi-annual monitoring Review by HBV Committee	Review by HBV Committee to determine whether reasonable modifications can be made, such as, eliminating Category I procedures. If yes: individual may continue enrollment/employment, but restricted from participation in Category I procedures; Semi-annual monitoring  If no: individual cannot continue employment/enrollment while HBV DNA levels equal or exceed 1,000IU/ml or 5,000 GE/ml
<b>Not required, but reasonably expected</b>	No restrictions Semi-annual monitoring	Restricted from participation in Category I procedures Semi-annual monitoring Review by HBV Committee
<b>Not required, Not reasonably expected</b>	No restrictions No monitoring	No restrictions No monitoring

## EXHIBIT C

Example Student Health/Occupational Medicine counseling letter for HBV positive UMDNJ individuals receiving no HBV Committee review (HBV<1,000 IU/ml, and Category I procedures not required, but reasonable expected. See EXHIBIT B)

Dear \_\_\_\_\_:

This letter will serve to confirm our discussion on [date] regarding your HBV status. Also, please read the attached University policy, "HIV, HBV, HCV, 00-01-45-52:00."

Please note the following, as discussed:

- You must always be extremely vigilant about the use of precautions during clinical activities in order to protect yourself, your colleagues and your patients. If in the course of your [matriculation or employment] you are cut by a sharp instrument or needle stick, you must, as soon as possible, report the incident to my office [and your School Office of Student Affairs]. With this knowledge, we can arrange for appropriate medical evaluation and care for you and for anyone who may have been exposed.
- You should also be aware of your need to practice Standard precautions, "Standard precautions" is a group of infection prevention practices that apply to all patients, regardless of suspected or confirmed diagnosis or presumed infection status. Standard Precautions is a combination and expansion of Universal Precautions and Body Substance Isolation. Standard Precautions is based on the principle that all blood, body fluids, secretions, excretions (except sweat), non-intact skin, and mucous membranes may contain transmissible infectious agents. Standard Precautions includes hand hygiene, and depending on the anticipated exposure, use of gloves, gown, mask, eye protection, or face shield, double gloving, regular glove changes, and use of blunt surgical needles. Also, equipment or items in the patient environment likely to have been contaminated with infectious fluids must be handled in a manner to prevent transmission of infectious agents (e.g., wear gloves for handling, contain heavily soiled equipment, and properly clean and disinfect or sterilize reusable equipment before use on another patient).
- You will be required to submit a report of blood work monitoring and lab results, at the direction of the [Student Health Service/Occupational Medicine Service]. If you become aware of any changes in your HBV status, such as increase in your viral load to 1000 IU/ml or higher, you must report such changes immediately to me, so that the UMDNJ HBV Committee can determine whether you will be restricted from participating in Category I procedures (see policy). You are advised that failure to comply with these terms may result in [academic or disciplinary action], up to and including [dismissal/termination from employment.]

I urge you to discuss with your personal physician, if you have not already done so, appropriate treatment or counseling regarding your medical care, including the advisability of obtaining a Hep A vaccine. You should also be thoroughly informed of the risks to your health from disease transmission through needle sticks or other injuries that may occur during the course of your [education/employment] and throughout your career. Moreover, because of your medical condition, you may be at a higher than normal risk for health problems in the event you are exposed to Hep A, or to the blood of patients with other blood-borne infectious diseases such as Hep C or HIV.

Please note that University policies are subject to change to reflect the most current scientific and medical evidence concerning transmission of HBV for a health care [worker/student] to a patient and vice versa. If changes are made to policies that impact your ability to continue [matriculation as a student/employment], a new evaluation of your ability to perform the essential functions of [your program of study/your employment] will be conducted. Although I cannot predict whether restrictions related to this will be necessary, you should be aware of the possibility that a future evaluation of the risk to patients or others may affect your [matriculation status/employment].

*{For student letters only, where applicable}: Finally, while your current program of instruction does not require you to participate in CDC Category I procedures, your career choices as a [physician, Advanced Practice Nurse, etc., and where applicable] may be limited. Future [residency directors and] employers may review your candidacy to determine if your health status poses a threat to the health and safety of patients. We are all eager to see you succeed, so I strongly advise you to seek career counseling through your school's Office of Student Affairs. You are not required to disclose your HBV status to your School, however your career counseling will be more relevant if you do so. Also, if you change your program of study, you must notify me immediately so we can review your HBV status in relationship to your new program of study.*

**EXHIBIT C (continued)**

Please sign the attached attestation to confirm your understanding of our counseling session and the contents of this letter and attached policy.

Yours truly,

Director of [Student Health Service/Occupational Medicine Service]

**EXHIBIT C (continued)**

ATTESTATION

I have read and understood the contents of this letter and the attached policy, and I agree to any requirements expressed in this letter in all respects. I understand that if I do not comply with the requirements in this letter and/or the attached policy, I may be subject to [discipline, up to including dismissal/termination].

\_\_\_\_\_  
Student /Employee Name (Print)

\_\_\_\_\_  
Student/Employee Signature

\_\_\_\_\_  
Date

## EXHIBIT D

### **CDC Recommendation - Notification of Patients of HBV-Infected Health-Care Providers**

There is no clear justification for or benefit from routine notification of the HBV infection status of a health-care provider to his or her patient with the exception of instances in which an infected provider transmits HBV to one or more patients or documented instances in which a provider exposes a patient to a bloodborne infection. Routine mandatory disclosure might actually be counterproductive to public health, as providers and students might perceive that a positive test would lead to loss of practice or educational opportunities. This misperception might lead to avoidance of HBV testing, of hepatitis B vaccination (if susceptible), of treatment and management (if infected), or of compliance with practice oversight from an expert panel (if infected and practicing exposure-prone procedures). In general, a requirement for disclosure is accepted to be an insurmountable barrier to practice and might limit patient and community access to quality medical care.