

PERSONNEL HEALTH: GENERAL POLICIES

Issued: February 1987
Revised: June 2013
Reviewed:

Personal Health: General Policies
Page 1 of 23
Infection Control 02-15a

I. PURPOSE

Infection control is an important concern for healthcare workers. First, healthcare workers are at increased risk of some infections because of exposure to infected patients or to body fluids and other potentially infectious materials. Consequently, personnel must be encouraged to receive appropriate prophylactic immunizations and to participate in education and testing programs. Second, healthcare workers who acquire communicable diseases either inside or outside the hospital may then transmit the disease to susceptible patients, personnel, visitors, family, or friends. To minimize this risk, healthcare workers should be knowledgeable about appropriate steps to take when they have been exposed to a communicable disease and should participate in hospital programs for post-exposure testing and management. Hospital policies and programs established jointly by the Infection Control Program, Human Resources, and Employee Health (University of Chicago Occupational Medicine [UCOM]) are outlined below. They address work-related illnesses, exposures to infectious agents, immunizations, prophylaxis, and work restrictions. General policies referred to herein may be found on the UCM intranet within policies and procedures.

II. RESPONSIBILITIES

A. Healthcare Workers

1. Healthcare workers are responsible for complying with the required health screening programs upon hire and during their employment or affiliation with University of Chicago Medical (UCM). Healthcare workers should know their history of communicable diseases and immunizations (e.g., chickenpox, measles, rubella). In the event of an exposure, personnel should be able to provide reliable information regarding their history to their supervisors and/or an infection control practitioner.
2. Healthcare workers who suffer an on the job exposure should also report the incident in accordance with Administrative Policy and Procedure 06-01, Work Related Injury, Illness, and Exposure Reporting. Employees should report the exposure incident to their

Issued: February 1987
Revised: June 2013
Reviewed:

Personnel Health: General Policies
Page 1 of 23
Infection Control 02-15a

The University of Chicago Medicine Policy and Procedure Manual

supervisor within the same shift. Employees must also report the incident to the Report Line 877-441-3845. Please refer to Administrative Policy and Procedure A06-01, "Work Related Injury, Illness, and Exposure Reporting" for additional requirements.

3. Healthcare workers are responsible for promptly notifying their supervisors and the infection control practitioner on call of any significant exposure to, or infection with, a communicable disease. Refer to Appendix A, Management of Healthcare Workers Exposed or infected with a Communicable Disease for information about exposure to, or infection with, diseases which may warrant an exposure work-up, post-exposure prophylaxis, or work restrictions (such as chickenpox, herpes zoster, measles, mumps or adenovirus).
4. Except for possible bloodborne pathogens exposures (e.g., needlestick injuries), exposed or infected personnel should be evaluated by UCOM or, if closed, the Mitchell Emergency Room (MER), to determine if work restrictions or other precautions are necessary. If initially seen in the MER and referred to UCOM or advised to seek further medical evaluation, it is the responsibility of the healthcare worker to follow up accordingly. Personnel with possible bloodborne pathogens exposure should page the needlestick hotline pager (9990).
5. Personal Hygiene
 - a. Cleanliness and good personal hygiene are mandatory.
 - b. Employees who have direct contact with patients, who handle sterile items used for invasive procedures, or who are directly involved in the sterilization of surgical instruments should not wear artificial fingernails. (Refer to Human Resources policy HR602, "Dress and Personal Appearance".)
 - c. Hand washing requirements (refer to general infection control policy IC02-08, "Hand Hygiene (Including Care of Hands), Antiseptics, and Skin Preparation"). In general, hands should be washed
 - i. before and after patient contact,
 - ii. after contact with fecal matter,
 - iii. after contact with a potentially contaminated object,
 - iv. before leaving the work area,
 - v. before eating, drinking, applying cosmetics or manipulating contact lenses, and

The University of Chicago Medicine
Policy and Procedure Manual

- vi after using the restroom.
 - d. Uniforms and laboratory coats should be clean (refer to general infection control policy IC02-14a, "OSHA Bloodborne Pathogens Standard: Exposure Control Plan".) If they become soiled with blood or body fluids they should be changed. Clean and dirty clothing (i.e., in use laboratory coats) should be stored separately to avoid contamination of clean clothing.
 - e. Personnel belongings should be kept in designated nonpatient care areas.
 - f. For their own protection, employees should only eat or drink in designated areas. There shall be no eating or drinking in laboratory areas, clean storage rooms, or patient care areas.
 - 6. If an employee has a health condition that compromises cell-mediated immunity (i.e., HIV infection or severely immunocompromised), he/she should be individually counseled by UCOM regarding his/her risk for tuberculosis in the work setting (Ref. G, p38). The employee may submit a written request for a new work assignment that carries a lower risk of exposure.
 - 7. If an employee who works in a patient care area develops a health condition, such as asthma, or has a change in the shape of their face (i.e., grows a beard or sideburns, loses or gains weight, has extensive dental work, etc.) which may have changed the fit of, or preclude them from wearing, a particulate respirator, they should be evaluated by UCOM prior to caring for a patient with known or suspected tuberculosis. Employees who have not passed fit testing with an N95 respirator may not take care of a patient with known or suspected tuberculosis unless they use a powered air purifying respirator (PAPR).
- B. Departmental Managers, Supervisors, and Other Administrative Personnel
- 1. Departmental managers, supervisors, and other administrative personnel are responsible for arranging appropriate medical evaluation of personnel with suspected communicable diseases or exposure to communicable diseases. Personnel may be directed to UCOM or to their private physician. UCOM should be contacted for possible work restrictions.
 - 2. The Infection Control Program should be notified as soon as possible of personnel diagnosed with communicable diseases in order to initiate an investigation of related exposures.

The University of Chicago Medicine
Policy and Procedure Manual

3. The manager/supervisor must also follow the requirements in the Administrative Policy and Procedure 06-01, Work Related Injury, Illness, and Exposure Reporting regarding investigation, follow-up, and documentation.
 4. When notified by UCOM/MER or the Infection Control Program that a health care worker (HCW) must be restricted or removed from work, the Department must make any necessary arrangements for re-allocating the employee's duties.
 5. HIV-infected or other severely immunocompromised persons are at high risk for tuberculosis. Upon request in writing by the immunocompromised HCW, supervisors should offer, but not compel, a work setting in which the HCW would have the lowest possible risk for occupational exposure to tuberculosis (Ref. G, p38).
 6. Employees who have not passed fit testing with an N95 respirator may not be assigned to take care of or enter the room of a patient with known or suspected tuberculosis unless they have been evaluated for, trained to use, and provided with an acceptable alternative (e.g., PAPR). Refer to section IV, letter F, "Health Screening and Fit Testing for Particulate Respiratory (PR)".
- C. University of Chicago Occupational Medicine
1. UCOM is responsible for the assessment of each employee's health and immunization status at the time of employment (Ref. A Section 250.450a1).
 2. UCOM is responsible for establishing and maintaining a medical file on all employees. The file should include the individual's pre-employment screen (tests results, chest x-rays, immunizations, and questionnaires) and any subsequent tests and written evaluation and management of work-related illnesses or exposures. Records regarding work-related exposures to bloodborne pathogens must be maintained for 30 years after employment has terminated (Ref. B, p64181).
 3. UCOM is responsible for the evaluation and management of hospital personnel with work-related illness or exposure to a communicable disease. UCOM is responsible for providing 24 hour/7 day per week coverage for the needlestick hotline pager (9990). When identified, UCOM is responsible for counseling HIV, HBV and HCV infected healthcare workers on safe work practices.

The University of Chicago Medicine
Policy and Procedure Manual

4. UCOM is responsible for providing written notification to managers or supervisors when personnel need to be restricted from work.
5. UCOM is responsible for providing Human Resources within 24 hours of their notification the information necessary to complete the OSHA 300 log on work-related exposures (Ref. C, p8);.
6. UCOM is responsible for notifying the Infection Control Program of the healthcare workers who acquire transmissible infections as specified below:
 - a. If the healthcare worker has tuberculosis, chickenpox, measles, mumps, diphtheria, pertussis, or other communicable disease, the infection control practitioner on-call should be paged immediately.
 - b. If two or more healthcare workers have a disease or condition which appear to be related (e.g., two or more employees in the same cost center with conjunctivitis).
7. UCOM will provide aggregate data regarding compliance with employee health testing and screening to the Committee on Infections and Epidemiology (CIE).

D. Mitchell Emergency Room (MER)

Except for possible bloodborne pathogens exposures (e.g., needlestick injuries), MER is responsible for the evaluation and management of hospital personnel with work-related illness or exposure to communicable diseases when UCOM is closed. When necessary, personnel should be given written documentation of initial treatment received in the MER and referred to UCOM for follow-up when UCOM is open.

E. Infection Control Program

1. The Infection Control Program will make recommendations and assist Human Resources and UCOM in the development of hospital screening and immunization programs, which will be approved by the Committee on Infections and Epidemiology.
2. In the event of work-related exposure to a communicable disease (e.g., chickenpox, pulmonary tuberculosis, meningococcal disease, mumps, measles or an outbreak), the Infection Control Program will:
 - a. Perform an investigation of exposed individuals;
 - b. Notify hospital personnel or their supervisor of exposure(s);

The University of Chicago Medicine
Policy and Procedure Manual

- c. Notify UCOM, or the MER if UCOM is closed, of the exposure if HCWs must go to UCOM or MER for testing or treatment;
 - d. Notify Hospital Administration, Medical Legal Affairs, and Public Affairs, if there are significant implications of the exposure.
- 3. The Infection Control Program will make recommendations regarding management and work restrictions for exposed hospital personnel (Appendix A, "Management of Healthcare Workers Exposed to or Infected with a Communicable Disease").
- 4. The Infection Control Program offers in-service education programs upon employment, annually, and upon request by the Department. Possible program topics include job-related infection risks and appropriate preventive measures. (Refer to general infection control policy IC02-06, "Education and Training of Healthcare Workers in Infection Control".)

III. CARE AND CONDITIONS OF THE HANDS AND SKIN

- A. Personnel should try to prevent the development of dermatitis on the hands. If creams or lotions are used they should be compatible with the antiseptics (i.e. chlorhexidine) and gloves that are being used in the employees work area. Areas of dermatitis may become colonized by microorganisms which can easily be transmitted to patients even after hands have been washed. Refer to the general infection control policy IC02-08, "Hand Hygiene (Including Care of Hands), Antiseptics, and Skin Preparation" for more information on selection and use of handwashing products and lotions.
- B. Personnel with weeping dermatitis or exudative skin lesions should refrain from all direct patient care and from handling patient care equipment until the condition resolves.
- C. Personnel with staphylococcal lesions on hands (boils, paronychia infections, etc.) should not work with patients, patient care equipment, or handle food.
- D. Personnel with streptococcal infection should not work with patients or patient care equipment until they have received at least 24 hours of effective therapy

The University of Chicago Medicine
Policy and Procedure Manual

- E. Herpes simplex infections
 - 1. Personnel with a herpetic infection on the finger (herpetic whitlow) may not provide patient care if the lesion is erupting or draining. Individuals are no longer infectious once the lesion scabs.
 - 2. Personnel with oral (cold sores) or genital herpetic lesions may continue to provide patient care but must practice meticulous handwashing before patient care. Whenever possible, a covering such as a dressing or mask should be placed over oral lesions prior to direct patient contact to prevent the employee from touching the lesions with their hands.
- F. Personnel who touch patient or handle patient care equipment and are suspected of having artificial finger nails, including tips, acrylic and gel overlays, etc., may be sent to UCOM for evaluation. An artificial nail is anything affixed to the nail other than plain nail polish **or no chip nail polish**. (Refer to Human Resources policy HR602, "Dress and Personal Appearance".)

IV. SCREENING AND IMMUNIZATION PROGRAMS

- A. Several screening and immunization programs are available to personnel working in the hospital (refer to Appendix B, "Summary of Screening and Immunization Programs"). Other screening tests and immunizations may also be available upon request through UCOM (Occupational Health).
 - 1. Costs of screening programs:
 - a. Pre-employment evaluation and some subsequent health screening programs are provided at no charge to Hospital and Biological Sciences Division (BSD) employees, University of Chicago (UC) medical students, and volunteers.
 - b. If a Hospital or BSD employee or volunteer is exposed to a communicable disease on the job and testing or prophylaxis is necessary, the cost may be covered.
 - c. By using a form 62, "Interdepartmental Order," a Department may also make arrangements to pay for special tests not required by the Hospital (e.g., HBsAg antibody test).
 - 2. Infection Control related pre-employment screening includes the following:

The University of Chicago Medicine
Policy and Procedure Manual

- a. Mantoux skin test(s) and/or chest x-ray, or QuantiFERON-TB Gold for tuberculosis.
 - b. Serologic testing for antibodies to rubella and subsequent immunization, if necessary.
 - c. Serologic testing for antibodies to rubeola and subsequent immunization, if necessary.
 - d. Serologic testing for antibodies to varicella zoster and subsequent immunization, if necessary. Antibody negative personnel who have not received two doses of varicella vaccine must be vaccinated, unless clinically contraindicated.
 - e. Serologic testing for antibodies to Paramyxovirus (mumps) and subsequent immunization, if necessary.
 - f. Hepatitis B vaccination (or signed declination statement) to personnel who have exposure to blood and other potentially infectious materials.
 - g. Dialysis Unit personnel will be tested for hepatitis B surface antigen (HBsAg) and antibody to hepatitis B surface antigen (anti-HBs) upon being hired. These individuals will be identified by the Dialysis Unit manager.
3. Required periodic screening programs for current healthcare workers include (also see respective sections below for additional detail):
- a. Yearly PPD-skin testing of PPD negative personnel or QuantiFERON-TB Gold (refer to the Tuberculosis Screening section below)
 - b. A health evaluation and yearly fit testing, when the employee has a change in their health status or change in the shape of their face, and whenever a new respirator is selected for use in the hospitals for personnel required to wear an N95 respirator. (Refer to Health Screening for Particulate Respirators section below)
 - c. Testing for hepatitis B infection in Dialysis unit personnel who are anti-HBs negative. (Refer to infection control policy IC03-12, "Dialysis" for frequency of testing.)
- B. Hepatitis B
- 1. Hepatitis B vaccine is available free of charge to Hospital and BSD employees, UC medical students, and volunteers who have occupational exposure to blood and other potentially infectious materials. The vaccine will be offered after training and within 10 days of initial assignment to positions in which occupational

The University of Chicago Medicine
Policy and Procedure Manual

exposure may occur (Ref. B), and at any other time during employment.

2. The hepatitis B vaccine series consists of three doses. The second dose is administered one month after the first dose.
3. A screening test is available to measure the titer of antibodies against hepatitis B virus. Healthcare workers who wish to have this test performed before deciding about hepatitis B vaccine will not be charged for testing. Post-vaccination antibody testing is indicated for persons at high occupational risk of blood inoculation (e.g., surgeons, operating room nurses, emergency room physicians and nurses, dialysis nurses and technicians), because knowledge of their antibody response will aid in determining appropriate post-exposure prophylaxis. Post-vaccination testing should be performed from 1 to 2 months after completion of the vaccine series. The test will be performed without charge after vaccination in UCOM (Occupational Health).
4. Healthcare workers who already have had hepatitis B infection may have residual antibodies against the virus. Although these individuals may receive little benefit from the hepatitis B vaccine, there is no contraindication to vaccination (Reference D).
5. Healthcare workers who decline hepatitis B vaccination must sign a declination statement (Appendix C). Healthcare workers who decline vaccination initially may later request and receive free vaccination. The Declination Statement should be kept in the individual's medical file in UCOM.
6. Occupational Health will maintain records of each healthcare worker whose job has an occupational risk of exposure to hepatitis B. The records will include a written opinion on whether the vaccine is indicated, and the healthcare worker's vaccination status (Ref. B, p.64181).

C. Measles (Rubeola) and Mumps Screening and Immunization (Ref. E)

1. Hospital and BSD employees, volunteers, and UC medical students shall be sero-tested for measles and mumps during their pre-employment screening; sero-susceptible individual will be immunized. Other students must prove immunity.
2. Alternatively, immunity may be established by one of the following means:
 - a. Proof of immunization with 2 doses of the live measles and mumps vaccine after the age of 12 months;
 - b. Proof of physician-diagnosed measles and mumps;

The University of Chicago Medicine
Policy and Procedure Manual

- c. Previous serologic record of immunity.
 - 3. Screening and immunization is provided at no cost to Hospital and BSD employees, UC medical students, and volunteers born during or after 1957.
- D. Rubella Screening and Immunization
- 1. Rubella screening and immunization of healthcare workers is designed to prevent transmission of rubella from personnel to pregnant patients.
 - 2. Prospective new Hospital and BSD employees, UC medical students, and volunteers must demonstrate immunity to rubella (with laboratory evidence of immunity or documented immunization with doses of live virus vaccine after the age of 12 months) or be immunized before beginning work. All other students must demonstrate immunity.
 - 3. Rubella screening and immunization is provided at no cost to Hospital and BSD employees, UC medical students, and volunteers.
- E. Tuberculosis Screening
- 1. Pre-employment: (Ref. F, 690.720(d) and G, p. 39)
 - a. Within 90 days before or 10 days after beginning work, all healthcare workers, including those with a history of BCG vaccination, should be tested for TB unless the individual states that he/she has previously had a positive reaction. PPD may be given to pregnant women. QuantiFERON-TB Gold may substitute for this PPD.
 - b. If a healthcare worker cannot provide written documentation of a negative PPD skin test result performed within the preceding 12 months prior to employment, he/she will be given the two step PPD skin test. Healthcare workers who can produce written documentation will be administered one PPD skin test upon employment.
 - c. If the healthcare worker is PPD skin test positive, or has symptoms compatible with pulmonary tuberculosis, a chest x-ray and other medical examinations as determined by the attending physician should be performed.
 - d. A report of a chest x-ray taken within 90 days prior to employment and showing no active disease will be accepted as a pre-employment tuberculosis screen for an

The University of Chicago Medicine
Policy and Procedure Manual

- employee who is PPD skin test positive and has no signs or symptoms of tuberculosis.
2. Screening of current healthcare workers (Also refer to Human Resources policy HR1004, "Tuberculosis Screening Program for Current Employees")
 - a. PPD-negative personnel who provide patient care, work in patient care areas or work with fresh tissue specimens will be tested for TB at least annually unless they fall into a category listed below. PPD may be given to pregnant women.
 - i. Once notified of the need for TB testing, personnel have 45 days to comply before they are subject to disciplinary action.
 - ii. Test results from TB skin testing done within 3 months prior to the employee's scheduled testing dates will be counted as compliance with this policy. If testing was done prior to 3 months to their scheduled date TB testing must be repeated.
 - b. TB test-positive personnel
Personnel with positive tuberculin tests, adequate treatment for disease, or preventive therapy for infection are exempt from further tests and chest x-rays unless they develop symptoms (persistent productive cough, fevers, night sweats, unexplained weight loss and malaise) suggestive of tuberculosis.
 3. Post-exposure screening (Refer to Human Resources policy HR1006, "Post-exposure Testing for Tuberculosis")
 - a. Personnel who did not wear a particulate respirator and shared the same air space with a patient with pulmonary or laryngeal TB or with a draining tuberculosis lesion will be considered exposed.
 - b. PPD-negative personnel shall either have had a TB test within three months prior to exposure or should receive a baseline skin test immediately. If that test is negative, another TB test should be obtained 8-12 weeks after exposure. Noncompliance with post-exposure testing may result in disciplinary action.
 - c. TB test-positive personnel need to seek medical evaluation promptly if they develop symptoms suggestive of active tuberculosis. These symptoms include a persistent

The University of Chicago Medicine
Policy and Procedure Manual

productive cough, fevers, night sweats, unexplained weight loss and malaise.

4. New converters
 - a. Healthcare workers whose TB skin test converts shall be evaluated prior to returning to work by a physician or their designee for active tuberculosis, isoniazid (INH) prophylaxis and risks for HIV infection (Ref. G, p.52822).
 - b. Converters shall be documented on the OSHA 300/ 301 logs unless there is evidence
 - i. That the worker is living in a household with a person who has been diagnosed with active tuberculosis;
 - ii. That the Public Health Department has identified the worker as a contact of a person with active tuberculosis that is unrelated to the workplace; or
 - iii. Medical investigation shows that the employee's infection was caused by an exposure to tuberculosis away from work or proves that the case was not related to a workplace exposure.
5. A chest x-ray should be performed on personnel in the following situations:
 - a. If the healthcare worker has a positive TB skin test during pre-employment screening;
 - b. If the healthcare worker has a TB skin test conversion from negative to positive and/or;
 - c. If a PPD-positive healthcare worker develops symptoms which are suggestive of active pulmonary TB.
6. Results of TB skin tests and chest x-rays must be documented in the healthcare worker's medical record and in a retrievable aggregate database to enable periodic analysis (Reference G.).
7. Tuberculosis screening is provided at no charge to Hospital and BSD employees, UC medical students, and volunteers.

F. Health Screening and Fit-Testing for Particulate Respirator (PR)

1. Personnel who provide patient care, enter patient rooms, work with fresh tissue specimens or work in Clinical Microbiology Laboratory or Morgue may need to wear a respirator (N95 or PAPR). Before using the particulate respirator, these individuals must be given a chemical fit-testing and a health evaluation (a screening questionnaire regarding their respiratory and cardiac history [Appendix D] is used for this evaluation). Because N95

The University of Chicago Medicine
Policy and Procedure Manual

PRs are available in sizes regular and small, employees should be told the size of the N95 PR used for fit testing. Employees who do not pass N95 PR respirator fit testing should be trained to use, and provided with, an acceptable alternative (e.g., PAPR).

2. Health screening and fit testing is required annually by OSHA. The health screening questionnaire and results of fit-testing will be kept in the healthcare worker's medical file in Occupational Health.

G. Influenza Vaccine

1. All employees with direct contact with patients will be offered seasonal influenza vaccination. All employees are required to complete the annual questionnaire documenting if they received or declined the vaccine.
2. Influenza vaccine is available each year from Occupational Health at no charge to Medical Center employees.

H. Varicella-zoster (chickenpox) Screening and Immunization

1. All healthcare workers (HCWs) will be serologically tested for antibodies to varicella zoster virus. Testing will be at no charge to UCM personnel and BSD medical students. HCWs who have not received two doses of varicella vaccine and have no protective antibody must be vaccinated, unless clinically contraindicated. The vaccine is available at no charge to UCM personnel.
2. Nonimmune personnel who cannot be vaccinated should be advised to avoid contact with patients with active varicella-zoster infection and to contact the infection control practitioner on-call in the event of exposure.

I. Rabies Vaccine

Rabies vaccine is available for BSD personnel who work with animals. The employee's BSD Department pays the cost.

J. Meningococcal Vaccine

Clinical Microbiology Laboratory Workers who desire vaccination against *Neisseria meningitis* may obtain the vaccine at no charge in UCOM.

V. GENERAL PROCEDURES TO FOLLOW FOR AN EXPOSURE TO OR INFECTION WITH AN INFECTIOUS AGENT

- A. Healthcare workers who are exposed to or infected with a communicable disease should notify their supervisor and report to UCOM (Occupational

The University of Chicago Medicine
Policy and Procedure Manual

Health). In the event of a job-related exposure (other than an exposure to blood or body fluids) or potentially communicable infection when UCOM is closed, employees may go to the Mitchell Emergency Room (MER). For exposure to blood or body fluids, the exposed employee should call the hotline pager 9990.

- B. If the exposure or infection is job-related, the cost of diagnosis and treatment will be at no charge to the healthcare worker. Employees must report the incident to 877-441-3845 in order to initiate evaluation of the incident as a workers compensation case. Please refer to Administrative Policy and Procedure A06-01, "Work Related Injury, Illness, and Exposure Reporting" for additional requirements.
- C. UCOM (Occupational Health) will evaluate and manage healthcare workers with communicable diseases and recommend work restrictions, when necessary. These recommendations should coincide with those of the Infection Control Program (refer to Appendix A, "Management of Healthcare Workers Exposed to or Infected with a Communicable Disease").
- D. When an employee is diagnosed to have a communicable disease that requires an exposure follow-up, the infection control practitioner on-call should be paged at pager 7025.
- E. Recordkeeping of exposures to blood or other potentially infectious materials (as defined in section VI below):
 - 1. The healthcare provider caring for an exposed employee must maintain a file, which contains the following information:
 - a. The healthcare worker's name and social security number;
 - b. A description of the individual's duties as they relate to the exposure incident;
 - c. Documentation of the route(s) of exposure and circumstances under which exposure occurred;
 - d. Results of the source individual's blood testing, if available;
 - e. Relevant medical information including vaccination status of the individual.
 - 2. All work-related needlestick injuries and cuts from sharp objects that are contaminated with another person's blood or other potentially infectious material must be entered on the OSHA 300 log as an injury. To protect the person's privacy, their name should not be entered on the log. The words "privacy case" should be entered in the space normally used for the employee's name. If the

The University of Chicago Medicine
Policy and Procedure Manual

employee is later diagnosed with an infectious bloodborne disease, the classification of the case must be changed from injury to illness and the name of the infectious disease must be added to the OSHA log.

3. Records of exposure to blood or other potentially infectious materials must be maintained for the period of employment plus 30 years (Ref. B, p.64180-1).

VI. EXPOSURE TO BLOOD AND OTHER POTENTIALLY INFECTIOUS MATERIALS WHICH MAY CONTAIN BLOODBORNE PATHOGENS

- A. Definition of exposure to blood and other potentially infectious materials
CDC has defined occupational exposure as percutaneous injury (e.g., a needlestick or cut with a sharp object), contact of mucous membranes or nonintact skin (e.g., exposed skin that is chapped, abraded, or afflicted with dermatitis) with
 1. Blood
 2. Tissues
 3. Semen, vaginal secretions, or other body fluids contaminated with visible blood, (because these substances have been implicated in the transmission of human immunodeficiency virus (HIV) and hepatitis B virus (HBV) infection);
 4. Cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid (because transmission of HIV and HBV from these fluids has not yet been determined); and
 5. Laboratory specimens that contain HIV (e.g., suspensions of concentrated virus) or HBV.
- B. Post-exposure procedure
 1. Aggressive local wound care to the site of exposure should be initiated immediately.
 - a. Percutaneous wounds should be cleansed thoroughly with soap and water.
 - b. Skin exposures should be cleansed with soap and water.
 - c. Mucous membrane exposures (e.g. eye splashes) should be irrigated thoroughly with tap water using the nearest eye washing station (or faucet if none available).
 2. The incident should be reported immediately to the healthcare worker's supervisor.
 3. Employees must immediately page the UCOM practitioner on-call at pager 9990.

The University of Chicago Medicine
Policy and Procedure Manual

- i. Employees that have exposures during UCOM working hours should come directly to UCOM in room L-156 if instructed to do so by the UCOM practitioner on-call.
 - ii. Employees that have exposures after UCOM working hours should follow the directions of the UCOM practitioner on-call and must report to UCOM on the next UCOM working day.
4. Employees must also report the incident to 877-441-3845. Please refer to Administrative Policy and Procedure A06-01, "Work Related Injury, Illness, and Exposure Reporting" for additional requirements.
5. If the source patient is known:
 - a. The UCOM practitioner **on-call (pager 9990) initiates workup during UCOM hours (7:30 am to 4pm) and after hour** will direct to the Administrator on call (AOC) to initiate the process of obtaining a sample of the source patient's blood.
 - b. If source patient blood is available in sufficient quantity in the clinical laboratory, it will be used for testing. In this instance the HOA will deliver a post exposure "source patient" requisition to the Laboratory Service Center in TW005. This requisition will contain the source name and medical history number.
 - c. If sufficient quantity of source patient blood is not available in the laboratory, a new specimen should be drawn from the source patient. It will be sent to the laboratory with a post exposure "source patient" requisition.
 - d. Post exposure "source patient" requisitions will be kept in pre-prepared post exposure packets which will be carried by the HOA and will be stocked in inpatient and outpatient clinical areas.
 - e. The source patient's. Blood test results will be reported to the physician or designee in UCOM.. The exposed healthcare worker must arrange to obtain results in person by contacting employee health at ext. 2-6757 or page the UCOM practitioner on call at pager 9990.
 - f. Exposed healthcare workers will be evaluated for HIV and/or hepatitis B prophylaxis.
 - i. During regular UCOM hours, this evaluation will take place in UCOM,

The University of Chicago Medicine
Policy and Procedure Manual

- ii. After UCOM hours, this evaluation will be initiated via telephone. If indicated prophylaxis will be administered to the exposed employee by the AOC. The AOC will arrange to meet the exposed employee at a mutually convenient location.
 - iii. Offsite employees should follow the directions of the UCOM Practitioner on-call including coming to the Hospitals to receive prophylaxis if indicated.
 - iv. All employees initially evaluated via telephone by the UCOM practitioner on call, must report to UCOM on the next business day.
- g. Post exposure follow-up for known or suspected HIV exposure. Adapted recommendations for post exposure prophylaxis can be found in the UCMC Formulary of Accepted Drugs (look in "Infectious Disease - Prophylaxis" section) and on the Centers for Disease Control and Prevention (search prevention guidelines/topic: AIDS).
 - i. High risk exposures include: 1) a deep injury to the healthcare worker; 2) visible blood on the device causing the injury; 3) a device previously placed in the source-patient's vein or artery (e.g., a needle used for phlebotomy); or 4) blood containing a high titer of HIV.
 - ii. Post-exposure prophylaxis should be initiated as soon as possible. The interval within which post-exposure prophylaxis for HIV prevention should be initiated for optimal efficacy is not known.
 - ii. In addition, the HCW will be offered testing for HIV antibody immediately and at 6 weeks, 3 months, 6 months and one year following exposure (Ref. J, M).
- h. If the source patient is HBsAg-positive, unvaccinated or incompletely vaccinated personnel will be offered testing for antibody to hepatitis B surface antigen (anti-HBs) to determine if hepatitis B immune globulin (HBIG) and/or vaccine is needed. Blood to test for anti-HBs level should be drawn prior to administration of globulin.
- i. If the source patient is HBsAg-negative, no further prophylaxis is needed.
- j. If the source patient is HCV antibody. Positive the employee should be offered baseline HCV antibody and alanine

The University of Chicago Medicine
Policy and Procedure Manual

aminotransferase testing and follow-up testing for HCV RNA at 6 weeks and 12 weeks plus HCV antibody at 6 and 12 months after exposure.

6. If the source patient is unknown or unavailable for testing, UCOM will evaluate the exposed individual and will provide HIV and/or hepatitis B prophylaxis if indicated. The exposed employee should follow the UCOM practitioner on call's instructions for obtaining baseline serologic testing for evidence of HIV infection, hepatitis C virus infection, and anti- HBs (if the exposed employee has not had an adequate antibody test anti- HBs). If the exposed person is negative for HIV antibody on initial testing, he/she will be offered retesting at 6 weeks, 12 weeks, 6 and 12 months after exposure to determine whether transmission has occurred. If the vaccinated employee has never been documented to have adequate anti-HBs titers a dose of hepatitis B vaccine should be given. If the employee was not previously vaccinated they should begin the vaccine series within one week of exposure. If the exposed employee is negative for hepatitis C virus infection on initial testing, he/she should be offered retesting 6 weeks, 12 weeks, 6 and 12 months after transmission to determine if exposure has occurred (see above).
7. If the exposed individual consents to baseline blood collection but not HIV serologic testing, the sample must be preserved for 90 days (Ref. B, p64180). This is done by sending the blood specimen to the Clinical Chemistry (Ligand Assay and Endocrinology Section) lab with an explanation that the specimen should be held due to employee exposure. During the 90 day period, the exposed individual may elect to undergo baseline HIV testing; the preserved specimen will be tested when a "Patient Consent for HIV Antibody Testing" form is sent to the lab with instructions to test the held specimen as soon as possible.
8. UCOM will notify the Infection Control Program of any new positive HIV, HBV, or HCV results for purposes of communicable disease reporting to the Chicago Department of Health.

C. Information available to exposed healthcare worker includes:

1. Counseling of personnel exposed to blood or body fluids of patients infected with HIV or hepatitis B is offered through UCOM. Counseling will include information about the laws and regulations concerning disclosure of the identity and infectious status of the source individual (Ref. B, p64180). If unusual

The University of Chicago Medicine
Policy and Procedure Manual

- questions or problems arise, the hospital epidemiologist will assist in the management of exposed personnel.
2. As required by OSHA (Ref. B, p64180-1), the healthcare provider managing the post-exposure evaluation and treatment will provide the exposed individual, within 15 days of completing the evaluation, notice in writing of:
 - a. Whether hepatitis B vaccination is indicated, and whether the individual has received vaccination;
 - b. That the individual has been informed of the results of the evaluation;
 - c. That the individual has been told about any medical conditions, resulting from the exposure incident, which requires further evaluation or treatment.
 - d. The aforementioned information will also be kept in the HCW's medical file.
 3. The OSHA Occupational Exposure to Bloodborne Pathogens Standard (Ref. B, p64175-82), is available in UCOM for personnel to peruse.

VII. OTHER EXPOSURES

- A. Exposure to Tuberculosis
 1. Exposure to tuberculosis occurs during the following situations:
 - a. A healthcare worker does not wear a mask and shares the same airspace with a person who has pulmonary or laryngeal tuberculosis;
 - b. A healthcare worker does not wear a mask and shares the same airspace with an individual who has a draining tuberculosis lesion, (e.g., abscess or skin ulcer).
 2. Individuals with positive AFB smears and/or positive cultures for tuberculosis are reported by technologists in the Clinical Microbiology Laboratory to the infection control practitioner on-call. The practitioner will review the medical record of the individual to determine if he/she is infectious and was not properly isolated or if personnel performed high-risk procedures on that person.
 3. With the assistance of other healthcare workers, an infection control practitioner will compile a list of exposed personnel and patients, if any. The practitioner will notify each HCW or his/her supervisor and the physicians of exposed patients.

The University of Chicago Medicine
Policy and Procedure Manual

4. Hospital personnel exposed to a patient with active tuberculosis should report to UCOM (Occupational Health) for evaluation and treatment as previously outlined. TB test-negative personnel who have not had a TB skin test within the three months prior to exposure should have a baseline TB test; then in 8-12 weeks, they should get a post-exposure test. TB-positive personnel require no further screening unless symptoms suggestive of tuberculosis develop.
- B. Exposure to Varicella-zoster (chickenpox, shingles)
Personnel who have been exposed to varicella-zoster infection should notify the infection control practitioner on-call if they are uncertain of their immune status or have no history of the disease or adequate vaccination.
1. The exposed healthcare worker with a questionable or negative history will be serologically tested for antibody.
 2. If the antibody titer does not indicate immunity, the exposed person will be restricted from direct patient contact and patient care areas during the period when he/she may develop chickenpox (i.e., 10-21 days after exposure). If the healthcare worker develops chickenpox, he/she will be restricted from the hospital until all lesions are dry and crusted. Personnel who do not develop chickenpox will receive two doses of varicella zoster vaccine unless contraindicated.
- C. Exposure to Pertussis (whooping cough)
1. A healthcare worker is considered exposed if he/she was within **6** feet of an infected patient with a cough and was not wearing a mask.
 2. The Lab Service Center will notify the infection control practitioner on-call of patients with a positive **result** for pertussis. The practitioner will identify and notify exposed personnel and/or their supervisor.
 3. Azithromycin (250 mg x 6 over 5 days: two on the first day and 1 on each of the following days) trimethoprim sulfamethoxazole (1/DS tablet BID for 14 days) is recommended for prophylaxis. Prophylaxis should be provided at no charge to Hospital and BSD employees, UC medical students, and volunteers.
 4. Employees must also report the incident 877.441.3845. Please refer to Administrative Policy and Procedure A06-01, "Work

The University of Chicago Medicine
Policy and Procedure Manual

Related Injury, Illness, and Exposure Reporting" for additional requirements.

5. Any HCW who develops symptoms suggestive of pertussis should be evaluated at UCOM. Evaluation should include a nasopharyngeal aspirate to diagnose pertussis and the HCW will be restricted from work until he/she has received five days of appropriate antibiotic therapy. Healthcare workers who have pertussis and refuse antibiotic therapy will be restricted from work for 21 days.

D. Exposure to Meningococcal Disease

1. Personnel may be exposed to meningococcal disease when they have direct, close respiratory contact (e.g., mouth-to-mouth resuscitation, intubation) with an infected person and are not wearing a mask. Although the exact mechanism is unknown, meningococcal disease has occurred in laboratory workers who manipulated microbiology cultures containing *Neisseria meningitidis* outside of the biological safety cabinet.
2. The Clinical Microbiology Laboratory will notify the Infection Control Program of patients with meningococcal disease (caused by *Neisseria meningitis*). An infection control practitioner will identify and notify exposed personnel.
3. Exposed personnel should report immediately to UCOM (Employee Health) or MER for prophylaxis (ciprofloxacin 500 mg PO x 1 dose or rifampin 600 mg PO BID x 2 days or ceftriaxone 250 mg IM x 1 dose). (Ref. N page 6). Prophylaxis will be provided at no charge to Hospital and BSD employees, UC medical students, and volunteers.

E. Exposure to Measles (Rubeola) [Reference E]

1. Personnel are considered exposed to measles when they share the same airspace with an infected person and are not wearing a mask.
2. Personnel who have been exposed to Rubeola were born during or after 1957, and/or are uncertain of their immunization history or history of infection, should report to UCOM for evaluation.
3. If exposure occurred within 72 hours of evaluation, the person should be vaccinated with the live attenuated vaccine and be allowed to return to work without restrictions.
4. If exposure occurred more than 72 hours prior to evaluation, the exposed healthcare worker should be serologically tested for antibody to measles. Individuals with no immunity should be vaccinated and restricted from patient care duties for 8-14 days. If

The University of Chicago Medicine
Policy and Procedure Manual

disease develops, the person should be restricted from the hospital for at least 4 days after onset of rash.

VIII. REFERENCES

- A. Illinois Department of Public Health. Personnel health requirements. Hospital Licensing Requirements; Rules and Regulations (77 Illinois Administrative Code), Section 250.450. Illinois Register 1994; 18:66.
- B. OSHA. Occupational exposure to bloodborne pathogens; final rule. 29 CFR Part 1910.1030. Federal Register 1991; 56:64175-64182.
- C. OSHA. Respiratory Protection. Subpart title: Personal protective equipment. Standard number 1910.134. Federal Register December 12, 2008.
- D. Centers for Disease Control and Prevention. A comprehensive immunization strategy to eliminate Hepatitis B virus infection in the United States. Recommendations of the Immunization Practices Advisory Committee (ACIP). MMWR 2006;55:RR-16.
- E. Centers for Disease Control and Prevention. Measles prevention: Recommendations of the immunization practices advisory committee (ACIP). MMWR 1998; 47:No. 1-57.
- F. Illinois Department of Public Health. Communicable Disease Control and Immunization. Part 696 Control of Tuberculosis Code. February 2008.
- G. Centers for Disease Control and Prevention. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in Health-care Settings, 2005. MMWR 2005; 54:(No. RR-17).
- H. Centers for Disease Control and Prevention. Prevention and control of influenza. MMWR 2011;60:(No. RR-17).
- I. Bolyard EA. CDC guideline for infection control in health care personnel, 1998. *Infect Control Hosp Epid* 1998;19: 407-63.

The University of Chicago Medicine
Policy and Procedure Manual

- J. American Public Health Association. Control of Communicable Diseases in Man, 19th edition. Heyman, D, ed., 2008.
- K. Centers for Disease Control and Prevention. Control and Prevention of Meningococcal Disease and Control and Prevention of Serogroup C Meningococcal Disease: Evaluation and Management of Suspected Outbreaks: Recommendations of the immunization practices advisory committee (ACIP). MMWR 1997; 46:No. RR-5.
- L. OSHA. Occupational injury and illness recording and reporting requirements; final rule. 29 CFR Part 1904 and 1952. Federal Register 2001; 66:6122-6135.
- M. Centers for Disease Control. Updated U.S. Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for post exposure prophylaxis. MMWR 2001;50: RR-11.

Emily Landon, MD, Chairperson
Committee on Infections and Epidemiology