

DRMS Directive 6055.3

DRMS-KH

April 12, 2001

OCCUPATIONAL HEALTH PROGRAM
EXPOSURE CONTROL PLAN

A. REFERENCES.

1. U.S., Department of Labor, Occupational Safety and Health Administration, 29 CFR Part 1910.1030, Occupational Exposure to Bloodborne Pathogens; Final Rule. Federal Register, December 6, 1991; 56:64175-64182.
2. Centers for Disease Control morbidity and Mortality Weekly Report: "Recommendations for Prevention of HIV Transmission in Health Care Settings." August 1987; Vol. 36, No. S-2.
3. Centers for Disease Control Morbidity and Mortality Weekly Report: 1988 Agent Summary Statement for Human Immunodeficiency Virus and Report On Laboratory - Acquired Infection with Human Immunodeficiency Virus. April 1, 1988; Vol. 37, No. S-4.
4. Centers for Disease Control Morbidity and Mortality Weekly Report: "Guidelines for Prevention of Transmission of HIV and HBV to Health Care and Public Safety Workers." June 23, 1989; Vol. 38, No. S-6
5. Centers for Disease Control Morbidity and Mortality Weekly Report: "Update" Universal Precautions for the Prevention of Transmission of HIV, HBV and other Bloodborne Pathogen in Health Care Setting." June 24, 1988; Vol. 37, No. 24.
6. Centers for Disease Control Morbidity and Mortality Weekly Report: "Public Health Service Statement on Management of Occupational Exposure to Human Immunodeficiency Virus, Including Consideration Regarding Zidovudine Postexposure Use." January 1990; Vol. 139, No. RR2.
7. Centers for Disease Control Morbidity and Mortality Weekly Report: "Protection Against Viral Hepatitis, Recommendations of the Immunization Practices Advisory Committee." February 1990; Vol. 39, No. S-2.
8. U.S. Department of Health and Human Services: "Biosafety in Microbiological and Biomedical Laboratories," Publication No. (NIH) 88-8395, May 1988.
9. AR 40-66, 31 Jan 85, Medical Record and Quality Assurance Administration; Change No. 1 to AR 40-66, 1 Apr 87. 4.
10. DRMS-M 6055.3, Occupational Health Program Exposure Control Plan, June 25, 1993 (hereby superseded).

B. PURPOSE.

1. The Exposure Control Plan (ECP) is implemented to comply with OSHA Bloodborne Pathogens Standard (29 CFR 1910.1030) and the OSHA revisions effective April 2001. OSHA has enacted this standard to "reduce occupational exposure to Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV) and other bloodborne pathogens". This plan details measures DRMS and its employees will take to decrease the risk of

transmission of bloodborne pathogens and provide appropriate treatment and counseling should an employee be exposed to bloodborne pathogens.

2. Incorporates revisions to Occupational Safety and Health Administration's (OSHA's) revision of the Bloodborne Pathogens standard in conformance with the requirements of the Needlestick Safety and Prevention Act. The Act directs OSHA to revise the Bloodborne Pathogens standard to include new examples in the definition of engineering controls along with two new definitions.

3. Requires:

a. Exposure Control Plans reflect how employers implement new developments in control technology.

b. Employers to solicit input from employees responsible for direct patient care in the identification, evaluation, and selection of engineering and work practice controls.

c. Certain employers to establish and maintain a log of percutaneous injuries from contaminated sharps.

4. Supersedes reference A10.

C. APPLICABILITY AND SCOPE. This directive is applicable to all employees (military, civilian, contract, student and volunteer) at the Battle Creek Federal Center and all DRMS activities.

D. DEFINITIONS.

1. ASSISTANT SECRETARY. The Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.

2. BIOHAZARD LABEL. A label affixed to containers of regulated waste, refrigerators/freezers and other containers used to store, transport or ship blood and other potentially infectious materials. The label must be fluorescent orange-red in color with the biohazard symbol and the word biohazard on the lower part of the label.

3. BLOOD. Human blood, human blood components, and products made from human blood.

4. BLOODBORNE PATHOGENS. Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, Hepatitis B Virus (HBV) and Human Immuno-deficiency Virus (HIV).

5. CLINICAL LABORATORY. A workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

6. CONTAMINATED. The presence of the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

7. CONTAMINATED LAUNDRY. Laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

8. CONTAMINATED SHARPS. Contaminated objects that can penetrate the skin including, but not limited to needles, scalpels, broken glass, broken capillary

tubes, and exposed ends of dental wire.

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

10. EMPLOYEE. An individual employed in a health-care, industrial or other facility or operation who may be exposed to bloodborne pathogens in the course of their assignments.

11. ENGINEERING CONTROLS. Controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the bloodborne pathogens hazard from the workplace, and safer medical devices, such as sharps with engineered sharps injury protections and needleless systems.

12. EXPOSURE CONTROL OFFICER. An employee who is designated by the employer, and who is qualified by training or experience, to provide technical guidance in the development and implementation of the facility's Exposure Control Plan.

13. EXPOSURE CONTROL PLAN. A written program developed and implemented by the employer which sets forth procedures, engineering controls, personal protective equipment, work practices and other methods designed to protect employees from exposures to bloodborne pathogens, and meets the requirements spelled out by the OSHA Bloodborne Pathogens Standard.

14. EXPOSURE INCIDENT. A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that result from the performance of an employee's duties.

15. HANDWASHING FACILITIES. A facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

16. HBV. Hepatitis B. Virus.

17. HIV. Human Immunodeficiency Virus.

18. LICENSED HEALTH-CARE PROFESSIONAL. A person whose legally permitted scope of practice allows him or her to independently perform the activities required by "Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up" or OSHA's Bloodborne Pathogens Standard.

19. MEDICAL CONSULTATION. A consultation which takes place between an employee and a licensed medical professional for the purpose of determining the employee's medical condition resulting from exposure to blood or other potentially infectious materials, as well as any further evaluation or treatment that is required.

20. NEEDLELESS SYSTEMS. A device that does not use needles for:

- a. The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established.
- b. The administration of medication of fluids; or
- c. Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

21. NIOSH. National Institute for Occupational Safety and Health of the Public Health Service, of the U.S. Department of Health and Human Services; the Federal agency which assists OSHA in occupational safety and health investigations and research.

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

23. OSHA. Occupational Safety and Health Administration of the U.S. Department of Labor; the Federal agency with safety and health regulatory and enforcement authorities for most U.S. industry and business.

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

25. PARENTERAL. Piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts and abrasions.

26. PERSONAL PROTECTIVE EQUIPMENT. Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, scrub suits, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

27. PRODUCTION FACILITY. A facility engaged in industrial-scale, large volume or high concentration production of HIV or HBV.

28. REGULATED WASTE. Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

29. RESEARCH LABORATORY. A laboratory producing or using research laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

30. SHARPS WITH SHARPS INJURY PROTECTIONS. A nonneedle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

31. SOURCE INDIVIDUAL. Any individual, living or dead, whose blood or any potentially infectious materials may be a source of occupational exposure to the

employee. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

32. STERILIZE. The use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

33. UNIVERSAL PRECAUTIONS. An approach to infection control. According to the concept of Universal Precautions, ALL human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

34. WORK PRACTICE CONTROLS. Controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

E. POLICY. An annual review and update of the Exposure Control Plan will be conducted. This review and update will be performed in order to reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens; and to document annually consideration and implementation of appropriate commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure. Consideration and implementation of safer medical devices should be documented in the Exposure Control Plan by describing the safer devices identified as candidates for adoption; and justification for selection decisions. This information will be updated annually. During the annual review, input from non-managerial employees responsible for direct patient care shall be obtained. Non-managerial employees are those who are potentially exposed to injuries from contaminated sharps. Their input shall be included in the process of identification, evaluation, and selection of effective engineering and work practice controls. Documentation of this solicitation of non-managerial employees shall be included in this Exposure Control Plan.

1. EXPLANATORY. There are a number of "good general principles" that should be followed when working with bloodborne pathogens. These include:

- a. It is prudent to minimize all exposure to bloodborne pathogens.
- b. Risk of exposure to bloodborne pathogens should never be underestimated.
- c. Our facility will institute as many engineering and work practice controls as possible to eliminate or minimize employee exposure to bloodborne pathogens.

2. EXPOSURE DETERMINATION.

- a. ALWAYS EXPOSED: General Position Titles
 - Nurse
 - Contract Physician
- b. SOMETIMES EXPOSED: General Position Titles
 - Recreation Specialist
 - Emergency Response Team Members
 - Designated First Aid/CPR Personnel
 - Firefighter
 - Contract Physical Security Specialist
 - Housekeeping

c. NOT EXPOSED: General Position Titles

All other employees are not exposed.

d. Tasks where occupational exposure to bloodborne pathogens may occur (in "sometimes exposed" employees shown in paragraph 2b above) are:

(1) Recreation Specialist: Exposure occurs when administering first aid to participants injured during sporting activities.

(2) Emergency Response Team Members: Exposure occurs when administering first aid to employees when nurse, firefighter, or other medical personnel are not present.

(3) Trained First Aid/CPR Personnel. Exposure occurs when administering first aid before emergency response can be obtained.

(4) Firefighter: Exposure occurs when administering first aid before emergency response can be obtained.

(5) Contract Physical Security Specialist: Exposure occurs when administering first aid before emergency response can be obtained.

e. Initial exposure determinations were made November 1992. The Safety and Occupational Health Manager and the Occupational Health Nurse will work with all sites to revise and update these lists as our tasks and procedures change.

3. METHODS OF COMPLIANCE

a. Universal Precautions. Universal precautions require all employees to treat blood, body fluids, and tissue of all patients as potentially infective with HBV, HIV, and other bloodborne pathogens. The precautions are intended to prevent parenteral mucous membrane, and skin exposure to blood and body fluids. (See Enclosure 4).

b. Engineering and Work Practice Controls.

(1) Reduce employee exposure by either removing the hazard or isolating the worker from exposure. For example, pocket mouth-to-mouth resuscitation devices designed to isolate emergency response personnel from direct contact with fluids will be provided.

(2) Work practice controls alter the manner in which a task is performed. Correct work procedures include proper handling and disposal of needles and sharps, used bandages and gauze, linens, and all other emergency items that come in contact with blood or other potentially infectious materials. All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize spattering, generating droplets, splashing and spraying.

(3) Hand-washing.

(a) All sites will have readily accessible hand washing facilities and ensure that personnel wash hands and any other exposed skin area with soap and water, and flush mucous membranes with water immediately or as soon as feasible following contact with blood or other potentially infectious materials or after removing personal protective equipment.

(b) If hand-washing facilities are not available, personnel must be provided with antiseptic cleanser, clean cloth/paper towels or antiseptic towelettes and employees shall wash their hands with soap and running water as soon thereafter as feasible.

(4) Prevention of Sharps Injuries.

(a) Contaminated needles and other contaminated sharps will not be bent, sheared, or broken.

(b) Contaminated needles will not be recapped or removed from syringes.

(c) Immediately, or as soon as feasible after use, place contaminated needles or other sharps in leak-proof, puncture resistant sharps containers. At

the Federal Center this is located in treatment room of Occupational Health Unit (2-2-45).

(d) Disposable sharps containers will be removed and replaced with a new one when $\frac{3}{4}$ full. They will be closed off by securely locking the closure mechanism and disposed of properly by a licensed service.

(5) Equipment which may be contaminated with blood or body fluids will be examined prior to servicing or shipping and will be decontaminated, when possible.

(6) All procedures involving blood or other body fluids shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.

(7) Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in all work areas where there is a reasonable likelihood of occupational exposure. Employees must remove any contaminated clothing or protective barriers prior to entering the clean area.

(8) Food and drink shall not be placed in refrigerators, freezers, shelves, cabinets, or on countertops or bench tops where blood or other potentially infectious materials are present or where specimens have been placed.

(9) Employees who have exudative lesions or weeping dermatitis will not perform or assist in invasive procedures or other direct patient care activities or handle equipment used for patient care.

c. Personal Protective Equipment (PPE).

(1) Supervisors will insure that personal protective equipment in the appropriate sizes is readily available to all employees at no cost to employees. Supervisors will ensure that employees are trained in its use and use it as required.

(2) PPE may include, but is not limited to, gloves, face shields, masks, eye protection, gowns, aprons, and mouthpieces, pocket masks, and other ventilation devices. DRMO activities will have available to employees: latex gloves (with or without powder), and one way valve CPR masks.

(3) PPE will be cleaned, laundered, or disposed of by the government when possible, at no cost to personnel.

(4) Disposable gloves should be a standard component of emergency response equipment and should be donned by ALL personnel prior to initiating any emergency patient care tasks involving occupational exposure. Extra pairs should always be available. Selection criteria should include dexterity, durability, fit and the tasks that will be undertaken while the gloves are worn.

(5) Supervisors will insure that employees use appropriate personal protective equipment unless the supervisor can show that the employee temporarily and briefly declined to use PPE when, under rare and extraordinary circumstances, it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety of the worker or a co-worker. When an employee makes this judgment, the supervisor will investigate and document the circumstances. The documentation will be forwarded to the Safety Manager NLT the next duty day. The supervisor and the Safety Manager will determine whether changes need to be instituted to prevent such occurrences in the future. A decision NOT to use protective barriers for a particular work area or a recurrent task will not be instituted. Interference with ease of performance of a procedure or improper fit of equipment are NOT acceptable reasons to not use PPE.

(6) The employer must ensure that employees observe the following precautions for handling and using personal protective equipment:

(a) Remove garments penetrated by blood or other infectious materials immediately, or as soon as feasible. An extra change of work clothing should be available for those considered always exposed or sometimes exposed. These items are NOT to be taken home to be laundered or rinsed out at the work place.

(b) Before leaving the work area, contaminated protective equipment shall be placed in appropriately designated areas or containers for storing, washing, decontaminating or discarding.

(c) Wear appropriate gloves when there is a potential for hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures; and when handling or touching contaminated materials, or if their ability to function as a barrier is compromised.

(d) Disposable (single use) gloves shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured; or when their ability to function as a barrier is compromised. They shall not be washed or decontaminated for reuse.

(e) Utility gloves may be decontaminated for reuse if the integrity of the glove is not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration, or when their ability to function as a barrier is compromised.

(f) Appropriate eyewear should be worn in accordance with the level of exposure encountered. Appropriate face and eye protection devices are: goggles, glasses with solid side shields or chin-length face shields. These are designed to protect the eyes, nose, or mouth from splashes, spray spatters, or droplets of infectious materials. Masks in combination with eye protection devices, such as listed above, shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated, and eye, nose, or mouth contamination can be reasonably anticipated.

d. Housekeeping.

(1) Supervisors will insure that contaminated work surfaces be decontaminated with a disinfectant when contaminated by splashes, spills, or contact with blood or other potentially infectious materials.

(2) Blood spills will be cleaned up with an approved detergent and water and the area disinfected with a 1:10 solution of household bleach or an approved disinfectant. Gloves must be used in this clean up.

(3) Gloves and other appropriate personal protective equipment should be used when handling contaminated laundry. Contaminated laundry shall be bagged or containerized at the location where it was used, and shall not be sorted or rinsed where it was used. Contaminated laundry shall be placed and transported in bags or containers and properly labeled in accordance with the labeling requirements of the standard (see Labeling section). If this occurs, consult your local base or disposal service for further directions.

4. HEPATITIS B VACCINATION, POST-EXPOSURE EVALUATION AND FOLLOW-UP.

a. Availability:

(1) All employers must make available, free of charge and at a reasonable time and place, the hepatitis B vaccine and vaccination series to all employees who are at risk of occupation exposure. Any booster doses recommended by the U.S. Public Health Service also must be provided. The series consists of 3 shots (see Enclosure 5).

(2) Employers must offer free hepatitis B vaccine and vaccination series after initial training and within 10 working days of initial assignment to employees who have occupational exposure unless 1) the employee has previously received the complete hepatitis vaccination series, 2) antibody testing reveals that the employee is immune or, 3) medical reasons prevent the employee from being vaccinated.

(3) The employee cannot be required to participate in an antibody-prescreening program to receive the hepatitis B vaccination series. All medical evaluations and procedures must be performed by or under the supervision of a licensed physician or an appropriately trained and licensed health care provider and administered according to current recommendations of the U.S. Public Health Service. Vaccinations also must be provided even if the employee initially declines but later accepts treatment while covered by the standard. Employees who decline the vaccination must sign a declination form (see Enclosure 1).

(4) All laboratory tests are free of charge and are conducted by an accredited lab. The employer must be provided with the health care professional's written opinion as to whether hepatitis B vaccination is needed and if the employee has received it.

b. Post-exposure evaluation and follow-up:

(1) Employees should immediately report an incident where exposure to bloodborne pathogens may have occurred to their supervisor. This allows for timely medical evaluation and follow-up by a health care professional as well as for timely testing of the source individual's blood for HIV and HBV. Reports must be treated by employers in the strictest confidence.

(2) Supervisors are required to report the incident to the Safety Manager within 24 hours of the occurrence, along with the details needed to investigate the incident. The Safety Office will investigate the incident and gather the following information:

- (a) When the incident occurred. Date and Time.
- (b) Where the incident occurred. Location within the facility.
- (c) What potentially infectious materials were involved in the incident? (Type of material blood, amniotic fluid, etc.).
- (d) Source of the material.
- (e) Under what circumstances the incident occurred. Type of work being performed.
- (f) How the incident was caused. Accident/unusual circumstances (such as equipment malfunction, power outage, etc.).
- (g) Personal protective equipment being used at the time of the incident.
- (h) Actions taken as a result of the incident.
- (i) Employee decontamination/cleanup/notifications made.

The above information is evaluated and a summary of the incident, its causes, and recommendations is written to avoid similar incidents in the future.

(3) In order to make sure that our employees receive the best and most likely treatment if an exposure to bloodborne pathogens should occur, our organization has set up a comprehensive post-exposure evaluation and follow-up process (Enclosure 3).

c. Health-care professionals written opinion: Whether the employee is evaluated and treated at a government facility, or chooses to seek care in the private sector, the following information will be obtained by the treating physician and documented in the employee's health record. The treating facility will provide a written opinion and will furnish a copy of this opinion to the exposed employee. In keeping with this process with emphasis on confidentiality, the written opinion will contain only the following information:

- (1) Whether Hepatitis B Vaccination is indicated for the employee.
- (2) Whether the employee has received the Hepatitis B Vaccination.

(3) Confirmation that the employee has been informed of the results of the evaluation.

(4) Confirmation that the employee has been told about any medical conditions resulting from the exposure incident which require further evaluation or treatment.

(5) All other findings or diagnoses will remain confidential and will not be included in the written report. An employee fact sheet will be provided to the employee describing the symptoms of HIV and HBV infection. (Enclosure 5.)

d. Medical recordkeeping: The comprehensive medical records on our employees who are at risk will contain:

- (1) Name of the employee.
- (2) Social security number of the employee.
- (3) A copy of the employee's Hepatitis B Vaccination status. Dates of any vaccinations.
- (4) Medical records relative to the employee's ability to receive vaccination.
- (5) Copies of the results of the examinations, medical testing and follow-up procedures which took place as a result of an employee's exposure to bloodborne pathogens.
- (6) A copy of the information provided to the consulting health-care professional as a result of any exposure to bloodborne pathogens.
- (7) As with all information in these areas, we recognize that it is important to keep the information in these medical records confidential. We will not disclose or report this information to anyone without our employee's written consent (except as required by law).

5. LABELS AND SIGNS.

- a. The following items will be labeled:
 - (1) Containers for Regulated Medical Waste.
 - (2) The sharps container.
- b. Labels will be fluorescent orange or orange-red with letters or symbols in a contrasting color.

6. INFORMATION AND TRAINING. All employees with occupational exposure as identified in the Exposure Determination section of this plan will participate in initial training/annual training within one year of their previous training, and training when changes in procedures or tasks occur which may affect occupational exposure.

- a. Training sessions must be comprehensive, including information on bloodborne pathogens as well as on OSHA regulations relating to this standard and the employer's exposure control plan.
- b. The person conducting the training must be knowledgeable in the subject matter, especially as it relates to emergency response personnel.
- c. An opportunity for a question and answer period must be part of the training session.
- d. A training program shall consist, at a minimum, of the following elements:
 - (1) An accessible copy and explanation of the regulatory text;
 - (2) A general explanation of the epidemiology and symptoms of bloodborne diseases;
 - (3) An explanation of the modes of transmission of bloodborne pathogens;
 - (4) An explanation of how to recognize events that may involve exposure to blood and other potentially infectious materials;
 - (5) An explanation of the basis for selecting personal protective equipment including information on the types, selection, proper use, location, removal, handling, decontamination, and disposal of personal protective equipment;
 - (6) An explanation of the use and limitations of safe work practices and personal protective equipment;
 - (7) Information on hepatitis B vaccination such as safety, benefits, efficacy, and availability;
 - (8) An explanation of the procedures to follow if an exposure occurs, including methods of reporting and the medical follow-up that will be made available;

(9) Information on the post-exposure evaluation and follow-up required in the event of an exposure and information on emergencies that relate to blood or other potentially infectious materials, follow-up procedures, and medical counseling;

(10) An explanation of information on warning signs, labels, and color-coding.

e. For employees who have received training on bloodborne pathogens in the year preceding the effective date of the standard, training need only be provided on provisions of the standard that were not included during the earlier training.

F. RESPONSIBILITIES.

1. All supervisory personnel will ensure that:

a. All personnel in positions listed in the Exposure Determination section of this plan receive initial and annual training as outlined in the Information and Training section of this plan (paragraph E6).

b. Required personal protective equipment and engineering controls are available and used by all personnel.

c. All employees use the protective practices Outlined in this instruction.

d. All necessary reporting and follow-up as outlined in this instruction will be done in a timely manner.

e. A copy of the Exposure Control Plan (ECP) is available in each work area.

f. Designate a specified area for the ECP within their work area.

2. The Safety and Occupational Health Program will:

a. Investigate reports of circumstances in which an employee declined to use personal protective equipment.

b. Monitor compliance during routine inspections.

c. Advise each site regarding equipment needed and how to order.

d. Establish and maintain a medical file that will contain information regarding immunization and training that pertains to this ECP.

e. Maintain this directive in a current status and review it biennially.

G. EFFECTIVE DATE AND IMPLEMENTATION. This instruction is effective upon signature by the DRMS Executive Assistant.

H. INFORMATION REQUIREMENTS. (Reserved for future use.)

BY ORDER OF THE COMMANDER:

1. Declination Statement. Executive Assistant
2. Exposure Incident
Investigation Form.
3. Post-exposure Evaluation
and Follow-up Checklist.
4. Universal Precautions
Policy.
5. OSHA Bloodborne Facts.
6. Sharps Injury Log.

DECLINATION STATEMENT

The following statement of declination of hepatitis B vaccination must be signed by an employee who chooses not to accept the vaccine. The statement can only be signed by the employee following appropriate training regarding hepatitis B, hepatitis B vaccination, the efficacy, safety, method of administration, and benefits of vaccination, and the availability of the vaccine and vaccination free of charge to the employee. The statement is not a **waiver**; employees can request and receive the hepatitis B vaccination at a later date if they remain occupationally at risk for hepatitis B.

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

Employee Signature

Date

Enclosure 2
DRMS-D 6055.3

<DRMS Form 1964, Jun 93>

POST-EXPOSURE EVALUATION AND FOLLOW-UP CHECKLIST

THE FOLLOWING STEPS MUST BE TAKEN, AND INFORMATION TRANSMITTED, IN THE CASE OF AN EMPLOYEE'S EXPOSURE TO BLOODBORNE PATHOGENS:

- | <u>ACTIVITY</u> | <u>COMPLETION DATE</u> |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| 1. EMPLOYEE FURNISHED WITH DOCUMENTATION REGARDING EXPOSURE INCIDENT. | |
| 2. SOURCE INDIVIDUAL IDENTIFIED.

SOURCE INDIVIDUAL _____ | |
| 3. SOURCE INDIVIDUAL'S BLOOD TESTED AND RESULTS GIVEN TO EXPOSED EMPLOYEE.

CONSENT HAS BEEN OBTAINED YES NO | |
| 4. EXPOSED EMPLOYEE'S BLOOD COLLECTED AND TESTED. | |
| 5. APPOINTMENT ARRANGED FOR EMPLOYEE WITH HEALTH-CARE PROFESSIONAL. | |

GUIDELINES FOR UNIVERSAL PRECAUTIONS

I. Introduction:

A. Routes of Transmission

1. The transmission of HIV/AIDS and Hepatitis in an occupational setting primarily occurs when infected blood, body fluid, or tissue, contacts breaks in the skin of workers. This can occur through needle sticks, scrapes or puncture of the skin.

2. The second type of transmission of infection occurs when contaminated body fluids contact an existing break in the skin; for example an abrasion, cut or scratch.

3. A third route of transmission is getting contaminated fluids on the mucous membranes of the nose, mouth or eyes.

B. Longevity of the Virus. Blood was allowed to dry on a surface at room temperature and cultured several times a day over a week.

1. Starting with 100 percent viable virus of HIV/AIDS, only 10 percent was viable after 9 hours, 1 percent after another 9 hours and 0.1 percent after another 9 to 27 hours.

2. Hepatitis virus, on the other hand, maintained its infectivity for several weeks.

C. Infection Control. Hand washing is the most effective infection control procedure. Employees will wash hands:

1. After removing PPE.
2. After each patient contact.
3. After handling potentially infectious materials.
4. After cleaning or decontaminating equipment.

Hand washing with soap and water will be performed for 10 to 15 seconds. If soap and water is not available on the scene, a waterless hand wash may be used, provided that a soap and water wash is performed immediately when facility is available.

II. Assessment/Types of Protection. Employee should select PPE that is appropriate for spill, splash or exposure to body fluids. No standard operating procedure or all PPE can cover all situations. Common sense must be used. When in doubt, use more rather than less PPE.

A. Hand Protection: Gloves, latex.

1. Protective gloves will be worn by all employees:

a. Engaged in activities that may involve direct contact of skin with potentially infectious materials.

b. When in contact with mucous membranes, wounds, blood, drainage or any moist material coming from another person.

c. If they have cuts, scratches, or breaks in their skin.

d. If the employee has dermatitis or other lesions and have direct care contact with another employee.

e. When cleaning up any spills, splatters or sprays of body fluids.

f. When disposing of or handling any materials which have body fluids on them.

2. Employees are to wash hands immediately after removing gloves. If gloves are torn, soiled or punctured, they should be replaced as soon as possible.

3. Disposable latex gloves will not be reused, washed or disinfected for reuse.

B. General Protection

1. Personal Protective Equipment (PPE) may include, but is not limited to, gloves, face shields, masks, eye protection, gowns, aprons, mouthpieces, pocket masks, and other ventilation devices.

2. When the potential for exposure to the face is present, employees will wear protective face gear. A combination of both the facemask and eye protection can be worn, offering full-face protection.

3. When performing CPR, employees will use disposable one-way valve pocket masks.

4. When there is potential for exposure to body or clothing, fluid resistant gowns or coveralls will be worn.

5. Employees with exudative lesions or weeping dermatitis should refrain from any direct patient contact. Such conditions not only allow blood borne infections to be transmitted from patients to employee, but also from employee to patients.

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C. Laundry

1. All contaminated clothing will be laundered by a contracted, approved industrial laundry, if the need arises. UNDER NO CIRCUMSTANCES WILL CONTAMINATED CLOTHES BE WASHED AT HOME BY EMPLOYEES! This will help protect employees' families from both infectious and chemical contamination.

2. All contaminated clothing will be bagged, stored and handled as biohazard. Contaminated clothing will be transported to the laundry at government expense.

3. All employees who have a potential for exposure will maintain extra clean work clothing at their workstation, so that potentially contaminated clothes can be exchanged.

D. Sharps (needles, scalpels or other instruments used for direct care) must be handled with extreme care. Employees will **not**:

1. Recap used needles.
2. Remove used needles from syringes.
3. Bend, break or otherwise manipulate needles.
4. Dispose of these in general trash.

E. Fluid Spills

1. Always wear protective barriers, including gloves, gown and (if spill is large) plastic shoe covers.

2. Soak up the spill with any absorbent material, such as a paper towel.

3. Flood the spill area with detergent solution (ordinary household detergent is suitable).

4. Soak up this detergent solution with absorbent material such as a paper towel.

5. Saturate the area with a dilute solution of chlorine (1 part chlorine with 10 parts water), and let it sit on the spill area for a minute or two to kill the HIV/AIDS virus, or up to 20 minutes to kill the Hepatitis virus.

6. Wash the area again with water.

7. Dry the area.

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8. Properly dispose of all materials used to clean the area. This means place in a labeled biohazard bag.

9. If employee is splattered with fluids, immediately remove contaminated clothing and wash the body with detergent and rinse with water.

10. Gloves should be carefully removed and disposed of after use.

III. Disposal Techniques

A. All exposed material and items such as needles, dressings, paper towels, paper products, gloves, mops, glass products should be disposed of IMMEDIATELY after use.

B. Containers for sharps will be rigid, puncture-resistant and leak-proof.

C. Containers are to have a biohazard label, which is three overlapping circles, and is to be fluorescent orange or orange-red with letters or symbols in a contrasting color.

D. If the outside of the container is contaminated, it should be stored in a plastic bag that is also labeled with the biohazard label.

E. There are three appropriate ways to dispose of biohazard containers:

1. Autoclave the containers and render them non-infectious. The resulting waste can then be handled as part of the standard hospital waste program.

2. Incinerate containers to meet standards for incineration.

3. Contract with an outside firm to incinerate the containers.

SUMMARY:

* If it's wet, it's infectious. Use gloves!

* If it could splash onto your face, use eye shields and mask or a full-face shield.

* If it's airborne, mask the patient or yourself.

* If it could splash on your clothes, use a gown or coveralls.

* If it could splash on your head or feet, use appropriate barrier protection.

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BLOODBORNE FACTS

HEPATITIS B VACCINATION - PROTECTION FOR YOU

U.S. Department of Labor
Occupational Safety and Health Administration

WHAT IS HBV?

Hepatitis B virus (HBV) is a potentially life-threatening bloodborne pathogen. Centers for Disease Control estimates there are approximately 280,000 HBV infections each year in the U.S.

Approximately 8,700 health care workers each year contract hepatitis B, and about 200 will die as a result. In addition, some who contract HBV will become carriers, passing the disease on to others. Carriers also face a significantly higher risk for other liver ailments which can be fatal, including cirrhosis of the liver and primary liver cancer.

HBV infection is transmitted through exposure to blood and other infectious body fluids and tissues. Anyone with occupational exposure to blood is at risk of contracting the infection.

Employers must provide engineering controls; workers must use work practices and protective clothing and equipment to prevent exposure to potentially infectious materials. However, the best defense against hepatitis B is vaccination.

WHO NEEDS VACCINATION?

The new OSHA standard covering bloodborne pathogens requires employers to offer the three-injection vaccination series free to all employees who are exposed to blood or other potentially infectious materials as part of their job duties. This includes health care workers, emergency responders, morticians, first-aid personnel, law enforcement officers, correctional facilities staff, launderers, as well as others.

The vaccination must be offered within 10 days of initial assignment to a job where exposure to blood or other potentially infectious materials can be "reasonably anticipated." The requirements for vaccinations of those already on the job take effect July 6, 1992.

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WHAT DOES VACCINATION INVOLVE?

The hepatitis B vaccination is a noninfectious, yeast-based vaccine given in three injections in the arm. It is prepared from recombinant yeast cultures, rather than human blood or plasma. Thus, there is no risk of contamination from other bloodborne pathogens nor is there any chance of developing HBV from the vaccine.

The second injection should be given 1 month after the first, and the third injection 6 months after the initial dose. More than 90 percent of those vaccinated will develop immunity to the hepatitis B virus. To ensure immunity, it is important for individuals to receive all three injections. At this point it is unclear how long the immunity lasts, so booster shots may be required at some point in the future.

The vaccine causes no harm to those who are already immune or to those who may be HBV carriers. Although employees may opt to have their blood tested for antibodies to determine need for the vaccine, employers may not make such screening a condition of receiving vaccination nor are employers required to provide prescreening.

Each employee should receive counseling from a health care professional when vaccination is offered. This discussion will help an employee determine whether inoculation is necessary.

WHAT IF I DECLINE VACCINATION?

Workers who decide to decline vaccination must complete a declination form. Employers must keep these forms on file so that they know the vaccination status of everyone who is exposed to blood. At any time after a worker initially declines to receive the vaccine, he or she may opt to take it.

WHAT IF I AM EXPOSED BUT HAVE NOT YET BEEN VACCINATED?

If a worker experiences an exposure incident, such as a needle stick or a blood splash in the eye, he or she must receive confidential medical evaluation from a licensed health care professional with appropriate follow-up. To the extent possible by law, the employer is to determine the source individual for HBV as well as human immunodeficiency virus (HIV) infectivity. The worker's blood will also be screened if he or she agrees.

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The health care professional is to follow the guidelines of the U.S. Public Health Service in providing treatment. This would include hepatitis B vaccination. The health care professional must give a written opinion on whether or not vaccination is recommended and whether the employee received it. Only this information is reported to the employer. Employee medical records must remain confidential. HIV or HBV status must NOT be reported to the employer.

This is one of a series of fact sheets that discusses various requirements of the Occupational Safety and Health Administration's standard covering exposure to bloodborne pathogens. Single copies of fact sheets are available from OSHA Publications, Room N-3101, 200 Constitution Avenue, N.W., Washington, DC 20210 and from OSHA regional offices.

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BLOODBORNE FACTS

PERSONAL PROTECTIVE EQUIPMENT CUTS RISK

U.S. Department of Labor
Occupational Safety and Health Administration

Wearing gloves, gowns, masks, and eye protection can significantly reduce health risks for workers exposed to blood and other potentially infectious materials. The new OSHA standard covering bloodborne disease requires employers to provide appropriate personal protective equipment (PPE) and clothing free of charge to employees.

Workers who have direct exposure to blood and other potentially infectious materials on their jobs run the risk of contracting bloodborne infections from hepatitis B virus (HBV), human immunodeficiency virus (HIV) which causes AIDS, and other pathogens. About 8,700 health care workers each year are infected with HBV, and 200 die from the infection. Although the risk of contracting AIDS through occupational exposure is much lower, wearing proper personnel protective equipment can greatly reduce potential exposure to all bloodborne infections.

SELECTING PPE

Personal protective clothing and equipment must be suitable. This means the level of protection must fit the expected exposure. For example, gloves would be sufficient for a laboratory technician who is drawing blood, whereas a pathologist conducting an autopsy would need considerably more protective clothing.

PPE may include gloves, gowns, laboratory coats, face shields or masks, eye protection, pocket masks, and other protective gear. The gear must be readily accessible to employees and available in appropriate sizes.

If an employee is expected to have hand contact with blood or other potentially infectious materials or contaminated surfaces, he or she must wear gloves. Single use gloves cannot be washed or decontaminated for reuse. Utility gloves may be decontaminated if they are not compromised. They should be replaced when they show signs of cracking, peeling, tearing, puncturing, or deteriorating. If employees are allergic to standard gloves, the employer must provide hypoallergenic gloves or similar alternatives.

Routine gloving is not required for phlebotomy in voluntary blood donation centers, though it is necessary for all other phlebotomies. In any case, gloves must be available in voluntary blood donation centers for employees who want to use them. Workers in voluntary blood donation centers must use gloves (1) when they have cuts, scratches or other breaks in their skin; (2) while they are in training; and (3) when they believe contamination might occur.

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Employees should wear eye and mouth protection such as goggles and masks, glasses with solid side shields, and masks or chin-length face shields when splashes, sprays, splatters or droplets of potentially infectious materials pose a hazard through the eyes, nose or mouth. More extensive coverings such as gowns, aprons, surgical caps and hoods, and shoe covers or boots are needed when gross contamination is expected. This often occurs, for example during orthopedic surgery or autopsies.

AVOIDING CONTAMINATION

The key is that blood or other infectious materials must not reach an employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions for the duration of exposure.

Employers must provide the PPE and ensure that their workers wear it. This means that if a lab coat is considered PPE, it must be supplied by the employer rather than the employee. The employer also must clean or launder clothing and equipment and repair or replace it as necessary.

Additional protective measures such as using PPE in animal rooms and decontaminating PPE before laundering are essential in facilities that conduct research on HIV or HBV.

EXCEPTION

There is one exception to the requirement for protective gear. An employee may choose, temporarily and briefly, under rare and extraordinary circumstances, to forego the equipment. It must be the employee's professional judgment that using the protective equipment would prevent the delivery of health care or public safety services or would pose an increased hazard to the safety of the worker or co-worker. When one of these excepted situations occurs, employers are to investigate and document the circumstances to determine if there are ways to avoid it in the future. For example, if a firefighter's resuscitation device is damaged, perhaps another type of device should be used or the device should be carried in a different manner. Exceptions must be limited - this is not a blanket exemption.

DECONTAMINATING AND DISPOSING OF PPE

Employees must remove personal protective clothing and equipment before leaving the work area or when the PPE becomes contaminated. If a garment is penetrated, workers must remove it immediately or as soon as feasible. Used protective clothing and equipment must be placed in designated containers for storage, decontamination, or disposal.

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OTHER PROTECTIVE PRACTICES

If an employee's skin or mucous membranes come into contact with blood, he or she is to wash with soap and water and flush eyes with water as soon as feasible. In addition, workers must wash their hands immediately or as soon as feasible after removing protective equipment. If soap and water are not immediately available, employers may provide other handwashing measures such as moist towelettes. Employees still must wash with soap and water as soon as possible.

Employees must refrain from eating, drinking, smoking, applying cosmetic or lip balm, and handling contact lenses in areas where they may be exposed to blood or other potentially infectious materials.

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BLOODBORNE FACTS

HOLDING THE LINE ON CONTAMINATION

U.S. Department of Labor
Occupational Safety and Health Administration

Keeping work areas in a clean and sanitary condition reduces employees' risk of exposure to bloodborne pathogens. Each year about 8,700 health care workers are infected with hepatitis B virus, and 200 die from contracting hepatitis B through their work. The chance of contracting human immunodeficiency virus (HIV), the bloodborne pathogen which causes AIDS, from occupational exposure is small, yet a good housekeeping program can minimize this risk as well.

DECONTAMINATION

Every employer whose employees are exposed to blood or other potentially infectious materials must develop a written schedule for cleaning each area where exposures occur. The methods of decontaminating different surfaces must be specified, determined by the type of surface to be cleaned, the soil present and the tasks or procedures that occur in that area.

For example, different cleaning and decontamination measures would be used for a surgical operatory and a patient room. Similarly, hard surfaced flooring and carpeting require separate cleaning methods. More extensive efforts will be necessary for gross contamination than for minor spattering. Likewise, such varied tasks as laboratory analyses and normal patient care would require different techniques for clean up.

Employees must decontaminate working surfaces and equipment with an appropriate disinfectant after completing procedures involving exposure to blood. Many laboratory procedures are performed on a continual basis throughout a shift.

Except as discussed below, it is not necessary to clean and decontaminate between procedures. However, if the employee leaves the area for a period of time, for a break or lunch, then contaminated work surfaces must be cleaned.

Employees also must clean (1) when surfaces become obviously contaminated; (2) after any spill of blood or other potentially infectious materials; and (3) at the end of the work shift if contamination might have occurred. Thus, employees need not decontaminate the work area after each patient care procedure, but only after those that actually result in contamination.

If surfaces or equipment are draped with protective coverings such as plastic wrap or aluminum foil, these coverings should be removed or replaced if they become obviously contaminated. Reusable receptacles such as bins, pails and cans that are likely to become contaminated must be inspected and decontaminated on a regular basis. If contamination is visible, workers must clean and decontaminate the item immediately, or as soon as feasible.

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Should glassware that may be potentially contaminated break, workers need to use mechanical means such as a brush and dustpan or tongs or forceps to pick up the broken glass - never by hand, even when wearing gloves.

Before any equipment is serviced or shipped for repairing or cleaning, it must be decontaminated to the extent possible. The equipment must be labeled, indicating which portions are still contaminated. This enables employees and those who service the equipment to take appropriate precautions to prevent exposure.

REGULATED WASTE

In addition to effective decontamination of work areas, proper handling of regulated waste is essential to prevent unnecessary exposure to blood and other potentially infectious materials. Regulated waste must be handled with great care - i.e., liquid or semi-liquid blood and other potentially infectious materials, items caked with these materials, items that would release blood or other potentially infected materials if compressed, pathological or microbiological wastes containing them and contaminated sharps.

Containers used to store regulated waste must be closable and suitable to contain the contents and prevent leakage of fluids. Containers designed for sharps also must be puncture resistant. They must be labeled or color-coded to ensure that employees are aware of the potential hazards. Such containers must be closed before removal to prevent the contents from spilling. If the outside of a container becomes contaminated, it must be placed within a second suitable container.

Regulated waste must be disposed of in accordance with applicable state and local laws.

LAUNDRY

Laundry workers must wear gloves and handle contaminated laundry as little as possible, with a minimum of agitation. Contaminated laundry should be bagged or placed in containers at the location where it is used, but not sorted or rinsed there.

Laundry must be transported within the establishment or to outside laundries in labeled or red color-coded bags. If the facility uses Universal Precautions for handling all soiled laundry, then alternate labeling or color coding that can be recognized by the employees may be used. If laundry is wet and it might soak through laundry bags, then workers must use bags that prevent leakage to transport it.

RESEARCH FACILITIES

More stringent decontamination requirements apply to research laboratories and production facilities that work with concentrated strains of HIV and HBV.

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SHARPS INJURY LOG

<i>Date</i>

<i>Type and brand of Device involved In injury</i>

<i>Location or work area At which injury occurred</i>

<i>How injury occurred</i>

<i>Date</i>

<i>Type and brand of Device involved In injury</i>

<i>Location or work area At which injury occurred</i>

How injury occurred