

**REGION SIX INCIDENT MEDICAL SPECIALIST
INFECTION CONTROL PLAN**

Date of Preparation: 4/05/01

In accordance with the OSHA Bloodborne Pathogens Standard, 29 CFR 1910.1030 and Respiratory Protection Standard 1910.134, the following exposure control plan has been developed:

A. Purpose

The Purpose of this exposure control plan is to:

1. Eliminate or minimize employee occupational exposure to blood or certain other body fluids.
2. Comply with the OSHA Bloodborne Pathogens Standard, 29 CFR 1910.1030.
3. To establish guidelines and procedures to reduce the risk of exposure to tuberculosis (TB).
4. Comply with Respiratory Protection Standard 29 CFR 1960.134.

B. Exposure Determination

OSHA requires employers to perform an exposure determination concerning which employees may incur occupational exposure to blood or other potentially infectious materials and Mycobacterium Tuberculosis. The exposure determination is made without regard to the use of personal protective equipment (i.e. employees are considered to be exposed even if they wear personal protective equipment). This exposure determination is required to list all job classifications in which all employees may be expected to incur such occupational exposure, regardless of frequency. The following job classifications are in this category:

1. All Incident Medical Specialists.
2. All other associated Health Care Providers.

C. Implementation Schedule and Methodology

OSHA also requires that this plan include a schedule and method of implementation for the various requirements of both standards. The following complies with this requirement:

1. **Compliance Methods.**

Universal precautions will be observed in order to prevent contact with blood and other potentially infectious materials, or when exposed to persons with suspected or confirmed TB. Incident Medical Specialist (IMS) personnel are determined to have potential exposure to TB when they perform high hazard procedures such as administering aerosolized medications, the use of airway adjuncts, and suctioning any patient, or when treating any suspected or confirmed TB patient for any reason. All blood or other potentially infectious material will be considered infectious regardless of the perceived status of the source individual.

Engineering and work practice controls will be utilized to eliminate or minimize exposure to employees. Where occupational exposure remains after institution of these controls, the following personal protective equipment shall be utilized:

- a. Gloves
- b. Eye/Face Protection
- c. Gowns
- d. Biohazard Bags
- e. Sharps Container
- f. Washing/Decontamination Materials
- g. National Institute for Occupational Safety and Health (NIOSH) approved high efficiency particulate air (HEPA) Respirators
- h. HEPA filters for pocket masks

The above controls will be examined and maintained on a regular schedule. The schedule for reviewing the effectiveness of the controls is as follows:

The Medical Unit Leader shall insure that hand washing facilities shall be made readily available to the employees who incur exposure to blood or other potentially infectious materials. In the event hand washing facilities are not available, antiseptic cleanser in conjunction with clean cloth/paper towels or antiseptic novelettes will be provided and kept accessible at all times. If these alternatives are used then the hands are to be washed with soap and running water as soon as feasible.

The Medical Manager shall ensure that after the removal of personal protective gloves, employees shall wash hands and any other potentially contaminated skin area immediately or as soon as feasible with soap and water.

The Medical Manager shall ensure that if employees incur exposure to their skin or mucous membranes then those areas shall be washed or flushed with water as soon as feasible following contact.

2. **Sharps**

Contaminated needles and other contaminated sharps will not be bent, recapped, removed, sheared or purposely broken.

Contaminated sharps that are reusable are to be placed immediately, or as soon as possible, after use into appropriate sharps containers. The sharps containers are puncture resistant, labeled with a biohazard label and are leak proof.

Sharps containers shall be available at all medical aid stations and mobile medical units. The Medical Unit Leaders shall ensure that all sharps containers are disposed of at an appropriate location.

3. **Work Area Restrictions**

In work areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials, employees are not to eat, drink, apply cosmetics or lip balm, smoke, or handle contact lenses. Food and beverages are not to be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potentially infectious materials are present.

Patients that enter the medical unit coughing or complaining of having a cough will be required to wear a surgical mask. If the patient refuses to wear the surgical mask, the patient shall be examined in an isolated area and the attending IMS person will wear the required HEPA respirator.

All procedures will be conducted in a manner, which will minimize splashing, spraying, splattering, and generation of droplets of blood or other potentially infectious materials.

4. **Contaminated Equipment**

Medical Unit Leader is responsible for ensuring that equipment which has become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary unless the decontamination of the equipment is not feasible.

5. **Personal Protective Equipment (PPE)**

The Medical Unit Leader is responsible for ensuring that the following provisions are met.

All PPE used at this facility will be provided without cost to employees. PPE will be chosen based on the anticipated exposure to blood or other potentially infectious materials, including TB. The protective equipment will be considered appropriate only

if it does not permit blood or other potentially infectious materials to pass through or reach the employees' clothing, skin, eyes, nose, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

The Medical Managers shall ensure that the employee uses appropriate PPE unless the employee temporarily and briefly declined to use PPE when under rare and extraordinary circumstances, and it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care or posed an increased hazard to the safety of the worker or coworkers. When the employee makes this judgment, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.

The Medical Unit Leader shall ensure that appropriate PPE in the appropriate sizes is readily accessible at the work site or is issued without cost to employees. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

PPE Cleaning, Laundering and Disposal

All personal protective equipment will be cleaned, laundered, or disposed of at no cost to the employee. All repairs and replacements will be made at no cost to the employees.

All garments, which are penetrated by blood, shall be removed immediately or as soon as feasible. All PPE will be removed prior to leaving the work area. When PPE is removed, it shall be placed in an appropriately designated container for storage, washing, decontamination or disposal. These containers shall be labeled accordingly.

Gloves

Gloves shall be worn where it is reasonably anticipated that employees will have hand contact with blood, other potentially infectious materials, broken skin, and mucous membranes; when performing vascular access procedures and when handling or touching contaminated items or surfaces.

Disposable gloves are not to be washed or decontaminated for re-use and are to be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised. Utility gloves may be decontaminated for re-use provided that the integrity of the glove is not compromised. Utility gloves will 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.

Eye and Face Protection

Masks in combination with eye protection devices, such as goggles or glasses with solid side shield, or chin length face shields, are required to be worn whenever potentially infectious materials may be generated and eye, nose, or mouth contamination can reasonably be anticipated.

Respiratory Protection

HEPA respirators will be worn when in the presents of a patient suspected or confirmed of having TB. HEPA respirators will be worn when administering aerosolized medications, when placing airway adjuncts, and when suctioning any patient suspected or confirmed of having TB. Pocket masks with HEPA filters and one-way valves or disposable bag valve masks shall be used to ventilate patients.

Additional Protection

Additional protective clothing (such as lab coats, gowns, aprons, clinic jackets, or similar outer garments) shall be worn in instances when gross contamination can reasonably be anticipated.

6. Housekeeping

The medical unit, and any patient transport vehicle and all equipment shall be kept clean and decontaminated at all times.

Decontamination will be accomplished by utilizing the following materials: Any equipment that comes in contact with mucous membranes that is not disposable, shall be decontaminated with an EPA approved chemical sterilizing agent. All other decontamination shall be accomplished by wiping with a 1:100 chlorine bleach and water solution.

All contaminated work surfaces will be decontaminated after completion of procedures and immediately or as soon as feasible after any spill of blood or other potentially infectious materials, as well as the end of the work shift if the surface may have become contaminated since the last cleaning.

Any broken glassware, which may be contaminated, will not be picked up directly with the hands.

Reusable sharps that are contaminated with blood or other potentially infectious materials shall not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.

7. Regulated Waste Disposal

Disposable Sharps

Contaminated sharps shall be discarded immediately or as soon as feasible in containers that are closable, puncture resistant, leak proof on sides and bottom and labeled or color coded.

During use, containers for contaminated sharps shall be easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g. laundries).

The containers shall be maintained upright throughout use and replaced routinely and not be allowed to overfill.

When moving containers of contaminated sharps from the area of use, the containers shall be closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

The container shall be placed in a secondary container if leakage of the primary container is possible. The second container shall be closable, constructed to contain all contents and prevent leakage during handling, storage and transport, or shipping. The second container shall be labeled or color-coded to identify its contents.

Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner, which would expose employees to the risk of percutaneous injury.

Other Regulated Waste

Other regulated waste shall be placed in containers, which are closable, constructed to contain all contents and prevent leakage of fluids during handling, storage, transportation or shipping.

The waste must be labeled or color-coded and closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

Disposal of all regulated waste shall be in accordance with applicable United States, state and local regulations.

8. Laundry Procedures

Laundry contaminated with blood or other potentially infectious materials will be handled as little as possible. Such laundry will be placed in appropriately marked (biohazard labeled, or color coded red bag) bags at the location where it was used. Such laundry will not be sorted or rinsed in the area of use.

9. Hepatitis B Vaccine, Tuberculosis Skin Test, HEPA Respirator, and Post-Exposure Evaluation and Follow-Up

General

The U.S. Government shall require all personnel entering the IMS program to have the hepatitis B vaccination series prior to acceptance in to the program. The hepatitis B vaccination shall have been completed by the IMS person's home EMS organization. Post exposure follow-up shall be made available to employees who have had an exposure incident.

The U.S. Government shall require all personnel entering the IMS program to have an annual tuberculin skin test. The tuberculin skin test is to be provided by the IMS person's home EMS organization. The TB skin test must be less than one year old. The TB skin test is a prerequisite to acceptance into the IMS program.

The U.S. Government shall require all personnel entering the IMS program to have been fit tested for NIOSH approved HEPA respirators. Post exposure follow-up shall be provided to employees who have had an TB exposure incident.

The U.S. Government shall ensure that all medical evaluations and post exposure follow-up, as a result of an exposure incident be:

- a. Made available at no cost to the employee;
- b. Made available to the employee at a reasonable time and place;
- c. Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed health care professional; and
- d. Provided according to the recommendations of the U.S. Public Health Service.

All laboratory tests shall be conducted by an accredited laboratory at no cost to the employee.

Post Exposure Evaluation and Follow-up

All exposure incidents shall be reported, investigated, and documented. When the employee incurs an exposure incident, it shall be reported to Medical Unit Leader, Safety Officer and Dr. Jui.

Following a report of an exposure incident, the exposed employee shall immediately receive a confidential medical evaluation and follow-up, including at least the following elements:

- a. Documentation of the route of exposure, and the circumstances under which the exposure incident occurred.
- b. Identification and documentation of the source individual, unless it can be established that identification is infeasible or prohibited by state or local law.
- c. In the event of an exposure to blood or other body fluids, the source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the U.S. Government shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.
- d. When the source individual is already known to be infected with HBV, HIV, or TB, testing for the source individual's known HBV, HIV, or TB, status need not be repeated.
- e. Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

Collection and testing of blood for HBV and HIV serological status will comply with the following:

- a. The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained.
- b. The employee will be offered the option of having their blood collected for testing of the employees HIV/HBV serological status. The blood sample will be preserved for up to 90 days to allow the employee to decide if the blood should be tested for HIV serological status.

All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. A licensed physician will perform all post-exposure follow-ups.

Information Provided to the Health care Professional

The U.S. Government shall ensure that the health care professional responsible for the employee's Hepatitis B vaccination is provided with the following:

- a. A copy of 29 CFR 1910.1030. (While the standard outlines the confidentiality requirements of the health care professional, it might be helpful for the employer to remind that individual of these requirements.)

- b. A written description of the exposed employee's duties as they relate to the exposure incident.
- c. Written documentation of the route of exposure and circumstances under which exposure occurred.
- d. Results of the source individuals blood testing, if available.
- e. All medical records relevant to the appropriate treatment of the employee including vaccination status.

Health Care Professional's Written Opinion

The U.S. Government shall obtain and provide the employee with a copy of the evaluating health care professional's written opinion within 15 days of the completion of the evaluation.

The health care professionals written opinion for HBV vaccination shall be limited to whether HBV vaccination is indicated for an employee, and if the employee has received such vaccination.

The health care professional's written opinion for post exposure follow-up shall be limited to the following information:

- a. A statement that the employee has been informed of the results of the evaluation.
- b. A statement that the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

Note: All other findings or diagnosis shall remain confidential and shall not be included in the written report.

10. Labels and Signs

Medical Unit Leader shall ensure that biohazard labels shall be affixed to containers of regulated waste, and other containers used to store, transport or ship blood or other potentially infectious materials.

The universal biohazard symbol shall be used. The label shall be fluorescent orange or orange-red.

Red bags or containers may be substituted for labels. However, regulated wastes must be handled in accordance with the rules and regulations of the organization having jurisdiction.

11. Information and Training

U.S. Government shall ensure that training is provided at the time of initial assignment to tasks where occupational exposure may occur, and that it shall be repeated within twelve months of the previous training. Training shall be tailored to the education and language level of the employee, and offered during the normal work shift. The training will be interactive and cover the following:

- a. An explanation of the Region Six (R-6) Infection Control Plan (this program), and a method for obtaining a copy.
- b. The recognition of tasks that may involve exposure.
- c. An explanation of the use and limitations of methods to reduce exposure, for example engineering controls, work practices and personal protective equipment (PPE).
- d. Information on the types, use, location, removal, handling, decontamination, and disposal of PPEs.
- e. An explanation of the basis of selection of PPEs.
- f. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
- g. An explanation of the procedures to follow if an exposure incident occurs, including the method of reporting and medical follow-up.
- h. Information on the evaluation and follow-up required after an employee exposure incident.
- i. An explanation of the signs, labels, and color coding systems.

The person conducting the training shall be knowledgeable in the subject matter.

Employees shall have received training on bloodborne pathogens and tuberculosis at their home EMS unit. IMS personnel shall only receive training on this plan.

Additional training shall be provided to employees when there are any changes of tasks or procedures affecting the employee's occupational exposure.

12. Record Keeping

Medical Records

U.S. Government is responsible for maintaining medical records as indicated below.

These records will be sent home with the employee and will be kept in their personnel file.

Medical records shall be maintained in accordance with OSHA Standard 29 CFR 1910.20. These records shall be kept confidential, and must be maintained for at least the duration of employment plus 30 years. The records shall include the following:

- a. The name and social security number of the employee.
- b. A copy of the employee's HBV vaccination status, including the dates of vaccination.
- c. A copy of the employees TB skin test results including the date of the test.
- d. All results of examinations, medical testing, and follow-up procedures as a result of an exposure incident.
- e. A copy of the information provided to the health care professional, including a description of the employee's duties as they relate to the exposure incident, and documentation of the routes of exposure and circumstances of the exposure.

Training Records

Training records shall be maintained for three years from the date of training. The following information shall be documented:

- a. The dates of the training sessions.
- b. An outline describing the material presented.
- c. The names and qualifications of persons conducting the training.
- d. The names and job titles of all persons attending the training sessions.

Availability

All employee records shall be made available to the employee in accordance with 29 CFR 1910.20.

All employee records shall be made available to the Assistant Secretary of Labor for the

Occupational Safety and Health Administration and the Director of the National Institute for Occupational Safety and Health upon request.

13. Evaluation and Review

The R-6 IMS steering committee and the IMS physician advisor is responsible for reviewing and updating this program, and its effectiveness as needed.

14. Dates

All provisions required by this standard will be implemented by April 20, 2001.

Appropriate First Aid for Exposures

Splashes to mucous membranes (eyes, nose, mouth)

Mouth -- none

Nose -- none

Eyes -- 20 minute irrigation. If eyewash not available, report to ED.

Nonintact skin -- Wash with soap and water, apply an antibiotic ointment such as polysporin.

Punctures or cuts -- squeeze area gently to encourage bleeding for a short period of time then cleanse with soap/water and apply an antibiotic ointment and then sterile dressing. If sutures appear necessary, send for treatment to ED.

Exposure to body fluid -- If the exposure is to a body fluid and frank blood is not apparent in it please guiac it and inform the exposed employee of the results. This may require the transport of the body fluid to the ED for guiac. Not all body fluids are considered infectious without the presence of blood, so this information is very important.

APPENDIX A

EXPOSURE INCIDENT FORMS
AND INSTRUCTION PACKET

EXPOSURE INCIDENT RECORD

Employee Instructions

You are completing this document because you have experienced an actual or a potential exposure to blood, potentially infectious human body fluids or tuberculosis. A medical evaluation of this exposure is required by the Occupational Safety and Health Administration standard (29 CFR 1910.1030).

It is important that you go to the medical facility, or to a private physician or other health care provider **within 1 to 2 hours after exposure** because the effectiveness of certain vaccines or other medication which might prevent any illness resulting from these exposures is greatest if given shortly after the exposure.

Take this Exposure Incident Packet with you when you go to the health care provider. The information contained in this packet is necessary for a proper medical evaluation of the exposure. Also, the health care provider will be in compliance with the post exposure administrative requirements of the OSHA Standard (29 CFR 1910.1030) by following the instructions contained in this packet.

The employee and the employees first or second line supervisor should fill out their portion of the **Exposure Incident Packet** before the employee takes the **Exposure Incident Packet** to the health care provider for a medical evaluation and follow-up on the exposure incident.

EMPLOYEE'S STATEMENT:

Name: _____ Social Security Number: _____

Job Title: _____ Work Location: _____

Work Phone: _____ Supervisor: _____

DESCRIPTION OF EXPOSURE INCIDENT:

Date: _____ Time: _____ am/pm

City/Town: _____ State: _____

Describe Incident (please include the type of infectious material to which you were exposed and the circumstances of the exposure):

SUPERVISOR'S STATEMENT:

Employee's Name: _____

A. Supervisor Identification:

Name: _____

Work Phone: _____

B. Description of Incident:

(Please describe the employee's duties as they relate to the exposure incident)

C. Hepatitis B Status:

The employee named above has received a three dose series of Hepatitis B Vaccine.

Yes _____ No _____

If yes, the series was completed on _____ (date).

D. Investigation of Source

Please describe what information is known about the source (person) of the exposure (name, address, telephone number, or other contact point), the result(s) of the blood testing of the source, if known, or why blood testing of the source is not feasible. If the source is known to have or test positive for Hepatitis B or Human Immunodeficiency Virus (HIV), please indicate this fact. The OSHA standard requires that the source be tested for these agents unless such testing is not legally possible.

EXPOSURE INCIDENT RECORD
for
BLOODBORNE PATHOGEN or TUBERCULOSIS EXPOSURE

HEALTH CARE PROVIDER REPORT OF POST-EXPOSURE EVALUATION

Employee Name: _____

Date of Office Visit: _____

Health Care Facility Address: _____

Health Care Facility Phone: _____

_____ The employee named above has been informed of the results of
the post-exposure medical evaluation.

_____ The employee named above has been told about any medical
conditions resulting from exposure to blood or other
potentially infectious materials which require further
evaluation or treatment.

(Printed/Typed Name of Health Care Provider)

(Signature of Health Care Provider)

(Date of Signature)

*Hepatitis B
Vaccine Declination*

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 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.

<hr/> <i>Signature</i>	<hr/> <i>Date</i>
<hr/> <i>Name (please print)</i>	<hr/> <i>District</i>

Obtaining Informed Consent For HIV Testing Of Source Patient

Pursuant to ORS 433.045 (1) informed consent for HIV testing must be obtained before submitting the blood of an individual for testing.

1. Explain to the source patient that a healthcare worker has been exposed to the patient's blood and there is a need to test the patient's blood for HIV, Hepatitis B and Hepatitis C. Explain that the patient will not be responsible for the cost of the test and that the test results will be kept in the confidential medical files of the exposed healthcare worker. The results will not go to the patient's medical record. The source patient may request copies from the healthcare workers personnel office.
2. Explain in general terms a) the test procedure, b) the alternatives, and c) the risks from having the test. Since the testing is not included in the patient record the results are **not** discoverable by insurance companies - therefore the source need not be afraid of discrimination. Tests shall include: HIV AB, Hep B surface AG, and Anti-HCV .
3. Provide the source patient the opportunity to request additional information and receive answers regarding HIV testing. They may wish to call the AIDS hotline at 1-800-777-AIDS to have specific questions answered. Remember that there is a two-hour window for PEP treatment for the exposed employee.
4. Specify that the test information shall be disclosed to the exposed employee, the employees Safety Manager and placed in the employee's confidential medical records. The name of the source will not be disclosed to the exposed employee. There may be circumstances under which disclosure might be permitted regarding Hepatitis positive patients to the Health Department.

If the Patient is unable to give informed consent

Consent may be obtained from the person having the right to consent for medical treatment. If within a reasonable period of time (2 hrs), consent cannot be obtained, then two physicians licensed in the state of Oregon may sign giving consent.

If patient refuses to give consent

Under certain circumstance, mandatory (court ordered) HIV testing may be done. If the patient refuses consent, inform them that if their risk factors for having HIV are significant, a request for mandatory testing may be pursued. The request for this testing shall be done through the safety officer. Indicate in writing that the source patient has refused test.

EXPOSURE INCIDENT PACKET
for
BLOODBORNE PATHOGEN or TUBERCULOSIS EXPOSURE

INSTRUCTIONS TO HEALTH CARE PROVIDER

This employee is being referred for your evaluation of an exposure incident to blood, another potentially infectious body fluid, or tuberculosis. This referral is to be performed under the provisions of the OSHA Standard (29 CFR 1910.1030). Several items included in the OSHA standard require your close attention.

1. Under the OSHA standard, the following bodily fluids are considered potentially infectious: blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva (in dental procedures), and any body fluid visibly contaminated with blood.
2. The exposed employee's blood should be collected as soon as feasible, after consent is obtained, and tested for HBV and HIV status.
3. If the employee gives consent for baseline blood collection, but does not give consent for HIV serological testing at the time of collection, the blood sample should be stored for 90 days. If within 90 days of the exposure incident, the employee elects that the baseline sample be tested, such testing should be performed.
4. Post-exposure prophylaxis for hepatitis to be given according to the guidelines of the U. S. Public Health Service, which is attached. Optimal use of the Public Health Service guidelines requires knowledge of the HBV status of the source and the exposed individual.
5. OSHA requires that you submit a report of the post-exposure evaluation to the appropriate office for inclusion in the employee's personnel records. A form for this purpose is attached.

Information for Healthcare Workers Following Exposure to Bloodborne Pathogens

Occupational Exposure to Blood and Body Fluids

In the course of your work you have been exposed to a patient's blood or body fluid. This exposure may put you at risk for acquiring HIV infection, Hepatitis B infections, or Hepatitis C infection. A program of evaluation and testing is being done on the source patient to determine your risk of acquiring these diseases. Until the testing and evaluation process is complete we are providing you with some general information about occupational exposure to blood or potentially infectious body fluids and how these diseases can be transmitted.

****You need to report your exposure to your supervisor immediately. If the supervisor is unavailable, you need to proceed to the ED and initiate the proper procedures with the ED physician.**

Modes of Transmission

Body fluids known to transmit bloodborne infections are:

Blood, semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, amniotic fluid, and body tissues.

Body fluids that **do not** transmit bloodborne infections **unless** visibly contaminated with blood are:

Feces, nasal secretions, sputum, sweat, tears, urine, and vomitus.

HIV

Blood products as above, sexual contact and IV drug use. Tattooing and body piercing may also place you at risk.

Hepatitis B

Blood products as above, sexual contact and IV drug use. Tattooing and body piercing may also put you at risk.

Hepatitis C

Blood products as above, IV drug use, and possibly sexual contact. Tattooing and body piercing may also place you at risk.

Table of Bloodborne Diseases and Risk Percentages Per Type of Exposure

Bloodborne pathogen	Percutaneous (needlestick, laceration)	Mucous membrane exposure	Non-intact skin exposure	Intact skin exposure (on skin for 20+ minutes)
HIV	0.3% Less than 1/300	0.09% less than 1/1000	Inadequate data available. Estimated to be less than mucous membrane exposure.	Inadequate data available. Estimated to be less than mucous membrane exposure.
Hepatitis B	2-40%	Not quantified	Not quantified	Not quantified
Hepatitis C	1.8%	Not quantified	Not quantified	Not quantified

Note: These statistics apply to source blood known to be infected with the respective pathogen described.

Considerations After Exposure

A very slight possibility exists that the source patient of your exposure was in the beginning stages of becoming HIV positive and had not yet developed antibodies to be detected by the HIV test, therefore you will be asked to consider having the HIV antibody test done on yourself. This testing will be done confidentially through arrangements made with the Finance Unit. The results will be kept in your employee medical record. No one will have access to those records without written permission. The testing will be done following the exposure, at 6 weeks after the exposure, at 3 months after exposure and 6 months after exposure.

To protect others from possible exposure, refrain from donating blood, plasma, body organs, and other tissue or sperm. Do not share toothbrushes, razors, needles or other implements that could be contaminated. Since HIV, Hepatitis B, and possibly Hepatitis C may be transmitted sexually as well as through infected blood you should practice abstinence or use barrier contraception (latex condoms) for sexual intercourse for six months following exposure.

Source Patient Results

The source patient may be tested for HIV, Hepatitis B and Hepatitis C. You must contact the facility where the source patient was tested to receive source patient results. Although the SUDS test for HIV takes only a few minutes and the results can be given to you by the ED doctor, the standard HIV test takes 24-48 hours to get the results from an HIV test on a source. If you have had a significant exposure, you will be offered the opportunity to begin drug treatment within 1-2 hours of the exposure as recommended by the US Public Health Service Guidelines.

Remember: Confidentiality must be maintained regarding source patient lab results.

Risk of Hepatitis B Infection After Exposure

The probability of someone becoming infected following a needle stick injury with the source person being positive for Hepatitis B is approximately 30%. Severity of Hepatitis B illness ranges from asymptomatic to severe liver failure. Hepatitis B becomes chronic active hepatitis, cirrhosis, or liver cancer in some cases. Approximately 5% of acutely infected adults will become chronic carriers. Most healthcare workers have been immunized against Hepatitis B by receiving a series of three (3) immunizations. Follow-up testing will be done to determine if you are protected from the disease by your immunizations. Immunization will protect you from getting Hepatitis B even if the source patient is positive for this disease. If you have not had the Hepatitis B immunizations you may be given Hepatitis B immune globulin to protect you from the disease.

Risk of Hepatitis C Infection After Exposure

The possibility of acquiring Hepatitis C following a needle stick injury from a positive hepatitis C source is believed to be approximately 9%. The severity of the illness varies and has a great potential for becoming chronic with 50% of those infected developing chronic Hepatitis C. This may be associated with chronic active hepatitis, cirrhosis, and liver cancer. There is no vaccine at the present time for Hepatitis C. You will be tested at baseline and at 6 months.

.Risk of HIV Infection After Exposure

The probability of being infected after a single needle stick with the source person being positive for HIV is 0.3%. Depending on the circumstances of the exposure the risk can be greater or less than this. The risk is increased if the puncture is deep and the device involved was visibly contaminated with blood or used in an artery or vein, and if the blood came from a source patient with pre-terminal AIDS (source death within 60 days of exposure), or very early HIV infection. The risk after mucous membrane or non-intact skin exposure to HIV infected blood or fluids is much less, but again the risk can be increased if the contact is prolonged or involves an area of skin that is damaged, or there is a lot of HIV virus in the fluid.

Participation in Follow-Up Testing

The choice to participate in the exposure follow-up regimen is yours. If you decline to participate you will be asked to sign a declination form. If you elect not to have the testing done on yourself the final outcome of any Worker's Compensation claim filed for this exposure may be affected. Baseline testing on you must be completed within two (2) weeks of your exposure.

CLINICIAN'S CHECKLIST

Instructions to Clinician. This form is designed to lead you through the clinician responsibilities for body fluid exposure follow-up. Please initial each section when completed. All forms needed to support this process should be available to you. Reassure employee prn.

Employee Name _____

SS# _____ Date/time of Exposure _____

1. Conduct risk assessment for HIV Post-Exposure Prophylaxis (HIV PEP)). Using the HIV Post-Exposure Prophylaxis Algorithm attached as needed, complete the table below.

A. Source material (check all that apply):

<input type="checkbox"/>	Blood	<input type="checkbox"/>	Vaginal secretions	<input type="checkbox"/>	Synovial Fluid
<input type="checkbox"/>	Bloody Fluid	<input type="checkbox"/>	Semen	<input type="checkbox"/>	Cerebrospinal Fluid
<input type="checkbox"/>	Pleural Fluid	<input type="checkbox"/>	Amniotic Fluid	<input type="checkbox"/>	Pericardial Fluid
<input type="checkbox"/>	Peritoneal Fluid	<input type="checkbox"/>	Tissue	<input type="checkbox"/>	Instrument of fluid contaminated with any of these above fluids

Note: if source material is not listed in the above table, then the exposure is not covered by this procedure for HIV assessment. Go to item 5 and continue with Tetanus risk assessment.

b. Type of Exposure and exposure code (EC) (check one):

<input type="checkbox"/>	EC 1	Mucus membrane or skin with compromised integrity (i.e. chapped, abraded, open wound), SMALL volume (few drops, short duration)
<input type="checkbox"/>	EC 2	Mucus membrane or skin with compromised integrity (i.e. chapped, abraded, open wound), LARGE volume (several drops, major blood splash, and/or longer duration (i.e. more than several minutes) OR percutaneous exposure with solid needle or superficial scratch
<input type="checkbox"/>	EC 3	Percutaneous with large bore hollow needle, deep puncture, visible blood on device, or needle used in artery or vein
<input type="checkbox"/>	Case by case: HIV PEP may not be needed	Intact skin only. HIV PEP is not usually needed, as contact with intact skin is not normally considered a risk for HIV transmission. <i>However</i> , if the exposure was to blood, and the circumstances suggest a higher volume exposure (e.g. an extensive area of skin was exposed or there was prolonged contact with blood), the risk for HIV transmission should be considered.

c. Determine HIV Status Code (HIV SC) from exposure source information (check one):		
	NO HIV PEP NEEDED	HIV negative (laboratory documentation negative HIV antibody within 2 weeks of exposure, no clinical evidence of recent retroviral like illness)
	HIV SC 1	HIV positive, low titer exposure(e.g. asymptomatic, high CD4count)
	HIV SC 2	HIV positive, higher titer exposure (e.g. advanced AIDS, primary HIV infection, high or increasing viral load or low CD4 count)
	HIV SC Unknown	Status of source unknown or source is unknown

d. Determine HIV PEP recommendation using information from 1b and 1c above (see algorithm for further details) (**check one**):

EC:	HIV SC:	HIV PEP Recommendation:
1	1	PEP may not be warranted
1	2	Consider Basic Regimen
2	1	Recommend Basic Regimen
2	2	Recommend Expanded Regimen
3	1 or 2	Recommend Expanded Regimen
2 or 3	unknown	If source or setting where exposure occurred suggests a possible risk for HIV exposure, consider Basic Regimen

If there is question or concern as to whether any PEP is appropriate in a given case, the clinician may consult the PEP hotline for confirmation of decision. The PEP hotline is available 24 hours a day, 7 days a week, toll free: 1-888-448-4911

2. Review findings of exposure assessment and Post-Exposure Counseling information Sheet with employee. Review medication sheet with employee. Both employee and clinician sign form

3. HIV Post-Exposure Prophylaxis Procedures. HIV PEP to be administered in accordance with recommendations of CDC.

a. If, after counseling, employee has further questions about HIV post-exposure prophylaxis, refer employee to pharmacy, or if pharmacy staff is unavailable, to the ED physician for further information.

b. Document consent or declination for HIV post-exposure prophylaxis on HIV PEP Consent/Delination/Medication Administration Record. Employee must either consent or decline.

c. If employee consents to HIV PEP:

1) Document history of renal or hepatic disease on progress note.
2) Document current medications on progress note.
3) Document pregnancy status on progress note. If unknown, testing will be done before initial dose is administered.
4) Complete Lab Order slip and send employee to lab to insure appropriate labs are drawn before initial dose is administered.
5) Physician will review employee history, lab results and pertinent exposure information and prescribe accordingly. Copy of prescription to be given to employee.
6) If possible, observe administration of initial dose as prescribed after lab testing has been done and reviewed. Note administration of initial dose on progress note. Enough medication will initially be provided for the patient to allow them time to access their PCP for follow-up (usually 2-3 days, dependent upon weekend and holidays).
4. Tetanus Risk Assessment and Post Exposure Prophylaxis Procedures. Obtain Tetanus booster history and initial/check as appropriate.
a. More than 10 years since last booster - obtain and complete consent/declination form, Administer vaccine, document in chart and note for WEST employee medical records
b. Less than 10 years since last booster - enter date here:
c. Booster due but contraindicated or employee declined; action noted on progress chart and note for WEST employee medical records
5. Hepatitis B Risk Assessment and Post-Exposure Prophylaxis Procedure. Obtain employee Hepatitis B vaccination and titer status if possible. Check the appropriate option below.
a. Employee with complete vaccination series and documented positive titer greater than 10 within 2 years of exposure: No treatment necessary.
b. Employee has had complete series with past positive titer, over two years ago: No treatment necessary, until employee lab results obtained. If employee HbsAB titer is ≤ 10 , obtain and complete consent form and administer booster dose of Hepatitis B vaccine within 7 days of exposure.
c. Employee with complete series, but never had positive HbsAb titer ≥ 10 :
1) If source is HbsAG positive, status is unknown and/or high risk, obtain consent for Hepatitis B Immune Globulin, administer 0.06 ml/kg, IM. Write script for second dose in 30 days.
2) If source is HbsAG negative, no action is needed.
d. Employee Hepatitis B vaccination series is in progress or employee has not been previously vaccinated:
1) Explain series to employee, obtain consent, administer Hepatitis B vaccine per package insert. Provide prescription for completion of vaccination series at one and six

- months.
- 2) If source is HbsAg positive or status is unknown and setting is high risk, obtain consent for Hepatitis B Immune Globulin, administer 0.06 ml/kg, IM.
- 3) If Hepatitis B post-exposure prophylaxis was appropriate, but contraindicated or employee declined, notify employee's PCP and note action on progress note.

6. Laboratory Testing

a. Provide employee with HIV Informed Consent Form (lab), orally summarize information on the form, answer questions and obtain a signature as appropriate. Check box to indicate action taken, appropriate to consent testing:

- 1) If employee signs written consent to testing:
- a) Complete Oregon Health Division HIV Test Form, sign. Enter last 6 digits of employee SSN and date of birth - do not enter employee name.
- b) Panel includes: HIV Antibody, ALT, and Chronic Hepatitis B & C Panel (Hepatitis B Surface Antibody, Hepatitis C Core Antibody, Hepatitis B Surface Antigen, Hepatitis C Antibody). (If employee has positive Hepatitis B titer within last 24 months, Hepatitis B testing may be deferred.)
- 2) If employee declines testing but would like blood held 90 days, make a note on lab slip that blood is to be drawn and held for 90 days.
- 3) If employee declines testing altogether, advise that Worker's Compensation status may be affected without baseline testing.

b. If employee consents to HIV Post Exposure Prophylaxis the following actions are required:

- 1) Tests include Comprehensive Metabolic Panel, CBC, and pregnancy test if pregnancy status is unknown. **This is a STAT test and results must be available before HIV PEP initial dose is administered!**
- 2) Advise employee that follow-up testing will be required and a notice will be sent.
- 3) Place this completed document in a sealed envelope and return to WEST Ambulance.

Comments _____

Clinician Signature and Title

Date

Employee Signature

Date

HIV Test - Patient Information

Background

Acquired Immunodeficiency Syndrome (AIDS) is a life-threatening disorder of the immune system. A virus called HIV causes it. The virus is spread by sexual contact with an infected person, by exposure to infected blood (as in needle sharing during intravenous (IV) drug use, or, rarely, as a result of blood transfusion), or from an infected mother to her newborn infant. Persons at high risk of AIDS include males who have had sexual contact with another male, intravenous drug users, hemophiliacs, and sexual contacts of any of these persons. AIDS does not typically develop until a person has been infected with HIV for several years. A person may remain free of symptoms for years after becoming infected. Infected persons have a 25 to 50% chance of developing AIDS over the 10 years after infection occurs.

Persons who have a history of high-risk behaviors should change those behaviors to prevent getting or giving AIDS, regardless of whether they are tested. Specific important behavior changes include safer sex practices (including abstinence, monogamy, or condom use for sexual contact with someone other than a long-term, strictly monogamous partner) and not sharing needles.

The HIV Test

Before consenting to an HIV Test, please read the following important information:

1. Purpose: This test is being done to determine whether you may have been infected with HIV. This test is not a test for AIDS; AIDS can only be diagnosed by medical evaluation.
2. Positive Test Results: If you test positive, you should seek medical follow-up with your personal health care provider. If your test is positive, you may be infected with HIV.
3. Accuracy: The test result is not 100% accurate. Possible errors include:
 - a. False positives: The test gives a positive result, even though you are not infected. This happens only rarely and is more common in persons who have not engaged in high-risk behaviors. Retesting should be done to help confirm the validity of a positive test.
 - b. False negatives: The test gives a negative result, even though you are infected with HIV. This is most likely to happen in recently infected persons; it takes at least 4 to 12 weeks for a positive test result to develop after a person is infected.

Some Concerns You Should Consider About the HIV Antibody Test:

If you have a positive test result, you may experience considerable anxiety from not knowing what it means for your health status.

If you have a negative test, it may falsely reassure you that you have not been exposed to HIV.

If you have a “reactive” test result as described above:

- 1) It probably means you have been infected with HIV.
- 2) It probably means you are still carrying the virus.
- 3) It probably means that you can infect others with the virus through sexual contact, sharing needles, or donating blood, plasma, sperm, or tissues or organs.
- 4) It does NOT determine whether you will develop AIDS.

If you have an equivocal test as described above, you should be retested a month or more later. The only direct physical effect expected from having the test is the mild discomfort of having the blood drawn.

Alternatives to the HIV Test

You should carefully evaluate why you are having the HIV test, and you should ask the person offering the test to you what alternatives to being tested exist.

Risks from Having the HIV Test

A positive test result may cause you significant anxiety. A positive test may result in uninsurability for life, health, or disability insurance policies for which you may apply in the future. Although prohibited by law, discrimination in housing, employment, or public accommodations may result from disclosure of a positive test result.

The fact that you have had an HIV test and the test results themselves are confidential, except where you have authorized the disclosure or where the disclosure is otherwise permitted by Oregon law. You should make certain, by questioning the person offering to test you, whether you are being asked to give authorization for others to have this information and, if so, who those others may be.

You Have the Right to Ask Questions and Obtain Further Information

If you have any questions relating to AIDS, the HIV test and the consequences of being tested or not being tested, you are entitled to answers to those questions by the person offering the test or by another knowledgeable person before you agree to testing.

Other Sources of Information

For more information about AIDS and the HIV test, you may call your local health department. You may also call the AIDS Hotline at 1-800-777-AIDS.

***REGION SIX INCIDENT MEDICAL SPECIALIST
INFECTION CONTROL PLAN***

Date of Preparation: 4/05/01

Prepared By _____ Date 4/05/01
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