



BLOODBORNE PATHOGEN, OPIM AND RAW SEWAGE EXPOSURE CONTROL PLAN

Policy

MBARI provides a safe and healthful workplace for employees. MBARI's policy is to establish, implement, and maintain an effective exposure control plan as required by the bloodborne pathogens regulation in California Code of Regulations, Title 8 Section 5193. This written plan is designed to prevent or minimize employees' occupational exposure to blood, Other Potentially Infectious Materials (OPIM) and raw sewage.

Definitions

- **HAV (Hepatitis A Virus)** is a virus that causes inflammation and infection of the liver. Hepatitis A is usually spread when a person ingests the virus from contact with objects, food, or drinks contaminated by feces or stool from an infected person. The virus can also be spread through sexual contact with someone infected with the virus. Hepatitis A can range in severity from a mild illness lasting a few weeks to a severe illness lasting several months. People with Hepatitis A usually improve without treatment and do not have any lasting liver damage. Hepatitis A can rarely cause liver failure and death; this occurs more commonly in persons 50 years of age or older and persons with other liver diseases. If vaccinated or you recover from contracting Hepatitis A, you develop antibodies that protect you from the virus for life.
- **HBV (Hepatitis B Virus)** is a virus that causes inflammation and infection of the liver. HBV is transmitted when blood, semen, or another body fluid from a person infected with HBV enters the body of someone who is not infected. This can happen through sexual contact; sharing needles; needlestick injuries; sharing personal care items (ie: razor or toothbrush); or from mother to baby at birth. For some people, HBV is an acute, or short-term, illness but for others, it can become a long-term, chronic infection. Risk for chronic infection is related to age at infection: approximately 90% of infected infants become chronically infected, compared with 2%–6% of adults. Chronic HBV can lead to serious health issues, like cirrhosis or liver cancer. The best way to prevent HBV is by getting vaccinated.
- **HCV (Hepatitis C Virus)** is a virus that causes inflammation and infection of the liver. HCV is a blood-borne virus. HCV is transmitted when blood or another body fluid from a person infected with HCV enters the body of someone who is not infected. This can happen through sharing needles; needlestick injuries; sharing personal care items (ie: razor or toothbrush); or from mother to baby at birth; and less commonly, by sexual contact. For some people, HCV is a short-term illness but for 70%–85% of people who



become infected with HCV, it becomes a long-term, chronic infection. Chronic HCV is a serious disease that can even result in death. The majority of infected persons might not be aware of their infection because they are not clinically ill. Diagnosis is made by blood test. Treatment is via antiviral drugs and is effective in over 90% of patients. There is no vaccine for HCV. The best way to prevent HCV is by avoiding behaviors that can spread the disease.

- **HIV (Human Immunodeficiency Virus)** is the virus that can lead to acquired immunodeficiency syndrome or AIDS if not treated. HIV is transmitted when blood, semen, or another body fluid from a person infected with the virus enters the body of someone who is not infected. This can happen through sexual contact; sharing needles; needlestick injuries; from mother to baby at birth; and less likely, sharing personal care items (ie: razor or toothbrush). The human body can't get rid of HIV completely even with treatment. HIV attacks the body's immune system. Untreated, HIV reduces the number of T cells in the body, making the person more likely to get other infections or infection-related cancers. No effective cure currently exists, but with proper medical care, HIV can be controlled and can dramatically prolong the lives of many people infected with HIV.
- **OPIM (Other Potentially Infectious Materials)** includes various contaminated human body fluids, unfixed human tissues or organs, and other materials known or reasonably likely to be infected with HIV, HBV, or HCV.
- **Parenteral contact** means piercing mucous membranes or the skin barrier through such events as needlesticks, cuts, and abrasions.
- **PPE (Personal Protective Equipment)** is specialized clothing or equipment worn or used by an employee for protection against a hazard.
- **Regulated Waste** is waste contaminated with blood or OPIM (dry or liquid). This waste may be in the form of contaminated clothing, contaminated sharps, contaminated spill supplies, etc.
- **Raw Sewage** is water that has been used for washing or flushing waste matter such as human urine and feces. HAV, HBV, HCV, and HIV may be present in raw sewage in very dilute concentrations.

Exposure Determinations



MBARI employees at times may have occupational exposure to bloodborne pathogens or raw sewage.

Occupational exposure to bloodborne pathogens means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or OPIM that may result from employees trained to provide first aid as a collateral duty to their routine work assignments.

This plan does not consider raw sewage as OPIM, but does realize the possibility that raw sewage may contain contaminated material, and the resultant practicality of limiting exposure to untreated sewage products. Therefore, MBARI is covering employees who may have occupation exposure to raw sewage under this policy.

- **MBARI's Safety Office**

MBARI's Safety Office members will evaluate exposure determinations throughout the institute as necessary, but no less than annually. This process involves identifying job classifications, tasks, procedures in which our employees may have occupational exposure to blood, OPIM or raw sewage.

- **MBARI's Ship Crew and Officers**

MBARI ship crew and officers are trained to respond to incidents or emergencies while at sea, provide first aid, administer medication or fluids, handle regulated waste, decontamination and clean-up of blood or OPIM spills on surfaces or equipment, and/or work on the ship's waste handling systems. All MBARI ship crew and officers are covered by this policy.

When in port, any personnel requiring medical care will seek such medical care from a qualified medical provider. Medical care beyond first aid will not be provided by ship personnel while the ship is in port.

When in port, decontamination of surfaces or equipment will be contracted to an outside company as the ship officers see fit.

- **MBARI's Emergency Response Team**

MBARI's Emergency Response Team members are trained to respond to incidents and emergencies throughout the institute and provide first aid as a collateral duty to their routine work assignments. All handling of regulated waste, decontamination and clean-up of blood or OPIM spills on surfaces or equipment shall be contracted to an outside company. All members of MBARI's Emergency Response Team are covered by this policy.



- **MBARI's Facilities Department**

Select members of MBARI's Facilities Department may respond to and work on the institutes waste handling systems. All handling of regulated waste, decontamination and clean-up of blood or OPIM spills on surfaces or equipment shall be contracted to an outside company. Select members of MBARI's Facilities Department are covered by this policy.

Schedules and Methods of Implementation

It is MBARI's policy to actively involve employees in all aspects of the methods of compliance used to eliminate or reduce bloodborne pathogens exposure in our workplace. MBARI welcomes employee suggestions whenever possible. To ensure the effectiveness of the methods of compliance MBARI's Safety Office will evaluate engineering and work practice controls using information from the Sharps Injury Log, employee interviews, ship crew and officer interviews, MBARI's Emergency Response Team interviews and discussions with MBARI's Safety Committee.

Methods of Compliance

MBARI has developed a schedule and methods of implementation for the applicable sub-sections d through h of the California Code of Regulations, Title 8 Section 5193. We have determined which subsections are applicable to our organization and documented the pertinent information as follows.

1. Universal Precautions

MBARI's methods of compliance include the observance of universal precautions as an approach to infection control. All human blood and some human bodily fluids are treated as if they were known to be infectious with HAV, HBV, HCV, HIV and other bloodborne pathogens. All employees must observe universal precautions to prevent contact with blood, OPIM or raw sewage. When a bodily fluid is difficult or impossible to identify, the bodily fluid will be considered OPIM.

2. Engineering Controls

New engineering control technologies that may provide superior alternatives to those currently used may be developed. MBARI uses a licensed contracted company to select and provide medical supplies and professional medical guidance to the ships.

A. Needleless systems

Needleless systems shall be used for:

- Administration of medications or fluids; and



- Any other procedure involving the potential for an exposure incident for which a needleless system is available as an alternative to the use of needle devices.

B. Needle Devices

If needleless systems are not used, needles with engineered sharps injury protection shall be used for:

- Accessing a vein or artery;
- Administration of medications or fluids; and
- Any other procedure involving the potential for an exposure incident for which a needle device with engineered sharps injury protection is available.

C. Non-Needle Sharps

If sharps other than needle devices are used, these items shall include engineered sharps injury protection.

D. Exceptions

The following exceptions apply to the engineering controls required above.

- **Market Availability.** The engineering control is not required if it is not available in the marketplace.
- **Patient Safety.** The engineering control is not required if a licensed healthcare professional directly involved in a patient's care determines, in the reasonable exercise of clinical judgement, that use of the engineering control will jeopardize the patient's safety or the success of a medical procedure involving the patient. The determination shall be documented.
- **Safety Performance.** The engineering control is not required if MBARI can demonstrate by means of objective product evaluation criteria that the engineering control is not more effective in preventing exposure incidents than the alternative used by the employer.
- **Availability of Safety Performance Information.** The engineering control is not required if MBARI can demonstrate that reasonably specific and reliable information is not available on the safety performance of the engineering control for specific procedures, and that MBARI is actively determining by means of objective product



evaluation criteria whether use of the engineering control will reduce the risk of exposure incidents occurring at MBARI.

3. Work Practice Controls

MBARI has established the below work practice controls. Some work practice controls are associated with new or currently used engineering controls, and some are independent of the use of engineering controls.

A. Personal Protective Equipment (PPE)

- Appropriate PPE is provided at no cost to our employees when potential exposures to blood, OPIM or raw sewage remain after engineering and work practice controls have been established.
- PPE, in appropriate sizes, is readily accessible at the worksite or is issued to employees.
- PPE is considered appropriate only if it does not permit blood, OPIM, or raw sewage to pass through to or reach the employee's work or street clothes, undergarments, skin, eyes, mouth, or other mucous membranes. PPE provided to employees effectively performs this function under normal conditions of use and for the duration of time it is used.
- PPE must be selected depending on the task to be performed and the severity of anticipated exposure.
- Appropriate PPE may include (but is not limited to):
 - o Safety glasses or goggles
 - o Face Shields
 - o Masks
 - o CPR mouthpieces
 - o Water tight disposable gloves or rubber gloves
 - o Lab Coats
 - o Coveralls
 - o Tyvek suits and boot covers
- MBARI ensures that employees use appropriate PPE unless the employee declines its use temporarily. If employees decline the use of PPE, MBARI investigates and documents the incident to determine whether changes can be made to prevent such occurrences in the future. Employees are encouraged to report all such instances without fear of reprisal.



Gloves

- MBARI employees are required to wear appropriate gloves whenever:
 - o It can be reasonably anticipated that their hands may contact blood, OPIM, mucous membrane, or non-intact skin;
 - o Vascular access procedures are performed;
 - o It can be reasonably anticipated that their hands may contact raw sewage.
- Disposable or single-use gloves are not washed or decontaminated for reuse. These gloves are properly disposed of and replaced:
 - o As soon as practical when contaminated; or
 - o As soon as feasible if torn, punctured, or whenever their ability to function as a barrier is compromised.
- Utility gloves are discarded if:
 - o They are cracked, peeling, torn, punctured, or exhibit other signs of deterioration; or
 - o Their ability to function as a barrier is compromised.
- Utility gloves may be decontaminated for reuse if their integrity is not compromised.

Masks, Eye Protection and Face Shields

- MBARI employees are required to use masks in combination with eye protection whenever:
 - o Splashes, spray, spatter, or droplets of blood, OPIM, or raw sewage may be generated; and
 - o Eye, nose, or mouth contamination may reasonably be anticipated.
- MBARI recommends employees use goggles designed to protect the eyes from splashes of liquids, when appropriate. Goggles generally



provide more protection to the eyes than safety glasses or face shields.

Coveralls and Waterproof Protective Gear

- Appropriate protective gear and clothing shall be dependent on the task to be performed and degree of exposure anticipated. Protective gear and clothing includes (but is not limited to) coveralls, Tyvek suits and boot covers.
- Employees shall not wear potentially contaminated protective clothing home.
- Contaminated protective clothing shall be removed as soon as feasible after contamination occurs, placed in a labeled biohazard bag for disposal or decontaminated as appropriate.

B. Hygiene

- Employees' exposure to blood, OPIM, or raw sewage is minimized by ensuring that:
 - o Handwashing facilities are readily accessible to employees;
 - o Appropriate antiseptic towelettes or antiseptic hand cleanser along with clean cloths or paper towels are available (when hand washing facilities are not accessible).
 - o Employees wash their hands and any other potentially contaminated skin (as soon as feasible) with soap and running water after: using antiseptic towelettes or hand cleansers for blood, OPIM or raw sewage contamination; removing personal protective equipment; contacting blood, OPIM, or raw sewage.
 - o Employees flush potentially contaminated mucous membranes with running water (as soon as feasible) after those body areas have been in contact with blood, OPIM, or raw sewage.
 - o All PPE is removed prior to leaving the work area. Any garment that has been penetrated by blood, OPIM, or raw sewage is removed immediately or as soon as feasible. PPE that has been removed is placed in a labeled biohazard bag



for disposal or decontaminated as appropriate.

C. Contaminated Clothing and PPE

- Clothing and PPE that has been contaminated with blood, OPIM or raw sewage shall be handled as little as possible.
- Employees who come into contact with or handle clothing or PPE contaminated with blood, OPIM or raw sewage are required to wear protective gloves and other PPE as appropriate.
- Clothing and PPE that has been contaminated with blood or OPIM shall be placed in a color-coded and labeled BIOHAZARD bag or container with the international biohazard symbol for proper disposal.
- Clothing and PPE that has been contaminated with raw sewage shall be placed in a bag for disposal as trash.
- PPE such as rubber utility gloves and safety glasses or goggles can be decontaminated if their integrity is not compromised.

D. Handling Contaminated Sharps

- MBARI employees are required to use universal precautions when handling all contaminated sharps.
- Contaminated sharps are placed immediately (or as soon as practical) in containers that are:
 - o Rigid;
 - o Puncture resistant;
 - o Leak-proof on the sides and bottom;
 - o Labeled as BIOHAZARD or BIOHAZARDOUS WASTE with the international Biohazard symbol;
 - o Closeable and sealable (if handling discarded sharps that are not to be reused). When sealed, the container is leak-resistant and cannot be reopened without great difficulty;
 - o Kept in an upright position throughout use;



- o Replaced as needed to prevent overfilling.
- Containers for contaminated sharps, moved from the area of use for disposal, are:
 - o Closed immediately prior to removal to prevent spillage or protrusion of contents during transport;
 - o Placed in a secondary container if leakage is possible.

E. Handling Regulated Waste

- Containers of biohazardous waste for disposal of regulated wastes (non-sharps) and secondary containers (for contaminated sharps and other regulated wastes) are:
 - o Closeable and constructed to contain all contents and prevent leakage and protrusion. If outside contamination of a container of regulated waste occurs, that container is placed in a secondary container;
 - o Containers for disposal of regulated wastes are labeled as BIOHAZARD or BIOHAZARDOUS WASTE with the international biohazard symbol and color coding.

E. Cleaning and Decontaminating Equipment and Surfaces

- When possible, cleaning and decontamination of equipment and surfaces will be contracted to an outside company. This may not be possible within a reasonable timeframe for ship schedules or if contamination occurs while a ship is out at sea.
- All equipment and work surfaces shall be cleaned and decontaminated as soon as possible after contact with blood, OPIM, raw sewage. To perform the cleaning and decontamination, appropriate disinfectants are used including:
 - o Dilute bleach solutions;
 - o U.S. EPA registered products effective against HIV and HBV.
- Employees are required to use all disinfectant products according to manufacturer's instructions, including applying appropriate concentrations and volumes to a given surface area and providing adequate contact time.



F. Prohibited Practices

- Shearing or breaking of contaminated needles and other contaminated sharps is prohibited.
- Contaminated sharps shall not be bent, recapped, or removed from devices.
- Sharps that are contaminated with blood or OPIM 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.
- Disposable sharps shall not be reused.
- Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.
- The contents of sharps containers shall not be accessed.
- Sharps containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of sharps injury.
- Mouth pipetting/suctioning of blood or OPIM is prohibited.
- Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.
- Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or OPIM are present or have previously been stored.

Communication of Hazards to Employees

1. Warning Labels

Warning labels are affixed to containers of regulated waste containing blood, OPIM or sharps. The warning labels are either an integral part of the containers or are affixed as close as is feasible to the containers by string, wire, or adhesive to prevent their loss or unintentional removal. The warning labels:



- a. are predominantly fluorescent orange or orange-red;
- b. have lettering and symbols in contrasting colors; and
- c. have the following words:
 - BIOHAZARDOUS WASTE (with the international biohazard symbol);
or
 - or in the case of sharps, SHARPS WASTE

2. Information and Training

MBARI employees with occupational exposure participate in a training program that is provided at no cost during working hours.

Trainers are knowledgeable in the subject matter covered by the training program as it relates to MBARI. Employees have an opportunity for interactive questions and answers with the person(s) conducting the training. If video or computerized training is used, it is MBARI's policy to arrange for a person knowledgeable about the training material to be available to answer questions.

Our training program includes information and explanations of at least the following:

- Epidemiology, symptoms, and modes of transmission of bloodborne diseases;
- The *Bloodborne Pathogen and Other Potentially Infectious Material Exposure Control Plan* we have implemented and how to obtain a copy of the written plan;
- Appropriate methods for recognizing tasks and activities that may involve exposure to blood, OPIM or raw sewage;
- Use and limitations of methods that will prevent or reduce exposures, including appropriate engineering, administrative or work practice controls, and personal protective equipment (PPE);
- The basis for selection of PPE;
- Types, proper use, location, removal, handling, decontamination, and disposal of PPE;



- Hepatitis A and B vaccination series, including efficacy, safety, method of administration, benefits, and the fact that the vaccinations will be offered free of charge to employees who have been deemed through their positions to be at high risk to come into contact with blood, OPIM or raw sewage while at work;
- Appropriate actions to take and persons to contact in an emergency involving blood, OPIM or raw sewage;
- Procedure to follow if an exposure incident occurs, including the:
 - o Method of reporting the incident;
 - o Medical follow-up that will be made available; and
 - o Procedure for recording the incident in the sharps injury log
- Post-exposure evaluation and follow-up that will be made available to employees; and
- Signs, labels, and/or color coding that is used.

In addition to the above mentioned information, we provide to all employees a copy of 8 CCR 5193, "Bloodborne Pathogens," and an explanation of its content.

Training is provided at the time of employees' initial assignment to tasks in which occupational exposure may occur and at least annually thereafter. Additional training, limited to addressing the new exposures created, is provided to the employee whose occupational exposure is affected by:

- Introduction of new engineering, administrative, or work practice controls;
- Changes or modifications in existing tasks or procedures; or
- Institution of new tasks or procedures.

Hepatitis A and B Vaccination and Post-Exposure Evaluation and Follow-Up

A. Hepatitis B Vaccination Series

The hepatitis B vaccine and vaccination series are made available to all employees who have occupational exposure to bloodborne pathogens and raw sewage:



- R/V *Western Flyer* officers and crew
- R/V *Rachel Carson* officers and crew
- R/V *Paragon* officers and crew
- MBARI Emergency Response Team members

MBARI strongly encourages these employees to be vaccinated.

The hepatitis B vaccination is made available to employees after they receive information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge. This information and the vaccination will be made available to employees who have occupational exposure within ten working days of their initial work assignment.

Employee participation in a prescreening program is not a prerequisite for receiving the hepatitis B vaccination series. The series is made available unless:

- It is proven the employee previously received the complete hepatitis B vaccination series; or
- Anti-body testing has revealed the employee is immune;
- The vaccination series is contraindicated for medical reasons.

MBARI does not make accepting the hepatitis B vaccination series a condition of employment. If an employee with occupational exposure initially declines the hepatitis B vaccination series and at a later time decides to accept it, we will make it available. Each employee who declines the hepatitis B vaccination series is required to sign the *Employee Declination of Hepatitis B Vaccination* waiver (available at the end of this policy).

B. Hepatitis A Vaccination Series

The hepatitis A vaccine and vaccination series are made available to all employees who have occupational exposure to raw sewage:

- R/V *Western Flyer* officers and crew
- R/V *Rachel Carson* officers and crew
- Select MBARI Facility Department staff (see Safety Office)

MBARI strongly encourages these employees to be vaccinated.

The hepatitis A vaccination is made available to employees after they receive information on the hepatitis A vaccine, including information on its efficacy, safety, method of administration, benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge. This information and the vaccination will be made available to employees who have occupational



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C. Provisions for the Initial Reporting of Exposure Incidents

An exposure incident means specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood, OPIM or raw sewage that is a result from the performance of an employee's duties. Should an employee have an exposure incident, they should seek medical care as soon as possible and no later than 24 hours after the exposure incident.

MBARI employees shall report all exposure incidents to their supervisor, the Safety Officer or Safety Office Administrative Assistant as soon as possible.

An *Exposure Incident Report* shall be recorded for all blood, OPIM or raw sewage exposure incidents. *Cal-OSHA 300 and 301 Forms* and applicable worker's compensation or Jones Act Forms shall be recorded when medical care beyond the rendering of first aid is provided. If the exposure incident involves a sharp, the *Sharps Injury Log* will also be completed.

D. Post Exposure Evaluation and Follow-Up

Occupational exposure to blood, OPIM or raw sewage requires timely and appropriate post-exposure intervention. MBARI will make immediately available to the exposed employee a confidential medical evaluation and follow-up, including at least the following elements:



- MBARI will document the route(s) of exposure, and the circumstances under which the exposure incident occurred;
- MBARI will identify and document the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law;
 - o The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HAV, HBV, HCV and HIV infectivity. If consent is not obtained, the employer shall establish that legally required consent cannot be obtained.
 - o When the source individual is already known to be infected with HAV, HBV, HCV or HIV, testing for the source individual's known HAV, HBV, HCV or HIV status need not be repeated.
 - o 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.
- MBARI will provide for collection and testing of the employee's blood for HAV, HBV, HCV and HIV serological status, and treatment as necessary at no cost to the employee by a licensed healthcare professional;
 - o The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained.
 - o If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.
 - o Additional collection and testing shall be made available as recommended by the licensed healthcare professional.
 - o MBARI will provide for post-exposure prophylaxis, when medically indicated, as recommended by the licensed healthcare professional;



- o MBARI will provide for counseling and evaluation by a licensed healthcare professional for reported illnesses.

E. Information Provided to the Licensed Healthcare Professional

The licensed health care professional responsible for the employee's post exposure evaluation and treatment is provided the following information:

- A copy of California Code of Regulations, Title 8 Section 5193 *Bloodborne Pathogens*
- A description of the exposed employee's duties as they relate to the exposure incident
- Documentation of the route(s) of exposure and circumstances under which the exposure occurred
- Results of the source individual's blood testing, if available
- Applicable medical records relevant to the appropriate treatment of the exposed employee, including:
 - o Hepatitis A and/or hepatitis B series vaccination status and all vaccination dates
 - o Medical records regarding the employee's ability to receive hepatitis A and/or hepatitis B vaccination (e.g., information on whether the complete series of vaccination(s) was already administered or if the vaccinations were contraindicated for medical reasons).

F. Licensed Healthcare Professional's Written Opinion

MBARI obtains a copy of the evaluating health care professional's written opinion within 15 days of the completion of the medical evaluation. A copy of this written opinion is provided to the employee involved in the exposure incident. The licensed health care professional's written opinion is limited to the following information:

- That the employee has been informed of the results of the evaluation; and
- That the employee has been told about any medical conditions resulting from exposure to blood, OPIM or raw sewage which require further evaluation or treatment.



All other findings or diagnoses remain confidential and are not included in the written opinion.

Recordkeeping

MBARI maintains an accurate record of each employee with occupational exposure, including relevant medical records, training records, Sharps Injury Logs, Confidential Medical Evaluations and Follow-up reports and applicable workers compensation and Jones Act forms as appropriate.

1. Medical Records

Employee medical records are kept confidential and are not disclosed or reported to any person within or outside our workplace unless the subject employee has given his or her express written consent (except as required by 8 CCR 5193, "Bloodborne Pathogens," or other applicable laws).

Medical records include the employee's name, Social Security number, and a copy of:

- The employee's hepatitis A and/or hepatitis B vaccination status including the dates of all vaccinations and any medical records relative to the employee's ability to receive vaccination;
- All results of examinations, medical testing, and follow-up procedures;
- The healthcare professional's written opinion; and
- The information provided to the healthcare professional.

MBARI will ensure that employee medical records are:

- Kept confidential; and
- Not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by this section or as may be required by law.

Relevant medical records are maintained for at least the duration of the individual's employment plus 30 years.

2. Training Records



Training records include the employee's name, job title and:

- Dates of the training sessions;
- Contents or a summary of the training sessions; and
- Names and qualifications of persons conducting the training.

Training records are maintained for a minimum of three years from the date on which the training occurred.

3. Sharps Injury Log Records

The Sharps Injury Log contains the information specified in the Sharps Injury Log (at the end of this policy). The log is maintained for a minimum of five years from the date that the exposure incident occurred.

4. Availability of Records

All relevant exposure and medical records are kept on-site, made available to subject employees, and transferred in accord with 8 CCR 3204, *Access to Employee Exposure and Medical Records*.

The records noted below are provided upon request to the following individuals and agencies for examination and copying.

Type of Record	Provided To
Medical	Subject employee and person(s) having the written consent of the subject employee
Training	MBARI employees and their representative(s)
Sharps Injury Log	Department of Health and Human Services, MBARI employees and their representative(s)
All Records	Chief of Cal/OSHA and NIOSH

5. Transfer of Records

If MBARI ceases to do business and there is no successor employer to receive and retain records for the prescribed periods, we will:



- A. Notify NIOSH at least three months prior to their disposal; and
- B. Transmit the records to NIOSH, if required by NIOSH to do so, within the three-month period.



Employee Declination of Hepatitis B Vaccination

I understand that due to my occupational exposure to blood, other potentially infectious material (OPIM) or raw sewage, 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. However, I decline the 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 I continue to have occupational exposure to blood, OPIM or raw sewage and wish to be vaccinated with the hepatitis B vaccine in the future, I can receive the vaccination series at no charge.

Employee signature: _____ Date: _____



Employee Declination of Hepatitis A Vaccination

I understand that due to my occupational exposure to raw sewage, I may be at risk of acquiring hepatitis A virus (HAV) infection. I have been given the opportunity to be vaccinated with hepatitis A vaccine at no charge. However, I decline the hepatitis A vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis A. If I continue to have occupational exposure to raw sewage and wish to be vaccinated with the hepatitis A vaccine in the future, I can receive the vaccination series at no charge.

Employee signature: _____ Date: _____



Sharps Injury Log

The following information, if known or reasonably available, is documented within 14 working days of the date on which each exposure incident was reported.

1. Date and time of the exposure incident: _____
2. Date of exposure incident report: _____ Report written by: _____
3. Type and brand of sharp involved: _____
4. Description of exposure incident:
 - Job classification of exposed employee: _____
 - Department or work area where the incident occurred: _____
 - Procedure being performed by the exposed employee at the time of the incident: _____
 - How the incident occurred: _____
 - Body part(s) involved: _____
 - Did the device involved have engineered sharps injury protection?
Yes (✓) _____ No (✓) _____
 - Was engineered sharps injury protection on the sharp involved?
Yes (✓) _____ No (✓) _____

If Yes	If No
A. Was the protective mechanism activated at the time of the exposure incident? Yes (✓) _____ No (✓) _____ B. Did the injury occur before, during, or after the mechanism was activated? _____ _____ Comments: _____ _____ _____	A. Does the injured employee believe that a protective mechanism could have prevented the injury? Yes (✓) _____ No (✓) _____

- Does the exposed employee believe that any controls (e.g., engineering, administrative, or work practice) could have prevented the injury?
Yes (✓) _____ No (✓) _____



Employee's opinion:

5. Comments on the exposure incident (e.g., additional relevant factors involved):

6. Employee interview summary:

7. Picture(s) of the sharp(s) involved (please attach if available)



Bloodborne Pathogen, OPIM or Raw Sewage Incident
Confidential Medical Evaluations and Follow-up

1. Date of report: _____
2. Date of incident: _____ 3. Time of incident: _____
4. Location of incident: _____

5. Description of the exposure incident

Circumstances of the incident (ie: how the incident occurred, body part[s] affected, procedure[s] being performed, sharps or other devices used, safety features on sharps or devices, PPE worn):

6. Details of exposure

Route(s) of exposure (✓):

Eye _____ Mouth _____

Intact skin _____ Non-intact skin _____

Parenteral contact _____ Other mucous membrane _____

Combination of above _____ (please specify)

Type and amount of fluid, blood, or OPIM involved _____

For percutaneous exposures (✓):

Was fluid injected? yes _____ no _____

Depth of injury (in millimeters) _____

For skin or mucous membrane exposure (✓):

Estimated volume of material (in milliliters) _____

Duration of contact _____

Condition of skin (chapped, abraded, or intact) _____



Exposure from (✓):

Splash/splatter/spray/touching/etc. _____

Contaminated sharp/item/device _____

Other _____

Other relevant information:

7. Description of sharps or other devices involved (including type, brand, and safety feature[s]):

Safety feature(s) on sharps/devices (✓):

Activated _____ Deactivated _____

Ineffective _____ Defective _____

Comments on safety feature:

8. Identification and documentation of the source individual

Our organization identifies and documents the source individual unless it is not feasible or is prohibited by state or local law.

Source Individual Not Identified

Why source individual was not identified:

If pre-exposure samples of blood or OPIM are available from an unidentified source individual, MBARI will have those samples available for testing of HAV, HBV, HCV, and HIV infectivity.

Sample Type

Test Date

Test Results



Source Individual Identified

The source individual is the person who is the source of the blood or OPIM involved in an exposure incident. Procedures for source individuals who consent to testing and those who do not give consent are described below.

Consent Obtained from the Source Individual

Testing of the source individual's blood for HAV, HBV, HCV, and HIV infectivity is performed as soon as feasible and after his or her consent is obtained. For HIV infectivity testing, MBARI obtains consent from the source individual (or his or her authorized legal representative) in the form of a "Voluntary Informed Written Consent." If the source individual is known to be already infected with HAV, HBV, HCV, or HIV, testing to determine his or her infectivity status is not repeated.

Results of the source individual's testing are made available to the exposed employee. The exposed employee is informed of applicable laws and regulations concerning disclosure of the identity and the infectious status of the source individual. Where applicable, source individuals (or their authorized legal representative) are informed that their sample(s) will be tested and the results documented. The testing of samples is subject to the provisions of the California Health and Safety Code sections 121130 through 121140 and other laws.

Consent Not Obtained (or Required) from the Source Individual

A source individual may refuse to give consent, and no pre-exposure sample(s) (i.e., samples collected from the source individual before the exposure incident occurred) may be available. In such situations, MBARI documents that legally required consent could not be obtained and no samples are tested.

If consent cannot be obtained (and is not required by law) and pre-exposure samples of blood or OPIM are available, MBARI will have those samples available for testing of HAV, HBV, HCV, and HIV infectivity.

9. Collection and testing of the exposed employee's blood

Our organization collects and tests the exposed employee's blood for HAV, HBV, HCV, and HIV serological status as soon as is feasible and after his or her consent is obtained. If the exposed employee consents to baseline blood collection but does not give consent at that time for HIV serologic testing, the sample is preserved for at least 90 days. If the employee decides, within 90 days of the exposure incident, to have the baseline sample tested for HIV serological status, the testing is conducted as soon as is feasible. Additional samples of blood will be collected and tested, and the provisions for post-exposure prophylaxis when medically indicated are made available as



recommended by the U.S. Public Health Service (in the CDC MMWR Recommendations and Reports: "Public Health Service Guidelines for the Management of Health-Care Worker Exposures to HIV and Recommendations for Post Exposure Prophylaxis," May 15, 1998, Vol. 47, No. RR-07). We consult CDC at www.cdc.gov/epo/mmwr for current recommendations.