POLICY ON INFECTIOUS DISEASES AND BLOODBORNE PATHOGENS

CCR, Title 8, Section 5193, Bloodborne Pathogens (BBP)

Who must receive BBP training ? Employees with occupational exposure to blood or other potentially infectious materials (OPIM) shall be provided training at no cost during working hours.

When should BBP training take place? At the time of initial assignment to tasks with occupational exposure, when employee's tasks or procedures change that affect the employee's occupational exposure and at least annually thereafter.

What qualifications shall the teacher have? "The trainer shall be knowledgeable in the subject matter covered as it relates to the workplace that the training will address."

.ıat elements must be included in the BBP training program? There are 14 required elements to BBP training.

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1. – Copy and Explanation of Standard. An accessible copy of the regulatory text of this standard and an explanation of its contents:

A copy of §5193. Bloodborne Pathogens follows. PLEASE NOTE: Some sections do not apply to dentistry and have been removed. An unedited version of the BBP is contained in the office OSHA COMPLIANCE MADE EASY MANUAL™ .

Subchapter 7. General Industry Safety Orders Group 16. Control of Hazardous Substances Article 109. Hazardous Substances and Processes

"Boxed" questions are particularly important. Try to locate the answers in the text and highlight for further reference. Also, some items have been bolded to aid in teaching.

§5193. Bloodborne Pathogens.

(a) **Scope and Application.** This section applies to all occupational exposure to blood or other potentially infectious materials as defined by subsection (b) of this section.
Exception: This regulation does not apply to the construction industry.

(b) **(b) Definitions.** For purposes of this section, the following shall apply:

"OPIM" means other potentially infectious materials.

"Other Potentially Infectious Materials" means:

(1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any other body fluid that is visibly contaminated with blood such as saliva or vomitus, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids such as emergency response;

(2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and

(3) Any of the following, if known or reasonably likely to contain or be infected with HIV, HBV, or HCV:

(A) Cell, tissue, or organ cultures from humans or experimental animals;

(B) Blood, organs, or other tissues from experimental animals; or

(C) Culture medium or other solutions.

"Parenteral Contact" means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

"Personal Protective Equipment" is specialized clothing or equipment worn or used by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard are not considered to be personal protective equipment.

"Production Facility" means a facility engaged in industrial-scale, large-volume or high concentration production of HIV, HBV or HCV.

"Regulated Waste" means waste that is any of the following:

Are street clothes and general work clothes considered PPE?

(1) Liquid or semi-liquid blood or OPIM;

(2) Contaminated items that:

(A) Contain liquid or semi-liquid blood, or are caked with dried blood or OPIM; and

(B) Are capable of releasing these materials when handled or compressed.

(3) Contaminated sharps.

(4) Pathological and microbiological wastes containing blood or OPIM.

(5) Regulated Waste includes "medical waste" regulated by Health and Safety Code Sections 117600 through 118360.

"Research Laboratory" means a laboratory producing or using research-laboratory-scale amounts of HIV, HBV or HCV. Research laboratories may produce high concentrations of HIV, HBV or HCV but not in the volume found in production facilities.

"Sharp" means any object used or encountered in the industries covered by subsection (a) that can be reasonably anticipated to penetrate the skin or any other part of the body, and to result in an exposure incident, including, but not limited to, needle devices, scalpels, lancets, broken glass, broken capillary tubes, exposed ends of dental wires and dental knives, drills and burs.

"Sharps Injury" means any injury caused by a sharp, including, but not limited to, cuts, abrasions, or needlesticks.

"Sharps Injury Log" means a written or electronic record satisfying the requirements of subsection (c)(2).

"Source Individual" means any individual, living or dead, whose blood or OPIM may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinical patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

"Universal Precautions" is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, HCV, and other bloodborne pathogens.

"Work Practice Controls" means controls that reduce the likelihood of exposure by defining the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique and use of patient-handling techniques).

(c) Here is where the BBP describes the elements that must be contained in the office Exposure Control Plan (ECP).

(c) Exposure Response, Prevention and Control.

(1) Exposure Control Plan.

(A) Each employer having an employee(s) with occupational exposure as defined by subsection (b) of this section shall establish, implement and maintain an effective Exposure Control Plan which is designed to eliminate or minimize employee exposure and which is also consistent with Section 3203.

determination. This exposure determination shall contain the following:

1. A list of all job classifications in which all employees in those job classifications have occupational exposure;
2. A list of job classifications in which some employees have occupational exposure; and
3. A list of all tasks and procedures or groups of closely related task and procedures in which occupational exposure occurs and that are performed by employees in job classifications listed in accordance with the provisions of subsection (c)(3)(A)2. of this standard.

(B) **This exposure determination shall be made without regard to the use of personal protective equipment.**

(d) Methods of Compliance.

(d) Universal precautions must be observed .

(2) When are Needless Systems, Needle Devices and non-Needle Sharps required?

(1) General. Universal precautions shall be observed to prevent contact with blood or OPIM. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

(2) Engineering and Work Practice Controls -General Requirements.

(A) Engineering and work practice controls shall be used to eliminate or minimize employee exposure.

(B) Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

(C) Work practice controls shall be evaluated and updated on a regular schedule to ensure their effectiveness.

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

(3) Engineering and Work Practice Controls -Specific Requirements.

(A) Needleless Systems, Needle Devices and non-Needle Sharps.

1. Needleless Systems. Needleless systems shall be used for:
   a. Withdrawal of body fluids after initial venous or arterial access is established;
   b. Administration of medications or fluids; and
   c. 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.
2. **Needle Devices.** If needleless systems are not used, needles with engineered sharps injury protection shall be used for:
   a. Withdrawal of body fluids;
   b. Accessing a vein or artery;
   c. Administration of medications or fluids; and
   d. Any other procedure involving the potential for an exposure incident for which a needle device with engineered sharps iinjury protection is available.

4. Do you have to use safety needles in all dental procedures? What are the exceptions?

3. **Non-Needle Sharps.** If sharps other than needle devices are used, these items shall include engineered sharps injury protection.
4. **Exceptions.** The following exceptions apply to the engineering controls required by subsections (d)(3)(A)1.-3.:
   a. Market Availability. The engineering control is not required if it is not available in the marketplace.
   b. 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, dental or nursing procedure involving the patient. The determination shall be documented according to the procedure required by (c)(1)(B)7.
   c. Safety Performance. The engineering control is not required if the employer 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.
   d. Availability of Safety Performance Information. The engineering control is not required if the employer can demonstrate that reasonably specific and reliable information is not available on the safety performance of the engineering control for the employer's procedures, and that the employer is actively determining by means of objective product evaluation criteria whether use of the engineering control will reduce the risk of exposure incidents occurring in the employer's workplace.

(B) What if you have to bend the needle to perform the dental procedure...is that allowable under the standard?

iii. Labeled according to subsection (g)(1)(A) of this section.

3. Disposal of Other Regulated Waste. Regulated waste not consisting of sharps shall be disposed of in containers which are:
   a. Closable;
   b. Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping;
   c. Labeled and color-coded in accordance with subsection (g)(1)(A) of this section; and
   d. Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

4. Outside Contamination. If outside contamination of a container of regulated waste occurs, it shall be placed in a second container. The second container shall be:
   a. Closable.
   b. Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;
   c. Labeled and color-coded in accordance with subsection (g)(1)(A) of this section; and
   d. Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

(F) Handling Specimens of Blood or OPIM.

Specimens of blood or OPIM shall be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping.

1. The container for storage, transport, or shipping shall be labeled or color-coded according to subsection (g)(1)(A), and closed prior to being stored, transported, or shipped. When a facility utilizes Universal Precautions in the handling of all specimens, the labeling/color-coding of specimens is not necessary provided containers are recognizable as containing specimens. This exemption only applies while such specimens/containers remain within the facility. Labeling or color-coding in accordance with subsection (g)(1)(A) is required when such specimens/ containers leave the facility.
2. If outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage during collection, handling, processing, storage, transport, or shipping and is labeled or color-coded to the requirements of this standard.
3. If the specimen could puncture the primary container, the primary container shall be placed within a secondary container which is puncture-resistant in addition to the above characteristics.

Do we have to decontaminate and label contaminated equipment that is being sent out for service or repair?

(G) Servicing or Shipping Contaminated Equipment.

Equipment which may become contaminated with blood or OPIM shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless the employer can demonstrate that decontamination of such equipment or portions of such equipment is not feasible or will interfere with a manufacturer's ability to evaluate failure of the device.

1. A readily observable label in accordance with subsection (g)(1)(A)8. shall be attached to the equipment stating which portions remain contaminated.
2. Information concerning all remaining contamination shall be conveyed to all affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so that appropriate precautions will be taken.

(H) Cleaning and Decontamination of the Worksite.

1. General Requirements.

a. Employers shall ensure that the worksite is maintained in a clean and sanitary condition.

b. Employers shall determine and implement appropriate **written methods and schedules for cleaning and decontamination of the worksite.**

c. The method of cleaning or decontamination used shall be effective and shall be appropriate for the:

i Location within the facility;

ii. Type of surface or equipment to be treated;

iii. Type of soil or contamination present; and

iv. Tasks or procedures being performed in the area.

d. All equipment and environmental and work surfaces shall be cleaned and decontaminated after contact with blood or OPIM no later than at the end of the shift. Cleaning and decontamination of equipment and work surfaces is required more often as specified below.

2. Specific Requirements.

a. Contaminated Work Surfaces. Contaminated work surfaces shall be cleaned and decontaminated with an appropriate disinfectant immediately or as soon as feasible when:

i. Surfaces become overtly contaminated;

When do receptacles have to be cleaned and decontaminated?

(C) Accessibility. The employer shall ensure that appropriate personal protective equipment in the appropriate sizes is readily accessible at the worksite or is issued 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.

(D) Cleaning, Laundering, and Disposal. The employer shall clean, launder, and dispose of personal protective equipment required by subsections (d) and (e) of this standard, at no cost to the employee.

Is there ever a situation when PPE can be removed?

(E) Repair and Replacement. The employer shall repair or replace personal protective equipment as needed to maintain its effectiveness, at no cost to the employee.

(F) Removal.

Does PPE have to be removed if you leave the operatory ?

1. If a garment(s) is penetrated by blood or OPIM, the garment(s) shall be removed immediately or as soon as feasible.

2. All personal protective equipment shall be removed prior to leaving the work area.

3. When personal protective equipment is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

(G) Gloves. Gloves shall be worn when it can be reasonably anticipated that the employee may have hand contact with blood, OPIM, mucous membranes, and non-intact skin; when performing vascular access procedures except as specified in subsection (d)(4)(G)4.; and when handling or touching contaminated items or surfaces. These requirements are in addition to the provisions of Section 3384.

1. Disposable (single use) gloves such as surgical or examination gloves, shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

2. Disposable (single use) gloves shall not be washed or decontaminated for re-use.

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

4. If an employer in a volunteer blood donation center judges that routine gloving for all phlebotomies is not necessary then the employer shall:

a. Periodically reevaluate this policy;

b. Make gloves available to all employees who wish to use them for phlebotomy;

c. Not discourage the use of gloves for phlebotomy; and

d. Require that gloves be used for phlebotomy in the following circumstances:

i. When the employee has cuts, scratches, or other breaks in his or her skin;

ii. When the employee judges that hand contamination with blood may occur, for example, when performing phlebotomy on an uncooperative source individual; and

iii. When the employee is receiving training in phlebotomy.

Do you have to wear a mask if you wear a face shield?

(H) Masks, Eye Protection, Face Shields, and Respirators.

1. **Masks in combination with eye protection devices**, such as goggles or glasses with solid side shields, or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or OPIM may be generated and eye, nose, or mouth contamination can be reasonably anticipated. These requirements are in addition to the provisions of Section 3382.

2. Where respiratory protection is used, the provisions of Sections 5144 and 5147 are required as applicable. Note : Surgical masks are not respirators.

What type of protective clothing is required?

(I) Gowns, Aprons, and Other Protective Body Clothing.

1. Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated. These requirements are in addition to the provisions of Section 3383.

2. Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated (e.g., autopsies, orthopaedic surgery). These requirements are in addition to the provisions of Section 3383.

Section (e) does not apply to dentistry and has been removed to save paper.....

(f) Hepatitis B Vaccination and Bloodborne Pathogen Post-exposure Evaluation and Follow-up.

(1) General.

(A) The employer shall make available the hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up for bloodborne pathogens exposure to all employees who have had an exposure incident. When an employer is also acting as the evaluating health care professional, the employer shall advise an employee following an exposure incident

reasons.

(B) The employer shall not make participation in a prescreening program a prerequisite for receiving hepatitis B vaccination.

(C) If the employee initially declines hepatitis B vaccination but at a later date while still covered under the standard decides to accept the vaccination, the employer shall make available hepatitis B vaccination at that time.

(D) The employer shall assure that employees who **decline to accept** hepatitis B vaccination offered by the employer sign the statement in Appendix A.

(E) If a routine booster dose(s) of hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster dose(s) shall be made available in accordance with section (f)(1)(B).

What should you do if you experience an exposure incident?

(3) Post-exposure Evaluation and Follow-up.

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

(A) The employer shall document the route(s) of exposure, and the circumstances under which the exposure incident occurred;

(B) The employer shall identify and document the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law;

1. The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV, HCV and HIV infectivity. If consent is not obtained, the employer 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.

2. When the source individual is already known to be infected with HBV, HCV or HIV, testing for the source individual's known HBV, HCV or HIV status need not be repeated.

3. 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.

(C) The employer shall provide for collection and testing of the employee's blood for HBV, HCV and HIV serological status;

1. The exposed employee's blood shall be collected as soon as feasible and tested after consent is obtained.

2. 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.

3. Additional collection and testing shall be made available as recommended by the U.S. Public Health Service.

(D) The employer shall provide for post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service;

(E) The employer shall provide for counseling and evaluation of reported illnesses.

(4) Information Provided to the Healthcare Professional.

(A) The employer shall ensure that the healthcare professional responsible for the employee's hepatitis B vaccination is provided a copy of this regulation.

(B) The employer shall ensure that the healthcare professional evaluating an employee after an exposure incident is provided the following information:

What should the Healthcare Professional receive?

1. A copy of this regulation;
2. A description of the exposed employee's duties as they relate to the exposure incident;
3. Documentation of the route(s) of exposure and circumstances under which exposure occurred, as required by subsection (f)(3)(A);
4. Results of the source individual's blood testing, if available; and
5. All medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain, as required by subsection (h)(1)(B)2.

(5) Healthcare Professional's Written Opinion.

The employer shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation.

(A) The healthcare professional's written opinion for hepatitis B vaccination shall be limited to whether hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.

(B) The healthcare professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following information:

1. That the employee has been informed of the results of the evaluation; and
2. That the employee has been told about any medical conditions resulting from exposure to blood or OPIM which require further

(B) Training shall be provided as follows:

1. At the time of initial assignment to tasks where occupational exposure may take place;

2. At least annually thereafter.

(C) For employees who have received training on bloodborne pathogens in the year preceding the effective date of the standard, only training with respect to the provisions of the standard which were not included need be provided.

(D) Annual training for all employees shall be provided within one year of their previous training.

(E) Employers shall provide additional training when changes, such as introduction of new engineering, administrative or work practice controls, modification of tasks or procedures or insitituion of new tasks or procedures, affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.

(F) Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used.

(G) The training program shall contain at a minimum the following elements:

1. Copy and Explanation of Standard. An accessible copy of the regulatory text of this standard and an explanation contents;
2. Epidemiology and Symptoms. A general explanation of the epidemiology and symptoms of bloodborne diseases;
3. Modes of Transmission. An explanation of the modes of transmission of bloodborne pathogens;
4. Employer's Exposure Control Plan. An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan;
5. Risk Identification. An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and OPIM;
6. Methods of Compliance. An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, administrative or work practice controls and personal protective equipment;
7. Decontamination and Disposal. Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;
8. Personal Protective Equipment. An explanation of the basis for selection of personal protective equipment;
9. Hepatitis B Vaccination. Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;
10. Emergency. Information on appropriate actions to take and persons to contact in an emergency involving blood or OPIM;
11. Exposure Incident. Explanation of the procedure to follow if an exposure incident occurs, including method of reporting the iincident, medical follow-up that will be made available and the procedure for recording the incident on the Sharps Injury Log;
12. Post-Exposure Evaluation and Follow-Up. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident;
13. Signs and Labels. An explanation of the signs and labels and/or color coding required by subsection (g)(1); and
14. Interactive Questions and Answers. An opportunity for interactive questions and answers with the person conducting the training session.

Note : Additional training is required for employees of HIV, HBV, and HCV Research Laboratories and Production Facilities, as described in subsection (e)(5).

(H) The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address.

(h) Recordkeeping.

What medical records must be kept and for how long?

(1) Medical Records.

(A) The employer shall establish and maintain an accurate record for each employee with occupational exposure, in accordance with Section 3204.

(B) This record shall include:

1. The name and social security number of the employee;
2. A copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination as required by subsection (f)(2);
3. A copy of all results of examinations, medical testing, and follow-up procedures as required by subsection (f)(3);
4. The employer's copy of the healthcare professional's written opinion as required by subsection (f)(5); and
5. A copy of the information provided to the healthcare professional as required by subsections (f)(4)(B)2., 3. and 4.

118360, Health and Safety Code.

HISTORY

1. New section filed 12-9-92; operative 1-11-93 (Register 92, No. 50).
2. Editorial correction of printing errors in subsections (c)(1)(A) and (d)(2)(C) (Register 93, No. 32).
3. Amendment of subsections (g)(1)(A)2. and (g)(1)(B)2. filed 2-5-97; operative 3-7-97 (Register 97, No. 6).
4. Amendment filed 1-22-99 as an emergency; effective 1-22-99 (Register 99, No. 4). The emergency regulation filed 1-22-99 shall remain in effect until the nonemergency regulation becomes operative or until August 1, 1999, whichever first occurs pursuant to Labor Code section 144.7(a).
5. Permanent adoption of 1-22-99 amendments, including further amendments, filed 7-30-99 pursuant to Labor Code section 144.7(a); operative 7-30-99 pursuant to Government Code section 11343.4(d) (Register 99, No. 31).
6. Repealer of subsection (c)(1)(D)2., new subsections (c)(1)(D)2.a.-b. and (c)(1)(E), subsection relettering, amendment of subsection (c)(2), new subsections (c)(2)(D)-(E) and amendment of subsections (d)(3)(B)2.Exception, (d)(3)(E)3.b., (d)(3)(H)1.b. and (d)(3)(H)2.a. filed 8-3-2001; operative 8-3-2001. Submitted to OAL for printing only. Exempt from OAL review pursuant to Labor Code section 142.3 (Register 2001, No. 31).
7. Change without regulatory effect providing more legible illustrations for biohazard symbols filed 3-2-2009 pursuant to section 100, title 1,California Code of Regulations (Register 2009, No. 10).

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2. – Epidemiology and Symptoms. A general explanation of the epidemiology and symptoms of bloodborne diseases:

Bloodborne Diseases are microorganisms such as viruses or bacteria that are carried in blood and can cause disease in humans. Examples include: malaria, or syphilis. Hepatitis B, Hepatitis C and the Human Immunodeficiency Virus (HIV) are the diseases specifically addressed by the BBP.

Hepatitis B (HBV)

In the United States, approximately 300,000 people are infected with HBV annually. Of these cases, a small percentage are fatal.

"Hepatitis" means *"inflammation of the liver,"* and, as its name implies, Hepatitis B is a virus that infects the liver. While there are several different types of Hepatitis (A, B, C, D, & E), Hepatitis B is easily transmitted primarily through "blood to blood" contact. HBV initially causes inflammation of the liver, but about 10% of those infected become chronic carriers and may develop conditions such as cirrhosis (failure) and liver cancer leading to death. The HBV virus is very durable, and it can survive in dried blood for up to seven days. For this reason, this virus is the primary concern for healthcare providers, housekeepers, custodians, laundry personnel and other employees who may come in contact with blood or OPIM.

Symptoms of HBV - Most people who become infected develop no signs or symptoms until later in life when the signs of liver failure become apparent. Therefore, most carriers do not know they are infected and infective. Half of all people infected with HBV have no symptoms and may never realize that they have been infected. Adults are more likely to develop symptoms than children. For those who do get sick, symptoms usually develop within 1 to 4 months after exposure to the virus. The initial symptoms are often similar to the flu. Common symptoms of hepatitis B include: appetite loss , fatigue, nausea and vomiting, itching all over the body, pain over the location of the liver (on the right side of the abdomen, under the lower rib cage, jaundice, dark urine, pale-colored stools. Many types of acute viral hepatitis such as hepatitis A and hepatitis C have symptoms that are indistinguishable from hepatitis B.

Human Immunodeficiency Virus (HIV)

AIDS, or acquired immune deficiency syndrome, is caused by a virus called the human immunodeficiency virus, or HIV. Once a person has been infected with HIV, it may be many years before AIDS actually develops. HIV attacks the body's immune system, weakening it so that it cannot fight other deadly diseases. AIDS is the final stage of the disease when the immune system fails and other diseases become overwhelming. While treatment for it is improving, there is no known cure.

According to the Centers for Disease Control (CDC), approximately 50,000 people are newly infected with HIV each year in the United States. In 2009 (the most recent year that data are available), there were an estimated 48,100 new HIV infections. Most (61%) of these new infections occurred in gay and bisexual men. Black/African American men and women were also strongly affected and were estimated to have an HIV incidence rate than was 7 times as high as the incidence rate among whites. Many people who are infected with HIV may be completely unaware it. The HIV virus is very fragile and will not survive very long outside of the human body. Employees providing first aid or medical care in situations involving fresh blood or OPIM are at greatest risk. Because it is such a devastating disease, all precautions must be taken to avoid exposure.

Employer's Exposure Control Plan An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan.

Our Office Exposure Control Plan (ECP)

- Is written in accordance OSHA's Bloodborne Pathogens Standard.The outline and format were taken from Cal/OSHA and designed by the Education Unit, Cal/OSHA Consultation Service, and California Department of Industrial Relations - Published in 2001.
- Location: The ECP is located in the OSHA Compliance Made Easy Manual (OCPI Manual) which is kept at the workplace and is available at all times for employee review.
- Title: Bloodborne Pathogens Exposure Response, Prevention and Control and begins on Page 2.1 of the OCPI Manual.
- ECP Includes the following:

Purpose - Page 2.1 of OCPI Manual

- The purpose of our ECP is to provide a safe and healthful workplace for employees.
- Our company's policy is to establish, implement, and maintain an effective ECP as required by OSHA's BBP.
- This written plan is designed to prevent or minimize employees' occupational exposure to blood and OPIM. The plan is consistent with the requirements of the Cal/OSHA Injury and Illness Prevention Program (T8 CCR 3203).
- Our ECP is made available upon request, for examination and copying, to our employees, the Chief of Cal/OSHA, and NIOSH (or their respective designees) in accord with (T8 CCR 3204), "Access to Employee Exposure and Medical Records."

Assignment of Responsibility – Page 2.1 of OCPI Manual

The person responsible for implementing and maintaining our ECP is the OSHA Coordinator (OC). Her name and duties are spelled out on Page 2.1 along with her signature of acceptance of those duties and responsibilities.

The ECP Includes:

- Methods of Compliance – General and Specific – Page 2.2
    - Engineering Controls
    - Work Practice Controls
- Engineering and Work Practice Controls – Specific Requirements are included in our office ECP on Pages 2.2A thru 2.16. of the OCPI Manual. Engineering and Work Practice Controls in our ECP include:
    - Needleless Systems, Needle Devices and Non-Needle Sharps
    - Exceptions for Use
    - Actions to Take Before We Treat Our Patients
    - How To Decontaminate Treatment Rooms
    - The Location of OSHA Required Items
    - How To Handle Contaminated Sharps
    - Policy on Eating and Drinking
    - Specimen Handling in Our Office
    - How To Protect Employees in the Laboratory
    - Sterilization Methods and Sport Testing
    - Personal Protective Equipment (PPE)
    - Handwashing
    - Laundry Procedures
    - Housekeeping
    - Regulated Waste Management
    - Hepatitis B and Hepatitis C Information
    - AIDS Information
    - Our Hepatitis B Vaccination Program

team). Then the documentation must show the decision to use or not use the devices. *Forms #17A, B, and C,* in the OCPI Manual, provide directions for safety device evaluation as required by the ACT.

Work practice controls reduce the likelihood of exposure by altering the manner in which a task is performed. An example of a common work practice control is to recap a needle with a "one-handed scoop" technique. OSHA prohibits recapping needles by holding the cap in one hand and the sharp in the other. Other work practice controls include using instruments instead of fingers to retract tissue during suturing or injections, announcing instrument passes, and keeping sharp ends pointed away from dental workers.

Administrative controls include training, education, and application of written Standard Operating Procedures (SOP) for preventing occupational exposure to blood and OPIM. Annual OSHA training and ongoing infection-control education are essential to office safety. The office's written exposure control plan serves as the SOP for preventing occupational exposures. Employees should review these written plans at least annually.

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7. Decontamination and Disposal. Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.

Types of PPE - We provide PPE based upon the task and degree of exposure anticipated. In most offices the following PPE is routinely provided: surgical mask, eye wear (both goggles and face shields) protective clothing and gloves (both sterile and exam). In some offices surgical caps, shoe covers and gowns may be required.

Proper Use - PPE adds an additional layer of protection. Employees must: use PPE in occupational exposure situations; Remove garments that become penetrated by blood or OPIM immediately or as soon as feasible; Replace all garments that are torn or punctured, or that lose their ability to function as a barrier to bloodborne pathogens;

PPE Location - Ask your supervisor to point out the location of PPE in your facility.

Removal, Handling, Decontamination and Disposal, Cleaning and Disposal - All PPE must be removed when leaving the work area; Place all garments in the appropriate designated area or container for storage, cleaning, decontamination, or disposal. Disposable PPE shall be placed in covered and plastic lined designated containers. Non-disposable gowns and jackets shall be placed in covered and plastic lined designated containers and handled as outlined on Page 2.9 "Laundry Procedures" of the OCPI Manual. Re-usable goggles and face shields shall be cleaned and disinfected as described in the ECP.

PPE Selection, Use, Removal

- Surgical Mask - During patient-care activities that are likely to generate splashes or sprays of blood or body fluids dental office staff should wear a surgical mask that covers both their nose and mouth. A surgical mask protects the patient against microorganisms generated by the wearer and also protects dental health care personnel from large-particle droplet spatter that may contain bloodborne pathogens or other infectious microorganisms. When a surgical mask is used, it should be changed between patients or during patient treatment if it becomes wet.
- Eye Wear - Dental personnel should wear protective eyewear with solid side shields or a face shield during procedures and patient-care activities likely to generate splashes or sprays of blood or body fluids. Protective eyewear protects the mucous membranes of the eyes from contact with microorganisms. Protective eyewear for patients also can protect their eyes from spatter or debris generated during dental procedures. Reusable protective eyewear should be cleaned and disinfected as outlined in ECP, when visibly soiled and disinfected between patients.
- Protective Clothing - (e.g., gowns, jackets) are worn to prevent contamination of street clothing and to protect the skin of personnel from exposure to blood and body fluids. When the gown is worn as PPE (i.e., when spatter and spray of blood, saliva, or OPIM is anticipated), the sleeves should be long enough to protect the forearms. Protective clothing should be changed daily or sooner if visibly soiled. Personnel should remove protective clothing before leaving the work area and never taken home to launder.
- Gloves - Dental office staff wear disposable gloves to prevent contamination of their hands when touching mucous membranes, blood, saliva, or other OPIM and to reduce the likelihood that microorganisms on their hands will be transmitted to patients during dental patient-care procedures. Glove use does not replace the need for handwashing. Personnel should wash their hands immediately before donning gloves and immediately after removal. Gloves may have small, unapparent defects or may be torn during use, and hands can become contaminated during removal of gloves. In addition, bacteria can multiply rapidly in moist environments underneath gloves. If the integrity of a glove is compromised (e.g., if the glove is punctured), the glove should be changed as soon as possible. Disposable gloves should not be washed and reused.
    - Effect of Dental Materials on Gloves - Exposure to glutaraldehyde, hydrogen peroxide, and alcohol preparations may weaken latex, vinyl, nitrile, and other synthetic glove materials. Other chemicals associated with dental materials that may weaken gloves include acrylic monomer, chloroform, orange solvent, eugenol, cavity varnish, acid etch, and dimethacrylates. Because of the diverse

Gloves - Gloves prevent contamination of healthcare workers' hands when touching patients or instruments and pieces of equipment contaminated with patient blood and OPIM. In addition, gloves reduce the likelihood that microorganisms present on health care workers' hands can be transmitted to patients during treatment. Appropriate gloves in the correct sizes must be readily available.

- Sterile surgeons' gloves are to be worn when performing oral surgery procedures. Non-sterile examination gloves are appropriate for all other procedures. Non-medical, heavy-duty utility gloves are proper for cleaning and disinfection and handling used instruments or chemicals. Non-medical gloves are never to be used during patient care.
- A new pair of medical gloves must be worn for each patient. Never wash medical gloves before or during use. Gloves are to be removed after use. Hands are then washed immediately to avoid transfer of microorganisms to other patients or the environment. Remove gloves that have become torn, cut or punctured as soon as feasible and wash hands prior to re-gloving.
- Gloves must be appropriate for the hazard present. For example, heat-resistant gloves are to be used when removing sterilized instruments from the autoclave, while puncture and chemical resistant gloves are best when handling used instruments prior to cleaning or when performing housekeeping tasks.

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9. **Hepatitis B Vaccination.** Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge.

The information for this section was taken directly from Centers for Disease Control and Prevention, cdcinfo@cdc.gov http://www.cdc.gov/vaccines/recs/schedules/default.htm.

Efficacy, Safety and Method of Administration

- **How is the Hepatitis B vaccine series given?** The Hepatitis B vaccine is usually given as a series of 3 or 4 shots over a 6-month period. **Is the Hepatitis B vaccine series effective?** Yes, the Hepatitis B vaccine is very effective at preventing Hepatitis B virus infection. After receiving all three doses, Hepatitis B vaccine provides greater than 90% protection to infants, children, and adults immunized before being exposed to the virus.
- **Is the Hepatitis B vaccine safe?** Yes, the Hepatitis B vaccine is safe. Soreness at the injection site is the most common side effect reported. As with any medicine, there are very small risks that a serious problem could occur after getting the vaccine. However, the potential risks associated with Hepatitis B are much greater than the risks the vaccine poses. Since the vaccine became available in 1982, more than 100 million people have received Hepatitis B vaccine in the United States and no serious side effects have been reported.
- **Is it harmful to have an extra dose of Hepatitis B vaccine or to repeat the entire Hepatitis B vaccine series?** No, getting extra doses of Hepatitis B vaccine is not harmful.
- **What if the Hepatitis B vaccine series was not completed?** Talk to your health professional to resume the vaccine series as soon as possible. The series does not need to be restarted.
- **Who should not receive the Hepatitis B vaccine?**The Hepatitis B vaccine is not recommended for people who have had serious allergic reactions to a prior dose of Hepatitis B vaccine or to any part of the vaccine. Also, it not recommended for anyone who is allergic to yeast because yeast is used when making the vaccine. Tell your doctor if you have any severe allergies.
- **Are booster doses of Hepatitis B vaccine necessary?** It depends. A "booster" dose of Hepatitis B vaccine is a dose that increases or extends the effectiveness of the vaccine. Booster doses are recommended only for hemodialysis patients and can be considered for other people with a weakened immune system. Booster doses are not recommended for persons with normal immune status who have been fully vaccinated.
- **What is Hepatitis B immune globulin (HBIG)?** HBIG is a substance made from human blood samples that contains antibodies against the Hepatitis B virus. It is given as a shot and can provide short-term protection (approximately 3 months) against Hepatitis B.

Pregnancy and Hepatitis B

- **Are pregnant women tested for Hepatitis B?** Yes. When a pregnant woman comes in for prenatal care, she will be given a series of routine blood tests, including one that checks for the presence of Hepatitis B virus infection. This test is important because women infected with this virus can pass Hepatitis B to their babies during birth. But this can be prevented by giving the infant HBIG and the first Hepatitis B vaccine at birth, and then completing the series.
- **What if a pregnant woman has Hepatitis B?** If a pregnant woman has Hepatitis B, she can pass the infection to her baby during birth. But this can be prevented through a series of vaccinations and HBIG for her baby beginning at birth. Without vaccination, babies born to women with Hepatitis B virus infection can develop chronic infection, which can lead to serious health problems. especially those infected during early childhood, remain infected for life because they never clear the virus from their bodies.

11. **Exposure Incident.** An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident, t medical follow-up that will be made available and the procedure for recording the incident on the Sharps Injury Log.

- Following an exposure incident and after the administration of first aid or medical attention, if required, the exposed employee should contact his or her immediate supervisor.
- The proper forms should be completed, including the Sharps Injury Log if the exposure incident involved a sharp.
- The employer will make available, at no cost, medical follow-up.
- Completion of *Form #8 – Bloodborne Pathogen Exposure Incident Report* and *Form #15 – Sharps Injury Log* in the OCPI Manual, will direct the exposed employee through the process.

12. **Post Exposure Evaluation and Follow-up.** Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.

Bloodborne Pathogen Exposure Incidents - OSHA's BBP requires employers to make immediate confidential medical evaluation and follow-up available for workers who have an exposure incident, such as a needlestick. An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials (OPIM), as defined in the standard that results from the performance of a worker's duties.

Reporting an Exposure Incident - Exposure incidents should be reported immediately to the employer or supervisor since they can lead to infection HBV, HCV,HIV, or other bloodborne pathogens.

The employer will arrange for immediate medical evaluation of the worker. Early reporting is crucial for beginning immediate intervention to address possible infection of the worker and can also help the worker avoid spreading bloodborne infections to others. Furthermore, the employer is required to perform a timely evaluation of the circumstances surrounding the exposure incident to find ways of preventing such a situation from occurring again. Reporting is also important because part of the follow-up includes identifying the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law, and determining the source's HBV and HIV infectivity status. If the status of the source individual is not already known, the employer is required to test the source's blood as soon as feasible, provided the source individual consents. **(See information on rapid HIV test below).**

If the individual does not consent, the employer must establish that legally required consent cannot be obtained. If state or local law allows testing without the source individual's consent, the employer must test the individual's blood, if it is available. The results of these tests must be made available to the exposed worker and the worker must be informed of the laws and regulations about disclosing the source's identity and infectious status.

Medical Evaluation and Follow-up - When a worker experiences an exposure incident, the employer must make immediate confidential medical evaluation and follow-up available to the worker. This evaluation and follow-up must be: made available at no cost to the worker and at a reasonable time and place; performed by or under the supervision of a licensed physician or other licensed healthcare professional; and provided according to the recommendations of the U.S. Public Health Service current at the time the procedures take place. In addition, laboratory tests must be conducted by an accredited laboratory and also must be at no cost to the worker. A worker who participates in post-exposure evaluation and follow-up may consent to have his or her blood drawn for determination of a baseline infection status, but has the option to withhold consent for HIV testing at that time. In this instance, the employer must ensure that the worker's blood sample is preserved for at least 90 days in case the worker changes his or her mind about HIV testing. Post-exposure prophylaxis for HIV, HBV, and HCV, when medically indicated, must be offered to the exposed worker according to the current U. S. Public Health Service recommendations. The post-exposure follow-up must include counseling the worker about the possible implications of the exposure and his or her infection status, including the results and interpretation of all tests and how to protect personal contacts. The follow-up must also include evaluation of reported illnesses that may be related to the exposure.

Post-Exposure Evaluation and Follow-up - The employer shall provide the healthcare professiona the following:

- A copy of the BBP Standard
- *Form #8 – Bloodborne Pathogen Exposure Incident Report* in the OCPI Manual which will include:
    - 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