Bloodborne Pathogens Program

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Agencies

• Centers for Disease Control and Prevention (CDC & P)
  • To create the expertise, information, and tools that people, and communities need to protect their health through health promotion, prevention of disease, injury and disability, and preparedness for new health threats

• Occupational Safety and Health Administration (OSHA) Federal and California
  • To ensure safe and healthful working conditions for working men and women by setting and enforcing standards and by providing training, outreach, education and assistance
  • Workplace Safety! Employee Health and Safety
  • It is the Employers responsibility!
Bloodborne Pathogens Standard

• The OSHA BBP Standard includes:
  • Exposure Response, Prevention and Control
  • Methods of Compliance
  • Hepatitis B
  • Hepatitis B, Vaccine C and HIV
  • BBP exposure evaluation and follow-up
  • Communication of Hazards to Employees
  • Record Keeping
Bloodborne Pathogens Standard

• The OSHA BBP Standard:
  • Focuses on three viruses
    • HIV – Human Immunodeficiency
    • HBV – Hepatitis B Liver
    • HCV – Hepatitis C Liver
    • Other Hepatitis
  • Covers occupational (work related) incidents only – Employer’s responsibility
Exposure Control Plan (ECP)
The “Key "to BBP

• Designed to eliminate or minimize employee exposure
• Program Shall be in writing
• Provided to employee at initial assignment
• Shall be accessible to employees at work site
• Reviewed and updated annually
• Changes to ECP communicated to employees
Exposure Control Plan (ECP)

• Elements:
  • Procedure for identifying, selecting, and implementing engineering controls into procedures performed by employees
  • Procedure for obtaining active involvement of employees in reviewing and updating the plan
Exposure Control Plan (ECP)

• Elements:
  • Exposure Determination for “At Risk” Employees
  • OSEC is very inclusive but not All are
  • Schedule for implementation of BBP Standard sections
  • Procedure for evaluating circumstances surrounding exposure incidents
  • Procedure for gathering information for the Sharps Injury Log if relevant *
Employee Training

• For all employees with potential **occupational** exposure to bloodborne pathogens

• Provided at the time of initial assignment

• Provided annually thereafter

• Additional training as needed when changes affect the employee’s occupational exposure

• Focuses on the prevention of worker exposure to HBV, HCV and HIV/AIDS
HBV and HCV Hepatitis Symptoms

• Acute (Immediate)
  • Fatigue
  • Loss of Appetite
  • Mild Fever
  • So Could be something else

• Chronic (Long Term)
  • Jaundice (yellow skin and white of eye)
  • Dark Urine
  • Cirrhosis
  • Cancer
HIV Symptoms

• Acute (Immediate)
  • Recurrent Fever
  • Swollen Lymph Glands
  • Diarrhea
  • Rapid & Extreme Weight Loss
  • More specific

• Chronic (Long Term)
  • Skin Lesions
  • Mental Disorientation
  • Death from compromised immune system = AIDS
  • Pneumia
## Occupational Exposures Potential

<table>
<thead>
<tr>
<th>Infection after Needle Stick Exposure</th>
<th>HIV</th>
<th>HBV</th>
<th>HCV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability</td>
<td>0.4%</td>
<td>6-30%</td>
<td>2-10%</td>
</tr>
</tbody>
</table>
Modes of Transmission

• Splash of contaminated fluid to
  • Mucous membranes (eyes, nose, mouth)
  • Broken skin (scratches or cuts)

• Penetration by contaminated sharp
  • Needles
  • Broken glass
  • Knives
  • Sharp/Ragged surfaces

• Sexual Contact
“Non” Modes of Transmission

• Coughing, unless blood is involved
• Casual contact or touching
• Touching surfaces not contaminated by blood after they are touched
• Spitting unless it contains blood
“Non” Modes of Transmission

• Drinking Fountains
• Toilets
• Food
• Insect bites
Remember!

- Bloodborne Pathogens are transmitted through direct contact with blood or other potentially infectious materials (OPIM).
Risk Identification

- Determination is Based on:
  - Job Classification including Task and Procedures
  - But Santa Clara OSEC is very inclusive
- Your “Job” determines the Potential Risk
- Some are higher risks than others
- “Good Samaritan Acts” are not covered
- Volunteering
Methods of Compliance: Exposure Controls

- **Universal/Standard Precautions**
  - Avoid direct contact with Blood
  - Avoid direct contact with Other Potential Infectious Material - OPIM.
  - Regardless of the situation
  - That’s Right do not come in contact with
Methods of Compliance: Exposure Controls

• Engineering Controls – “Remove it”
  • Serve to reduce employee exposure in the workplace by either isolating the worker from the exposure or removing the hazard
Methods of Compliance:

Exposure Controls
Methods of Compliance: Exposure Controls

• Administrative/Work Practice Controls
  • Controls that reduce the likelihood of exposure by altering the manner in which a task is performed
Methods of Compliance:
Exposure Controls
Methods of Compliance:

Exposure Controls
Biohazard Symbols
Methods of Compliance:
Exposure Controls

• Personal Protective Equipment (PPE) – “Barrier”
  • Specialized clothing or equipment worn by staff for protection against a hazard by creating a barrier. (General work clothes are not intended to function as protection against a hazard and are not considered to be personal protective equipment).
Methods of Compliance: Exposure Controls

• Personal Protective Equipment (PPE)
  • Selection
  • Removal and Disposal
  • Use
Methods of Compliance: Exposure Controls

• Engineering Controls – “Remove it”
• Work Practice Controls – “Administrative”
• Personal Protective Equipment – “Barrier”
• General: Universal/Standard Precautions
Emergency Response

• Please refer to your facility/site procedures regarding emergencies involving blood or OPIM
  • Actions to take
  • Persons to contact
  • Employees or Contract out
HBV Vaccination

• All identified employees may request the HBV vaccination at no cost

• Follow site procedures and policy
HBV Vaccination

• A HBV Vaccination is considered the most important part of HBV infection control
  • PPE May not prevent unanticipated exposures
An antibody is a protein produced by the immune system in response to the presence of an antigen.
HBV Vaccination

• Vaccine is a series of three inoculations
  • First shot starts vaccination series
  • 1 Month Later = second shot
  • At 6 Months = third and final shot
HBV Vaccination

• Vaccine is Safe

• Side Effects
  • Pain at Injection Site  -  3-30%
  • Increase in Body Temp  -  1-6%
  • Placebo controlled studies show the same side effects.
HBV Vaccination

• Declination
  • I decline hepatitis B vaccination at this time I will continue to be at risk of acquiring hepatitis B
  • If in the future I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge
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HBV Vaccination

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HBV Vaccination

- Who should **NOT or Defer** having the vaccine:
  - Antibody testing has revealed immunity
  - Vaccine is contraindicated for medical reasons
  - Postpone if have moderate acute illness
  - Vaccine is considered safe for pregnant women, but it is an individual choice
HBV Vaccination

• Standard Questions
  • How Long does it last
  • Booster Shots
  • Titer
  • 5% non-responders – may recommend a second series
  • Can I get HBV from the vaccination
  • Vaccine provides immunity in over 95% of recipients
  • Remember it is more preventive than a cure “But”
Hep C Cure

• EPCLUSA is a prescription medicine used to treat adults with chronic (lasting a long time) hepatitis C (Hep C)
• Treatment duration with EPCLUSA is 12 weeks. Your Hep C Specialist will determine your treatment regimen based on your individual case.
• Yes side effects and limitations
• A prevention not a cure
MAVYRET Hep C Cure

• MAVYRET is indicated for the treatment of adult and pediatric patients 12 years and older or weighing at least 45 kg with chronic hepatitis C virus (HCV) without cirrhosis or with cirrhosis (MAVYRET is
MAVYRET Hep C Cure

• IMPORTANT SAFETY INFORMATION

• WARNING: RISK OF HEPATITIS B VIRUS REACTIVATION IN PATIENTS COINFECTED WITH HCV AND HBV: Test all patients for evidence of current or prior hepatitis B virus (HBV) infection before initiating treatment with MAVYRET. HBV reactivation has been reported in HCV/HBV coinfected patients who were undergoing or had completed treatment. Monitor HCV/HBV coinfected patients for hepatitis flare or HBV reactivation during HCV treatment and post-treatment follow-up. Initiate appropriate patient management for HBV infection as clinically indicated.
Ayurveda takes a holistic and natural approach while addressing hepatitis, customized to individual requirements. Hepatitis causes derangement of the liver physiology due to inflammation of the liver tissue. This inflammation occurs due to an infestation of the hepatitis virus.

In Ayurveda’s scripts, malfunctioning of the liver is explained primarily as a consequence of aggravated Pitta (internal fire). Pitta allows transformation of materials (food) and is accountable for digestion and metabolism. Pitta allows the organs of the body to work in natural harmony.
Occupational Exposure

• Once the worker has been Potentially Exposed
• The incident Must be recorded
• Your ECP policies & procedures need to be followed
  Know this before not after
Exposure Incident is

• Exposure Incident means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other infectious materials that result from the performance of an employee's duties.
Exposure Incident Process

• Identifies both individuals

• Documents route of exposure

• Confidential Medical Evaluation of both individuals
Exposure Incident Process

• Medical Follow up is based on exposure risk and source individual information and is Confidential.
• Possible Post exposure treatment within 24 hours.
• Counseling of Individuals.
Exposure Incident Documentation

• Date and Time of Exposure
• How Exposure Occurred
• Note Medical/Labs /Peace Officers Will Need Type and Brand of Sharp Involved
  Why? Sharps Log
• Description of Incident Includes
  – Job Classification
  – Work Area it Occurred
  – Procedure being performed
  – How it Occurred
  – Body Part Involved
Exposure Incident Documentation

• If Engineering Protection was available
  – Was it activated?
  – Did injury occur before it was activated, during or after?
  – If no engineering does employee have an opinion how engineering could prevent and or other employee protection controls
  – This is specific to BBP but Good “BMP” for other compliance
Record Keeping

• The employer shall establish and maintain an accurate record for each employee with an occupational exposure incident
  • Records shall include:
    • Name & Social Security Number of employee
    • Copy of employees HBV vaccination records if exist/available
    • Copy of all medical testing and findings
    • Copy of physicians written opinion
• Record keeping
  • The employer shall maintain records for:
    • The duration of the employment
    • PLUS 30 years
    • Records must be kept CONFIDENTIAL!
Biohazardous Waste

• Contaminated sharps, equipment & tools
• Pathological & Microbial wastes
• Body Parts
Biohazardous Waste

• Includes all “Medical Waste”

• Liquid or semi-liquid blood or OPIM - *Other Potentially Infectious Materials*

• Items contaminated with Blood or OPIM which could release liquid or semi-liquid
Biohazardous Waste Disposal

• Disposal
  • Proper Containers
  • Labeled
  • Authorized Hauler
  • Follow Regulations
  • Follows disposal site mandates
Review

• T or F Universal precautions regarding BBP is best described as not coming into direct contact with another individuals blood?

• T or F OSHA only enforces Occupational or work-related activities?

• T or False An example of an Administrative workplace exposure prevention control is training?
Review

• T or False The following is a symbol of Biohazard waste?

• T or False The Hepatitis B vaccination is a prevention with some curative effect for potential workplace exposure?

T or False Your site Exposure Control Program (ECP) is an excellent resource/references for BBP policy/procedures for your work site?
Review

• T or F The hierarchy of workplace exposure prevention is the following: PPE, Engineering, Administration?

• T or F If your site determines your work activities require a Hep B vaccination then you must receive the vaccination?

• T or F In order to be exposed to a BB Virus the blood you were exposed to must contain the virus and it has to enter your body?
SHARKNADO

ENOUGH SAID!
Wash Hands

洗手 Lave as Mãos
Πλύσιμο χεριν  Мойте руки
Tanpri, Lave Men w Lavese Las Manos
Myj Ręce  Rũa Tay