

BLOODBORNE PATHOGENS (BBP) TRAINING

*Developed by faculty at the University of Washington,
School of Dentistry*

2016

Why You Need BBP Training

- In 1992, the state of Washington enacted a law mandating annual training for all individuals with jobs that could expose them to a Bloodborne Pathogen (BBP).
- This module is designed to provide you with the Bloodborne Pathogen (BBP) training required annually by State and Federal law.



- <http://apps.leg.wa.gov/WAC/default.aspx?cite=296-823>
- https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=10051



What You Will Accomplish with this Training

- This training will:
 - ▣ familiarize you with the kinds of blood-borne pathogens (BBP) found in the dental office, describe the risk they pose to you & patients, as well as teach you preventive measures to avoid risk of exposure,
 - ▣ assist you in developing an exposure control plan for mitigating risk of exposures in your office, &
 - ▣ fulfill your annual state BBP training requirement.

Bloodborne Pathogens - Defined

- BBPs are microorganisms present in blood which can result in serious diseases
- 'Blood' includes:
 - ▣ human blood & its components
 - ▣ products made from human blood
 - ▣ medications derived from blood (e.g. immune globulins)

NOTE: BBPs are prevalent in dental practice & simple to avoid exposure

Pathogens and Dentistry

- Several pathogens including viruses, bacteria, fungi, & parasites are potentially harmful.
- Due to their prevalence, **viral & bacterial** infections are high risk in dentistry.
- Viruses are small infectious agents causing colds, flu, hepatitis, HIV, & herpes.

All can be contracted through accidentally during the normal work day and considered as occupational exposures.

Occupational Exposures

- ❑ “Occupational Exposure” means reasonably anticipated BBP contact with skin, eye or mucous membranes that may result during the performance of an employee’s duties.



All health care workers are encouraged to follow **best work practices** to avoid exposure to blood and other bodily fluids.

Pathogens and Dentistry

- Bacteria are living organisms that **do not need a living host**, making them highly infectious.
- Bacteria can cause intestinal diseases (i.e. salmonella & E. coli) & tuberculosis (TB).
- Viruses **need a living host** in order to reproduce.



**They can be present on any surface
in your office**

Pathogen Transmission

1. **Inhalation** occurs when organisms are carried on respiratory droplets in the air entering the respiratory system (i.e. colds, flu, TB are transmitted by coughing/sneezing spreading the microorganism through the air.
2. **Ingestion** by consuming contaminated food & from contaminated hands. Thorough hand washing is critical!



Hep A can be contracted by failure to completely wash hands after restroom use.

Pathogen Transmission

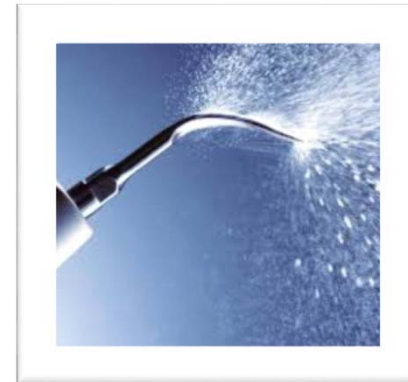
3. **Bloodborne** contact is the primary focus of this training, as it poses the highest risk of disease transmission to the dentist & team.



Transmission Pathways in Dentistry

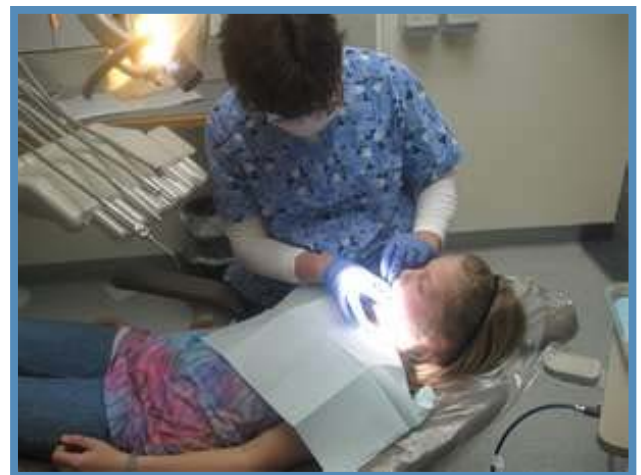
- BBPs can be transmitted from person to person by:
 - mucous membranes
 - an airborne pathway
 - a break in the skin

- How can this happen?
 - Splash to the eyes from a 3-way syringe, model trimmers, etc.
 - Aerosol spray from handpieces, scalers by inhaling the mist
 - Breaks in the skin from a needle stick, cuts from sharp instruments, (i.e. enamel hatchets, needles, bur, etc.)



Transmission Pathways in Dentistry

- Body fluids other than blood, such as saliva & tears may be contaminated with blood, therefore contain BBPs.
- Exposure to any body fluid through the pathways described may pose a risk of disease transmission to the dentist & any team member who may have come in contact with the fluid.



Transmission Pathways in Dentistry

- BBPs enter the body if there is a break in the skin. Note, cuts or needle sticks with blood contaminated instruments can transmit the pathogen through the skin.
- Cracked, cut, burned, abraded or other openings in the skin are more susceptible if that area comes in contact with a BBP.

BBPs cannot penetrate intact skin



Where We Commonly Find BBPs



sharp instruments



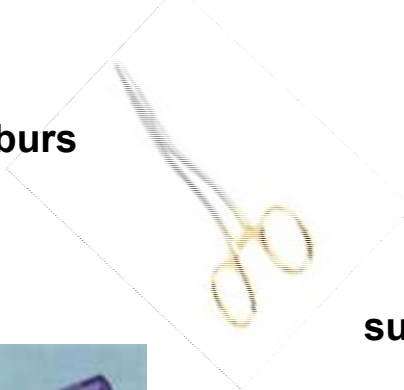
burs



irrigating syringes



countertops



suturing



extracted teeth



used needles



contaminated gauze



floss threaders

Transmission Pathways in Dentistry

- As previously mentioned, BBPs of an infected patient can enter the body through the mucous membranes, including the membranes in your eyes, nose and mouth.
- By the nature of your role as dental personnel, **you are at risk** as a normal part of doing your job.



Identify your staff job functions to assess their risk !

Transmission Pathways in Dentistry



Risk of Infection and Prevention

- By the nature of your job in dentistry, you are at risk for an “occupational” exposure. For this reason, dental professionals, along with all health care workers, are trained in accordance with state law to understand the risks and to learn and implement preventive measures.
- This training is not intended to raise unhealthy fear. It is intended to assure that you take precautions during your work & understand the serious nature of the diseases potentially transmittable to you.

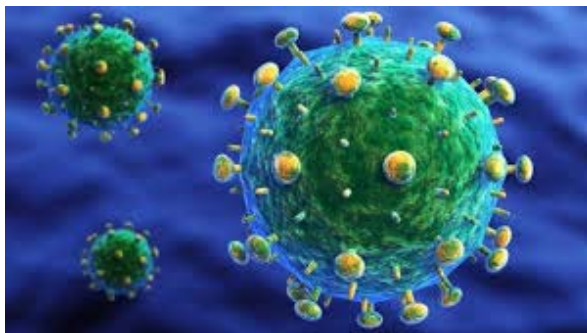


Risk of Infection

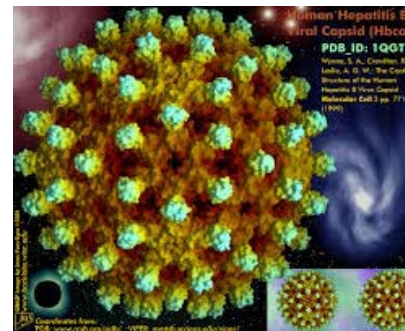
- Even though **most exposures do not result in infection**, the risk is not to be considered lightly. Risk variables are:
 - Pathogen involved
 - Type or route of exposure
 - Amount of bacteria or virus in the infected blood when exposed
 - Amount of infected blood involved
 - Whether or not a post-exposure treatment was taken
 - Immune status & specific response of the infected worker

Primary BBP Concerns for Dental Workers

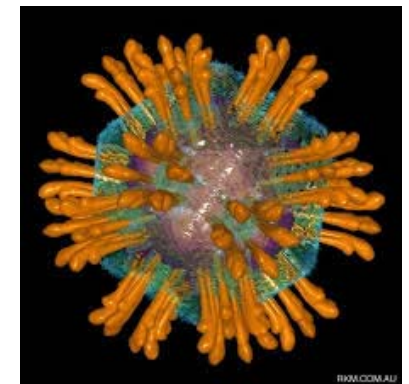
- Due to common use of sharps, the primary BBPs of concern are the following:
 - ▣ hepatitis B (HBV)
 - ▣ hepatitis C (HCV)
 - ▣ human immunodeficiency virus (HIV)



HIV virus



HBV virus



HCV virus

Hepatitis B and Hepatitis C



- Hepatitis viruses (HBV & HCV) are very infectious organisms affecting the liver. These infections can be acute (short term) or become chronic (lasting a person's lifetime). Hepatitis infections can range from damage that is mild, become severe and even cause death.
- HBV can survive outside the body for more than 7 days in a dry state, such as **countertops or contaminated needles**. HBV is 100 times more contagious than HIV!

Risk of BBP Transmission Statistics

Occupational transmission in the dental setting



The risk of infection following a needlestick/cut from a positive (infected) source is as follows:

- HBV: 6% - 30%
(many variables)
- HCV: 1.8%
(range 0%-10%)
- HIV: 0.1%

http://www.cdc.gov/OralHealth/infectioncontrol/faq/bloodborne_exposures.htm#ref

Hepatitis B

- The incubation period varies from 45 – 180 days but averages 60 – 90 days.
 - ▣ Onset of acute disease is typically gradual.
 - ▣ About 30% of infected individuals do not demonstrate any symptoms.
- The course & outcome of HBV infection vary significantly depending on the age at which one becomes infected.

Clinical illness occurs in 30 – 50% of older children & adults.

Hepatitis B

- Death rate due to HBV is approximately 1,800 per year, but most acute HBV infections in adults result in complete recovery with an immunity from future infection. Approximately 10% of adults who are infected develop chronic infection and **become carriers**.
- Persons with chronic HBV often have no symptoms, but they are at higher risk of developing cirrhosis or liver cancer which can lead to premature death. Once infected with the virus, one becomes immune to future hepatitis B infections.

Hepatitis C

- HCV is the **most common chronic bloodborne infection** in the U.S. An estimated 3.9 million people in the U.S. are living with chronic HCV infection.
 - ▣ In 2014, a total of 2,194 cases of acute hepatitis C were reported to CDC from 40 states with an estimated 30,500 acute hepatitis C cases occurring in 2014.
- HCV may be responsible for 60 - 70% of all chronic liver disease in the U.S. and is the leading indicator for liver transplants. It is estimated that 17,000 persons in the U.S. die from HCV-related illness annually. This is almost 10 times the deaths estimated due to HBV-related illness.

<http://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#section1>

Hepatitis C



- Currently antivirals & new medications are being used to treat HCV, but there is no preventative vaccine for HCV.
- The average incubation period is about 14 – 180 days weeks, on an average 45 days.
- It is common for people to live with hepatitis C for years without knowing they have it, because they do not have symptoms.
- There is considerable concern & distress for those waiting to determine whether or not they may have contracted the hepatitis C virus due to exposure.

Co-infections

- Contracting 2 or more infections at the same time is called co-infection.
 - ▣ For example, someone with HIV/HCV co-infection has both the hepatitis C virus and human immunodeficiency virus.



Consider this possibility when testing for a particular pathogen.

Bloodborne Pathogen Statistics

Pathogen	Disease	General Facts	Clinical Symptoms
human immunodeficiency virus (HIV)	AIDS	<ul style="list-style-type: none"> Attacks the human immune system Estimated 1.2 million in the US are living with HIV and 1 in 5 of those are unaware of their infection No cure; no vaccine available 	<ul style="list-style-type: none"> Symptoms vary, ranging from no symptoms to moderate flu like symptoms Most infected with HIV eventually develop AIDS
hepatitis B virus (HBV)	hepatitis B	<ul style="list-style-type: none"> HBV can survive outside the body for at least 7 days 100 times more contagious than HIV Estimated 43,000 new infections in 2007 No cure but preventative vaccine 	<ul style="list-style-type: none"> Some may not have symptoms Flu like symptoms Fatigue Abdominal Pain Loss of Appetite Nausea/Vomiting Joint Pain
hepatitis C virus (HCV)	hepatitis C	<ul style="list-style-type: none"> Most common chronic bloodborne infection in the US Estimated 17,000 new infections in 2007 	<ul style="list-style-type: none"> Many never have symptoms Flu-Like symptoms Jaundice Fatigue Abdominal pain Nausea

Summary of Exposures: WA State



- Washington State Department of Labor conducted a 7 year study (1995 – 2001) of all percutaneous injuries in WA. This study published in 2006 reported a total of 4,695 exposures submitted by health care workers, of which 924 (20%) were reported by Dentists, Hygienists and Dental Assistants (BMC Public Health, 2006).
- Injuries during this period occurred primarily in general dental clinics and offices while incidents in dental specialty clinics were only 9% of the total 924 incidents.

Note: As of 2016, this is the most recent data available for exposures in the State of Washington

Summary of Exposures: WA State

- The number of incidents increased from 78 reported exposures in 1995 to 216 in 2001. Without safer practices and continued training the number of incidents were predicted to increase.
- In addition to the emotional impact when exposed to a BBP, the financial impact is not trivial. The estimated direct medical costs in 2001 associated with initial assessment ranged from \$539 - \$672 while follow up & treatment ranged from \$360 - \$1,383 per injury.



Sharps Injuries: WA State (1995-2001)

Dental Assistant	Dental Hygienist	Dentist
<ul style="list-style-type: none">• 578 or 86% involves syringe needles• 60 or 9% involved burs, explorers, scalers or scalpels• 18 or 3% involved suture needle• 11 or 2% other devices	<ul style="list-style-type: none">• 147 or 91% involved syringe needles• 14 or 9% dental instruments	<ul style="list-style-type: none">• 54 or 82% involved syringes/needles• 7 or 11% involved dental instruments• 5 or 7% involved suture needles

Activities Leading to Exposures

Dental Assistant	Dental Hygienist	Dentist
<ul style="list-style-type: none">• Cleaning instruments, changing local anesthetic and recapping needles	<ul style="list-style-type: none">• Administering local anesthesia, recapping and cleaning instruments	<ul style="list-style-type: none">• Administering local anesthesia

Significance of BBP Exposures in Dentistry

- Washington practitioner statistics for the year 2000
 - 5,760 Dental Hygienists
 - 8,240 Dental Assistants
 - 43,500 Nurses
- Washington needle stick injuries from 1995 – 2001
 - 828 needle sticks for Dental Hygienists & Assistants combined
 - 1048 needle sticks for Nurses

The risk to dental professionals is higher!

Significance of BBP Exposures in Dentistry

- The data indicates the risk for exposure & needle stick injuries is higher among **dental health professionals** but many other variables contribute to the increase in numbers of incidents including:
 - ▣ Growing number of dental professionals
 - ▣ Accurate reporting of incidents
 - ▣ Greater number of patients posing higher risk

Exposure Control Plan

Do you have a plan for your office? This section will identify what you need in to include in your plan, & specifics for staying compliant with state law.



Exposure Control Plan

- Washington **state law requires** dental practices to have an exposure control plan. This is a written plan to eliminate or minimize occupational exposures.
 - Employers must:
 - **update the plan annually** to reflect changes in tasks, procedures & positions that affect occupational exposure, & also technological changes that eliminate or reduce occupational exposure.
 - annually document they have considered & begun using appropriate, commercially-available effective **safer medical devices**.
 - document the **input from frontline workers** in identifying, evaluating & selecting effective engineering & work practice controls.

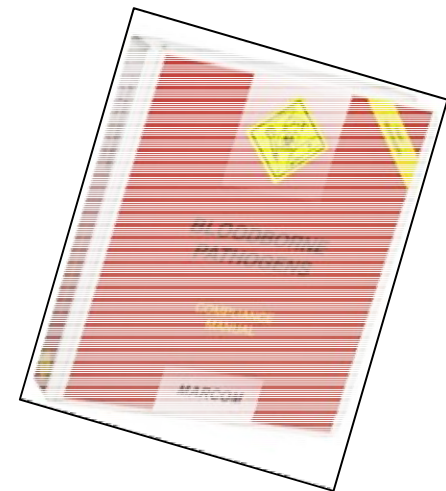
Exposure Control Plan: Components

- ❑ An exposure control plan includes the following requirements:
 - ❑ Exposure determination (identification of which employees can reasonably anticipate contact with blood and other bodily fluids)
 - ❑ Use universal precautions
 - ❑ Engineering controls (devices that isolate or remove BBP hazards)
 - ❑ Work practice controls (practices that reduce possibility of exposure by changing the way a task is performed)
 - ❑ Personal Protective Equipment (PPE)
 - ❑ Hepatitis B vaccinations & other recommended immunizations
 - ❑ Post exposure evaluation & follow-up
 - ❑ Labels and signs to communicate hazards
 - ❑ Information and training for workers
 - ❑ Recordkeeping



Exposure Control Plan: Determination

- The written exposure control plan must include a list of job classifications in which all workers have occupational exposure & a list of job classifications in which workers have occupational exposure.
- ▣ This must also include a list of the tasks and procedures performed by those workers that result in their exposure.



Exposure Control Plan: Determination

- Who is at risk on the job?
 - ▣ It is important to know **by job classification**, which employees should reasonably anticipate contact with blood & other body fluids.
 - ▣ Dentists, lab technicians, hygienists and dental assistants should always anticipate contact with blood & body fluids.
 - ▣ Front desk employees & others with direct patient contact **may** also come in contact with blood & body fluids.

Exposure Control Plan: Determination



Example from UW School of Dentistry's Exposure Control Plan - Job classifications in which ALL employees have occupational exposure to bloodborne pathogens:

Job Title	Department/Location	Tasks
Student Dental Providers UW School of Dentistry Faculty Dental Assistant Staff Researchers/Labs Assistants Sterilization Technicians	Predoctoral and Post-doctoral clinics Sterilization services Research labs (working with human subjects)	Treatment of patients Decontamination of instruments Handling of tissue

The following job classifications at UW School of Dentistry in which some employees have occupational exposure:

Job Title	Department/Location	Task
Receptionists, Dental Records Staff, Dispensary Clerks	Patient Services Front Office Clinic Dispensaries	Possible Patient Contact
Administrative Staff	Administration – Location varies	Possible Patient Contact

Exposure Control Plan: Universal Precautions

- Practices must implement the use of universal precautions.
- Universal precautions = Treating all blood & other **potentially infectious material (OPIM)** as if infectious with bloodborne pathogens.



Exposure Control Plan: Engineering Controls (Safer Medical Devices)

- Syringes with a sliding sheath that shields the attached needle after use
- Needles that retract into a syringe after use
- Scalpels with sliding/locking guards
- Instrument cassettes
- Needle stick shields

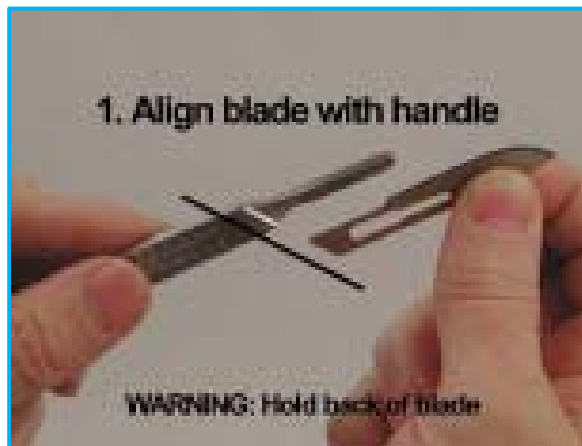


Safer Medical Devices



Safe Work Practices

- Attach or remove blade using a hemostat rather than handling it directly with the fingers.



no



yes

<https://www.youtube.com/watch?v=cqUxQ9jKMkg>

Exposure Control Plan: Engineering Controls (Safer Medical Devices)

- ❑ Use approved sharps disposal containers
- ❑ Sharps containers should be:
 - ❑ Closable
 - ❑ Puncture-resistant
 - ❑ Leak-proof
 - ❑ Labeled or color-coded
 - ❑ Upright & visible where sharps used
 - ❑ Disposed of when 2/3 full
 - ❑ **not overfilled**



Exposure Control Plan – Work Practice Controls (Safe Work Practices)

- Completing tasks safely helps to minimize exposure to blood or other potentially infectious materials.
- Don't bend, recap or remove needles without having appropriate safety mechanisms in place such as stick shields.
 - ▣ When recapping, use the one handed “Scoop and Swoop” method with a needle shield in place. Never hold the cap during the “Scoop and Swoop” technique.
 - ▣ Don't shear or break needles.
 - ▣ Immediately place contaminated reusable sharps in appropriate containers until properly decontaminated.

Safe Work Practices



yes



no

- ❑ **Do not** use 2 hands to recap a syringe.
- ❑ Use the a product such as “Protector” cardboard shield.
- ❑ Recap needles using 1-hand scoop technique.

www.certol.com/LandingPages/ProTector.aspx

Exposure Control Plan: Work Practice Controls (Safe Work Practices)

- Wash hands after each glove use & immediately or ASAP after exposure.
- Alcohol hand sanitizers may be used but should **not replace** hand washing.
- Remove PPE before leaving work/treatment area.



Exposure Control Plan: Work Practice Controls (Safe Work Practices)

- Although very effective when used routinely, PPE cannot completely eliminate the risk of an exposure incident; accidents happen.
- Exam and surgical gloves do not protect against sharp injuries, & unexpected splashes may expose eyes & mucous membranes to possibly infectious materials.
- In case of an exposure to blood or other fluids:
 - ▣ Perform basic first aid to cleanse the wound & affected area.
 - ▣ Report the injury immediately.
 - ▣ Follow instructions for obtaining medical attention, follow up & reporting.

Exposure Control Plan – Work Practice Controls (Safe Work Practices)

- Do not eat, drink, smoke, apply cosmetics or lip balm, or handle contact lenses in any work areas where there is the possibility of exposure to blood or bodily fluids.
- Do not place food or drink in refrigerators or freezers used for dental materials, shelves, cabinets, or on countertops or bench tops in any work areas.



Exposure Control Plan: Work Practice Controls (Safe Work Practices)

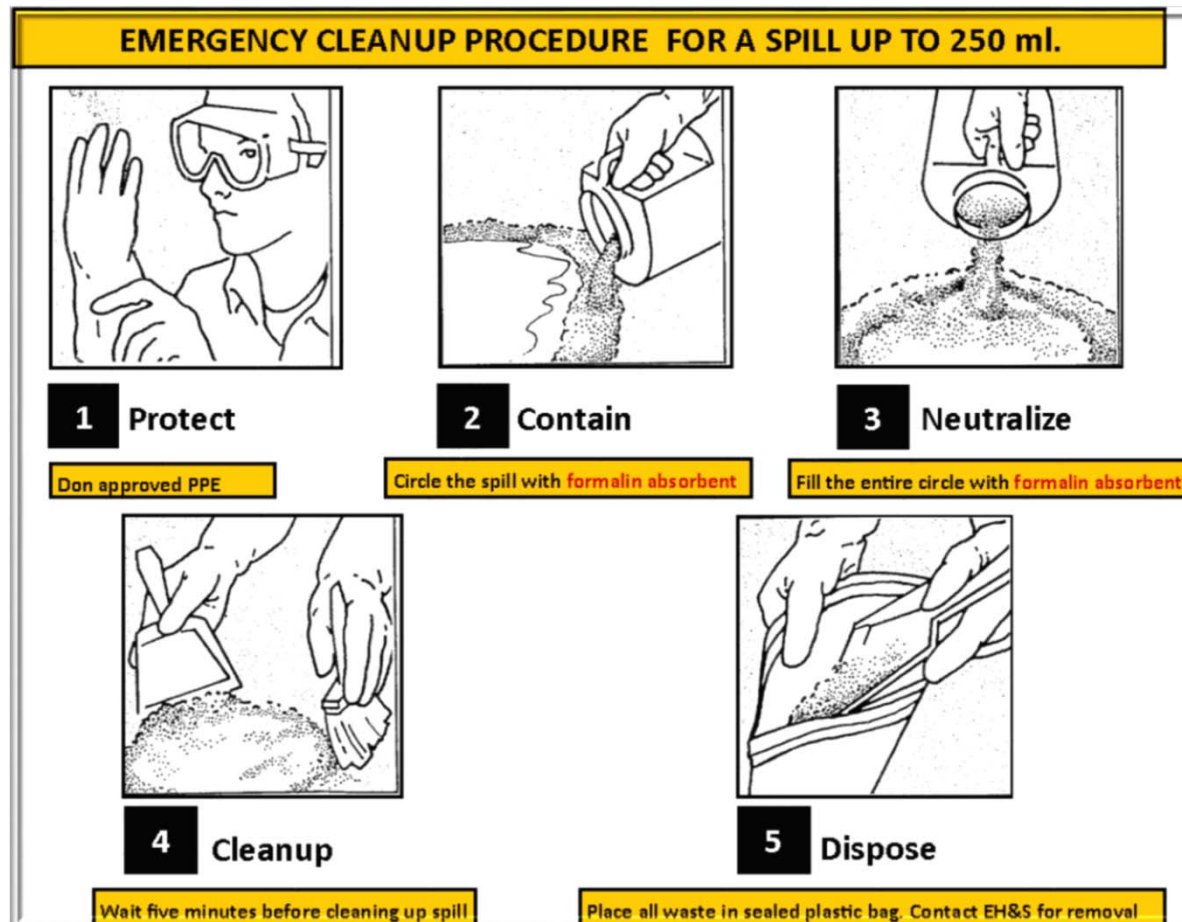
- Guidelines for **cleaning up** spills, sharps & broken glass contaminated with blood and/or bodily fluid:
 - ▣ Wear protective eyewear & mask if splashing is anticipated.
 - ▣ Remove glass & other sharps materials using a broom & dust pan, forceps, hemostat, etc. - **Do not use your hands.**
 - ▣ Properly discard all materials into a sharps or puncture-resistant biohazardous waste container.
 - ▣ Use absorbent towels or paper to soak up the spilled materials.



Exposure Control Plan – Work Practice Controls (Safe Work Practices)

- Guidelines for cleaning up spills, sharps and broken glass contaminated with blood and/or bodily fluid (continued from previous slide):
 - ▣ Clean the area with 10% bleach or EPA-registered disinfectant.
 - ▣ Saturate the spill area with disinfectant & leave for 10 minutes (or as specified by product manufacturer) or allow to air dry.
 - ▣ Use antiseptic wipes using the “Wipe, Discard, Wipe” (clean/disinfect) method.
 - ▣ Dispose of paper towels & cleaning materials into proper waste containers in accordance with hazardous materials guidelines.

Exposure Control Plan: Spill Clean Up



Exposure Control Plan: Work Practice Controls (Safe Work Practices)

□ Regulated waste poses a significant risk of exposure to workers, including those who may handle waste downstream.

□ Regulated waste includes:

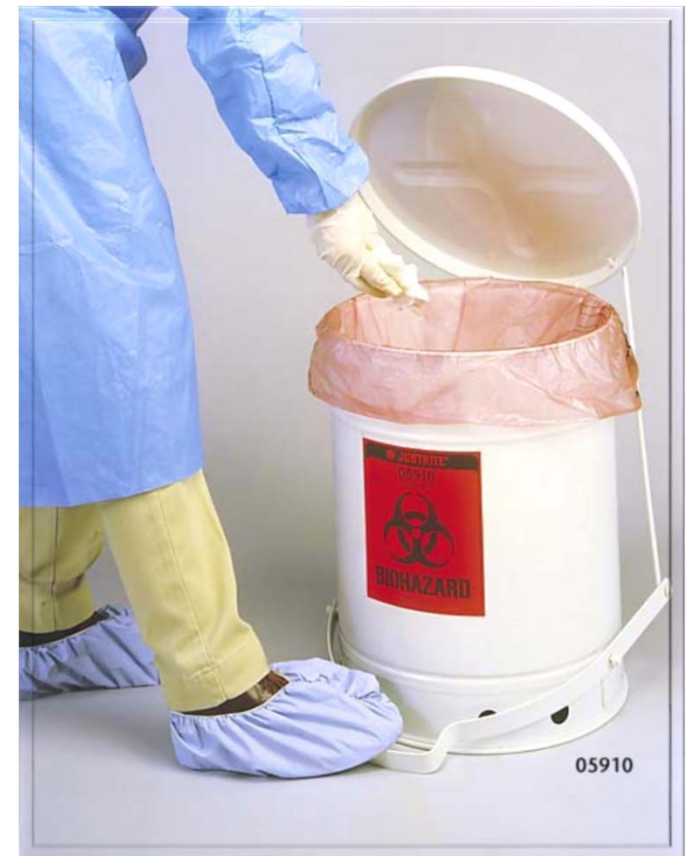
- Liquid or semi-liquid blood
- Contaminated items that would release liquid or semi-liquid blood if compressed or compacted
- Dried caked blood that might flake off or be released if handled
- Contaminated sharps
- Pathological and biological items with blood

Regulated waste does not include materials that sufficiently absorb blood such as band aids and feminine hygiene products.

Exposure Control Plan: Work Practice Controls (Safe Work Practices)

Regulated waste container guidelines:

- ❑ Easily accessible
- ❑ Labeled or color-coded
- ❑ Leak-proof & closeable
- ❑ Puncture-resistant for sharps
- ❑ Replaced routinely & not overfilled
- ❑ Lined & disinfected (as applicable)
- ❑ Always wear adequate PPE when handling sharps & waste



Exposure Control Plan: PPE

- PPE is required whenever exposure to blood or other body fluids cannot be completely eliminated.
- PPE must adequately ensure that blood or other body fluids cannot pass through or reach your clothes, skin, eyes, mouth or other mucous membranes.



Exposure Control Plan: PPE

- Gloves (not re-used)
- Face shields or masks & eye protection
 - ▣ Eyewear has side shields
 - ▣ Full face shield used for high splatter procedures
- Resuscitation devices
 - ▣ Oxygen mask
 - ▣ Bag valve mask
- Lab coats & gowns
 - ▣ Fluid resistant fabric
 - ▣ Cover to the neck
 - ▣ Long sleeved with cuffs
 - ▣ Worn only in treatment/lab areas
 - ▣ Laundered by office or professional service

Exposure Control Plan: PPE



- Gloves must be worn when hand contact with blood or other body fluids can be reasonably anticipated or when handling or touching contaminated items or surfaces.
- Recommend making a list of tasks/procedures that always require the use of gloves.
- Non-latex gloves should be available for those who are hyper-sensitive to latex (worker or patient).
- Discuss the types of gloves used in your workplace (e.g., latex, nitrile, vinyl, powderless, utility) & the process for disinfecting & replacing non-disposable gloves.

Exposure Control Plan: PPE

- ❑ Do not re-use disposable gloves.
- ❑ Change gloves frequently; pinhole leaks can allow passage of microscopic organisms.
- ❑ Remove torn & damaged gloves; wash hands thoroughly with soap & water before replacing them.
- ❑ Wash hands with soap & water between each glove use.



Exposure Control Plan: PPE

- Remove gloves safely
 - ▣ Grasp near cuff of glove and turn it inside out. Hold in the gloved hand.
 - ▣ Place fingers of bare hand inside cuff of gloved hand & turn inside out & over the first glove.
 - ▣ Dispose gloves into proper waste container.
 - ▣ Clean hands thoroughly with soap & water (or antiseptic hand rub product if hand washing facilities not available).



Exposure Control Plan: PPE

- ❑ Appropriate face & eye protection must always be worn in clinical settings because splashes, sprays, splatters & droplets of blood as well as other bodily fluids pose a hazard to the eyes, nose & mouth.
- ❑ Face shields are necessary when the risk & amount of potential splash or splatter is substantial.
- ❑ Safety glasses with side shields may be adequate when the risk of splash is minimal.
- ❑ Splash goggles or the combination of a mask & eye protection may be required in higher risk situations.

Comparison of Eye Protection Options

Science & Safety
CONSULTING SERVICES
Science IS—INQUIRY...Safety

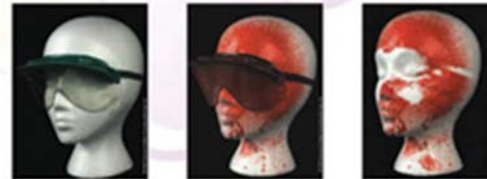
Safety Glasses With Vented Side Shields
(Impact Only)



Safety Glasses With Nonvented Side Shields
(Impact Only)



Visorgogs® (Impact Only)



Impact Safety Goggles
(Impact Only)



Chemical Splash Safety Goggles
(Impact and Splash Protection)



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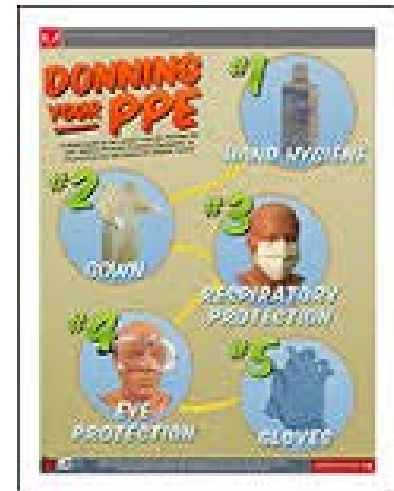
Linda M. Strout, Ph.D. 919-881-0282 ph
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LMS@SCSDS.com
www.scienceandsafetyconsulting.com

AirClean Systems
www.aircleansystems.com

Putting on (donning) PPE:

Follow these steps for donning PPE:

- Don your gown.
- Seat your patient in the chair.
- Don your face mask and adjust fit.
- Don your protective eyewear.
- Wash your hands.
- Don your gloves.



Remove your PPE in proper sequence:

Follow this sequence to remove (doffing) PPE:

- Remove your protective eyewear.
- Remove face mask touching only the mask.
- Avoid touching your face.
- Remove your gloves.
- Wash your hands.
- Remove your gown; avoid contaminating your hands.
- After removing your gown, wash your hands again.



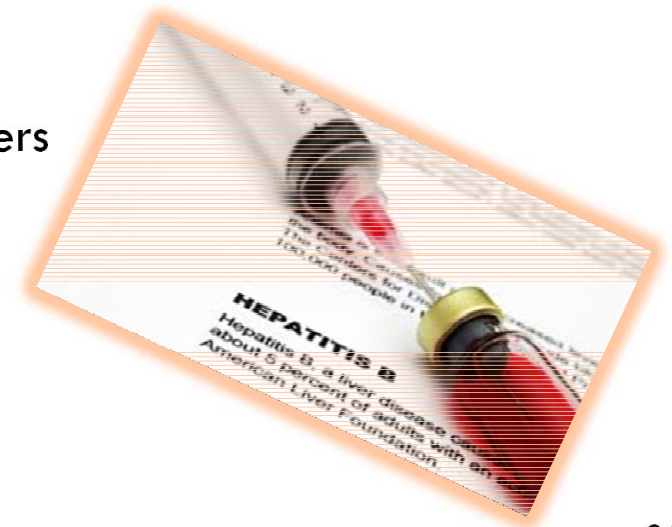
Exposure Control Plan: PPE

- Use the following when administering CPR:
 - ▣ Gloves
 - ▣ Resuscitation device such as:
 - Mouthpiece
 - Resuscitation bag
 - Pocket mask
 - Microshield
 - Overlay barrier



Exposure Control Plan: Hepatitis B Vaccine

- ❑ Employers are required to make hepatitis B vaccinations available to all workers with occupational exposure.
- ❑ This vaccination must be offered after the worker has received the required BBP training & within 10 days of initial assignment to a job with occupational exposure.
- ❑ Hepatitis B vaccination information:
 - ❑ 3 injections at 0, 1, & 6 months of employment
 - ❑ Effective for 95% of adults
 - ❑ Post-vaccination testing for high risk health care workers



Exposure Control Plan: Post-Exposure Evaluation & Follow-Up

- Post-exposure evaluation & follow-up must be made available to any occupationally exposed worker who experiences an exposure incident of:
 - ▣ eyes
 - ▣ mouth
 - ▣ other mucous membranes
 - ▣ or non-intact skin contact with blood / OPIM

Evaluation and follow-up must be cost free to the worker.

Exposure Control Plan: Post-Exposure Evaluation & Follow-Up

- Post-exposure evaluation & follow-up includes:
 - ▣ Documentation of the route(s) of exposure & circumstances under which the incident took place.
 - ▣ Identification & testing of the source patient/individual for HBV & HIV infectivity.
 - ▣ Collection & testing of the exposed worker's blood.
 - ▣ Offering post-exposure prophylaxis & counseling.
 - ▣ Evaluation of reported illnesses.

Exposure Control Plan - Post-Exposure Evaluation and Follow-Up

- After the employee has received post-exposure follow-up, the employer is required to obtain a written opinion from the healthcare provider and provide it to the employee within 15 working days.



Exposure Control Plan - Post-Exposure Evaluation and Follow-Up

- Questions that need to be answered by your practice
 - Do you have a written exposure protocol?
 - Where will staff go for post-exposure testing?
 - Who will counsel the source patient?
 - Where will the source patient go for testing?
 - Who will follow-up and make sure the exposed employee receives the healthcare professional's report?
 - Who will make sure the cost of evaluation & follow-up is covered?

Every practice needs to create and maintain a written plan.

Exposure Control Plan: Labels & Signs to Communicate Hazards

- Warning labels must be affixed to the following:
 - ▣ Containers of regulated waste
 - ▣ Containers of contaminated reusable sharps
 - ▣ Refrigerators and freezers containing blood or other potentially infectious materials
 - ▣ Containers used to ship blood or other potentially infectious materials
 - ▣ Bags or containers of contaminated laundry

Red bags or red containers may be used instead of labels.

Exposure Control Plan: Labels & Signs to Communicate Hazards

Example of labeled regulated waste



Example of labeled regulated waste



Exposure Control Plan – Information and Training for Workers

- Employers must ensure that their workers receive regular training that covers the following topics:
 - ▣ Blood borne pathogens and diseases
 - ▣ Methods used to control occupational exposure
 - ▣ Hepatitis B vaccine
 - ▣ Medical evaluation and post-exposure follow-up procedures
- Employers must offer the training above upon hire, annually thereafter, and when new or modified tasks and/or procedures affect a worker's occupational exposure.

Exposure Control Plan – Maintain Worker Medical and Training Records

- Worker medical records kept by employers contain name and SS#; HBV vaccination status and associated records; copies of results of exams, medical testing & follow-up procedures; copies of the healthcare professional's written opinion; & copies of information provided to the healthcare professional.
 - ▣ The employer must ensure medical records are kept confidential & not reported or disclosed without written consent of the worker except as required by standard or law.
 - ▣ Records must be maintained for the duration of employment plus 30 years.



Exposure Control Plan – Maintain Worker Medical and Training Records

- Employers must maintain training records to confirm employees have received required training at the time of hire, annually, and when duties and/or procedures change that affect the employee's potential for exposure.
 - ▣ Training records must include dates of training, contents or a summary of the training sessions, names and job titles of all persons attending the training, and the names & qualifications of the persons conducting the training.
 - ▣ Training records must be retained for 3 years from the training date.

Exposure Control Plan – Maintain Worker Medical and Training Records

- A sharps injury log is required by WA state for healthcare organizations with more than 10 employees.
 - ▣ A sharps injury log is used to track **root causes of injuries** (devices, work practices, etc.), not intended to track which employees had injuries.



Exposure Control Plan – Maintain Worker Medical and Training Records

- The following elements must be tracked in the sharps log:
 - Type and brand of device, if known
 - Department or work area where exposure occurred
 - Explanation of how the incident occurred

- The sharps log must be recorded and maintained in a way that protects the confidentiality of the injured worker.

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Exposure Incident Response



- To reduce the chance of contracting a transmittable disease, it is very important to carry out post-exposure initial treatment.
 - ▣ Eye or facial exposure
 - Flush exposed eyes (while holding eyelids open) with water for 15 minutes as soon as possible (prior to seeking medical care) using emergency eyewash stations if available.
 - ▣ Needle sticks and non-intact skin exposure
 - Scrub area thoroughly with warm water & sudsy soap for 15 minutes. Perform first aid.

Seek medical care as soon as possible.

Summary

- References to develop a successful exposure control plan & required components are listed in the following slides. In addition to the links provided, visit the University of Washington School of Dentistry Health & Safety website for examples of policies, procedures & exposure control plan.

<http://dental.washington.edu/health-and-safety/>

References

- Bloodborne Pathogen OSHA Fact Sheet
 - http://www.osha.gov/OshDoc/data_BloodborneFacts/bbfact01.pdf
- Model Plans for OSHA Bloodborne Pathogen Standard
 - <http://www.osha.gov/Publications/osha3186.pdf>
- CDC Bloodborne Pathogens Topic Page
 - <http://cdc.gov/niosh/topics/bbp/>
- Medical & Dental Offices: A Guide to Compliance with OSHA Standards
 - <http://www.osha.gov/Publications/osha3187.pdf>
- UW School of Dentistry Health & Safety Website
 - <http://www.dental.washington.edu/programs/health-and-safety/health-and-safety.html>

References

- Safety & Health Assessment & Research for Prevention, (SHARP) Program, Washington State Department of Labor & Industries, Olympia, USA
 - <http://www.lni.wa.gov/Safety/Research/Pubs/default.asp>

- BMC Public Health, (2006) Percutaneous Injuries among dental professionals in Washington State
 - <http://www.biomedcentral.com/1471-2458/6/269>

- Washington State Department of Health
 - <http://www.doh.wa.gov>

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Congratulations!

Now that you have completed the Bloodborne Pathogen Training, you must complete this online exam to receive CDE credit. You must have at least 10 correct answers to pass. After passing the test you will receive a Verification of Completion document within one week. **If you have less than 10 correct answers, you must retake the exam.** You may retake the exam as many times as you need until you pass.

To receive CDE credit and to test your knowledge, click the link below:

Test Link: <https://catalyst.uw.edu/webq/survey/sallyg/161608>

If you have any questions, or if you do not receive your certificate within one week, please contact UW Continuing Dental Education:

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