

PRESENTER'S GUIDE

"BLOODBORNE PATHOGENS IN HEALTHCARE FACILITIES"

**Training for
THE OSHA BLOODBORNE PATHOGENS STANDARD**

OUTLINE OF MAJOR PROGRAM POINTS

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The following outline summarizes the major points of information presented in the program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

- **They're too small to see with the naked eye, but they pose health risks that are too big to ignore.**
- **Bloodborne pathogens are disease-causing micro-organisms found in human blood, as well as in human blood components and products.**
- **Exposure to bloodborne diseases is a serious concern in the healthcare industry.**
 - The Occupational Safety & Health Administration (OSHA) has developed regulations for dealing with bloodborne pathogens in the workplace.
- **While there are a number of bloodborne pathogens, the Human Immunodeficiency Virus, or "HIV", Hepatitis B and Hepatitis C currently pose the greatest threats.**
- **This program will show:**
 - How exposure to bloodborne pathogens can occur in healthcare facilities.
 - How regulations and following required procedures help to prevent such exposure.
 - What to do if an exposure occurs.
- **The dangers associated with the HIV pathogen have received a great deal of public attention.**
 - It is reported to have infected over one million people in the U.S. alone, and it continues to spread.

- **Symptoms experienced at the onset of HIV infection can vary. They include:**
 - Weakness.
 - Fever.
 - Sore throat.
 - Nausea.
 - Headaches.
 - Diarrhea.
 - Other "flu-like" symptoms.
- **Many people with the HIV virus show no apparent symptoms for years after their initial infection.**
- **There is still no proven vaccine that can prevent HIV, and no known cure.**
 - However, great strides have been made recently in treating HIV.
 - There are several drugs and drug combinations that appear to be effective in controlling the disease and relieving its symptoms in many people.
- **People who contract HIV risk developing the Acquired Immunodeficiency Syndrome ("AIDS") which attacks the immune system.**
 - AIDS reduces the body's ability to fight off other diseases, and as a result can ultimately be fatal.
 - Controlling the HIV pathogen is very important.
- **Hepatitis is a liver disease that usually results in the inflammation of the liver, and frequently progresses to more serious conditions including cirrhosis and cancer.**
 - Each year in the U.S., there are over 40,000 new cases of Hepatitis B, the most common type of viral hepatitis.
 - And it is estimated that more than 3 million people in the U.S. are carrying the Hepatitis C virus.
- **The prevalence of hepatitis is so widespread that many experts consider it to be a greater transmission hazard than HIV.**

- **While there is no known cure for Hepatitis B, a vaccine is available that can prevent infection.**
 - In some cases, the vaccine can be effective in preventing infection after exposure as well.
 - There are also treatments that can help to control Hepatitis B and relieve its symptoms.

- **In recent years there has been even more progress made in the treatment of Hepatitis C.**
 - Today there are drugs that can actually cure Hepatitis C in many people.

- **Hepatitis B symptoms can take six weeks to six months to develop, symptoms of Hepatitis C from four weeks to three months.**
 - The initial indications resemble those of a mild "flu".
 - There is a sense of fatigue, nausea, loss of appetite, and possible stomach pain.
 - Often, jaundice (a distinct yellowing of the skin) will eventually develop, as well as a darkening of the urine.

- **In healthcare environments, bloodborne pathogens are most often transmitted "parenterally".**
 - This is when microorganisms that are present in a substance are accidentally "injected" into a worker by a contaminated sharp object.
 - These exposures often occur through punctures from infected needles, or human bites.
 - They are so common that preventing "parenteral" exposures is one of the major focuses of the OSHA Bloodborne Pathogens Standard.

- **Bloodborne pathogens can also be transmitted through open skin abrasions or cuts that come into contact with potentially infectious materials, such as:**
 - Blood.
 - Human tissue.
 - Vaginal secretions from discarded hygiene products.
 - Other body substances with blood in them.

- **Cultures and body substances visibly contaminated with blood must be considered potentially infectious, and so must any body fluids and materials of unknown origin.**
 - Materials taken from infected lab substances may carry bloodborne pathogens as well.

- **OSHA's Bloodborne Pathogens Standard requires your facility to create an "Exposure Control Plan".**

- **The plan spells out how your facility will address the requirements of the regulation itself, and includes:**
 - A determination of each employee's potential for exposure to bloodborne pathogens,
 - An examination of ways to limit or eliminate these exposures.

- **The Exposure Control Plan also discusses setting up a Hepatitis B vaccination program, as well as procedures to be followed whenever an accidental exposure occurs. Other parts of the plan address:**
 - Biohazard warning signs and labels.
 - Employee training.
 - Keeping records regarding exposure, vaccination and training.

- **The plan must also incorporate the use of "Standard Precautions", which require that all human blood and other body substances be treated as if they are known to be infectious.**

- **For people in the healthcare industry, one of the most critical issues the Exposure Control Plan addresses is how to reduce the risk of needlesticks and other "sharps" injuries.**
 - The Centers for Disease Control estimates that contaminated sharps cause nearly 400,000 injuries to healthcare personnel each year.
 - When these injuries involve infectious agents such as Hepatitis or HIV, the affected workers are almost always at risk of contracting a bloodborne disease.

- **To help combat the potential for needlesticks, OSHA requires that facilities re-evaluate their Exposure Control Plan at least once a year.**
- **A major focus of these reviews is to make sure that your facility is using every means available to keep you safe.**
- **As a rule, the review must confirm that the Exposure Control Plan:**
 - Reflects changes in technology that can eliminate or reduce exposure to bloodborne pathogens.
 - Documents the investigation and implementation of new medical devices that are designed to reduce or eliminate occupational exposure to bloodborne pathogens.
 - Incorporates the opinions of frontline employees whose interactions with patients expose them to potentially contaminated sharps.
- **If you would like to look at your facility's Exposure Control Plan, ask your supervisor.**
- **Labeling is the most "visible" requirement in the regulation.**
 - Containers that carry any potentially infectious materials, such as blood or tissue, must be marked with a "biohazard" label.
 - Biohazard labels must also appear on any equipment and materials that are may have been contaminated ("contaminated" indicates the presence or anticipated presence of potentially infectious materials on an item or surface).
- **Biohazard labels are fluorescent orange-red, with the biohazard symbol in a contrasting color.**
 - The word "biohazard" is also marked on the lower portion of the label.
 - Red bags or red containers can substitute for these labels.

- **There are several "exceptions" to these labeling requirements.**
 - Individual containers of blood do not have to be labeled if they are placed inside another labeled container for transport or storage.
 - Facilities that are following Standard Precautions in handling all specimens do not have to use this type of labeling if the specimens are recognizable by the employees who normally handle them.
 - Labeled blood products released for transfusion or other clinical use are also exempt as long as these specimens remain within the facility.

- **Common places that you will see biohazard labels include:**
 - Refrigerators and freezers containing blood or other potentially infectious materials.
 - Containers used to store, transport or ship these materials.
 - Contaminated equipment awaiting cleaning.
 - Containers of "Regulated Waste".

- **"Regulated Waste" refers to several things, including:**
 - Potentially infectious materials such as blood.
 - Items such as used bandages and dressings.
 - Contaminated bedding and towels.

- **Contaminated sharps, including needles, scalpel blades and broken glass, are also considered to be "Regulated Waste".**
 - Containers that may have had infectious material in them are considered to be "Regulated Waste" too.

- **Your employer has compiled lists of job classifications and activities that may present a risk of exposure to bloodborne pathogens.**
 - These lists can be found in your facility's Exposure Control Plan.

- **There are many ways that you and your employer can work to reduce your exposure to bloodborne pathogens. They include:**
 - The use of Standard Precautions (treating all blood and body substances as if they are infectious).
 - Implementing engineering controls.
 - Following "safe work practices".
 - The use of personal protective equipment.
 - Adhering to good housekeeping practices.

- **"Engineering controls" refer to equipment or machinery that can minimize exposure, such as:**
 - Puncture-resistant "sharps" containers.
 - Self-ventilating laboratory hoods.
 - Sharps with engineered injury protections, such as self-sheathing needles.

- **"Safe work practices" reduce the potential for exposure by focusing on the safest ways to perform tasks.**
 - Handwashing is one of the most important.

- **If you have been involved in a situation where you may have been exposed to bloodborne pathogens, OSHA requires that you wash your hands immediately after removing any gloves and personal protective equipment that you were wearing.**
 - When you're finished, remember to use your towel to turn off the faucet so you won't "re-contaminate" yourself on a surface that you touched before you washed your hands.

- **You must also rinse your eyes, nose and other mucous membranes with generous amounts of water if they have been exposed to potentially infectious material.**

- **OSHA requires other safe work practices as well:**
 - The Standard stresses the need to minimize any splashing, spraying or creation of droplets when you're dealing with potentially infectious samples.
 - No "mouth pipetting" or "suctioning" is permitted.

- **OSHA considers "housekeeping" practices to be very important to the control of exposure situations.**
 - Written cleaning schedules, specifying the methods of decontamination that are being used, must be maintained to assure that all areas are clean and sanitary.

- **Work surfaces that are obviously contaminated must be cleaned immediately with an appropriate disinfectant.**
 - They should be cleaned at the end of each work shift, as well.

- **Broken glassware is not to be picked up by hand, but by using a brush and dustpan, tongs or other tools.**

- **There are several "safe work practices" that must be followed regarding contaminated needles and sharps:**
 - They must not be bent.
 - They cannot be recapped or removed unless there is no feasible alternative.
 - If they have to be recapped or removed, you must use a one-handed technique, or a mechanical device.

- **Contaminated sharps must be discarded as soon as possible into appropriately labeled containers that are:**
 - Closeable.
 - Puncture-resistant.
 - Leak-proof.

- **These containers must be easily accessible, left upright, replaced routinely, and never overfilled.**
 - They must be closed when handled, and are subject to the same secondary container requirements as specimens.

- **Rules also govern the handling of potentially infectious body substances and "Regulated Waste".**
 - "Regulated Waste" includes contaminated personal protective equipment, bandages, linens and other materials that are being disposed of.

- **They must be placed in appropriately labeled, closeable and leak-proof containers.**
 - Containers must be closed and secured during handling.
- **When the outside surface of the primary container is contaminated, an appropriately labeled secondary container must be used as well.**
- **If there is a danger that the items in the waste could puncture the primary container, the secondary container must be puncture-resistant as well as leak-proof.**
- **Another part of the Bloodborne Pathogens Standard concerns contaminated laundry.**
 - Laundry should be handled as little as possible and always bagged appropriately.
 - It must never be sorted or rinsed at its originating location.
- **Labeled or color-coded bags must be used to transport laundry.**
 - Bags must be leak-proof if the laundry is wet and shows a potential for "soak-through".
 - All laundry must be handled with gloves and other appropriate protective equipment.
- **OSHA's regulation also addresses personal activities in the workplace.**
 - You should never eat, drink or smoke in areas where exposure to bloodborne pathogens could occur.
 - Never apply cosmetics, lip balm or contact lenses while you're in these areas, either.
 - Food or drink should never be stored in laboratory refrigerators or freezers.
- **The last type of "safe work practice" the regulation addresses deals with equipment.**
 - If a piece of equipment is contaminated with blood or other body substances, a "biohazard" label must be affixed immediately.

- **Once it is labeled, the equipment must be cleaned and decontaminated as soon as possible, using your facility's approved disinfectant (such as diluted bleach).**
 - If it cannot be totally decontaminated, the equipment must remain labeled as a "biohazard".
- **Protective coverings on equipment must be replaced if they are contaminated.**
 - Before any piece of equipment is serviced or shipped it must be inspected for contamination as well.
- **All employees or service personnel who may come in contact with the equipment must be notified of its location, and type of contamination that exists there.**
- **Using personal protective equipment (PPE) is another key part of the Bloodborne Pathogens Standard.**
 - PPE must be worn whenever there is a chance of exposure to blood or other potentially infectious material.
 - Gloves are mandatory in these situations.
- **Disposable gloves should be replaced as soon as possible after becoming contaminated.**
 - You should never attempt to decontaminate and reuse them.
- **"Disposables" should be replaced immediately when they are torn or otherwise damaged.**
 - Removing rings before putting on your gloves will help to keep them from tearing.
- **Utility gloves, usually rubber or vinyl, are heavier and can be reused once they are decontaminated.**
 - However, they must be discarded if they are cracked, peeling or otherwise damaged.
 - You must change gloves and wash your hands after each exposure.
- **If you are sensitive to latex, talk to your supervisor.**
 - Non-latex gloves will be made available to workers with documented latex allergies.

- **Whenever there is a chance that fluids may splash or splatter, extra precautions need to be taken.**
 - At a minimum, masks and eye protection should be worn.
- **Standard safety glasses protect the eyes from direct exposure from the front.**
 - "Side shields" provide added coverage.
- **Safety goggles fit snugly and provide complete protection of the eye region.**
- **Face shields protect not only the eyes, but the rest of your face as well.**
- **"Pocket" and other face masks are designed to protect the mouth and lip area.**
 - They should be worn whenever eye protection is used.
- **Lab coats and other protective clothing can shield much of the body.**
 - They should be selected based on the degree and circumstances of your anticipated exposure.
 - They should effectively prevent the pass-through of fluids and other materials.
 - Gowns with total frontal coverage do a good job of protecting street clothes from contamination.
- **Surgical caps and hoods should be worn whenever gross contamination is anticipated, such as during autopsies or in orthopedic surgery.**
 - Shoe covers should also be worn in these situations, and when cleaning up spills of any significant size.
- **Your facility has personal protective equipment available for you in your work area.**
 - If you are unsure of the location of a particular item, ask your supervisor.

- **You also need to be aware of your facility's procedures for handling PPE once it has been worn.**
 - Know the location of collection and disposal points, and use them.
 - Remember, you must take off your PPE before leaving your work area.

- **Following "safe work practices" and using personal protective equipment can substantially reduce the risk of exposure.**
 - But your first line of defense against infection is vaccination.

- **Although there are currently no vaccines that can prevent HIV or Hepatitis C, there is a vaccine for Hepatitis B, and it's been available for some time.**
 - The vaccine is administered in three injections, given several months apart.
 - Hepatitis B vaccines are safe.
 - There is no possibility of being infected by the vaccine.

- **Your employer has set up a free Hepatitis B vaccination program for all employees who are at risk of exposure.**
 - Your supervisor can give you more information about the program.
 - If you are at any risk, it's very important that you be vaccinated.
 - It is so important that OSHA requires you to sign a form if you decline the vaccination.

- **If you are accidentally exposed to Hepatitis B-infected blood and have not been vaccinated, your employer will offer you an "accelerated vaccination series", at no cost.**

- **Early detection is extremely important.**
 - Vaccination may prevent infection if it is given in time, because many forms of Hepatitis B are slow to develop.
 - But "after the fact" vaccination does not always prevent the disease from developing.

- **As careful as we may be, needlesticks, blood leakage and spills can still occur.**
 - So you need to know what to do in case of such an emergency.
- **First, if you have come into contact with any potentially contaminated material, you should wash the affected area with soap and water as soon as possible.**
- **If the incident involves a spill or leak, you should soak up the material, or contain it using absorbent barriers.**
 - Any surface that has been contaminated should be cleaned with your facility's approved disinfecting solution.
- **As soon as the spill or leak has been dealt with, any contaminated materials should be disposed of in an approved waste disposal container.**
 - Any "disposable" personal protective equipment that has been contaminated should also be discarded.
 - Re-usable equipment should generally be recycled for decontamination.
- **After an exposure to any bloodborne pathogen occurs, a number of people will need to be notified, including:**
 - Your supervisor.
 - Your Environmental Services Department.
 - The Infection Control Group.
- **You may also need to complete an "incident report".**
- **If the exposure was caused by a contaminated sharp, your facility will record it in a special "sharps injury log".**
 - This log is specifically set up to keep track of "percutaneous" injuries, which penetrate the skin.

- **Every entry into the log must include the following information:**
 - The type and brand of the device that was involved in the incident.
 - The department or work area where the accident took place.
 - An explanation of what happened.
- **Immediately following the exposure, your employer will give you a written summary of:**
 - The routes of exposure you experienced.
 - The circumstances under which the exposure occurred.
 - If possible, the identity of the individual from whom the potentially infectious material originated.
- **Your employer will also try to determine if the source individual's blood is infected with Hepatitis B, Hepatitis C or HIV.**
- **An appointment will then be arranged for you with a healthcare professional to review the medical implications of what took place.**
- **Your employer will provide the healthcare professional with information such as:**
 - The type of work you were doing when the incident occurred.
 - The result of the source individual's blood test.
 - Any of your medical records which are relevant to possible treatment.
- **With your permission, your blood will also be tested to determine if an infection has occurred.**
- **Your situation will then be evaluated and thoroughly discussed with you.**
 - If needed, medical treatment will be recommended.
 - If the Hepatitis B vaccination is called for, it will be provided by your employer at no cost.

- **The healthcare professional is also required to verify four things for your employer:**
 - That you have been informed of the results of their evaluation.
 - That you discussed any medical condition resulting from the exposure which would require follow-up.
 - Whether you should receive Hepatitis B vaccination.
 - Whether you have received the first injection in the vaccination series.
- **All other information that results from your medical evaluation will remain confidential.**

*** * * SUMMARY * * ***

- **Today, bloodborne pathogens such as HIV, Hepatitis B and Hepatitis C continue to pose a serious health threat in the U.S. and around the world.**
- **OSHA's Bloodborne Pathogens Standard is designed to counter this threat by reducing or eliminating the transmission of bloodborne diseases.**
- **The Standard requires each healthcare facility to develop and implement its own Exposure Control Plan.**
- **In healthcare environments, bloodborne pathogens are most often transmitted:**
 - "Parenterally", when they are accidentally injected into a worker by a contaminated sharp object.
 - Or when infection enters the body through mucous membranes or unprotected skin abrasions and cuts.
- **An Exposure Control Plan spells out how a healthcare facility will use policies, "safe work practices", PPE and other control systems to reduce transmission risk.**

- **The Exposure Control Plan also explains:**
 - What to do in case of accidental exposure.
 - What responsibilities a healthcare employer has to an employee who may have been exposed to bloodborne pathogens.
- **OSHA's Bloodborne Pathogens Standard creates a strong foundation for keeping workers, patients and others safe from exposure to bloodborne pathogens that can be found in healthcare facilities.**
- **Now you also have the knowledge and skills to help make your workplace a safer and healthier place for everyone... every day!**