PRESENTER'S GUIDE

"<u>BLOODBORNE PATHOGENS</u> IN COMMERCIAL AND INDUSTRIAL FACILITIES"

Training for THE OSHA BLOODBORNE PATHOGENS STANDARD

Quality Safety and Health Products, for Today... and Tomorrow

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 the disease-causing micro-organisms found in human blood, as well as human blood components and products.
- If you don't work in the healthcare industry, or a business like pharmaceuticals where you might use blood-related substances, you may be thinking that being exposed to bloodborne diseases isn't something you have to worry about.
- But you should be aware of the hazards of bloodborne pathogens. You could encounter them when:
 - Helping a coworker who has had an accident and is bleeding.
 - Using a piece of equipment that has blood on it from a previous user who hurt themselves.
 - Disposing of blood-contaminated waste materials.
- Exposure to bloodborne diseases can be a serious concern in virtually every work environment, which is why 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 ("HIV"), Hepatitis B and Hepatitis C currently pose the greatest threats.

- This program will show:
 - How exposure to bloodborne pathogens can occur in commercial and industrial environments.
 - How regulations and required procedures help to prevent such exposure.
 - What to do if 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.
- But 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 in treating HIV, and there are several drugs as well as drug combinations that appear to be effective in controlling the disease and relieving its symptoms in many people.
- People who contract HIV risk developing Acquired Immunodeficiency Syndrome ("AIDS"), which attacks the immune system.
 - This reduces the body's ability to fight off other diseases, and as a result can ultimately be fatal.
 - Controlling the spread of the HIV pathogen is very important.

- Hepatitis is a liver disease.
 - It usually results in an inflammation of the liver, and frequently progresses to more serious conditions including cirrhosis and cancer.
- The prevalence of hepatitis is so widespread that many experts consider it to be a greater health hazard than HIV.
 - Each year in the U.S., there are over 40,000 new cases of Hepatitis B, the most common type of viral hepatitis.
 - It is estimated that more than 3 million people in the U.S. are carrying the Hepatitis C virus.
- While there is no known cure for Hepatitis B, a vaccine is available that can prevent infection.
 - In some cases the same vaccine can be effective in preventing infection after exposure.
 - Currently there are also treatments that can help to control Hepatitis B and relieve its symptoms.
- And there has been even more progress made in the treatment of Hepatitis C.
 - Today there are drugs that can cure Hepatitis C in many people.
- Hepatitis B symptoms can take six weeks to six months to develop, symptoms of Hepatitis C typically develop in 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 yellowing of the skin) will develop, as well as a darkening of the urine.
- In commercial and industrial environments, bloodborne pathogens can be transmitted in a number of ways.
 - Exposure to a coworker who has been injured.
 - Cleaning up after an accident involving blood.
 - Cleaning or trash removal where you can encounter paper towels or other materials that might have blood on them, or discarded feminine hygiene products.
 - If blood has gotten onto a piece of equipment that you need to use.

- All of these situations can result in potential infection if you have cuts or abrasions of your own where someone else's blood can be absorbed.
- Because of all of these potentials for exposure, OSHA's Bloodborne Pathogen Standard requires your facility to create an "Exposure Control Plan" as a first step towards preventing infection.
- This 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 those exposures.
- If you work in a facility where blood or blood-related products are used your Exposure Control Plan will also deal with setting up a Hepatitis B vaccination program.
- Every facility's plan must also address the procedures that should be followed if an accidental exposure to a bloodborne pathogen occurs.
- Other parts of the plan address:
 - Warning signs and labels.
 - Employee training.
 - Keeping records regarding exposure, vaccinations and training.
- If you would like to take a look at your facility's plan, ask your supervisor.
- Your facility's Exposure Control Plan includes many ways that you and your employer can work together to reduce your risk of exposure to bloodborne pathogens. These include the use of:
 - Standard Precautions.
 - Engineering controls.
 - "Safe work practices".
 - Personal protective equipment.
 - Appropriate housekeeping practices.

- "Standard Precautions" are the foundation of exposure control.
 - They require that all human blood and other body substances be treated as if they are known to be infectious.
 - This assumption underlies all of the procedures that are used to protect you and your coworkers from bloodborne pathogens in the workplace.
- "Engineering controls" refer to the tools and equipment that help to minimize your risk of exposure to infection.
 - These can include something as simple as a dustpan and broom that are used to sweep up contaminated materials.
- "Safe work practices" are procedures that protect you from exposure to bloodborne pathogens.
 - A good example of this is one of the simplest, yet also one of the most effective forms of protection, handwashing.
- If you may have been exposed to bloodborne pathogens, OSHA requires that you wash your hands immediately.
 - If you were wearing gloves or any other personal protective equipment you should take that off first.
 - When you're finished, use your towel to turn off the faucet (so you won't "re-contaminate" yourself on a surface you touched before you washed your hands).
- If your eyes, nose or other mucous membranes have been exposed, you must rinse them with generous amounts of water, as well.
- For employees who work in environments where blood or blood-related materials are present, the Bloodborne Pathogens Standard governs some personal activities, as well.
 - The regulation specifies that you should never eat, drink, or smoke in work areas where exposure to bloodborne pathogens could occur
 - You should never apply cosmetics, lip balm or contact lenses while you're in these areas, either.

- Personal protective equipment (PPE) can provide another effective barrier against exposure.
 - It plays a key role in the Bloodborne Pathogens Standard.
- If you work in an environment where blood or bloodrelated materials are used, PPE must be worn whenever there is a chance of exposure.
 - There are many types of PPE you can use, from gloves and goggles to lab coats and face shields.
- If your job doesn't normally involve working with bloodrelated substances, the most likely ways you could be exposed to a bloodborne pathogen are:
 - When you are helping a coworker who has been injured and is bleeding.
 - When you are cleaning up blood contamination from an accident, or trash that may have contaminated materials in it.
- In these cases you should protect your hands with gloves.
 - You may be able to get a pair of latex gloves from a first-aid kit in your work area.
 - Otherwise, you should use any clean work gloves you can find.
- You also need to be aware of your facility's procedures for handling personal protective equipment once it has been exposed to blood.
 - Many times you'll need to dispose of this PPE after you use it.
- Because your work clothes and reusable PPE will require cleaning and decontamination, the Bloodborne Pathogens Standard also covers the handling of "laundry".
 - Laundry should be handled as little as possible and always bagged appropriately.
 - It must never be sorted or rinsed at its originating location.
 - Bags must be used to transport laundry and should be red-orange in color, or display a "biohazard" label.

- Biohazard labels are fluorescent red-orange as well, with the biohazard symbol in a contrasting color.
 - The word "biohazard" itself appears on the lower portion of the label.
- If the laundry is wet and shows a potential for "soak through", the bags must be leak-proof.
 - All laundry should be handled with gloves and other appropriate protective equipment.
- If the PPE you've worn can be decontaminated and reused, make sure you place it in the appropriate bin or other collection container.
- If you work in an industry where blood supplies are present or exposure to blood can be an ongoing issue, following "safe work practices" and using personal protective equipment can substantially reduce your risk of exposure.
- Your risk of <u>infection</u> can be best addressed by vaccination.
 - As we've discussed, there are currently no vaccines that can prevent HIV or Hepatitis C infection.
- There <u>is</u> 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 Hepatitis infection from the vaccine itself.
 - Ask your supervisor about your facility's policy regarding preventative Hepatitis B vaccination.
- The Hepatitis B vaccine can also be important no matter what your work environment is.

- If you are accidentally exposed to Hepatitis B infected blood and have not been vaccinated, you can still receive an "accelerated vaccination series".
 - Because many forms of Hepatitis B are slow to develop, vaccination may prevent infection if it's given in time.
 - But "after the fact" vaccination will not always prevent you from developing the disease.
- OSHA considers your facility's "housekeeping" practices to be a very important element of your Exposure Control Plan.
- To keep your workplace clean, sanitary, as well as free of pathogens, the Bloodborne Pathogens Standard requires your facility to maintain written cleaning schedules that specify the methods of decontamination that will be used.
 - This assures that work areas, equipment and "common areas" such as restrooms and locker rooms remain infection-free.
- "Housekeeping" also includes using labeling to alert employees to potential sources of contamination.
 - Any equipment and surfaces that come into contact with blood or other potentially infectious materials must immediately have a "biohazard" label affixed to them.
- Once labeled, hazardous surfaces and equipment must be cleaned and decontaminated as soon as possible, using an approved disinfectant (such as diluted bleach).
 - If they cannot be totally decontaminated, they must remain labeled as a "biohazard".
- Protective coverings on equipment must always be replaced if they become 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 these items must be notified of their location and type of contamination that exists there.

- You also have to think about the materials that were used during clean-up.
 - If you decontaminate a surface with diluted bleach and paper towels, what should you do with the contaminated towels?
- OSHA considers towels and other potentially infectious materials that must be disposed of to be "Regulated Waste" and rules in the Bloodborne Pathogens Standard specifically address how to handle them.
 - Just like laundry, "Regulated Waste" must be placed in labeled, closeable and leak-proof containers.
 - These containers must be closed and secured during handling.
- If the outside surface of the primary waste container is contaminated, an appropriately labeled secondary container must be used as well.
 - If there is a danger that the items contained in the waste could puncture the primary container, the secondary container must be puncture-resistant as well as leak-proof.
- This waste must then be disposed of in accordance with existing federal and state regulations.
- As careful as we may be, we can still come into contact with items that have blood on them.
 - You need to know what to do in case of such an emergency.
- If you have been exposed to any potentially contaminated material you should first wash the affected area with soap and water as soon as possible. Then immediately:
 - Clean any contaminated surfaces with your facility's approved disinfecting solution.
 - Dispose of any contaminated materials, including those that were used in the clean-up process, in an approved waste disposal container.
 - Any PPE that has been contaminated and is disposable should also be discarded.
 - Re-usable equipment should be decontaminated.

- After any exposure incident, you will need to inform your supervisor and your Safety or Environmental Services Department.
 - You may also need to complete an "incident report".
- Your employer will immediately provide you with a written summary of:
 - The routes of exposure that 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 qualified healthcare professional to review the medical consequences 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 be evaluated and discussed with you.
 - Depending on the circumstances, medical treatment may be recommended.
 - If the "after the fact" 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 have discussed any medical condition resulting from the exposure that requires follow-up.
 - Whether they feel that you should receive the Hepatitis B vaccination.
 - Whether you have received the first injection in the Hepatitis B vaccination series.
- All other information that results from your medical evaluation will remain confidential.

* * * SUMMARY * * *

- Disease-causing micro-organisms found in human blood are called "bloodborne pathogens".
- Today, bloodborne pathogens such as HIV, Hepatitis B and Hepatitis C pose a serious health threat in the U.S. and around the world.
- OSHA's Bloodborne Pathogens Standard is designed to help counter this threat by reducing or eliminating the transmission of bloodborne diseases.
- The Standard requires each industrial or commercial facility to develop and implement its own Exposure Control Plan.
- In commercial and industrial environments, you are most likely to be exposed to bloodborne pathogens:
 - When you help a coworker who has been injured and is bleeding.
 - When blood has gotten onto a piece of equipment that you will be using.
 - Any time you are handling materials that have been contaminated with blood.

- Your facility's Exposure Control Plan spells out exactly how it will use policies, procedures, PPE and other control systems to reduce or eliminate these types of transmission hazards on the job.
- The plan also describes what will be done in case of accidental exposure, and what responsibilities an employer has to an employee who may have been exposed.
- OSHA's Bloodborne Pathogens Standard creates a strong foundation for keeping workers safe from being exposed to infectious material on the job.
- Now you also have the knowledge and skills to help make your workplace a safer and healthier place for everyone... every day!