BLOODBORNE PATHOGENS IN TRANSPORTATION AND WAREHOUSE ENVIRONMENTS

COURSE OUTLINE

- **There are several types of bloodborne pathogens that you should be aware of.**
  - The human immunodeficiency virus (HIV), is one of the most well-known diseases you can contract from blood.

- **HIV slowly breaks down the body's immune system.**
  - This makes it much harder to fight off infections and illnesses.

- **The onset of HIV can be accompanied by a number of symptoms, including…**
  - Weakness.
  - Fever.
  - Sore throat.
  - Nausea.
  - Headaches.
  - Diarrhea.
  - Other "flu-like" feelings.

- **But many people with HIV show no apparent symptoms for years after their initial infection.**

- **There is still no proven vaccine for HIV, and no known cure.**
  - But there are other preventative measures and treatments available.
  - For instance, pre-exposure prophylaxis (PrEP) is an FDA-approved treatment that helps prevent HIV transmission.

- **There are also options for anyone who does contract HIV.**
  - Antiretroviral therapy (ART) can help most patients' viral load drop to an undetectable level within 6 months.
  - That means that as long as the patient continues to take their medication as prescribed, the virus will not progress and cannot be transmitted to another person.

- **Without treatment, people who contract HIV risk developing Acquired Immunodeficiency Syndrome ("AIDS").**
  - This is an advanced stage of the virus where the immune system is severely weakened.
  - It can ultimately be fatal.
  - So controlling the HIV pathogen is very important.

- **Another bloodborne pathogen you should know about is hepatitis.**
  - It usually results in an inflammation of the liver.
  - It also frequently progresses to more serious conditions, including cirrhosis and cancer.

- **Hepatitis B and C are the most common bloodborne diseases in the country.**
  - Hepatitis B transmits through infected blood and bodily fluids, while you can only contract hepatitis C through blood-to-blood contact.

- **While there is no known cure for hepatitis B, a vaccine is available that can prevent infection.**
  - In some cases, the same vaccine can also be effective in preventing infection after exposure.

- **There are also treatments that can help to control hepatitis B and relieve its symptoms.**
  - These approaches can range from antiviral medications to liver transplants, depending on how serious the infection has become.

- **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 95% of the population within 8-12 weeks.

- **But how can someone tell if they have been infected?**
  - Hepatitis B symptoms can take six weeks to six months to develop.
  - Hepatitis C takes from four weeks to three months to appear.

- **The initial indications resemble those of a mild case of the "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.

- **Bloodborne pathogens can be transmitted in a number of ways, including through 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.

- **In some cases, bloodborne pathogens can also be transmitted "parenterally".**
  - This is when microorganisms that are present in a substance are accidentally "injected" into a worker by a contaminated sharp object.
  - Preventing "parenteral" exposures is one of the major focuses of OSHA's Bloodborne Pathogens Standard.

- **The Bloodborne Pathogens Standard requires your facility to do a number of things to protect you and your coworkers from bloodborne diseases.**
  - The first involves creating an "Exposure Control Plan".

- **This Plan spells out how your workplace will address the requirements of the Standard, including…**
  - Determining each employee's potential for exposure to Bloodborne Pathogens.
  - Examining ways to limit or eliminate these exposures.
  - Setting up a hepatitis B vaccination program.
  - Post-exposure protocols.

- **Other parts of the plan address:**
  - Warning signs and labels.
  - Employee training.
  - Keeping records regarding exposure, vaccination and training.

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

- **OSHA's Bloodborne Pathogens Exposure Control Plan has requirements for labeling materials and equipment in your facility that may be contaminated with blood.**
  - Surfaces that have any potentially infectious materials, such as blood or tissue on them, must be marked with a "biohazard" label.

- **These labels must also appear on any equipment and materials that are suspected of being contaminated.**
  - OSHA defines "contaminated" as indicating "…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.

- **Common places that you may see biohazard labels include…**
  - Contaminated equipment awaiting cleaning.
  - Areas on floors or work surfaces that have blood or other body fluids on them.
  - Containers of "Regulated Waste".

- **In most facilities "Regulated Waste" refers to items that have been used to clean up blood or other body fluids such as…**
  - Bandages.
  - Dressings.
  - Towels.

- **To help you protect yourself from infection, 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.

- **Whether you're in a warehouse or on the road, there are many ways that you and your employer can work to help reduce your risk of exposure to bloodborne pathogens. They include…**
  - The use of Standard Precautions, (remembering to treat all blood and body substances as if they are infectious).
  - Following "safe work practices".
  - The use of personal protective equipment.
  - Appropriate housekeeping practices.

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

- **If you have been involved in a situation where you may have been exposed to bloodborne pathogens, OSHA requires you to…**
  - Remove any gloves and personal protective equipment that you may have been wearing.
  - Wash your hands.
  - Use a paper towel to turn off the water.

- **If they may have been exposed to blood, you should also rinse your…**
  - Eyes.
  - Nose.
  - Other mucous membranes.

- **"Housekeeping" practices are very important in controlling bloodborne pathogen exposure.**
  - Specifying the methods of decontamination that should be used is crucial.

- **If work surfaces are obviously contaminated, they must be cleaned immediately with an appropriate disinfectant.**
  - Any material that has blood on it should never be picked up by hand.
  - Instead, use a brush and dustpan, tongs or other tools.

- **Similar caution should be taken when handling potentially infectious body substances and "Regulated Waste".**
  - This includes contaminated personal protective equipment, bandages or clean-up materials that are being disposed of.

- **These must all be placed in containers that are…**
  - Appropriately labeled.
  - Closeable.
  - Leak-proof.
  - Closed and secured during handling.

- **Sometimes, the items in the waste could puncture the primary container**
  - In these cases, a secondary container that is puncture-resistant and leak-proof must be used as well.

- **There are currently no vaccines that can prevent the bloodborne diseases HIV or hepatitis C.**
  - Therefore, it’s very important to use “safe work practices” to reduce your risk of exposure to these viruses.

- **When it comes to hepatitis B, however, there is a vaccine that you can receive that will protect you from the virus.**
  - In fact, the hepatitis B vaccine has been available for some time.
  - It is administered in three injections, given several months apart.

- **Hepatitis B vaccines are safe. There is no possibility of infection through the vaccine itself.**
  - The most common side effect is temporary soreness at the injection site.

- **When you work in transportation and warehouse environments, accidents that can potentially expose you to blood happen frequently, so your employer should have a free hepatitis B vaccination program for all employees who are at risk of exposure.**
  - Your supervisor can give you more information about any program you may have at your facility.

- **If you are at any risk, it's important that you do get vaccinated.**

- **If you want to refuse the vaccine for any reason, OSHA requires you to sign a declination form that states that…**
  - You are aware that you will remain at risk of acquiring hepatitis B.

- **If you are accidentally exposed to hepatitis B-infected blood and have not been vaccinated, your employer will offer you an "accelerated vaccination series", also at no cost.**
  - Early detection is important, because many forms of hepatitis B are slow to develop.
  - This "after the fact" vaccination may prevent infection if given in time.

- **As careful as everyone is, accidents involving exposure to blood can still occur.**
  - So you need to know what to do in case of an emergency.

- **If you have come into contact with any potentially contaminated material, the first thing you should do is wash the affected area with soap and water as soon as possible.**
  - If the incident involves a large amount of blood, you should soak up the material, or contain it using absorbent barriers.
  - Next, any surface that could have been contaminated should be cleaned with a disinfecting solution.
  - Once the situation 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 be recycled for decontamination.

- **There are several important things that need to be done after an exposure incident occurs.**
  - First, notify your supervisor.
  - You may also need to complete a written "incident report" that includes the time, date and location of the exposure, as well as all of the people involved in it.

- **Immediately following the exposure, your employer will give you a written summary of…**
  - The routes of exposure.
  - The circumstances under which the exposure occurred.
  - The identity of the individual from whom the potentially infectious material originated, if possible.

- **Your employer will also try to determine if the source individual's blood is infected with…**
  - Hepatitis B.
  - Hepatitis C.
  - HIV.

- **Then, you'll have an appointment with a healthcare professional.**
  - They will review the medical implications of the incident and how you should move forward.

- **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.
  - 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 discussed with you.
  - If appropriate, medical treatment may be recommended.

- **If hepatitis B vaccination is called for, it will be provided by your employer at no cost.**
  - Similarly, if it is determined that you were exposed to blood containing HIV, you may be prescribed a post-exposure treatment.

- **Once your risk of infection and treatment program has been decided, the healthcare professional will 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 vaccinations or some other method of treatment.
  - Whether you have received the first injection in the hepatitis B vaccination series.

*** * * SUMMARY * * ***

- **HIV, hepatitis B and hepatitis C are all bloodborne pathogens that workers in transportation and warehouse environments can be exposed to.**

- **OSHA's Bloodborne Pathogens Standard requires any facility where there is a risk of exposure to blood or any other bodily fluids to have a written Exposure Control Plan.**

- **Your facility can reduce the risk of employees being exposed to bloodborne pathogens through safe work practices, thorough housekeeping, and having good exposure protocols in place.**

- **If an exposure incident does occur, it's important for you to know your facility's protocol for accidental exposure, as well as the post-exposure procedures that you need to follow.**

- **Now that you understand what bloodborne pathogens are, how to avoid contact with them and what to do in an exposure situation, you can help make your facility safer and healthier for everyone… every day.**