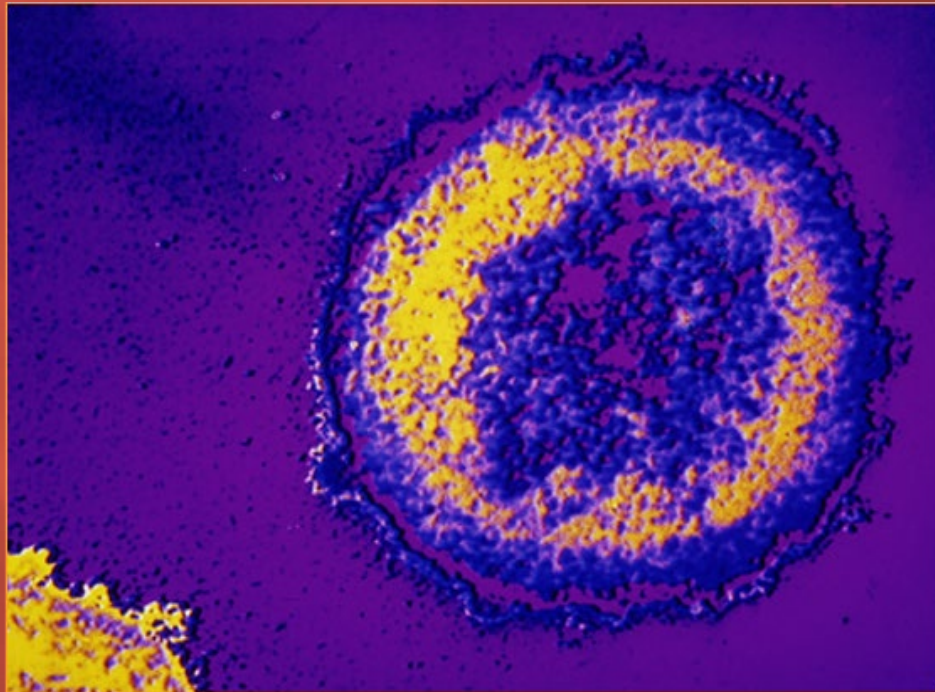


Jay Industries, Inc.

- ▣ **Bloodborne Pathogens 29 CFR 1910.1030**
OSHA Bloodborne Pathogens Training



Bloodborne Pathogens Goal

- ▣ Eliminate or Minimize
- ▣ Employee Exposure to
- ▣ Bloodborne Pathogens at work

Purpose of Training

- ▣ Employees will learn about:
 - ▣ Bloodborne diseases
 - ▣ How to prevent exposure
 - ▣ How to handle possible exposure
 - ▣ Who is affected the most
 - ▣ Hepatitis B Vaccine
 - ▣ Our plan for prevention and protection

Could You Contract a Bloodborne Disease at Work?

- ▣ Administering first aid?
- ▣ Cleaning the restrooms?
- ▣ Using a tool covered with dried blood?
- ▣ A co-worker sneezes on you?
- ▣ Working in a sewer drain or manhole?
- ▣ Cleaning up after an accident?

10,000 employees a year get a bloodborne disease at work.

Occupational Exposure

Are you at Risk?

- ▣ Janitorial Staff – may clean up blood or OPIM
- ▣ Maintenance Staff – may clean up a machine after an injury
- ▣ First Aid Responders – any Jay Employee who is trained to administer First Aid and CPR in case of an accident or injury

Terms - Blood

▣ Blood

- Human Blood
- Human Blood components, and products made from blood

Terms – Other Potentially Infectious Material (OPIM)

▣ OPIM

- Semen, Vaginal Secretions
- Amniotic Fluid, Cerebrospinal Fluid, Synovial Fluid
- Pleural Fluid, Saliva, Sweat, Vomit, Urine
- Skin, tissue, cell cultures
- Other bodily fluids

Terms – Bloodborne Pathogens

- ▣ Microorganisms (germs) present in blood or other body fluids
- ▣ These germs can cause serious diseases

Terms – Exposure Incident

- ▣ Exposure Incident

- ▣ A specific eye, mouth, mucous membrane, or non-intact skin contact with blood or OPIM that results from the performance of work by an employee.

Terms – Universal Precautions

▣ Universal Precautions

- ▣ All potentially infectious materials must be handled as if it contains bloodborne pathogens.
- ▣ Proper work practice controls, engineering controls, and PPE must be used to prevent further contamination and exposure.

Common Bloodborne Pathogens

Common bloodborne pathogens include:

- ▣ Human Immunodeficiency Virus (HIV)
- ▣ Hepatitis B (HBV)
- ▣ Hepatitis C (HCV)
- ▣ Hepatitis A (HAV)

Also includes:

- ▣ Syphilis-Malaria-Brucellosis

Human Immunodeficiency Virus (HIV)

- ▣ HIV is the virus that leads to AIDS
- ▣ AIDS is the Acquired Immune Deficiency Syndrome
- ▣ HIV depletes the immune system so it can no longer fight diseases
- ▣ HIV is life threatening
- ▣ Currently there is NO VACCINE against HIV

HIV Facts

- ▣ HIV is not as infectious as Hepatitis B because there are not as many virus particles present in bodily fluids
- ▣ 1 teaspoon of blood contains about 15 HIV particles
- ▣ HIV is more fragile than Hepatitis B and can be easily destroyed on surfaces outside the body

Hepatitis B (HBV)

- ▣ HBV can live on surfaces at room temperature for up to 10 days, even if blood is dried
- ▣ It is smaller and more common than HIV
- ▣ In 1 tsp of blood, there can be up to one billion (1,000,000,000) HBV particles
- ▣ There are 1 to 1.4 million chronic carriers in USA (according to CDC)

More on Hepatitis B

- ▣ Can lead to Cirrhosis, Liver Disease and Liver Cancer
- ▣ HBV is the most common form of Hepatitis
- ▣ 300,000 new cases per year, with 10,000 due to work exposure
- ▣ Recovery is good if properly diagnosed
- ▣ It is easier to catch than HIV
- ▣ Symptoms include jaundice, fatigue, abdominal pain, loss of appetite, intermittent nausea and vomiting.
- ▣ VACCINATION has been available since 1982

Hepatitis C (HCV)

- ▣ Hepatitis C is the most common chronic bloodborne infection in the United States
- ▣ According to the CDC, there are 2.7 to 3.9 million people with Hepatitis C
- ▣ Symptoms include: jaundice, fatigue, abdominal pain, loss of appetite, intermittent nausea, vomiting
- ▣ May lead to chronic liver disease and death
- ▣ There is NO VACCINE to prevent HCV

Hepatitis A (HAV)

- ▣ Contracted through contaminated food or drinking water which contains infected fecal matter
- ▣ There is NO VACCINE available to prevent HAV

Healthy Liver



HBV Infected Liver



Potential Transmission

- ▣ Contact with another person's blood or other body fluid
- ▣ Mucous membranes: eyes, mouth, nose
- ▣ Non-intact skin
- ▣ Contaminated sharps/needles



Potential Exposure

- ▣ Industrial accident
- ▣ Administering first aid
- ▣ Post-accident cleanup
- ▣ Janitorial or maintenance work

Jay Industries, Inc.

Exposure Control Plan (ECP)

- ▣ Potential exposure determination
- ▣ Safe work practices
- ▣ Decontamination
- ▣ Selecting and using PPE
- ▣ Handling biowaste
- ▣ Labels and signs
- ▣ Training requirements
- ▣ Recordkeeping requirements

Exposure Control Plan

- ▣ Our plan is located on Jay Industries, Inc. intranet home page (green screen)
- ▣ Go to EHS tab on right side
- ▣ Open Plans and Procedures tab
- ▣ Bloodborne Pathogens tab

Who Must be Trained?

- ▣ All employees with occupational exposure to blood or other potentially infectious material (OPIM)
- ▣ Employees who are trained in First Aid and CPR
- ▣ Employees who may clean up an accident, such as janitors or maintenance

How often is BBP training required?

- ▣ All employees receive BBP training in Orientation
- ▣ Employees who are trained in First Aid and CPR must have initial class and an annual refresher course
- ▣ Employees who clean up an accident, such as janitorial and maintenance, must have initial class and an annual refresher course

Universal Precautions

- ▣ Treat all blood and bodily fluids as if they are contaminated
- ▣ Proper cleanup and decontamination



Reminder: These are Potentially Infectious Body Fluids

- ▣ Blood
- ▣ Saliva, vomit, urine
- ▣ Semen or vaginal secretions
- ▣ Skin, tissue, cell cultures
- ▣ Other body fluids

Sometimes fluids are mixed and it is difficult to determine what they are – all should be considered potentially infectious materials.

Engineering Controls

- ▣ Used needles must be disposed of in a Sharps container
- ▣ Sharps containers are red plastic jugs found near main restrooms or large first aid cabinets
- ▣ Proper disposal prevents used needle sticks

Contact EHS if the Sharps container is full and needs replaced.

Personal Protective Equipment

- ▣ Available at NO cost
- ▣ Found in Bloodborne Pathogen (BBP) kits near large First Aid cabinets
- ▣ Once used, put all contaminated items in red biohazard bag
- ▣ If kit is used, notify EHS for replacement
- ▣ BBP kit contains:
 - Masks
 - Gowns
 - Gloves
 - Safety glasses
 - Shoe covers
 - Hand wipes
 - biohazard bag

Protective Equipment

- ▣ Bleeding control – latex gloves
- ▣ Spurting blood – latex gloves, protective clothing (gown), respiratory mask, eye/face protection (goggles or glasses)
- ▣ Post-accident cleanup – latex gloves
- ▣ Janitorial work – latex gloves



Remove gloves safely without spreading germs



1.

- Grasp the palm of one glove near your wrist.
- Carefully pull the glove off.



2.

- Hold the glove in the palm of the still-gloved hand.
- Slip 2 fingers under the wrist of the remaining glove.

3.

- Pull the glove until it comes off inside out.
- The first glove should end up inside the glove you just took off.
- Dispose of the gloves safely.



4.

- Always wash your hands after removing gloves. Gloves can have holes in them that are too small to be seen.



Safe Work Practices

- ▣ Remove contaminated PPE or clothing as soon as possible
- ▣ Clean and disinfect contaminated equipment and work surfaces
- ▣ Thoroughly wash up immediately after exposure
- ▣ Properly dispose of contaminated items in a red biohazard bag
- ▣ Call EHS for pick up and disposal of biohazard bag

First Aid Responders

- ▣ If you get blood on you:
 - Wash it off as soon as possible
 - Use soap and water to wash
 - Immediately flush your eyes with running water at a sink or eyewash station
 - Report the incident to your supervisor

First Aid Precautions

- ▣ Protect yourself before offering assistance
- ▣ Wear clean, leak-proof disposable gloves
- ▣ Be aware of your own cuts or broken skin
- ▣ Help a co-worker to stop their own bleeding
- ▣ If blood is spraying, wear goggles or a mask
- ▣ Treat all blood or body fluids as though they are infected
- ▣ Be Careful!
- ▣ Offer comfort while awaiting responders

Housekeeping Precautions

- ▣ Wash hands as soon as possible after contamination and removing gloves
- ▣ No food or drink in clean-up area
- ▣ Clean and decontaminate equipment and surfaces that touch potentially infected materials
- ▣ Do not pick up broken glass or items with your hands, use a broom and dustpan
- ▣ Do not handle items such as pens and door handles while wearing contaminated gloves

Housekeeping items in BBP kit

- ▣ Fluid solidifier
- ▣ Disinfectant spray
- ▣ Pick up scoop and scraper
- ▣ Paper Towels
- ▣ Red Biohazard bags
- ▣ Antimicrobial hand wipes
- ▣ Gloves
- ▣ SDS sheet on contents

Decontamination

- ▣ Wear protective gloves
- ▣ Disinfectant/cleaner provided in bodily fluid disposal kit
- ▣ Or, a solution of $\frac{1}{4}$ cup bleach per gallon of water
- ▣ Properly dispose of contaminated PPE, towels, and rags in a red biohazard bag
- ▣ DO NOT THROW CONTAMINATED MATERIALS IN THE TRASH CAN.

How do I clean up safely?

- ▣ Wear protective gloves
- ▣ Disinfect using solution in kit or $\frac{1}{4}$ C household bleach per one gallon water
- ▣ If fluids are dry:
 - Spray with disinfectant; wipe dry with paper towel
- ▣ If fluids are wet:
 - Place paper towel or absorbent material over fluid to soak it up
 - Then spray the area with disinfectant; wipe dry
 - Put all contaminated materials in a red bag with a biohazard sticker

Exposure Incident

- ▣ A specific incident involving contact with blood or OPIM
- ▣ Report all incidents involving blood or bodily fluids to supervisor
- ▣ Supervisor will complete an accident/incident report

Regulated Medical Waste

- ▣ Liquid or semiliquid blood or OPIM
- ▣ Contaminated items that would release blood or OPIM when compressed
- ▣ Contaminated sharps
- ▣ Waste containing blood or OPIM

Regulated Medical Waste

- ▣ Contact EHS for pick-up and disposal of regulated waste
- ▣ DO NOT THROW CONTAMINATED MATERIAL IN THE TRASH CAN

Labels and Signs

- ▣ Labels must include the universal biohazard symbol, and the term “Biohazard” must be attached to:
 - ▣ Containers or red bags of regulated biohazard waste
 - ▣ Sharps containers used to store, transport, or ship used needles

Biohazard Warning Label

- ▣ Warning Label must be placed on biohazard red bags and sharps containers



Hepatitis B Vaccination

The Hepatitis B Vaccination is offered after training to the following employees of Jay Industries, Inc.:

- ▣ Employees trained to offer First Aid and CPR
- ▣ Janitorial
- ▣ Maintenance

Hepatitis B Vaccine

- ▣ Three part vaccine timed over a period of months
- ▣ Offers protection for Hepatitis B
- ▣ Given by Avita at no cost to the employee
- ▣ See handout or ask medical provider about side effects and complications of vaccine
- ▣ Contact Human Resources to authorize and schedule the vaccine
- ▣ If vaccine is refused, must sign declination form

Exposure Incident

- ▣ A specific incident of contact with potentially infectious bodily fluid
- ▣ If there are no infiltrations of mucous membranes or open skin surfaces, it is not considered an occupational exposure
- ▣ Report all accidents involving blood to bodily fluids
- ▣ Post-exposure medical evaluations are offered

What to do if exposure occurs?

- ▣ Wash exposed area with soap and hot water
- ▣ Flush splashes to nose, mouth, or skin with water
- ▣ Irrigate eyes with water or saline
- ▣ Report the incident to a supervisor
- ▣ Complete an Accident/Incident report
- ▣ Contact Human Resources for direction

Post-exposure follow-up

- ▣ Jay Industries, Inc. Human Resources will:
 - Direct employee to Avita or OhioHealth MedCentral
 - Provide documentation of route of exposure and how it occurred via the Accident/Incident form completed by supervisor
 - Identify and obtain written consent from source individual for follow-up testing

Post-exposure follow-up

Health Care Provider will:

- Obtain sample from source individual and exposed employee and test blood as soon as possible after incident
- Advise exposed employee on possible vaccination and treatment options
- Provide written opinion of findings to employer and copy to employee within 15 days of evaluation

Recordkeeping

Medical records include:

- ▣ Hepatitis B vaccination status
- ▣ Post-exposure evaluation and follow-up results

Training records include:

- ▣ Training dates
- ▣ Contents of the training
- ▣ Name and qualifications of trainer

Administration

- ▣ Environmental, Health and Safety (EHS) Department is the keeper of the plan and reviews it every year
- ▣ Human Resources (HR) can be contacted about the Hepatitis B vaccine
- ▣ Questions? Contact EHS or HR

Summary

- ▣ Bloodborne Pathogen rules are in place to protect your health and safety.
- ▣ Follow the rules to reduce your risk of disease.
- ▣ Failure to follow the rules is a risk that you should not take.

Any Questions?

- ▣ Questions?
- ▣ Issues?
- ▣ Problems?