

## Blood borne Pathogen Awareness Training

Welcome to the employee training for Blood Borne Pathogens. This training has been developed to inform and educate Kansas City, Kansas District Employees on how to prevent exposure or reduce the risk of contracting blood borne pathogens. Universal precautions will be discussed as a preventative measure to contracting these pathogens as well as procedural requirements that staff must follow should they have an exposure incident when they are performing their duties at work. After the training, you will complete a short quiz to verify that you have read the information. Once you have completed the quiz, please give it to your school nurse.

## Universal Precautions

### "Universal Precautions"-what does this mean?

"Universal precautions" are an approach to infection control. According to the concept of universal precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, and other blood borne pathogens.

This method of infection control came about because people with blood borne infectious diseases are **difficult to identify** and, in many cases, **may not show symptoms up to 10 years after exposure or even lab evidence of infection** for several months after exposure, although they may still transmit the virus to others.

### What does "universal precautions" look like to me in the school?

For the most part, **the use of universal precautions will consist of the use of gloves when handling blood or body secretions.**

Gloves should be worn any time a provider (that's you):

- has an **open lesion** on the hands;
- handles **contaminated disposable items** such as tissues, diapers, clothing;
- has any **hand contact** with blood or body fluids
- especially when providing **clean up of body fluid spills** such as vomit, blood, feces, urine, and when rendering first aid and diapering assistance.

Remember to **remove your soiled gloves and washing your hands** before touching any cabinets, doorknobs, or items other people may come in contact with.

Good way to remember Universal Precautions:

**Consider *everything* Contagious!**

The most important protection you can use for preventing the spread of communicable diseases is to :

# WASH YOUR HANDS

## WASH YOUR HANDS

### WASH YOUR HANDS ....Especially....

- before drinking or eating,
- before handling clean utensils, equipment or food,
- after going to the bathroom,
- after contact with any body secretions,
- after handling any soiled diapers, garments or equipment,
- after caring for children, especially those with any body secretion discharges, and
- **Always wash your hands before applying and after the removal of gloves.**

Proper hand washing should consist of:

- **Use of soap or other disinfectant if away from campus**
- **Friction**
- **Use of warm running water**
- **Drying thoroughly to prevent chapping**

Other Protection that may be needed:

- In rare instances you may need to use a **protective mouth shield** if you are providing CPR or Rescue Breathing to someone.
- These protective devices are available in the school health rooms or may be purchased yourself for your own use. Please contact your school nurse if you would need assistance in locating these items in your building or for your own purchase.

### What should I do if I get body secretions on my hands?

Ideally, **you should be wearing gloves** when handling body secretion in accordance with universal precautions, but at times when you have had exposure or the gloves have not provided the protection you have needed, wash your hands or area of exposure as soon as possible after the exposure occurred.

If you have a question on whether you have experienced an incident that may need a medical evaluation, you may contact your building administrator and/or building school nurse **as soon as possible after the incident.**

### Should I have disinfectants available in my room to clean contaminated surfaces?

- Disinfectants are available to staff and should be used on **hard surfaces, athletic mats, counter tops** and any other surfaces that have had exposure to blood and other body fluids. Cleaning should occur at the conclusion of each day or sooner if known contamination has occurred. Areas such as changing tables used for diapering should be **disinfected after each student**.
- Towels (Wipes), disposable, must be used for **one individual only** and then placed in the appropriate receptacle. Mops must be **rinsed with disinfectants** and use of gloves is required.

Remember, Hepatitis B retains infectivity for at least 1 month at room temperature. As with any type of cleaning agents used around children, safety within the setting must be assured and **chemicals should be properly labeled** in accordance with school building housekeeping practices.

**Do not use any supplies of your own** without checking with your building custodian. Chemicals may cause damage to items or may not have proper tubercle bacillus agents or may not be approved products for use in the school setting. Please contact your building custodians for assistance and direction for proper cleaning of any areas of contamination. If you need assistance with obtaining any cleaning supplies for your own use in your area of work, please contact the building principal, custodian, or school nurse.

### What do I do with contaminated items in my classroom or health room?

- **Sharps** such as syringes and sharps for self-checking and self-administration of insulin on school grounds, or other items such as broken glass should be placed in a **disposable container** which is closable, puncture resistant, leak proof on all sides and bottom, and properly labeled.
- Items that have sharp edges must not be picked up by hand. Use tongs or brooms and dustpans to prevent the risk of penetrating intact skin or gloves.
- If you have students performing health duties on campus that involve syringes and other skin puncturing activities that the building school nurse is unaware of, please contact the school nurse to supply you with the appropriate containers and instructions.

Other items in your classroom that may be soiled or need discarding should be placed in a **plastic lined, leak resistant container, puncture resistant (if containing contaminated sharps) and properly labeled** in accordance with disposal of contaminated wastes.

## Information on Hepatitis B

**Hepatitis B** (One type of a blood borne pathogen)

### Information about this virus

Hepatitis B is a **virus** that damages the liver. It is a **blood borne** virus.

### How is Hepatitis B transmitted?

Hepatitis B is transmitted from an infectious person to another through **blood, semen, vaginal fluids, and some saliva especially if it is blood tinged.**

*These body secretions are considered infectious 1-2 months before and after the onset of symptoms and also in chronic carrier states of Hepatitis B.* Therefore, blood to blood contact associated with IV drug use, tattooing, ear piercing, acupuncture, and sharp piercing objects may be a method of transmission. Sexual intercourse with an infected person is the most important route of transmission in the United States. Blood exposure of an infected individual to the open wounds of another, and blood exposure of an infected individual to the mucous membranes of another is considered a possible way to transmit this virus. Saliva may be a vehicle of transmission through bites; however other types of exposure to saliva, including kissing, are unlikely modes of transmission. Infected mother to baby transmission is another mode of transmission.

### What are the symptoms of Hepatitis B?

The **symptoms can be from mild to severe to fatal.** A person may experience

- loss of appetite
- fatigue
- nausea
- vomiting
- dark urine
- abdominal pain
- joint pain
- jaundice (a yellow appearance to the skin and whites of eyes)

Studies show that it can take anywhere from **6 weeks to 6 months after exposure to the Hepatitis B Virus for some symptoms to become apparent. In at least 30% of the individuals infected with Hepatitis B no symptoms are present.** Hepatitis symptoms are not specific to Hepatitis B and may present as the flu.

Approximately **5,000** Americans die of Hepatitis or its complications every year.

Hepatitis B is very resilient and can maintain infectivity for at least 1 month at room temperature.

### How do I know if I am infected with Hepatitis B?

The only sure way is through a **blood test**. If you have experienced any of the symptoms and have had: unprotected sexual contacts, used IV drugs (association with dirty needles), have had contact with blood and body secretions of others while having open lesions on your hands, have cared for population groups with high risk of Hepatitis B infection such as staff of institutions or classrooms for the developmentally disabled or health care workers with frequent blood contact. Risk factors for contracting Hepatitis B can also occur from an unknown factor. Therefore, as with any health care concern you may have, you would want to discuss your symptoms with your physician.

### **Why does Hepatitis B concern me in my job at school?**

If your job requires you to have contact with blood or body secretions during the work day at school, the **law requires you to attend an annual training** on blood borne pathogens, especially Hepatitis B, so you can protect yourself from contracting the diseases.

People who are infected with blood borne diseases may look and feel healthy at this time, but may **pose a risk to you and your health** if you do not take appropriate actions to protect yourself. As a result, "**Universal Precautions**" are required for any contact with another person's blood or body secretions.

There is a vaccine that is available to protect you from infection to Hepatitis B. It is a *recombinant* vaccine which means it works by taking a *plasmid containing gene* and inserting it into common baker's yeast.

What this means is you **cannot** contract the virus from the vaccine.

To complete the series, it involves **three (3)** injections of the vaccine. The series is usually given at months 0, 1, and 6. (This means you take your first injection at "month **0**", the second one is given **one month later** and the third is given 6 months after the **first** one.).

The efficacy of the vaccine has shown to be 79% at 6 months and 95-97% at 7 months. What this means is that one month after completing the vaccine series, only 3-5% of the adults who receive the vaccine are **not** protected from the virus. The vaccine duration of immunity is greater than 11 years at this time.

### **Are there any side effects to the vaccine?**

Studies have shown that recipients of the vaccine may experience local reactions such as soreness, redness, and swelling at the injection site, as with all vaccines. The reactions are generally mild and usually subside within a two day period.

### **What happens if I miss the due date on a vaccine?**

The Center for Disease Control has recommended that a person continue with the series where they had left off previously. There is no need to repeat the vaccines you have already received.

### **What if I have had reactions to other vaccines in the past or are hypersensitive to a lot of things?**

Hepatitis B vaccine is contraindicated in individuals who are hypersensitive to yeast or any other components of the vaccine used. Please consult your physician or the contracted agency for the school district about the benefits and possible side effects of vaccination.

### **Will the District pay for the vaccine series?**

- **If you are employed in a job that has been targeted** as providing "**at risk for occupational exposure**" you are required to be vaccinated against Hepatitis B.

At risk group are as follow:

Nurses

Elementary Secretaries

Teachers with students with identified health risk

Support paraprofessionals with students in the following Special ED category: SMD, Disabled, Autistic ABC, Trainable disable

Bus Drivers

P.E. Teachers

Coaches' assistant coaches

Custodians

- If you have **not** received this vaccine and you are in an identified position to receive this series, you will be given an authorization form and notification to receive this series through the district contracted agency at the end of this course.

**If you are unsure if your job is considered "at risk for occupational exposure", please contact your School Nurse.**

**Other employees** identified as performing duties that are in accordance with the law, have put them "at risk" or they have had an "exposure incident" are entitled to the vaccine series supplied by the Employer.

**Do I need to sign a waiver for the school district records, if I am in a job category that is offered the vaccine series, and I choose not to have the vaccine series at this time?**

**Yes.** The district has a waiver for you to sign indicating you have been offered the series but choose **not** to receive it at this time. If you opt out now and change your mind about receiving the vaccine, as long as you continue to be employed in a position that is targeted "at risk for occupational exposure", you may request to receive the vaccine series by contacting the School Nurse.

If you have any specific questions about blood borne pathogens and /or the information in this training, please contact Pam Harris, Health Facilitator, at 627-5683 or your school nurse.

## 2 Information on Human Immunodeficiency Virus

### Human Immunodeficiency Virus

- HIV was first identified in 1981. It was identified as a virus that attacks and destroys a person's natural immune system, affecting the number and efficacy of a person's white blood cells (CD4).
- HIV is spread by exchanging infectious blood, semen and vaginal fluids with an infected individual. HIV can also be passed from an infected mother to her baby during pregnancy, delivery or breast-feeding.
- People infected with this virus **May look and feel healthy** during the early stages of infection, although they can be transmitting the virus if they are exchanging their infectious body fluids with others.

HIV is not transmitted by casual contact.

Risky behaviors associated with the spread of HIV include:

- Sharing of needles and syringes associated with drug use,
- Contact with infected fluids/blood-especially through unprotected sex with an infected person.
- From mother to baby during pregnancy, delivery or breast feeding.

**HIV – there is not a vaccine available at this time** to prevent infection and **there is still no cure for the virus**. Medication treatment has been an option for some infected individuals, although long- term studies and results of this treatment are still under investigation.

HIV is the virus that causes AIDS. The acronym AIDS stands for **Acquired Immune Deficiency Syndrome**. This diagnosis occurs after HIV has essentially destroyed an individual's immune system. A person's immune system is what usually fights off infections. Death of an individual infected with HIV occurs as a result of the body's inability to fight off opportunistic infections.

#### Data about HIV/AIDS:

HIV is not a reportable disease everywhere therefore; the number of possible HIV cases can only be estimated.

#### Are there simple things that I can do personally to reduce my risks of contracting these viruses?

Simple personal **preventative measures** to reduce your risks of contracting a blood borne pathogen infection include:

- \* Abstinence from unprotected sexual intercourse until a monogamous relationship occurs. You may want to consult with your Health Care Provider if either partner has participated in the risky behaviors mentioned above.
- \* Proper use of condoms, lubricants and spermicidal products (condoms most effective in providing a barrier are those made of latex or polyurethane; laboratory evidence has shown natural membrane condoms allow the passage of natural pores and therefore are not recommended. Even when used consistently, correctly, and reliably, a person's risk of acquiring a sexually transmitted disease is greatly reduced, but not guaranteed.)

- Don't use drugs or share needles ever.
- Use **Universal Precautions (mentioned above in this training)** while assisting or handling anything that has potential for contamination with blood or body fluids.
- Vaccination against Hepatitis B.

**Even though I knew about Universal precautions, I still had an exposure incident, what should I do?**

**Lets begin with explaining what an “exposure incident means---”**

An exposure incident means a specific

- Eye
- Mouth, or other mucous membrane
- Non-intact skin
- Potential contact with the blood or other potentially infectious materials that results from the performance of an employee's duties. This includes human bites from students as well!

**Now, what do I do about this exposure incident?**

Contact your building administrator **immediately**. Do not wait until the end of the workday!

- **To prevent the spread of a communicable disease such as Hepatitis B** after an exposure, it requires a quick and prompt medical evaluation. Waiting may decrease your chances for the best treatment options available for you. Remember that to acquire an infection one must come in contact with an **infectious** person's blood/body fluids. Because we do not know what infectious pathogens another person may have, it is essential to have medical follow-up.
- After reporting the incident of exposure, a confidential medical evaluation and follow-up care will be provided at no cost to you.
- If an immunoglobulin (shot) is recommended and given to reduce your chances of contracting Hepatitis B, it should be given within 72 hours to be effective. The sooner it is given, the more effective it may be in preventing infection.
- **All district employees have the right to this follow-up medical evaluation if they have an “exposure incident” while working for the school district.**
- **The medical provider for the employee may request to have the sources (in the school setting this is usually a student, but the law is not limited to a student/staff exposure) blood tested for pathogens to assist with a better treatment plan for the employee, but cannot require the individual to have his/her blood tested**

# Blood borne Pathogens Quiz

1. If you have the potential to be exposed to infectious materials on the job, you may request a vaccine for which Blood borne disease?

- a. HIV
- b. Syphilis
- c. Hepatitis B
- d. Brucellosis

2. Which of the following materials could contain Blood borne pathogens?

- a. Bloody saliva
- b. Semen
- c. Vaginal secretions
- d. All of the above

3. If you wear gloves when cleaning up an accident site, it is not necessary to wash you hands afterwards.

- a. True
- b. False

4. Blood borne pathogens may enter your system through:

- a. Open cuts
- b. Skin abrasions
- c. Dermatitis
- d. Mucous membranes
- e. All of the above

5. You should always treat all body fluids as if they are infectious and avoid direct skin contact with them.

- a. True
- b. False

6. You should never eat, drink or smoke in a laboratory or other area where there may be potential exposure to Blood borne pathogens.

- a. True
- b. False

7. Protecting yourself from blood borne diseases requires knowing the facts about HIV and HBV and taking sensible precautions.

- a. True
- b. False

8. Uncontaminated sharps may be disposed of in regular trash bags.

- a. True
- b. False

I have read and understand the contents and modes of transmission of HIV, HBV and other pathogens discussed in this training module. I further understand the protective measures to be taken to protect myself.

**Employee Signature** \_\_\_\_\_ **Date** \_\_\_\_\_