

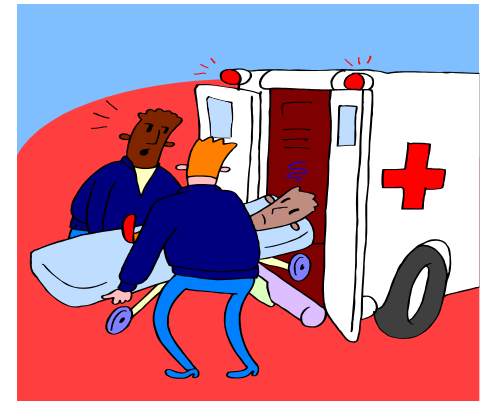
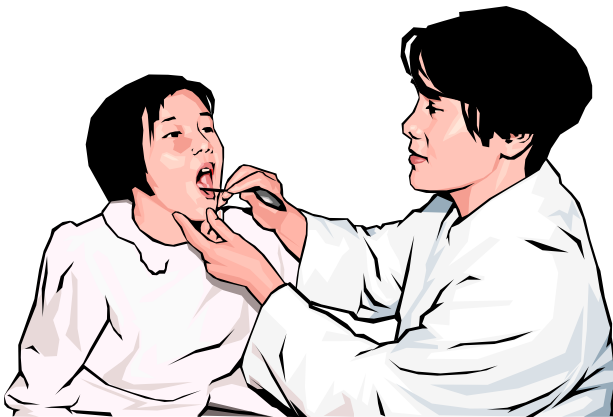
MERCER COUNTY SCHOOLS



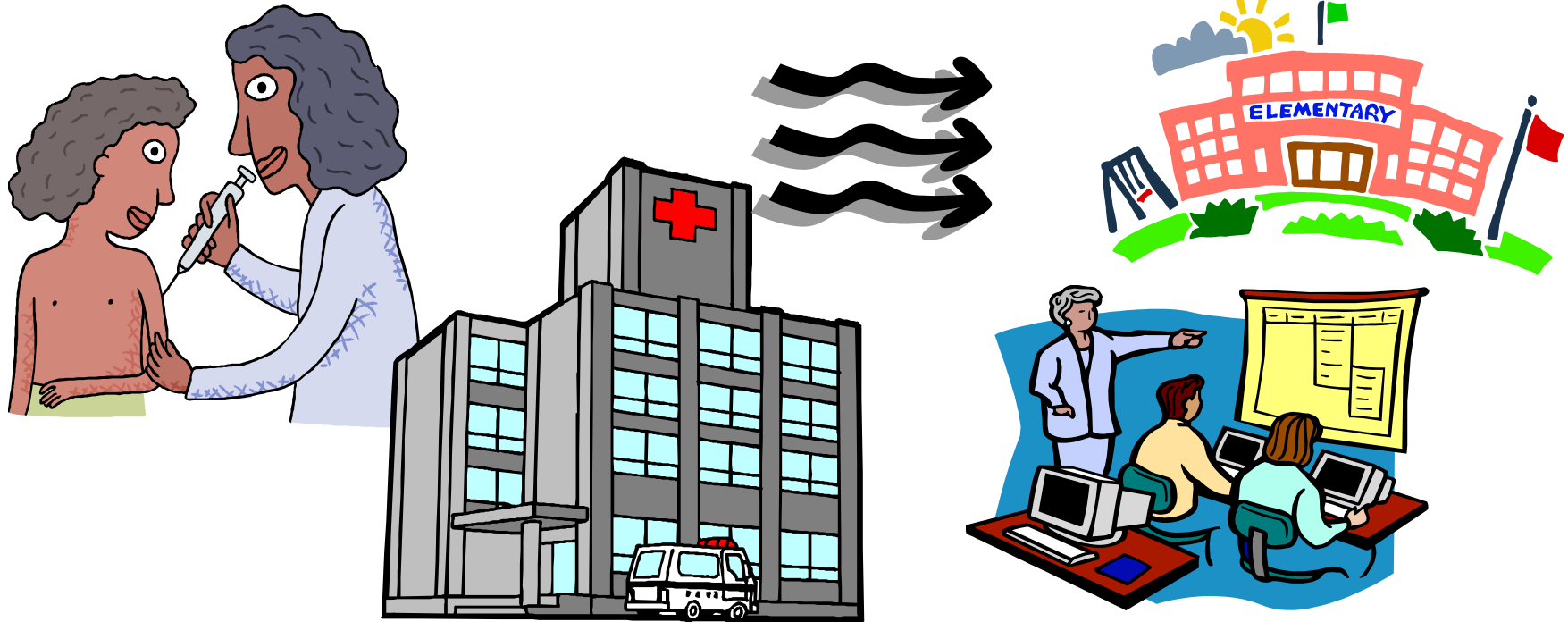
BLOODBORNE PATHOGEN TRAINING

Bloodborne Pathogens

In 1986, due to concerns about exposure to **HBV**, the virus which causes Hepatitis B, and acceleration of the spread of **HIV**, the virus which precedes the disease known as **AIDS**, hospitals worker's unions petitioned **OSHA** (Occupational Safety and Health Administration) to create a **STANDARD** to protect healthcare personnel from exposure to infectious pathogens in the workplace. These actions led to the development of the **BLOODBORNE PATHOGENS STANDARD**. The final rule, 29 CFR 1910.1030, was published in the Federal Register in 1991. This can be viewed at http://www.osha.gov/FedReg_osha_pdf/FED20010118A.pdf



Although at first glance, it appears that the **STANDARD** was developed for and applies only to healthcare facilities, more careful study indicates it is necessary to cover certain school personnel who, in the performance of their normal job duties may be subject to occupational exposure to bloodborne pathogens.



Unfortunately, as long as we have schools with children/students, there will be accidents such as: bumps, bruises, scrapes, abrasions, bloody noses, and broken bones that may pierce the skin --just to name a few.



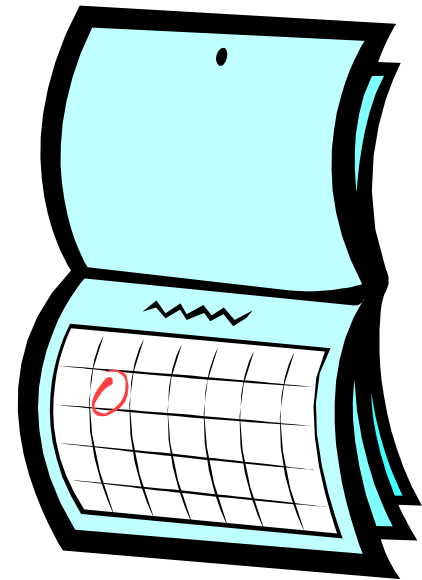
- **Schools** + **Children** = Accidents and possible exposure to **Bloodborne pathogens**.



QUESTION

1) When was the Bloodborne Pathogen Standard published in the Federal Register?

- a) 1971
- b) 1981
- c) 1991
- d) 2001



QUESTION

2) Which of the following statements is true?

- a) The Standard was developed to protect only healthcare workers.
- b) The Standard was developed not only to protect health care workers, but also those who in the performance of their normal job duties may be subject to occupation exposure to bloodborne pathogens.
- c) The Standard has been a Federal Law since 1971.
- d) The Standard has been a Federal Law since 1991.
- e) Both answers B and D

The Provision



When there is occupational exposure, the district provides, at no cost to the employee, appropriate personal protective equipment such as gloves. Additional personal protective equipment may be necessary, including but not limited to gowns, masks, or devices. “Appropriate” means the equipment does not permit blood or potentially infectious materials to pass, under normal conditions of use. The employer shall ensure that the employee uses appropriate personal protective equipment unless the employer shows that the employee temporarily and briefly declined to use personal protective equipment when under rare and extraordinary circumstances, it was the employee’s professional judgment, that in the specific instance it’s use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to safety of the worker or co-worker. When the employee makes this judgment the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.

QUESTION

3) The cost of implementing and providing the Bloodborne Pathogen Exposure Control Plan training, personal protective equipment, any needed vaccinations, and post-exposure evaluation is the responsibility of the

- a) Employee
- b) Health Department
- c) Mercer County Board Of Education

QUESTIONS

- 4) Each time you perform a task involving potentially infectious material you must use appropriate personal protective equipment.**
- a) True
 - b) False
- 5) You may give unprotected mouth-to-mouth resuscitation to an injured person, especially if it is a life-and-death situation.**
- a) True
 - b) False

Who needs Bloodborne Pathogen
training???



That's Right --
YOU DO

**All school employees are required to have yearly trainings.

Job Classification

- Principals, Counselors,
- Teachers

- Secretaries
- Bus Drivers
- Coaches
- Instructional Assistants
(Classroom)
- Instructional Assistants
(special needs)

- Nurse
- Food Service

Task/Procedure

- First Aid care
- Biology/Science
(work with sharps)
- First Aid Care
- First Aid Care
- First Aid Care
- First Aid Care

- First Aid Care
- Catheterization
- Elimination assistance
- Direct Patient Care
- Cleaning Contaminated trays

Job Classification

Task/Procedure

- Custodians

Cleans contaminated trash receptacles, disposes waste, contact with sharps

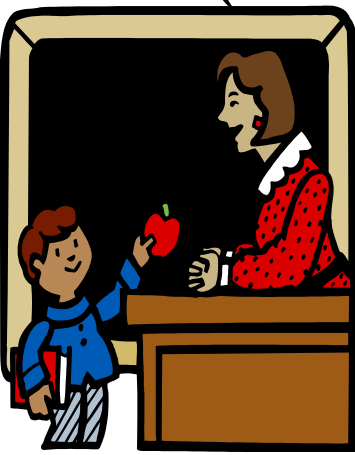
- Maintenance

(bus garage)

First Aid Care

(building/grounds)

Sewage contact



QUESTION

6) Coaches and Bus Drivers **DO NOT** need to worry about being exposed to Bloodborne pathogens as a part of their daily job duties.

- a) True
- b) False



What is a “PATHOGEN” anyway?

- A bloodborne pathogen is present in human blood and can cause disease in humans.
- Did you know that there are at least 150 different bloodborne pathogens.

Bloodborne Diseases



*Remember that students are not immune from disease. These pathogens can affect anyone. Gender, the color of your skin, and where you live, have no bearing on who can become infected.

Two common bloodborne diseases:

- 1) Hepatitis B Virus (HBV) and
- 2) Human Immunodeficiency Virus (HIV)

Bloodborne Pathogens in the school setting, refer most commonly to HBV and HIV.

Hepatitis B (HBV)

- HBV is easier to contract (actually **100** more times as likely) than HIV.
 - *One reason for this is that HBV can survive for up to **7 days in dried blood** increasing chances of infection.
- A) **Hepatitis** – means inflammation of the liver.
- B) **Symptoms**: -Possibly none at all for a long period of time

Hepatitis B symptoms (continued)

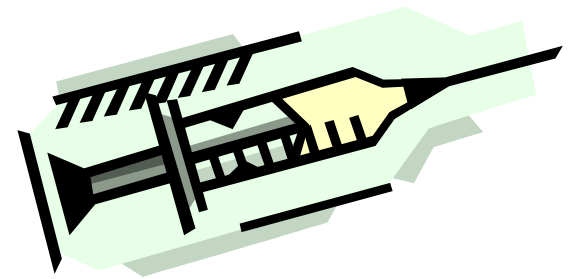
- Flu-like symptoms such as nausea, vomiting, and fatigue.
- Appetite loss
- Jaundice (or yellow skin)
- Stomach pain
- Clay colored stools
- Dark urine

Hepatitis B

- C) Outcome:
- Liver damage
 - Cirrhosis (a chronic degenerative disease of the liver)
 - Liver Cancer
 - Death (is almost certain if goes untreated)



Hepatitis B



D) Prevention through vaccine:

You can protect yourself with the Hepatitis B Vaccination.

****Just a series of 3 shots over a 6 month period provide protection. Soreness, swelling, and redness are the most common side effects.**

****The cost of the Hepatitis B series will be reimbursed up to \$30 for all at risk employees (as identified by the school system) at high risk of occupational exposure.**

Hepatitis B Vaccination

As stated in The Mercer County Board Of Education Bloodborne Pathogen Exposure Control Plan:

1. Hepatitis B vaccination is available after the employee has received the required training and within 10 working days of initial assignment to all employees who have occupational exposure unless the employee has previously received the complete Hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.
2. The district will not make participation in a prescreening program a prerequisite for receiving Hepatitis B vaccination.
3. If the employee initially declines Hepatitis B vaccination but at a later date while still covered under the plan decides to accept the vaccination, the district provides for the Hepatitis B vaccination at that time.
4. The district assures that employees who decline to accept Hepatitis B vaccination offered by the district sign the following statement: “I understand that due to my occupational exposure to blood and other potentially infectious materials I may be at risk for acquiring Hepatitis B Virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk for acquiring Hepatitis B, a serious

Hepatitis B Vaccination (continued)

disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.”

5. If a routine booster dose(s) of Hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such as booster dose(s) will be available.

****You have the right to decline the vaccine, but must sign the Hepatitis B Vaccine Declination statement per the Exposure Control Plan.**



Hepatitis B Vaccine Declination

[Mandatory]

Mercer County Board of Education

Harrodsburg, KY

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk for acquiring Hepatitis B Virus [HBV] infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to myself. However, I decline Hepatitis B vaccination at this time. I understand that by declining the vaccine, I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series and be reimbursed up to \$30 for the series.

Employee's Name _____

Employee's Signature _____

Date _____ Witness Signature: _____

QUESTIONS

7) Everyone who is infected with HBV will have symptoms.

- a) True
- b) False

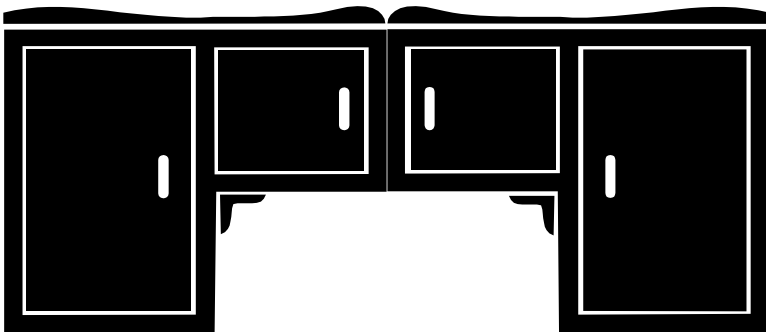
8) In most cases HBV responds to medical treatment.

- a) True
- b) False

QUESTION

9) HBV can survive on environmental surfaces dried at room temperature for at least a week.

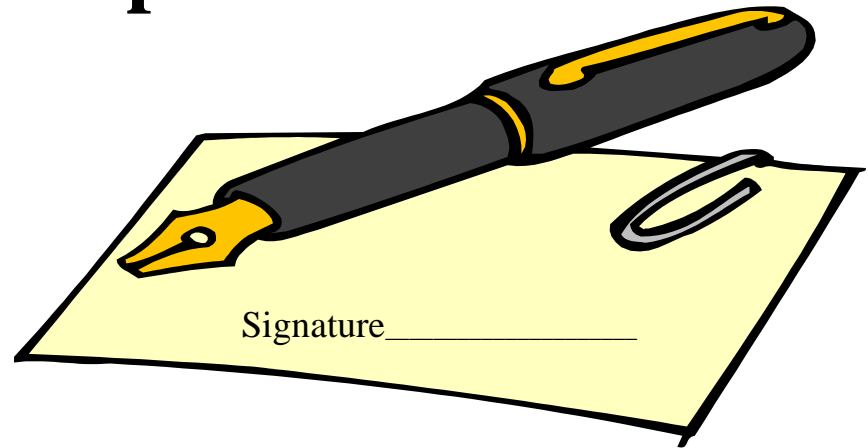
- a) True
- b) False



QUESTION

10) What form should be filled out if an employee has been designated as having the potential to come in contact with Hepatitis B refuses the Hepatitis B vaccine?

- a) Hepatitis B Declination
- b) Hepatitis B Refusal
- c) Hepatitis B Proclamation



11) Only hospital workers should be vaccinated against HBV

- a) True
- b) False

Human Immunodeficiency Virus (HIV)

- HIV causes the disease called AIDS (Acquired Immunodeficiency Syndrome)
- A) **HIV** -Attacks the body's immune system which reduces it's ability to fight disease.
- B) **Symptoms:**
 - Flu-like symptoms such as fever, diarrhea, fatigue, loss of appetite
 - sore throat
 - nausea
 - headaches

HIV Symptoms (continued)

-One may unknowingly spread the disease because you can carry the (HIV) virus without developing the symptoms for several years

FACT

**The fastest growing population with AIDS is the heterosexual community.

HIV Outcome (Continued)

C) Outcome: May develop AIDS-related illnesses including:

-Cancer

-Neurological problems

-other opportunistic infections

D) Unfortunately there is NO preventable vaccine



*** However understanding how bloodborne diseases are transmitted is an important step toward protection.”**

QUESTIONS

12) The infectious disease carried by blood that you should be concerned with is only HIV.

- a) True
- b) False

13) Inner city children are the only children infected with HIV or HBV.

- a) True
- b) False



QUESTION


14) In the early stages, HIV symptoms may include fever, diarrhea, and fatigue.

- a) True
- b) False

15) You can only get HIV and HBV through sexual contact or by sharing needles.

- a) True
- b) False

Workplace Transmission

- HBV, HIV, and other pathogens may be present in blood or other materials such as:
 - semen and vaginal secretions
 - body fluids with visible  blood
 - torn or loose skin
- They are not typically spread through air, sweat, tears, or saliva
- Saliva with visible blood after dental work would be an exception

Workplace Transmission (continued)



- “OPEN DOORS” for infection include:

- open cuts, nicks, or abrasions
- dermatitis, acne
- mucous membranes

- The most common modes of transmission in the work place include:

- 1) Indirect Transmission blood coming in contact with mucous membranes (mouth, nose, eyes) or non-intact (open) skin
- 2) Accidental Injury from contaminated sharps such as broken glass, sharp metal, needles, knives, and exposed ends of orthodontic wires

QUESTION

16) One of the most common modes of transmission in the workplace is

- a) Blood in contact with intact skin
- b) Blood in contact with mucous membranes
- c) Touching nasal secretions

Preventing Infection

- The keys to preventing infection are:
 - 1) Understanding the dangers you face and
 - 2) Knowing how to protect yourself by following **Universal Precautions**

Universal Precautions

- Universal Precautions are intended to prevent transmission of infection, as well as decrease the risk of exposure for school personnel and students. It is not currently possible to identify all infected individuals. Universal precautions pertain to blood and other potentially infectious materials containing blood. These precautions do not apply to other body fluids and wastes such as saliva, sputum, feces, tears, nasal secretions, vomitus, and urine unless blood is visible in the materials. However, these other body fluids and waste can be sources of other infections and should be handled as if they are infectious.

Handwashing

- Proper handwashing is one of the most crucial steps to preventing the spread of infection. Below are listed the steps to perform proper handwashing.
 - 1) Remove textured jewelry from hands and wrists
 - 2) Dispense paper towel
 - 3) Use running water to wet hands and wrists
 - 4) Lather soap, using friction to clean all hand surfaces for at least 30 seconds
 - 5) Rinse well with warm water and dry hands with the paper towel that was dispensed and ready
 - 6) Use paper towel to turn off water



- Hands should be washed before and after contact with an individual and between different sites on an individual. If hands come in contact with blood or potentially infectious materials wash immediately. Hands should be washed whether gloves are worn or not.

Barriers

- Barrier use is intended to reduce the risk of contact with blood and body fluids as well as to control the spread of infectious agents from individual to individual. Barriers anticipated for use at school include disposable gloves, absorbent materials, and resuscitative devices. Gloves should be removed without touching the outside and disposed of after use.

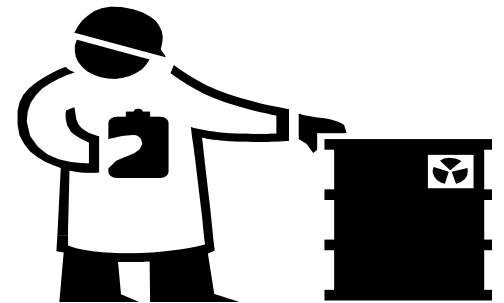


Choosing Personal Protective Equipment

- Gloves are worn when it is anticipated you will have contact with blood or other potentially infectious materials.
- Masks in combination with eye protection can be worn whenever splashes, sprays, or droplets may be generated.
- Gowns, aprons, or lab coats can be worn to protect clothing.

Disposal of Waste

- It is anticipated that schools would only have regulated waste in a severe incident. When blood or other potentially infectious material can be compressed and not release the substance, it will be placed in a plastic bag and disposed of in the usual waste disposal manner. If compression causes the release of the substance it will be treated as regulated waste.



Clean-up

- Spills of blood and other potentially infectious materials should be cleaned up immediately
 - 1) Wear gloves
 - 2) Soak up spill with paper towel or other absorbent material
 - 3) Use a solution of one part bleach to one hundred parts water (1:100), or other EPA (Environmental Protection Agency) approved disinfectant
 - 4) Wash area well
 - 5) Dispose of gloves, soiled towel, and other waste in a plastic bag. Contaminated sharp items should be disposed of in a puncture resistant container (red box)
 - 6) Clean and disinfect reusable supplies and equipment

Exposure

- An exposure incident occurs when blood or other potentially infectious materials come in contact with broken skin, mucous membranes, or by needle stick/sharps injury. This requires immediate washing, reporting, and follow-up.

QUESTIONS

17) The steps to Universal Precautions include

- a) Handwashing, the use of barriers, clean-up, and disposal of waste
- b) Handwashing, spraying air freshener, and disposal of waste
- c) Handwashing, the use of barriers, and bandaging

18) The key to avoiding infection is to stay far away from high risk groups.

- a) True
- b) False

QUESTIONS

- 19) An exposure incident occurs when blood or other potentially infectious materials come in contact with**
- a) Closed skin
 - b) Open skin, mucous membranes, or by a stick from a contaminated sharp object
 - c) Disinfectant
- 20) Universal precautions are to prevent _____ by considering every person potentially infectious**
- a) Dirty hands
 - b) Transmission of disease
 - c) Sore throats

QUESTIONS

21) The most important step in carrying out universal precautions is

- a) Stop bleeding
- b) Handwashing
- c) Using protective barriers

22) It is only important to wash your hands at the end of each work day

- a) True
- b) False

QUESTIONS

23) In general, the best way to prevent an exposure incident is to

- a) Use Universal Precautions
- b) Disregard all body fluids, none can cause infections
- c) Immediately throw away all sharp objects contaminated with blood directly into a trash receptacle

24) What main task might a teacher/employee perform that may put them at risk to come in contact with blood or other potentially infectious materials?

- a) First Aid care
- b) Answering the phone
- c) Eating lunch
- d) Teaching Math

Bloodborne Pathogen Exposure Control Plan

- According to OSHA the local school district shall develop a plan to eliminate or minimize district occupational exposure to bloodborne pathogens.
- In accordance with OSHA Bloodborne Pathogen Standard, 29 CFR 1910.1030, the following program has been developed. All schools are to be in compliance with Universal Precautions

Methods of compliance

In general, universal precautions are to be observed at all times to prevent contact with blood or potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids are considered potentially infectious materials. In essence:

1. Treat all blood and body fluids as being potentially infectious.
2. Use an appropriate barrier between any cuts or body fluid spills (preferably latex gloves)

Methods of Compliance (continued)

3. Wash hands thoroughly with soap and water before and after victim care and between victims or sites on the same victim
4. Contaminated needles and other contaminated sharp objects are not to be bent, broken, sharpened, or recapped.
5. Contaminated sharp instruments are to be placed in appropriate containers. These containers are to be puncture resistant, labeled and/or color coded, leak-proof on the sides and bottom.

QUESTION

25) I will comply with Universal Precautions if I

- a) Change gloves once daily
- b) Put broken glass and sharp metal fragments in plastic bags to dispose of them
- c) Treat all blood as being potentially infectious

Exposure Incident Procedure

Mercer County Board of Education

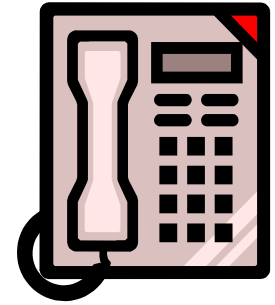
An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral (meaning not in or through the digestive tract) contact with blood or other potentially infectious materials that results from performance of an employee's duties.

In the event that an exposure incident occurs the following procedures are to be followed:

1. Remain Calm.
2. Remove any clothing that is blood soaked immediately or as soon as feasible.
3. If you have an exposure incident involving:
 - a) Non-intact skin: Wash the affected area with soap and water
 - b) Eye, mouth, or mucous membranes: Flush with water for 15 minutes.
 - c) Parenteral contact: Wash affected area with soap and water

Exposure Incident Procedure

Mercer County Board of Education



4. The school Nurse is responsible for the implementation of this plan.
5. If you are unable to contact the school nurse, notify your immediate supervisor/first aid provider.
6. If an exposure incident occurs after school hours or during a school related activity, the school employee should report to Haggin Hospital Emergency Room for post-exposure medical follow-up.

*A copy of the **Mercer County Board of Education Bloodborne Pathogen Exposure Control Plan** is on file with each school nurse, school office, and the Board Office and on the district website.

QUESTION

26) If I have an exposure incident I should immediately contact _____, if unable to contact that person then I should contact _____.

- a) Betty Sims -- Tim Berger
- b) Private Doctor -- Dr. Phil
- c) School Nurse -- Immediate Supervisor /First-Aid Provider
- d) Parents -- Judge Judy