

# OSHA UPDATE 2013

BLOODBORNE PATHOGENS



### TOPICS

- OSHA
- TERMS
- UPDATES
- HEPATITIS B
- HEPATITIS C
- HIV
- REPORTING AN EXPOSURE



### OBJECTIVES

- To have a basic understanding of bloodborne pathogens and the role of Greenwood School District 50 and OSHA.
- To protect our employees and understand how to report an exposure.



### WHY?

1. It is an OSHA Federal requirement.

2. Through education and understanding, employees will be better protected and the risk of an exposure can be reduced.

#### 29 CFR 1910.1030

### Bloodborne Pathogens Standard

Federal Register - December 6, 1991

### What does it mean?

Mandates rules for employers to protect workers from occupational exposure to blood and other body fluids that potentially contain bloodborne pathogens.

# BBP TRAINING IS MANDATORY





## BBP TRAINING INCLUDES:

- NEW HIRE EDUCATION AND TRAINING
- ANNUAL EDUCATION AND TRAINING
- AVAILABILITY OF PPE
- OFFERING OF HEPATITIS B TO AT RISK EMPLOYEES
- PROPER REPORTING OF BLOOD/BODY FLUID EXPOSURES



## BLOODBORNE PATHOGENS TRAINING CHECKLIST

- Required elements for training
- See handout "Annual Bloodborne Pathogens Training Checklist"

**BIOHAZARD** 



## OFFERING HEPATITIS B IMMUNIZATION

- "High risk" employees are determined by School District policy
- BBP Training offer Hep B series within 10 days of BBP training
- Hep B Series 0 1 month 5 months
- If you have had the Hep B Series, please provide documentation
- To schedule the Hep B Series, please contact your school nurse, supervisor, or Assistant Superintendent for Human Resources

# Greenwood School District 50 has determined the following job categories to be "at risk" for occupational exposure:

- Athletic Directors, Trainers, and Coaches
- Bus Drivers and Monitors
- Case Managers
- Custodians
- First Responders (Those who are assigned to provide coverage in the school's Health Room)
- Guidance Counselors
- Maintenance Personnel
- School Nurses
- School Psychologists
- Speech Therapists

- Code Blue Team members
- PE Teachers & Assistants
- Principals
- Assistant Principals
- School Administrators (if involved with discipline)
- Health Occupations Instructors
- Special Education Teachers of EMD, TMD, PMD, ED and their assistants
- Career Center Teachers working with potentially dangerous machinery



# Greenwood School District 50 has determined the following job categories to have some potential for occupational exposure:

- Shadow positions (assigned to work with particular students)
- Art Teachers (who work with sharps such as sewing needles)
- School Secretary (who provides coverage for the Health Room)
- Biology/Chemistry Lab Teachers (who work with sharps such as scalpels)
- Teachers of BIC or ISS



## EXPOSURE CONTROL PLAN is written to:

- MINIMIZE exposure to blood or other potentially infectious materials (OPIM)
- MANAGE exposures properly
- DESCRIBE engineering and work practice controls which reduce risk
- PROVIDE information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment.

## REVIEW TERMS THAT ARE LOCATED IN THE ECP

- STANDARD PRECAUTIONS
- AT-RISK EMPLOYEES
- PPE
- WORK PRACTICE CONTROLS
- ENGINEERING CONTROLS
- OPIM Other Potentially Infectious Material
- PEP Post-Exposure Prophylaxis



### STANDARD PRECAUTIONS

TREAT ALL BLOOD AND BODY FLUIDS AS IF THEY ARE KNOWN TO BE INFECTIOUS



### AT-RISK EMPLOYEES

THOSE EMPLOYEES WHO, BY NATURE OF THEIR TASKS HAVE THE POTENTIAL TO BE EXPOSED TO BLOOD, BODY FLUIDS, OR OTHER POTENTIALLY INFECTIOUS MATERIALS.



# PPE = PERSONAL PROTECTIVE EQUIPMENT

- GLOVES
- MASKS
- EYE PROTECTION
- FACE SHIELDS
- RESPIRATORS
- GOWNS, APRONS, LAB COAT



# WORK PRACTICE CONTROLS

- HAND WASHING
- PROPER USE OF SHARPS CONTAINERS
- STORAGE AND HANDLING OF CONTAMINATED EQUIPMENT
- NO EATING, DRINKING, SMOKING, HANDLING CONTACT LENSES AND APPLYING MAKE-UP IN WORK AREAS



## ENGINEERING CONTROLS

- RESPIRATOR
- MEDICAL SAFETY DEVICES
- SHARPS CONTAINERS
- DISINTEGRATOR PLUS---MAY BE PROVIDED BY STUDENT



## OPIM = OTHER POTENTIALLY INFECTIOUS MATERIAL

ANY BODY FLUID THAT IS
GROSSLY CONTAMINATED WITH
BLOOD OR ANY INTERNAL BODY
CAVITY FLUID



# MEDICATION REGIMEN AVAILABLE AFTER AN EXPOSURE IF THE SOURCE IS POSITIVE FOR:

- HEP B
- HIV SEVERAL MEDICATIONS AVAILABLE
- HEP C CURRENTLY NO PEP AVAILABLE



## BBPs: BLOOD, "BODY FLUIDS"

- BLOOD, GENITAL SECRETIONS, OR INTERNAL BODY CAVITY FLUIDS
- "VISIBLY (GROSSLY) BLOODY FLUIDS"
- NOT: SALIVA, TEARS, URINE, FECES, VOMITUS, SPUTUM--- UNLESS GROSSLY CONTAMINATED WITH BLOOD
- PORTAL OF ENTRY IS NECESSARY FOR A BONA FIDE EXPOSURE (IE: FRESH, OPEN WOUND) "CONTACT WITH INTACT SKIN NOT NORMALLY A RISK FOR BBP"
  - CDC MMWR JUNE 29, 2001 (P.3)



#### BBP's: BLOOD/BODY FLUIDS

IF SALIVA, TEARS, URINE, FECES, VOMITUS, SWEAT OR SPUTUM IS GROSSLY BLOODY THEN.... IT IS CONSIDERED CONTAMINATED.

OTHERWISE, NO RISK (NOT A BBP EXPOSURE).



#### TERMINOLOGY:

"EXPOSURE" = a <u>behavioral</u> event/ incident (ie, needlestick, mucous membrane splash)

"INFECTION" = a <u>biologic/immunologic</u> event (ie, growth of organism, antibody response = seroconversion)

"DISEASE" = a <u>clinical</u> event (ie, symptoms and/or signs of the infection)



### WHAT IS HEPATITIS B

- VIRAL INFECTION OF THE LIVER
- SYMPTOMS NONE to MILD to SEVERE
- CHRONIC CARRIERS (5%) CAN DEVELOP CHRONIC
   LIVER DISEASE AND CAN INFECT OTHERS
- 95% SPONTANEOUS RESOLUTION
- INCUBATION PERIOD AVERAGE 60-90 DAYS.
  RANGE 45-180 DAYS.
- HEPATITIS B VACCINE PROVIDES IMMUNITY



### WHAT IS HEPATITIS C

- VIRAL INFECTION OF THE LIVER
- CAN LEAD TO CIRRHOSIS AND CANCER
- LEADING INDICATOR FOR LIVER TRANSPLANT
- FLU-LIKE SYMPTOMS OR NO SYMPTOMS
- INCUBATION PERIOD AVERAGE 6-7 WEEKS.
  RANGE 2-26 WEEKS
- NO VACCINE OR PEP AVAILABLE



### HEPATITIS C VIRUS

### CLINICAL:

- 60-70% No Symptoms
- 10-20% Mild Symptoms
- 20-30% Symptoms (Jaundice)

85% become chronic (lifelong) carriers!



### HEPATITIS C VIRUS

### RISK FACTORS

- (90% New Acute HepC) diagnosed cases:
  - Injecting drug use (~60%)
  - sexual exposures (~15%)
  - transfusions (~1% prev. 10% prior to 1992)
  - occupational (HCWs 1-2%)
  - unknown (10-20%)
- 3-4 million chronic carriers in USA (CDC)
- 36, 000 new infections annually in US
- 50,000-70,000 cases estimated in South Carolina



### WHAT IS HIV/AIDS?

#### HIV = VIRUS THAT CAUSES AIDS

- Human Immunodeficiency Virus destroys T Cells (Necessary for Healthy Immune System)
- INCUBATION PERIOD: Conversion to HIV + Within 25 Days to 3 months. Rarely Longer Than 6 Months
- Can Be HIV POSITIVE But Not Have AIDS
- PEP is available initiate as soon as possible. The interval after which there is no benefit for humans is undefined.

## AIDS = ACQUIRED IMMUNODEFICIENCY SYNDROME

1/2 People with HIV develop AIDS within 10 Years

HIV + Opportunistic Diseases & Destroyed T Cells = AIDS

# RISK OF INFECTION WITH HEP C, HEP B, and HIV

#### AFTER ONE NEEDLESTICK EXPOSURE-----

- HEP B-30% (UNLESS VACCINE IMMUNITY)
- HEP C- 1-3%
- HIV- .3%

### AFTER MUCOUS MEMBRANE EXPOSURE, EXAMPLE - SPLASH------

- HEP B 10% (UNLESS VACCINE IMMUNITY)
- HEP C 1%
- HIV .1 %

#### HEPATITIS B, HEPATITIS C & HIV

- Life-threatening BBP
- Transmitted through exposure to blood and other infectious body fluids
- Anyone with occupational exposure is at risk
- Workers must use PPE and engineering controls



#### OCCUPATIONAL EXPOSURES: EMPLOYEE'S RESPONSIBILITIES

- KNOW BASIC BBP (HBV, HCV, HIV) ISSUES
- ATTEND ANNUAL BBP TRAINING
- KNOW WHAT IS A BONA FIDE EXPOSURE
- REPORT IT
- If you don't know, ASK!

## IF YOU THINK YOU HAVE BEEN EXPOSED



### IMMEDIATELY TAKE CARE OF YOURSELF and

IMMEDIATELY NOTIFY
YOUR SUPERVISOR



#### BBPs: 4 BASIC REQUIREMENTS

4 BASIC MEDICAL REQUIREMENTS TO VALIDATE AN OCCUPATIONAL EXPOSURE CAUSING THE INFECTION (i.e., WORK. COMP.):

- 1. DOCUMENTED BONA FIDE EXPOSURE
- ☐ 3. EXPOSED EMPLOYEE BASELINE TEST (-)
- □ 4. EXPOSED EMPLOYEE FOLLOWUP TEST (+)

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### RESOURCE WEBSITES

www.cdc.gov

www.osha.gov

- WWW.nasn.org National Association of School Nurses
  - Implementing OSHA Standards in a School Setting
  - Occupational Exposure to BBP



### End of Module

Click Here to return to the Employee Training Page