



Greenwood School
District 50

OSHA UPDATE
2011

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 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



UPON EMPLOYMENT for
new hires
and **ANNUALLY** for
employees at risk of BBP
exposure



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”





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



OPIIM = OTHER POTENTIALLY
INFECTIOUS MATERIAL

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



PEP = POST EXPOSURE PROPHYLAXIS

**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 behavioral event/ incident
(ie, needlestick, mucous membrane splash)

“INFECTION” = a biologic/ immunologic event
(ie, growth of organism, antibody response
= seroconversion)

“DISEASE” = a clinical 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
 - 📁 2. SOURCE PATIENT (+) FOR BBP
 - 📁 3. EXPOSED EMPLOYEE BASELINE TEST (-)
 - 📁 4. EXPOSED EMPLOYEE FOLLOWUP TEST (+)



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