



Greenwood School  
District 50

OSHA UPDATE  
2012

**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



**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:

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**“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](http://www.cdc.gov)

- [www.osha.gov](http://www.osha.gov)

- [www.nasn.org](http://www.nasn.org) -National Association of School Nurses

- Implementing OSHA Standards in a School Setting

- Occupational Exposure to BBP



# End of Module

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