

Bloodborne Pathogens Training For School Personnel



OSHA Defined:

- Occupational Safety and Health Administration
- Published a standard to reduce or eliminate health risk, resulting in:
 - Annual training of employees
 - Safe workplace environment
 - Exposure Control Plans

Exposure Control Plan

- Defines who is at risk
- Outlines procedures to minimize or eliminate exposures to blood- borne diseases
- Procedures to follow in event of exposure
- Be sure to locate the Exposure Control Plan on your campus



Bloodborne Pathogens

What are they?



- Infectious materials in human blood and body fluids that can cause disease in humans.
- Exposure can result in serious illness or death.
- These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Who is covered?



- Anyone who can anticipate coming in contact with blood or body fluids while at work.
- The school system is required to identify personnel whose job duties may expose them to blood or body fluids.
- Everyone is required to receive information on the dangers of exposure.

Who is at risk?

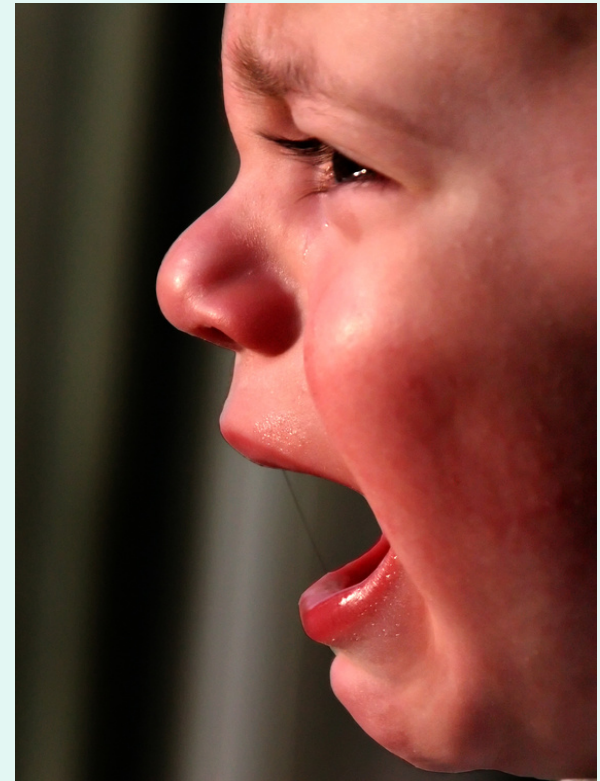
- Anyone who comes in contact with human blood or body fluids.
- Anyone who touches potentially contaminated surfaces or equipment.



How do bloodborne pathogens enter your body?

Indirect Transmission

- Open cuts and nicks
- Skin abrasions
- Dermatitis
- Acne
- Mucous membranes of eyes, nose or mouth



Workplace Transmission



- Blood
- Body Fluids containing visible blood
- Semen and vaginal secretions
- Torn or loose skin

Workplace Transmission

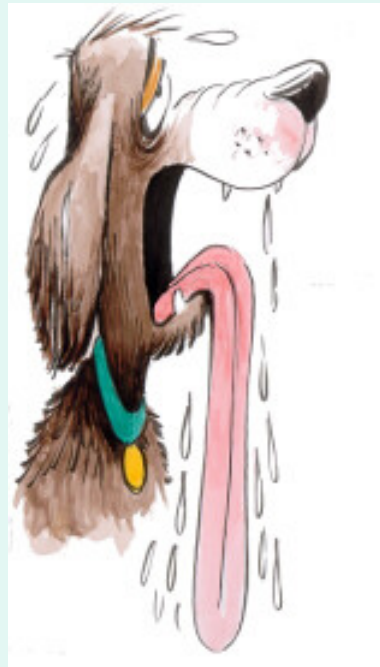
- Accidental Injury

- Broken Glass
- Sharp metal
- Needles
- Knives
- Orthodontic wires that are exposed



Not infectious for bloodborne pathogens

- Feces
- Urine
- Tears
- Saliva



- Vomitus
- Sputum
- Sweat

** unless visible blood

Reducing Your Risk of Exposure

- Universal Precautions
- Personal protective equipment

Gloves, mask, gown, lab coat, face shield, protective eye wear

- Engineering controls
- Housekeeping
- Hepatitis B vaccine



Universal Precautions

- Treat all blood and body fluids as potentially infectious.
- Critical because it is impossible to tell who is infected with HBV or HIV by appearances.
- Many have no knowledge or symptoms of their disease.





PPE Selection Based on Anticipated Exposure

- Gloves- any time contact with blood or other body fluids may occur
- Masks and eye protection- if there is any chance of splashing into the mouth nose or eyes
- Gowns/lab coats, shoe covers- risk of splattering or spilling on clothes or skin



Engineering Controls

- Devices that reduce employee risk by isolating or removing the hazard

Examples:

Sharps containers

Safety medical devices

Biosafety cabinets



Work Practice Controls

- Depends on you!
- Examples- proper handwashing, getting Hep B vaccine



proper handling of sharps
proper disposal of infectious
waste
wearing appropriate PPE

When to wash hands

- Before and after touching someone or something potentially infectious
- After removing gloves
- After handling potentially infectious material
- After using the bathroom
- Before eating, smoking, applying cosmetics, handling contact lens



Work Practice Controls

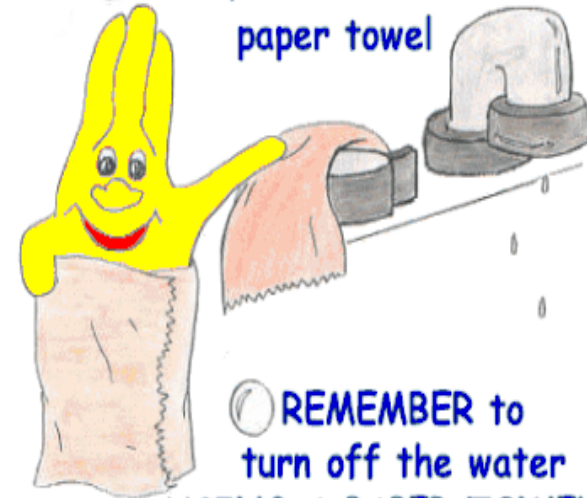
- Handwashing- Single most important means of preventing the spread of infection



○ **RINSE WELL**



○ **DRY** your hands with a paper towel



○ **REMEMBER** to turn off the water
USING A PAPER TOWEL
INSTEAD OF YOUR HANDS

* Waterless hand cleaner-only if no soap and water available!



Personal Hygiene

- Minimize spattering, spraying and splashing when attending to an injured person.
- Don't eat, drink, smoke, apply cosmetics or lip balm or handle contacts where there is a risk for exposure.
- Don't keep food and drink in refrigerators, freezers or countertops where blood or other infectious materials are present.

Biohazardous Waste Disposal

- Discard contaminated sharps in approved sharps containers
- Discard all other infectious material in red biohazard trash bags
- Picked up by biohazard waste technicians
- Incinerated



International Biohazardous Waste Symbol



Housekeeping/Decontamination

- Disinfect equipment and surfaces with approved disinfectant (Dispatch, 10% bleach solution, Saniwipes) when..
 - Surfaces become contaminated
 - At the end of the work shift
 - After any spill of blood or other potentially infectious material (OPIM)



Blood or OPIM Spill Procedure

- Prevent accidental exposure to others
- Wear appropriate PPE
- Absorb spill (paper towels or biohazard spill kit)
- Spray Dispatch or bleach solution, set for 10 min. or air dry
- Dispose of all cleaning materials and PPE in biohazard trash bag

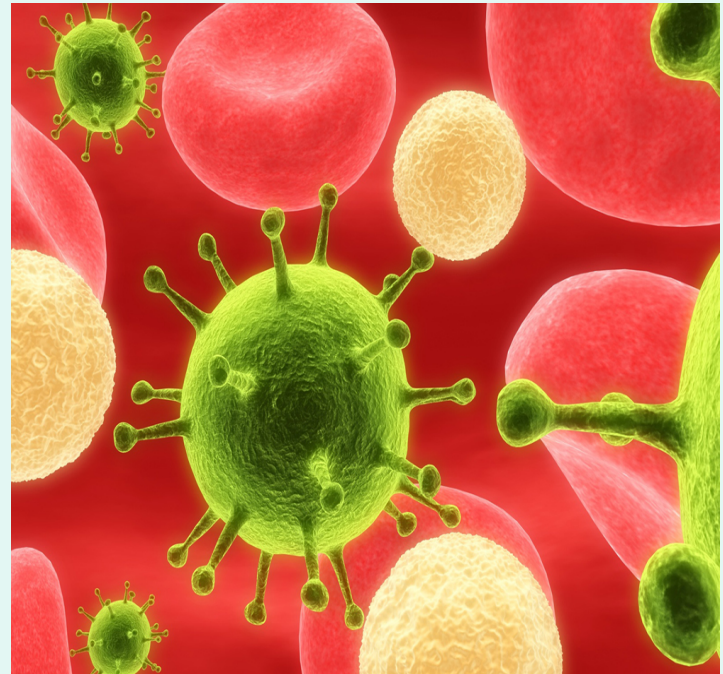


Bloodborne Pathogens of Concern

- Hepatitis B

- Hepatitis C

- HIV/AIDS



Hepatitis B

- Infection of the liver
- Can lead to cirrhosis, liver cancer and death
- 20% risk of infection with a contaminated sharp
- Virus can survive in dried blood for up to 7
- days



Symptoms of Hepatitis B

- Fatigue
- Loss of appetite, nausea
- Jaundice (yellowing of skin and eyes)
- Fever
- Abdominal pain, joint pain
- 30% have no symptoms
- Preventable





Hepatitis B Vaccine

- Recommended for all high risk groups
- Free- provided by employee health
- Safe
- 3 shots- initial , 1mo., 6mo.
- Life long immunity
- Decline- must sign OSHA waiver



Do I need Hep B Vaccine?

DO YOU ?

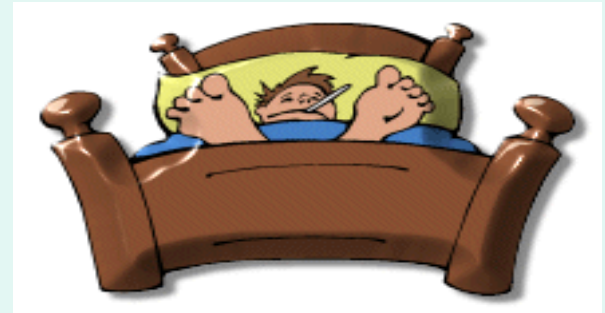
- Work directly with human blood products, body fluids, tissue
(athletic trainer, coach, shop teacher, school nurse, P.E teacher)
- Give assistance to accident or injury victims on a regular basis **(first responders)**
- Clean up blood or other bodily fluids **(custodians, teacher who work with developmentally disabled students, bus mechanics)**

Hepatitis C

- Most common chronic blood borne infection in US
- Causes liver damage, cirrhosis and liver cancer
- Leading reason for liver transplants
- 2% risk of infection by contaminated sharp

Symptoms of Hepatitis C

- Same as Hepatitis B
- May occur within 2 weeks to many years
- 85% don't know they are infected



Hepatitis C Vaccine

- **There is NO vaccine and NO cure for Hepatitis C!**
- There are 50,000 needlesticks annually related to HCV infected patients



Major Risk Factors for Hepatitis B and C

- Sexual activity with multiple partners
- IV drug use
- Hep B- neonatal transmission
- Hep C- blood transfusion prior to 1990



- small risk- tattooing, body piercing, shared nasal cocaine



HIV/AIDS

- Attacks the body's immune system
- Unable to fight off other infections
- No vaccine and no cure
- 6,000 new infections every day



Symptoms of HIV

- Mild flu-like symptoms initially (fever, swollen glands)



- May be free of symptoms for months to many years
- Eventually leads to AIDS and death

HIV Transmission



High risk sexual activity and IV drug abuse account for 80%

Neonatal

Accidental occupational exposure



Chances of Infection

- If you are exposed to HIV infected blood/body fluids by:
 - A dirty needle/sharp: 3 in 1000 (0.3%)
 - Mucous membrane splash: 1 in 1000 (0.1%)
 - Non intact skin: 1 in 1000 (0.1%)
 - Prompt antiviral treatment after exposure can reduce risk of infection by 60 – 80%

What if I am exposed?

- Wash with soap and water
- Splash to mucous membranes- rinse or flush with water for 15 min.
- Have source of infection remain available



Who needs to know?

:

Principal

School Treasure will contact
Human Resources Department



School Nurse

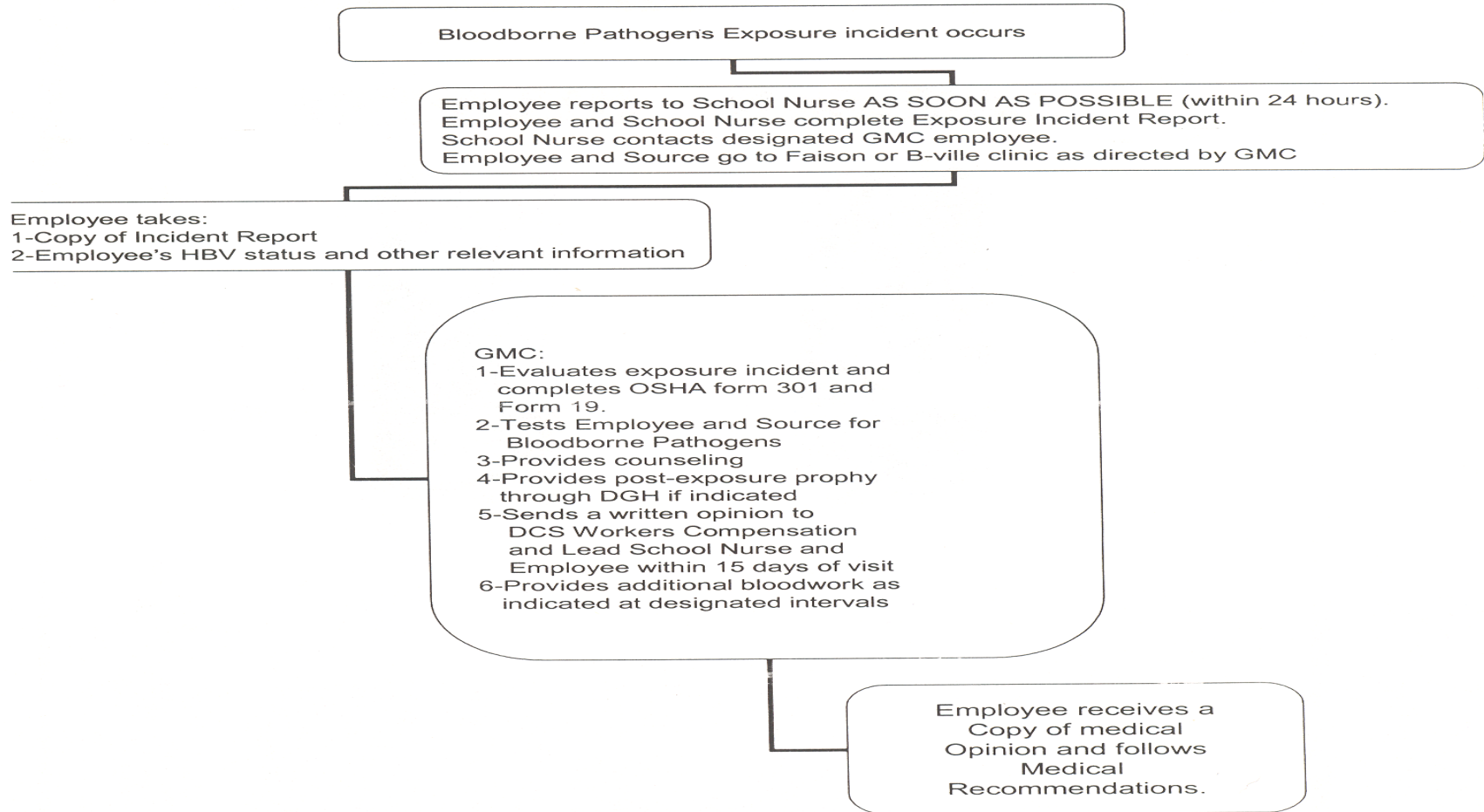
Follow guidelines found in your Exposure
Control Plan

Post Exposure Follow Up

- Follow county's policy for exposure
- Complete appropriate forms referenced in your counties exposure control plan
- Confidentiality is maintained



Occupational Exposure to Bloodborne Pathogens: Flow Chart



EMPLOYER'S REPORT OF EMPLOYEE'S INJURY OR OCCUPATIONAL DISEASE TO THE INDUSTRIAL COMMISSION

The filing of this report by an employer is required by law. It does not satisfy the employee's obligation to file a claim.

The Use Of This Form Is Required Under The Provisions of The Workers' Compensation Act

IC File # _____

Emp. Code # _____

Carrier Code # _____

Employer FEIN _____

Carrier File # _____

The I.C. File # is the unique identifier for this injury. It will be provided by return letter and is to be referenced in all future correspondence.

Employee's Name _____	Employer's Name _____ () _____	Telephone Number _____
Address _____	Employer's Address _____	City _____ State _____ Zip _____
City _____ State _____ Zip _____	Insurance Carrier _____	Policy Number _____
() Home Telephone _____	() Work Telephone _____	Carrier's Address _____ City _____ State _____ Zip _____
Social Security Number _____ Sex <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> Other _____	Date of Birth _____	() Carrier's Telephone Number _____ () Fax Number _____

Employer	1. Give nature of employer's business _____
Time And Place	2. Location of plant where injury occurred County _____ Department _____ State if employer's premises _____ 3. Date of injury _____ 4. Day of week _____ Hour of day _____ A.M. _____ P.M. 5. Was employee paid for entire day _____ 6. Date disability began _____ A.M. _____ P.M. 7. Date you or the supervisor first knew of injury _____ 8. Name of supervisor _____
Person Injured	9. Occupation when injured _____ 10. (a) How long employed by you _____ (b) Wages per hour \$ _____ 11. (a) No. hours worked per day _____ (b) Wages per day \$ _____ (c) No. of days worked per week _____ (d) Avg. weekly wages w/overtime _____ (e) If board, lodging, fuel or other advantages were furnished in addition to wages, give estimated value per day, week or month. \$ _____
Cause And Nature Of Injury	12. Describe fully how injury occurred and what employee was doing when injured _____ (Statement made without prejudice and without vouching for correctness of information contained therein) 13. List all injuries and specify body part involved (e.g. right hand or left hand) _____ 14. Date & hour returned to work _____ * 15. If so, at what wages _____ 16. At what occupation _____ 17. Are you continuing the employee's salary in full _____ Was employee treated by a physician _____
Fatal Cases	18. Has injured employee died _____ If so, give date of death (Submit Form 29) _____

Employer name _____ Date Completed _____

Signed by _____ Official Title _____

For IC use ONLY	
Nature	_____
Body	_____
Cause	_____
SIC	_____
Coder	_____

FORM 19
2/01
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FORM 19

MAIL TO:
NCIC - STATISTICS SECTION
4334 MAIL SERVICE CENTER
RALEIGH, NORTH CAROLINA 27699-4334
MAIN TELEPHONE: (919) 807-2500
OMBUDSMAN: (800) 688-8349

The background features a white surface with a vertical teal stripe running down the center. Scattered throughout are numerous question marks in various colors: green, pink, blue, and cyan. Some question marks are solid, while others have a spiral pattern. The text is centered and reads:

**See your school
nurse if you have**

Questions!