### Blood Borne Pathogens (Child Care Environment)

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# INTRODUCTION

- Children are prone to falls while learning to walk, experience cuts, bruises, nose bleeds and other injuries.
- Parents/care givers must know the danger of blood borne pathogens and how to respond appropriately.
- The most common blood borne pathogens in the child care environment are HBV, HCV and HIV/Aids
- Hepatitis B (HBV) is so prevalent and contagious, an available vaccine is now given to all babies at birth.



# What exactly are blood borne pathogens?

- Blood borne pathogens are microorganisms carried by blood and body fluids. They multiply in the blood stream.
- The most common are: hepatitis B virus (HBV), hepatitis C (HBC) and (HIV) human immunodeficiency virus.
- HBV (Hepatitis) is much more common than HIV/AIDS.
- Children are expose to blood borne diseases as much as adults.



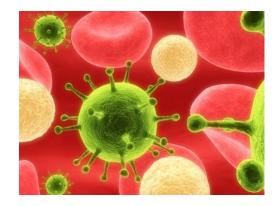
# HEPATITIS B (HBV)

#### When HBV virus enters the body:

- Can result in mild illness or permanent liver damage
- Hepatitis B is the cause of up to 80% liver cancer
- There is no cure for Hepatitis B
- There is a vaccine available to help prevent Hepatitis B
- Vaccine now given to all babies at birth and to adolescents

#### SYMPTOMS OF HEPATITIS B

- Weakness
- Fatigue
- Loss of appetite
- Nausea
- Abdominal pain
- Fever
- Headache
- Occasional yellowing of skin and whites of eyes



# HEPATITIS C (HCV)

#### Modes of transmission include:

- Injecting drug use account for 60% of cases
- Occupation
- Hemodialysis
- Perinatal
- Sexual transmission
- There is no vaccine against hepatitis C

#### How Hepatitis C is spread:

- HBV/HCV Infected mothers passing virus to their unborn child
- Blood to Blood transmission thru blood transfusion, skin or thru mucous membranes
- Infected person to uninfected person during sexual activity
- IV drug users that share needles
- Tattooing with unspecialized equipment



### HIV/AIDS The human immunodeficiency virus causes the disease known as AIDS.



- Flu-like symptoms (fever, diarrhea, fatigue).
- Breastfeeding it is <u>NOT</u> recommended for infants of infected mothers
- You may carry the virus without showing symptoms for several years.
- HIV is spread through contact with blood and body fluids.
- HIV is not transmitted by touching or working around people who carry the disease.



- Bleeding injuries
- Biting
- Loose tooth
- Changing Band-Aids or dressings
- Handling breast milk
- Any task that involves visible blood
- Performing CPR

# CHILD CARE: RISK OF BLOOD-BORNE INFECTION FROM:

# Modes of Infection

### **ACCIDENTAL INJURY**

Infection from contaminated object:

- Broken glass
- Sharp metal
- Needles

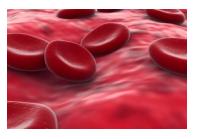


- Knives
- Exposed ends of orthodontic wires.

### INDIRECT TRANSMISSION

Touching body after handling contaminated surface

- Mouth
- Eyes



- Nose
- Non-intact skin

# One of the best ways to prevent blood borne pathogens is to

### Who And When?

#### Care Givers:

- o arrival at work
- Before handling food, baby bottles, feeding children
- After helping child using toilet
- After changing diapers , using bathroom
- After contacting child's body fluids, diapers, runny noses, vomit
- After cleaning up a child, bathroom items or toys

# Wash Your Hands!



### Children:

- Upon arrival at daycare
- Before and after eating
- After using toilet or having diaper changed
- After playing on playground
- Before going home

For your info:

Proper Hand Washing Techniques

- 1. Use soap and running water
- 2. Rub your hands vigorously for 10 15 seconds
- 3. Wash all surfaces: Backs of hands, wrists, between fingers and under nails
- 4. Rinse well
- 5. Dry hands with a disposable towel



### Types of PPE (personal protective equipment)

Additional protection from blood borne pathogens...

- Gloves
- Aprons
- Face shields/MasksEye protection



# GLOVES

Gloves must be used when hands may contact:

- Changing diapers.
  - Blood/infectious materials.
    - Mucous membranes
      - non-intact skin.



Gloves should be available at all diaper changing stations, all bathrooms and play room areas, as well as all baby bottle and food (snack) preparation areas.

## Cleaning and sanitizing procedures: for use in child care environments

Use on all surfaces exposed to possible blood borne pathogen contamination...



- Put on clean disposable gloves
- Wash area with cleaning agent and rinse with water
- NON POROUS SURFACES spray with 10:1 bleach solution until glistening wet. Allow it to sit for 2 minutes before wiping dry, or let air dry.
- BLEACH SOLUTION MUST BE MADE DAILY ONE QUARTER CUP PER GALLON OF WATER OR 1 TABLESPOON PER QUART

### Proper disposal of sharps, contaminated materials and fabrics in child care environment:

All needles, broken glass, sharps, contaminated materials and fabrics should be discarded into a bio-hazard container.



# **Conclusion:**

- As parents and care givers, we can prevent the majority of blood borne diseases by being diligent in our prevention efforts.
- The incidence of disease is very low, but the potential long term effect of these diseases is deadly.
- Through vaccinations and adherence to the Standard/Universal Precautions set forth by the CDC and OSHA, we fighting chance against blood borne pathogens.



### **Reportable Diseases**

http://www.nlm.nih.gov/medlineplus/ency/article/001929.htm

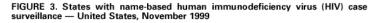
(All of the diseases in this assignment are reportable to the Centers for Disease Control.)

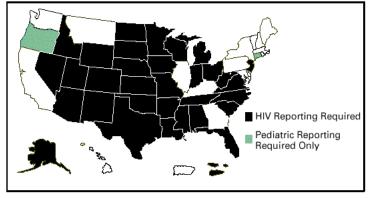
#### Information

All states have a "reportable diseases" list. It is the responsibility of the health care provider, doctor or laboratory), to report cases of these diseases to the U.S. Centers of Disease Control (CDC).

The states list appear as follows. Diseases marked with an asterisk (\*) were reportable to the CDC at the national level in 2009: Ages 13- (Child) and 13+ (Adult)

Acquired Immunodeficiency Syndrome (<u>AIDS</u>)\* <u>Hepatitis A</u> \* <u>Hepatitis B</u> \* Hepatitis C\*







### **Referenced Works**

Department of Labor, *OSHA'S occupational exposure to blood borne pathogens standard*. (2010, April 04). Retrieved from <u>http://www.osha.gov/SLTC/bloodbornepathogens/bloodborne\_faq.html</u>

Dugdale, D. C., III, MD, (2009, May 30). *Reportable disease : Medline Plus medical encyclopedia*. Retrieved from <u>http://www.nlm.nih.gov/medlineplus/ency/article/001929.htm</u>

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