

Standard Precautions in the School Setting

Alabama State Department of Education

Prevention and Support Services

Alabama School Health

Purpose of training

- To reduce the transmission of communicable disease and facilitate consistent use of STANDARD PRECAUTIONS
 - ➤ Increase attendance, decrease the number of absences in schools.
 - > Decrease sick leave days taken by teachers, nurses and staff.

Employees responsibility:

to know the methods by which disease is spread and the measures that must be taken to prevent the transmission of disease

- All employees having potential contact with blood and/or body fluids.
- Employees assisting with routine procedures or participate in emergent, direct care
- All employees, teachers and staff, who may inadvertently come in contact with blood or body fluids.
- Employees who assist with preparation of food
- Employees with responsibilities of cleaning up potentially hazardous spills

Content:

Prevent exposure to infections agents

- Handwashing
- Protective barriers
- Cleaning contaminated surfaces
- Proper disposal of contaminated materials

Standard Precautions: Blood Borne Pathogens

Blood borne pathogens are microorganisms in the blood, which may be transmitted in the blood or other body fluids, to cause illness and disease.

- Standard Precautions should be implemented to prevent exposure to blood borne pathogens such as Human Immunodeficiency Virus (HIV), Hepatitis B virus (HBV) and Hepatitis C virus.
- Along with other communicable pathogens which may cause illness:

Prevent / Decrease exposure to: Communicable Pathogens

- ✓ <u>Viruses</u> such as Human Immunodeficiency Virus (HIV), Hepatitis B virus (HBV) and Hepatitis C virus. As well as colds, influenza virus (flu), mononucleosis, stomach viruses such as rotavirus
- ✓ <u>Bacteria</u> such as salmonella, meningococcal, streptococcal infection, staphylococcus aureus, MRSA
- ✓ Fungal infection such as ring worm

The appearance of someone infected?

- Infected people may not look "sick"
- Infected people may not know they are infected
- Infected people many not disclose that they are infected (Confidentiality and Privacy)

CONSIDER THE BLOOD AND BODY FLUIDS OF EVERYONE TO BE POTENTIALLY INFECTIONS

- This approach is recommended because 30 to 80 percent of people with viral hepatitis and other infectious diseases have no symptoms and my be unaware they have a disease.
- This approach is helpful to everyone in every area of their life, to decrease their chances of infection
- When standard precautions are used in all aspects of daily life, it helps prevent the spread of infections within the community.

Prevention:

- Proper hand hygiene technique is the single most important procedure for helping to prevent the spread of infection
- Personal protective equipment (PPE), such as gloves, should be worn anytime the employee anticipates he/she may come in contact with blood or other body fluids.

What is a Communicable Disease?

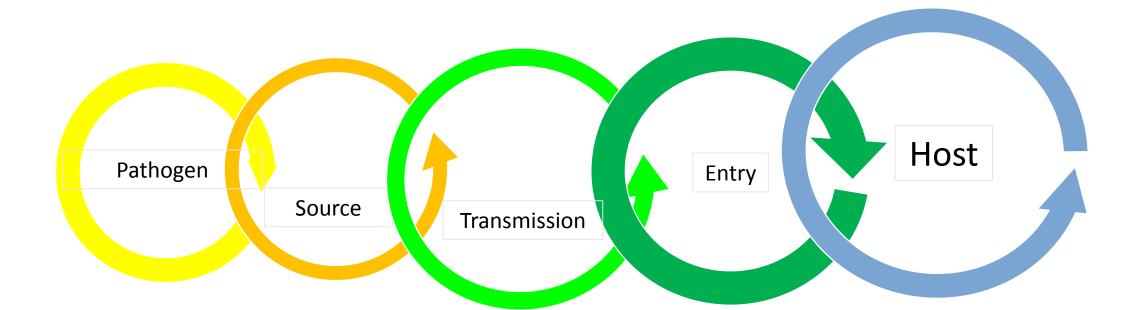
• A disease which is capable of being transmitted from one infected person, animal, or contact to a susceptible person.

It may occur through direct or indirect transmission

Center for Disease Control (CDC)

www.cdc.gov/tb/programs/laws/menu/definitions.htm

Chain of infection:



How Does Disease Transmission Occur?

- The spread of infection requires 3 factors:
- 1. A disease causing organism (Quantity of organism matters)
- 2. Susceptible Host (A person who is not immune to that organism)
- 3. Mode of transmission (The way the organism gets in the body to infect the person)

How does <u>Transmission</u> Occur?

- 1. <u>Direct contact</u>: Infection occurs by contact from person to person
- Indirect contact: Infection occurs by contact with inanimate objects in the environment

Transmission: Direct contact

Direct contact: Infection occurs by contact from person to person

- 1. Contamination through small breaks or cracks in the skin
- 2. Contact with mucous membranes (eyes, nose, mouth)

Examples:

Puncture wounds such as needle sticks or sharps injury Abrasions & wounds

Communicable Transmission : May also be Indirect contact

Three types of indirect contact

- Airborne: transmission through air or droplets (cough, sneeze, nasal discharge)
 Examples: Influenza/Flu, and Tuberculosis/ TB
 Chicken Pox may also be transmitted thru direct contact
- 2. Vehicle: infection through contaminated water, food or fecal material. Examples: Hepatitis A, Salmonella
- 3. Vector: Infection via insects
 Example: Lyme disease, transmitted from ticks

plan and prevent the spread of infection!

- 1. Hand washing
- 2. Plan for available personal protective equipment (PPE), for routine and emergent situations that could place a person in potential contact with infectious materials.
- 3. Plan appropriated decontamination and equipment for disposal of waste products

- Wet hands
- Rub hands together producing friction, lather with soap (Soap suspends easily removable soil and microorganisms)
- Wash between fingers, knuckles, back of hands, nails and around jewelry.
- Wash for at least 20 seconds (Hum the "Happy Birthday" song from beginning to the end twice)
- Rinse hands well under clean running water, while holding fingers down toward sink
- Dry hands with a paper towel then use the towel to turn off faucet.
- ❖IS IT REALLY THAT SIMPLE ? (An experiment using a black light may show surprising results!)

Wear gloves

- When having contact with blood, other potentially infectious material, mucous membranes, and non-intact skin
- When handling contaminated substances or surfaces
- When anticipating contact with contaminated substances or surface
- Protect eyes, face and clothing from potential splashes or sprays of blood, body fluids, and secretions (i.e. nursing procedures such as suctioning, tracheostomy care)

Center for Disease Control and Prevention (CDC) recommendations:

- Gloves should be readily available. Latex gloves should not be used by persons with an allergy to latex. (Check with your school nurse, regarding other glove alternatives.)
- Pick up spills using disposable towels and tools that can be disinfected.

Ask the person to hold the towel or item to collect the fluid, until you are able to put on gloves. (i.e. nose bleed)

Wear gloves

It is sometimes helpful to explain to the person that you are assisting, that when putting on gloves you are also protecting their open wound or mucous membranes from potential exposure to germs, viruses and bacteria.

Glove removal

- Grasp the cuff area of one glove using other gloved hand (Touch dirty to dirty glove/glove)
- Pull the glove off the hand, allowing it to turn inside out.
- Grasp and contain the glove, formed into a ball within the palm of the gloved hand.
- Place the thumb of the ungloved hand underneath the cuff (between skin and glove) of the gloved hand, and remove it by pulling inside out, over the first glove. (Touch clean to clean)
- Push glove inside out, down over fingers and around balled up glove. Both soiled glove surfaces are now contained inside the second glove.
- Grasp inside out gloves and discard into plastic sealable bag, in accordance with disposal procedures
- Wash hands

Blood Borne pathogen: <u>Hepatitis B</u>

• 30% of those infected have no symptoms

- Transmission of hepatitis B virus results from exposure to infectious blood or body fluids.
- Potentially life threatening disease
- An infectious illness caused by Hepatitis B virus (HBV) which infects the liver, causing inflammation (Hepatitis)
- Vaccine available

Blood borne pathogen: Hepatitis c

80% of those infected have no symptoms

- Transmission of hepatitis C virus results from exposure to infectious blood or body fluids.
- May lead to long term liver damage or liver cancer
- No Vaccine Available

Blood borne Pathogen: Human Immunodeficiency Virus (HIV)

Transmitted through contaminated blood and body fluids

Attacks immune system

- Can lead to AIDS
 - ❖No cure
 - ❖ No vaccine

Other Communicable Diseases Airborne infections:

Examples: Influenza (flu), Meningitis, Chicken pox, tuberculosis (TB)

- Encourage students to cover the nose/mouth when coughing or sneezing
- Use tissues to contain respiratory secretions and dispose of them in the nearest waste receptacle after use
- Perform hand hygiene after having contact with respiratory secretions
 & contaminated objects/materials.

Wear gloves: For Specific Task

- First aid, CPR and emergency care
- Nursing, health care procedures (handling any blood or body fluids, or a specific procedure)
- Teachers/ staff who have received specialized training by the nurse for procedures such as EpiPen in an anaphylaxis emergency.
- Unlicensed Diabetic Assistance, staff that has received training and delegation for specific identified students using blood glucose testing with sharps and needles for diabetic care, emergency care with glucose gel or glucagon)
- Before and after diapering and toileting
- Cleaning contaminated areas
- Disposing of trash
- Handling of food

infection Prevention:

- Clean objects and classroom items routinely and anytime they become soiled
- Wash any cuts, scrapes, lesions, insect bites and sores with soap and water
- Keep lesions clean and dry, cover with a bandage

MRSA

- MRSA is being seen in increasing numbers among healthy people of all ages
- The bacteria enters an abrasion or wound, causing a skin and soft tissue infection
- Staph aureus is most often spread to others by contaminated hands, touching wounds, sharing towels and other personal items
- The staphylococcus aureus bacteria is difficult to treat, and is resistant to most antibiotics.

MRSA Signs and Symptoms

- Fever
- Local swelling, redness, heat
- Painful lesion or pimple with or without drainage
- Boil-tender red lump with a "white head"

MRSA Prevention:

- Regularly clean commonly touched surfaces such as door knobs, bathrooms, mats, etc., with EPA approved disinfectant
- Handwashing
- Good personal hygiene

Definition of sanitizing and/or disinfecting:

• "Sanitizer" is a product that reduces germs on inanimate surfaces to levels considered safe by public health codes or regulations. A sanitizer may be appropriate to use on food contact surfaces (dishes, utensils, cutting boards, high chair trays) and shared daily items.

 "Disinfectant" is a product that destroys or inactivates germs on an inanimate object. A disinfectant may be appropriate to use on nonporous surfaces such as diaper changing tables, countertops, door and cabinet handles, and toilets and other bathroom surfaces."

Consistently Follow protocol

- It is very important to clean up any blood or body fluids spills immediately.
- Hepatitis is a very durable virus and can survive outside of the body for a week or longer.
- Follow product manufacture directions on the approved disinfectant used in your school system.
- Consistently follow recommended protocol, double bag soiled or contaminated objects before disposing.

Environmental Protection agency (EPA) cleaning agent

- EPA registered products: Federal law requires that all EPA-registered products must be used according to the instructions on the manufacturer's label.
- Look for the U.S. Environmental Protection Agency (EPA) registration number on the label of any product to be used as a sanitizer or disinfectant. A very large number of EPA registered products are available. To select environmentally friendly products, look for the Design for the Environment (DfE) label authorized by the EPA that indicates that "based on currently available information, EPA predictive models, and expert judgment – the product contains only those ingredients that pose the least concern among chemicals in their class"
- http://epa.gov/dfe/pubs/projects/formulat/label.htm

Clean surface

- Note: the surface must be visibly clean before sanitizing or disinfecting it. If it is not visibly clean, wash the surface with detergent solution, and then rinse with water before applying the sanitizer or disinfectant.
- Some sanitizers/disinfectants require rinsing the surface after the chemical is applied for the require contact time. Be sure to read labels and follow the manufacturer's instructions for use.

Follow Procedure Policy for disposal of sharps

- Place used disposable syringes and needles and other sharp items in an appropriate puncture-resistant container, following protocol, when handling sharp instruments after a procedure
- Never recap used needles
- Do not bend, break or otherwise manipulate used needles by hand
- Do not remove used needles from disposable syringes

Report accidental exposure:

Immediately report all exposure incidents involving students and/or personnel to the principal and school nurse

In conclusion:

- Treat blood and body fluids as infectious
- Wash hands, routinely, and encourage students to do the same
- Use protective barriers, consistently, as needed
- Always clean contaminated areas
- Dispose of sharps and contaminated objects appropriately, follow policy

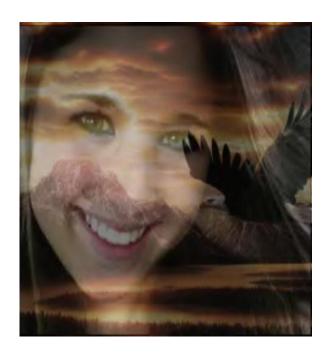
Additional Information:

Center for Disease Control (CDC) website, http://www.cdc.gov

Alabama Department of Public Health website,

Act# 2014-274 S-75 Jessica Elkins Act

- Meningococcal Meningitis info to parents for grades 6-12
- Make available info about Meningococcal Meningitis as required in Section A 1-3.



https://www.youtube.com/watch?v=Dbxfq5DKMR0

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