



School Health

Employee Training

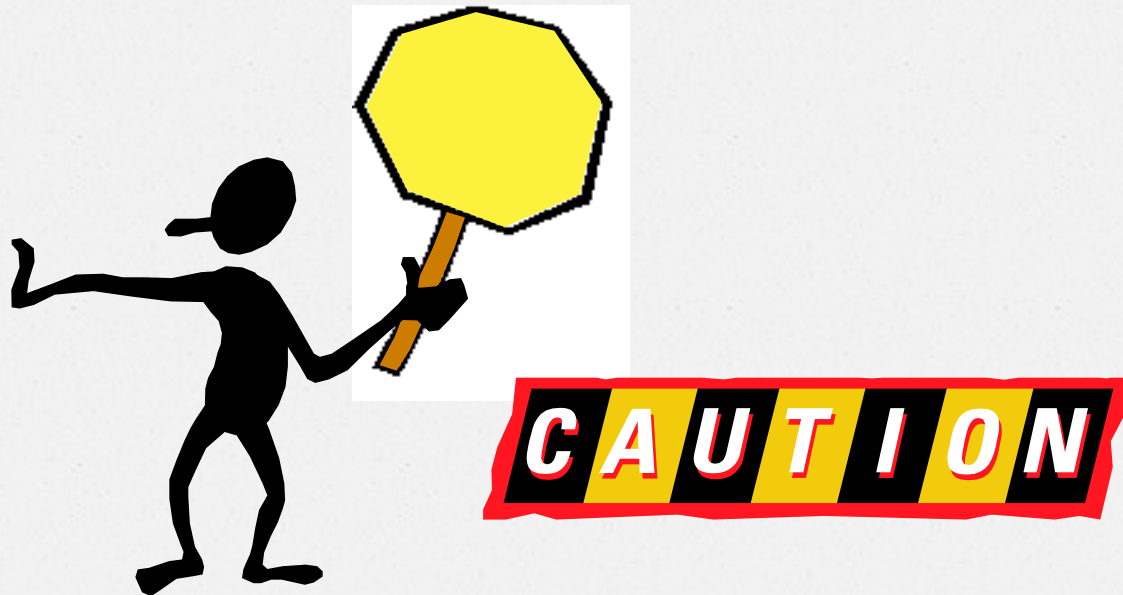
Standard Precautions/ Bloodborne Pathogens



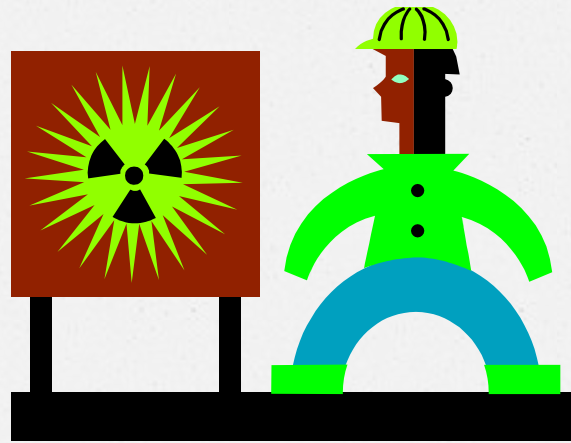
Purpose:

- To promote the health and safety of students, school personnel and others in the school environment.
- Each school will teach, support & practice standard precautions .

Standard Precautions/ Bloodborne Pathogens



Can you stay safe & healthy at work?



o What are Standard Precautions?



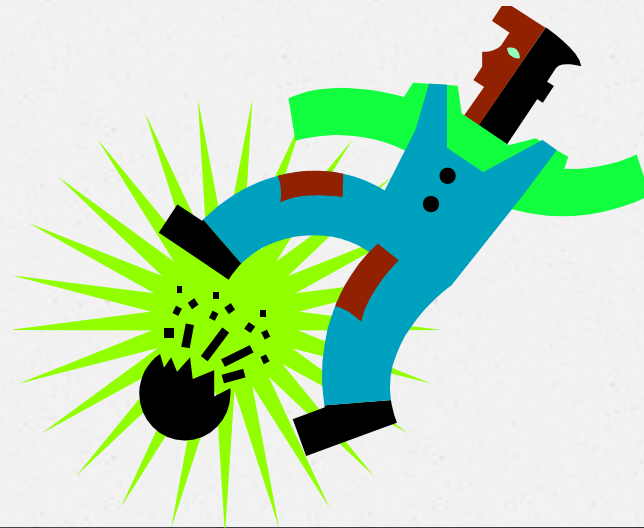
Bloodborne pathogens are microorganisms such as **viruses** or **bacteria** that are **carried in blood** and can **cause disease** in people.

There are many different pathogens including

malaria, syphilis, and brucellosis, but **Hepatitis B (HBV)** and **Human Immunodeficiency Virus (HIV)** are the two addressed in this training.

Standard Precautions =

- o An approach to infection control that treats *all* human blood and *certain* body fluids as if they are infectious for Human Immunosuppressive Virus, (HIV), Hepatitis B Virus, (HBV) and Hepatitis C (HCV) or other bloodborne pathogens.



Most Common Diseases That Are Carried by Blood

- o There are many diseases carried by blood.
- o The two most common are :

1. Hepatitis B Virus

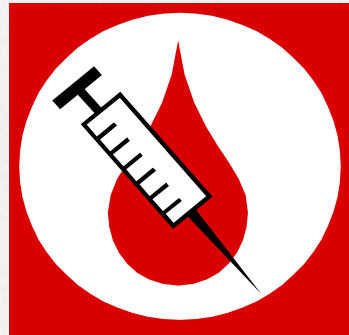
AKA > HBV

2. Human Immunodeficiency Virus or

AKA> HIV

Modes of Transmission

- o Bloodborne pathogens such as HBV and HIV can be transmitted through contact with infected human **blood** and **other potentially infectious body fluids** such as:
- o Semen
- o Vaginal secretions
- o Cerebrospinal fluid
- o Synovial fluid
- o Pleural fluid
- o Peritoneal fluid
- o Amniotic fluid
- o Saliva (in dental procedures), and
- o Any body fluid that is visibly contaminated with blood.

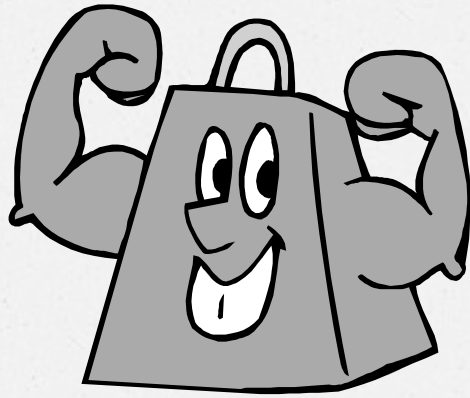


Hepatitis-B or HBV

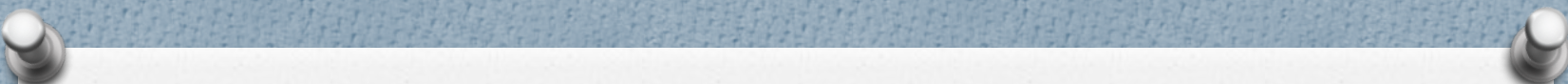
Most common bloodborne disease you may be exposed to.

Effects of HBV:

- ✓ Flu- like symptoms *or*
- ✓ No symptoms at all
- ✓ Your blood and body fluids may be infected so you may infect others.
- ✓ Unborn babies can be infected
- ✓ Can be spread by sexual contact
- ✓ Can be damaging to the liver can cause inflammation of the liver and may cause death.



Hepatitis is "Tough"
Lasts a long time!



o Most Common Ways to
transmit HBV or HIV:

Most Common Ways to Transmit HBV or HIV:

- Sexual Contact
- Sharing of hypodermic needles
- From mothers to their babies at/before birth
- Accidental puncture from contaminated needles, broken glass, or other sharps
- Contact between broken or damaged skin and infected body fluids
- Contact between mucous membranes (eyes, mouth, nose) and infected body fluids

Transmission

- Hepatitis B is normally transmitted by “blood to blood” contact.
- The Hepatitis B virus is very durable, and it can survive in dried blood for up to *seven days*. For this reason, this virus is the primary concern for employees such as housekeepers, custodians, laundry personnel and other employees who may come in contact with blood or potentially infectious materials in a non first-aid or medical care situation.

HIV

- HIV attacks the body's immune system
- Causes AIDS.
- There is *no vaccine* to prevent HIV infection

Effects of HIV:

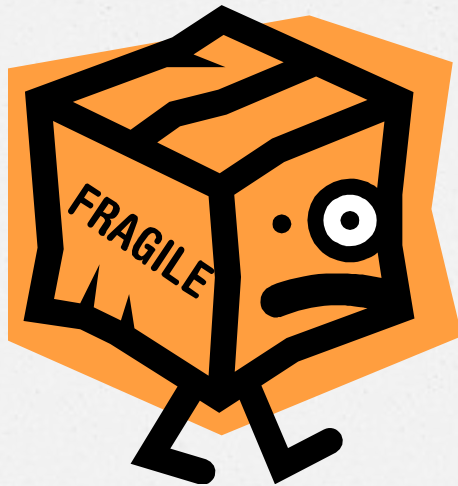
- ✓ May be infected and not have symptoms
- ✓ May have flu-like symptoms
- ✓ Will develop AIDS
- ✓ May be affected by other illnesses that are related to AIDS. These may be neurological impairments, cancer or other infections.

Transmission

- The HIV virus is **very fragile** and will not survive very long outside of the human body. It is primarily of concern to employees providing first aid or medical care in situations involving fresh blood or other potentially infectious materials. It is estimated that the chances of contracting HIV in a workplace environment are only 0.4%. However, because it is such a devastating disease, all precautions must be taken to avoid exposure.

HIV is easily destroyed!

Use Bleach!

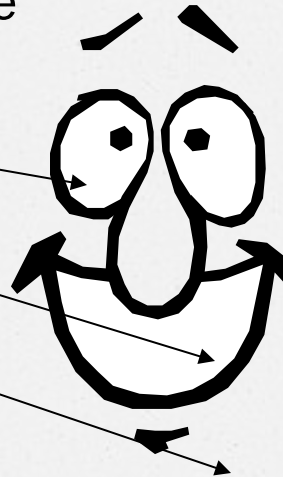


What Protects us?

Skin forms an impervious barrier against bloodborne pathogens. However, **infected blood can enter your system through:**

- Open sores
- Cuts
- Abrasions
- Acne
- Any sort of damaged or broken skin such as sunburn or blisters
- Bloodborne pathogens may also be transmitted through the **mucous membranes** of the

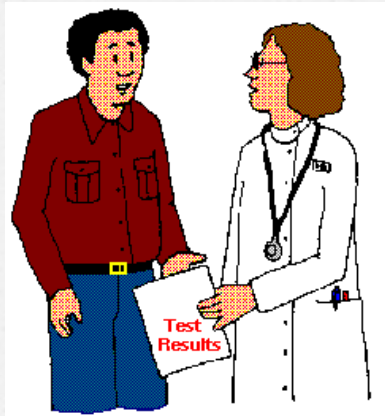
- Eyes
- Nose
- Mouth



Use Standard Precautions!

- o If you are exposed, however, you should:
- o Wash the exposed area thoroughly with soap and running water. Use non-abrasive, antibacterial soap if possible.
- o **If blood is splashed in the eye or mucous membrane, flush the affected area with running water for at least 15 minutes.**

If you have an exposure:



Contact your principal or supervisor. An incident report should be completed. You will need to see your personal physician for assessment.

Casual Contact is NOT a Risk!

- o A Hug
- o A Handshake
- o Using a telephone
- o Using a toilet
- o Sitting next to someone
- o Wiping someone's tears
- o Having someone's sweat touch you



Specific steps to follow to protect
against contamination from
infected blood or body fluids.



Remember!

- Treat **all** blood and body fluids as though you know they are infected with a pathogen!



Moist/wet body
substances/fluids
can be dangerous!

#1 Step = Hand Washing!

- Wash your hands and any other skin surfaces that may have been exposed as soon as you have contact with blood or body fluids.
- Hand washing is the first step to the prevention of infection to yourself or transmission of an infection to others.

Method of Hand Washing

Stop Disease!



Method for Hand Washing

- o Use non-abrasive soap & running water
- o Rub hands vigorously
- o Wash *all* surfaces for at least 15 seconds including ;
 - ✓ backs of hands
 - ✓ wrists
 - ✓ between fingers
 - ✓ under fingernails
- o Rinse well
- o Dry hands with paper towel
- o Turn off water using paper towel instead of bare hands

No Running Water?

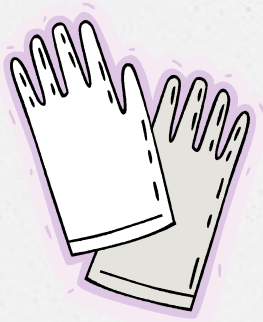


- The CDC recommends use of waterless alcohol antiseptic cleaner if your hands are not visibly soiled.

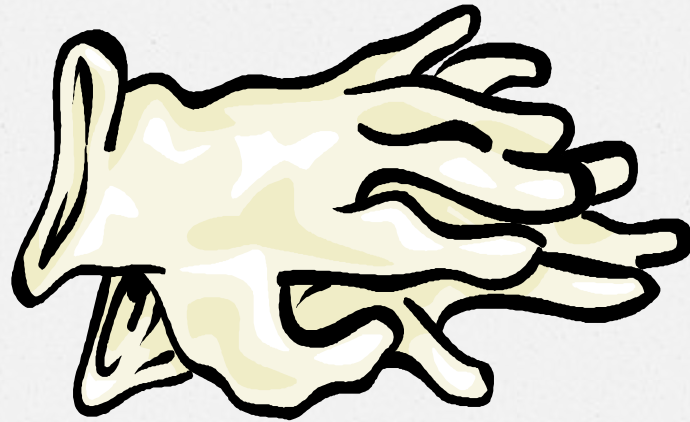


Protective Equipment

- Wear protective equipment when there is a chance of exposure to blood and or body fluids!



Always USE GLOVES!





Caution!

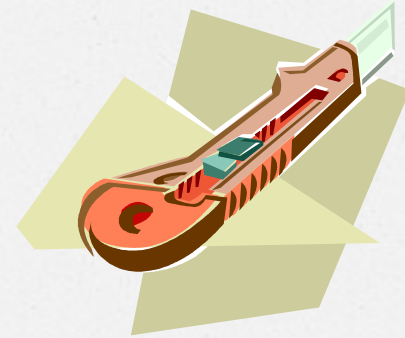
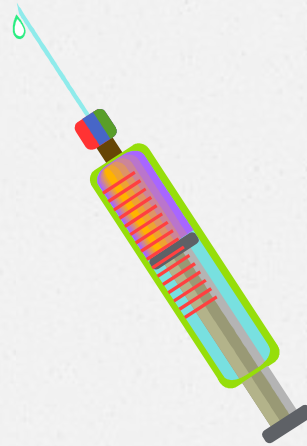
- o Always use gloves when you are touching blood, body fluids, or surfaces that have been contaminated.
- o Always use gloves when administering first aid.
- o If you have any exposed cuts cover with band-aids before giving first aid to another person.
- o Use gloves once, then dispose, being careful to remove gloves without touching the outside or contaminated surface of gloves. Then wash your hands!
- o Always use gloves if there is *even a possibility* you might have contact with another person's body fluids.



Disinfect = To kill Germs

- o Disinfect any contaminated surfaces or objects with a germicidal agent.
- o Hepatitis B virus can survive in dried blood for at least a week.
- o Use an appropriate disinfectant. It may be a bleach solution made using CDC guidelines. (One part bleach to ten parts water). Should be 85% bleach.

Proper Disposal of Contaminated Clothing, Sharp Instruments, and Supplies



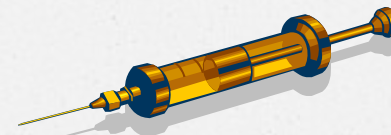
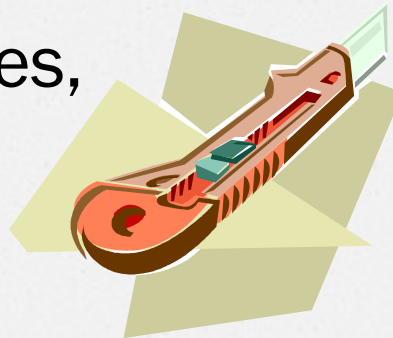
Clothing or Supplies:

- If contaminated with blood and/or body fluids or any *potentially infectious material*:
- Should be placed in doubled plastic bags & tied.
- Used needles or sharp instruments must be discarded in a “Sharps Container”. This container must be puncture resistant. (See your school nurse for assistance)



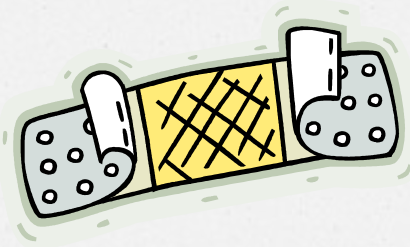
Potential Sources of Exposure in the School setting:

- ☐ Blood
- ☐ Vomit
- ☐ Urine
- ☐ Feces
- ☐ Saliva
- ☐ Needles, syringes,
or other sharp
instruments.



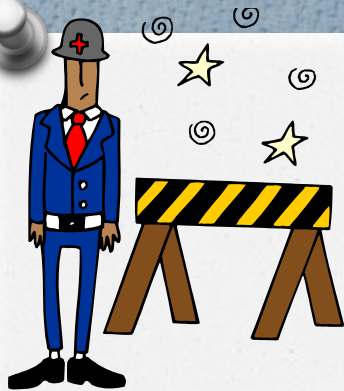


Note:



Soiled feminine /sanitary pads, soiled facial tissues, bandages, etc. are *not* considered a biohazard or as medical waste; however, in handling these materials employees should wear gloves and wash hands afterwards.





Barriers to Prevent Infection

- Barriers are your defense between your body and the body fluids from someone else. Barriers will help prevent the following infectious diseases:
 - ❑ HIV (responsible for AIDS virus)
 - ❑ Hepatitis A & B
 - ❑ Staphylococcus (Staph), and
 - ❑ Streptococcus (Strep)

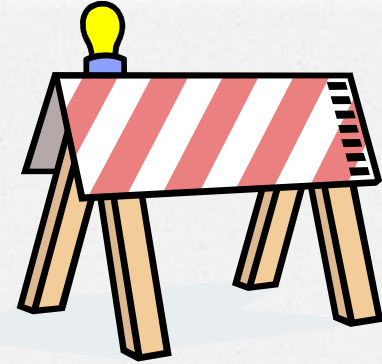


What Barriers are Available to Me?

1. **Gloves** – Should be available in every school area, including buses. If you do not have gloves use some type of barrier; a plastic bag, gauze, newspaper or paper towel.

Use gloves to change a diaper, change clothes that are soiled with body fluids, feed a student, clean mats, or equipment soiled with body fluids.

Barriers:



- Use masks to do CPR. If a mask is not available you can use a piece of gauze to cover the mouth.
- Hepatitis –B Virus (HBV) Vaccinations- For those who are health care professionals or give medical care on a daily basis, or respond to medical emergencies.
- Post- Exposure Treatment and Notification procedures. If you experience an occupational exposure, report to your immediate supervisor and complete an incident report.

Clean Up and Disposal of Waste

Spills of blood and body fluids must be handled using Standard Precautions. The spill should be cleaned immediately!

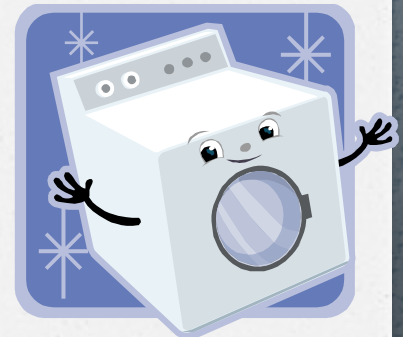


- o Wear protective clothing (Gloves)!
- o Mop up spill with paper towels
- o Clean contaminated area using approved disinfectant (1:10 bleach solution)
- o Dispose of gloves, towels, dressings, other waste in sealed double bags.
- o See school nurse for disposal of sharp instruments.



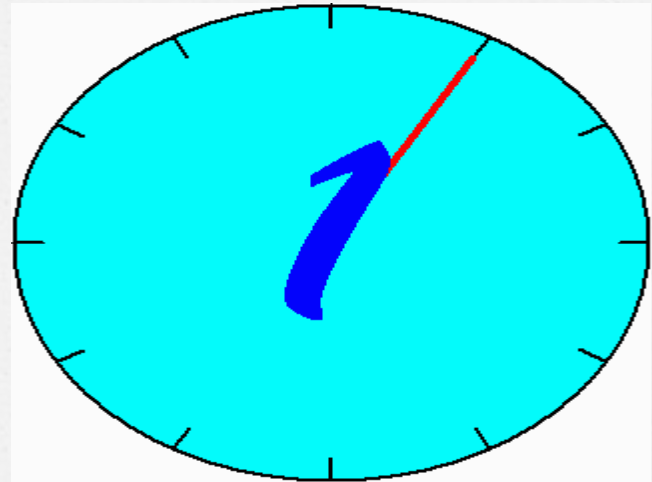
Special Care of Laundry

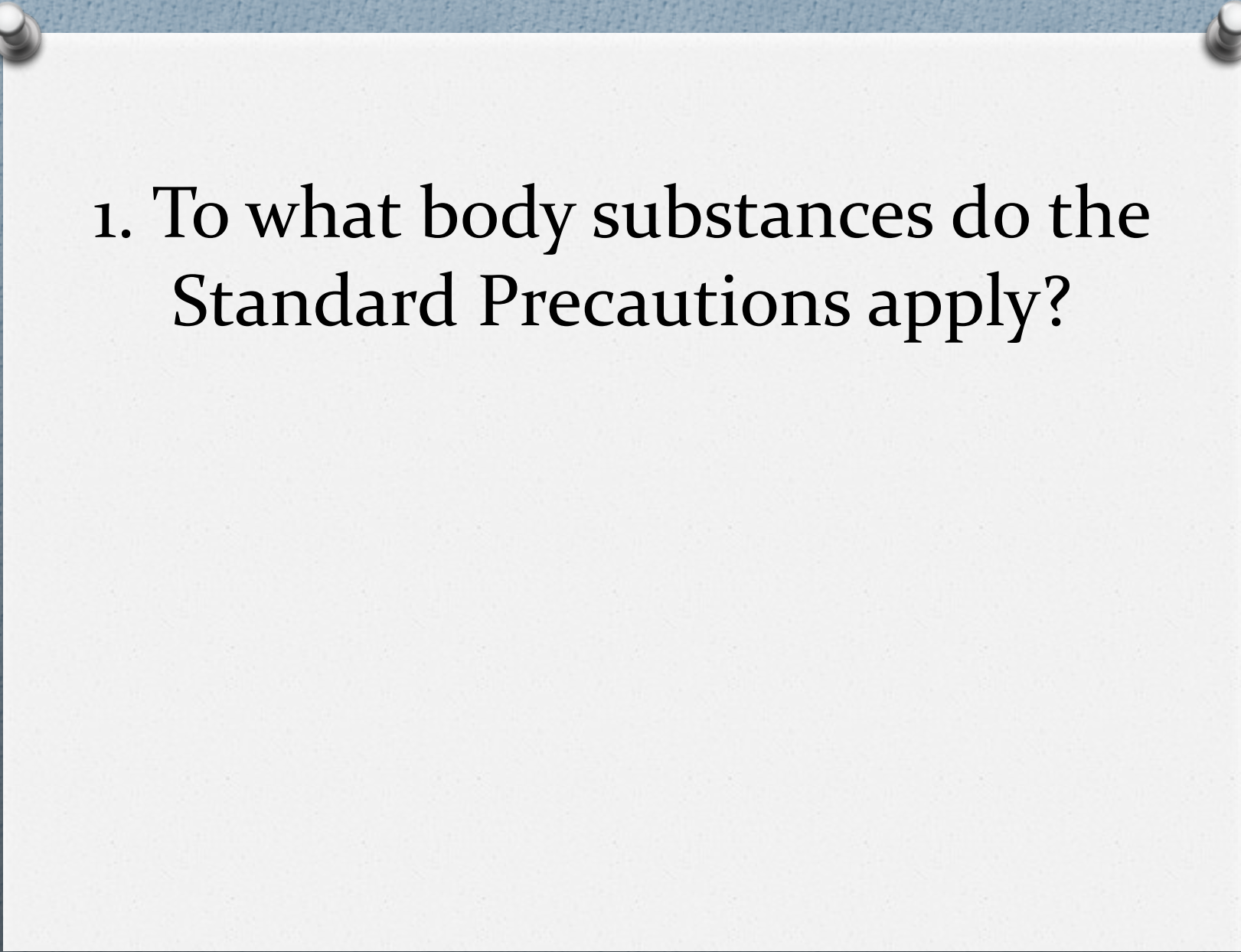
- o If clothing, sheets or towels become contaminated with blood and or body fluids, handle only with gloves and as little as possible. Place the items in a double plastic bag and tie top.
- o Clothing should be washed in hot water with detergent for a complete cycle.



Quiz

Ready, Set, and Go!



- 
1. To what body substances do the Standard Precautions apply?

Answer:

Standard Precautions apply to :

1. Blood
2. All body fluids, secretions, and excretions except sweat.
3. Non-intact skin.
4. Mucous membranes.

2. What is an Exposure?

Exposure is:

- o Blood or body fluid contact from an injured or ill employee/student to the affected employee or an injury by a contaminated sharp object.
- o This may include contact via broken skin, human bites, needle sticks, etc. Following documentation of an occupational exposure, the employee should follow instructions from their physician regarding any recommended testing and or any follow-up.

3. As a school employee my risk of coming in contact with a bloodborne pathogen such as HIV, HBV or HBC is :

1. High
2. Low
3. Non-existent

2. Low

- Because unlike healthcare professionals your exposure & contact with blood or body fluids is infrequent.
- But if you do find yourself in a position of possible exposure you must deal with blood & body fluids safely!

True or False

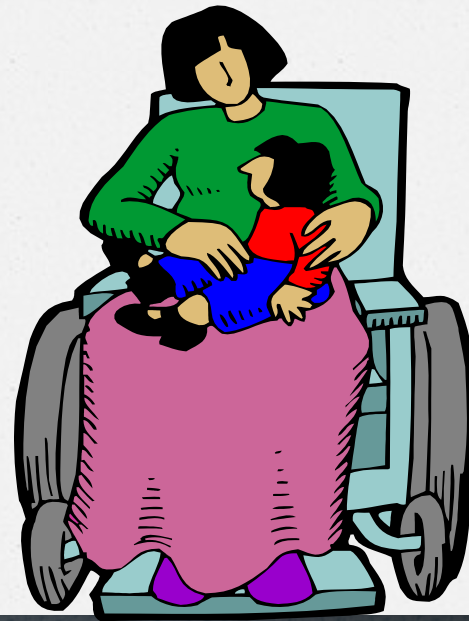
4. You can get HIV or HBV if you hug an infected person.

a. True

b. False

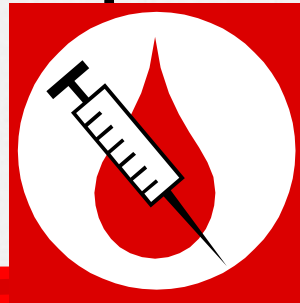
b. False

- You cannot get HIV or HBV from casual contact.



What do these pictures show?

Sexual Contact



Needle
stick



Mucous membranes of
Mouth, nose, or eyes
in contact with body
fluids of infected
person.



Blood from infected
person comes in contact
with broken skin of
another person.

Answer:

Most common ways blood borne pathogens can be spread.

5. If you are exposed to potentially infectious materials on the job, you may request a vaccine for which Bloodborne disease?

- a. HIV
- b. Syphilis
- c. Hepatitis B
- d. Brucellosis

Answer:

- C. Hepatitis B

6. Which of the following materials could contain bloodborne pathogens?

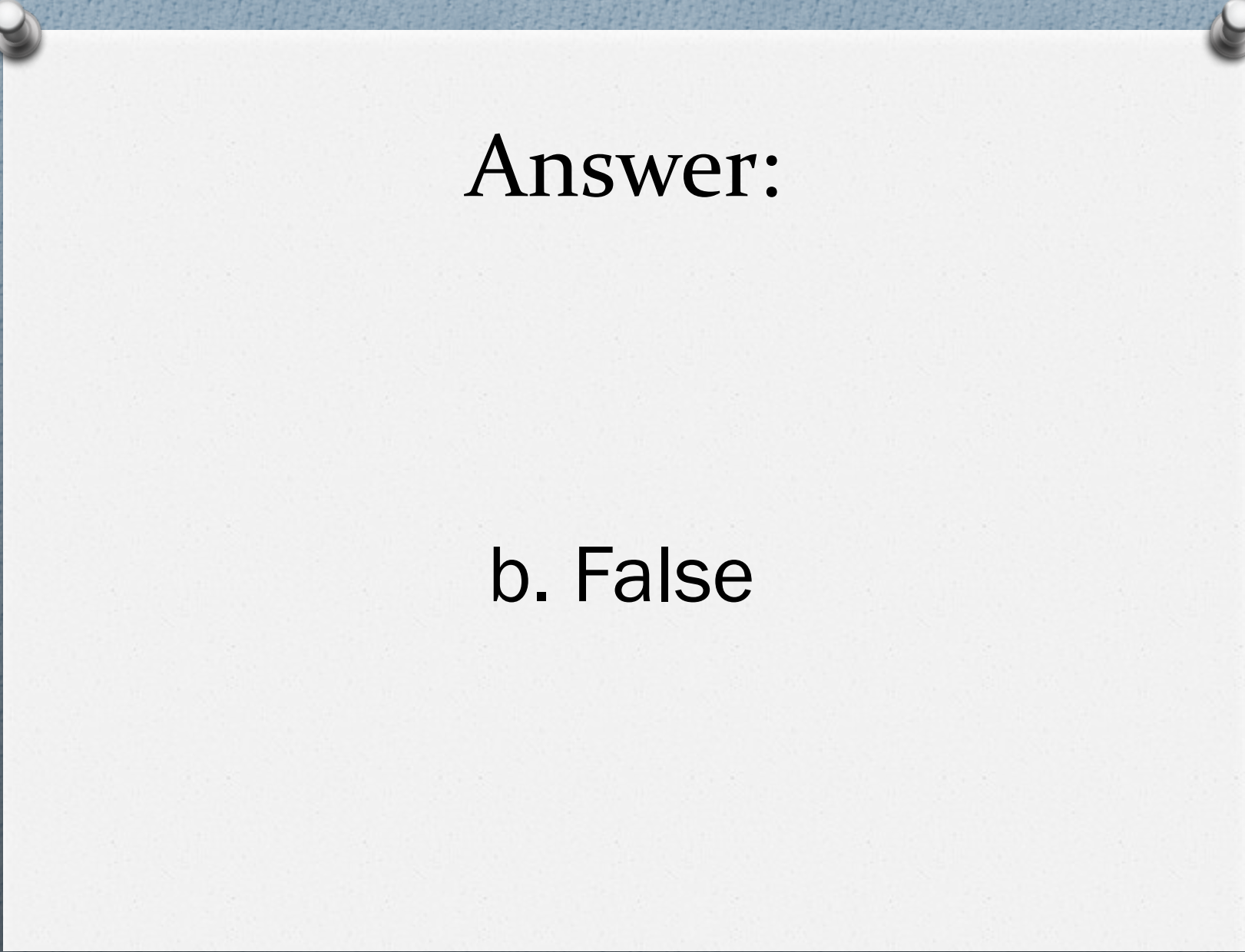
- a. Bloody saliva
- b. Semen
- c. Vaginal secretions
- d. All of the above

Answer:

- ◊ D. All of the above

7. If you wear gloves when cleaning up an accident site, it is not necessary to wash our hands afterwards.

- a. True
- b. False

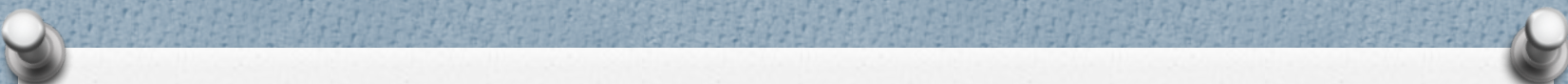


Answer:

b. False

Bloodborne pathogens may enter your system through:

1. Open cut
2. Skin abrasions
3. Dermatitis
4. Mucous membranes
5. All of the above

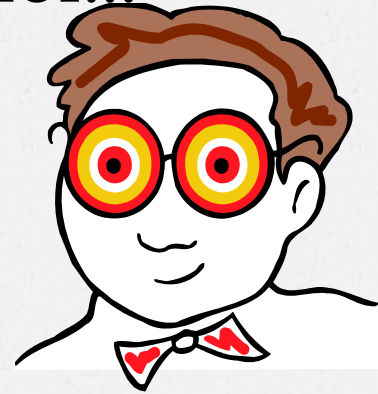


Answer:

5 - All of the above

8. If you have blood or potentially infectious materials splashed into your eye, you should flush your eye with clean, running water for...

- a. 2 minutes
- b. 5 minutes
- c. 10 minutes
- d. 15 minutes



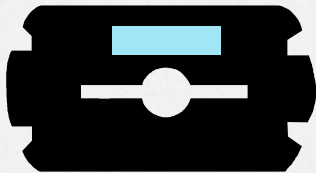


Answer:

d. 15 minutes



9. Uncontaminated sharps may be disposed of in regular trash bags.



- a. True?
- b. False ?



Answer:

b. False !



10. A quarter cup of household bleach to one gallon of water provides a strong enough solution to effectively decontaminate most surfaces, tools and equipment if left for 10 minutes.

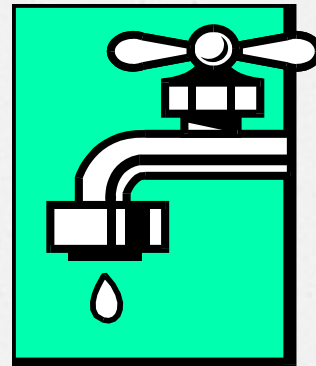
- a. True
- b. False

Answer :

a. True



Plus



Bonus Question!

True or False:

o You can be safe from bloodborne pathogens at school and at work.

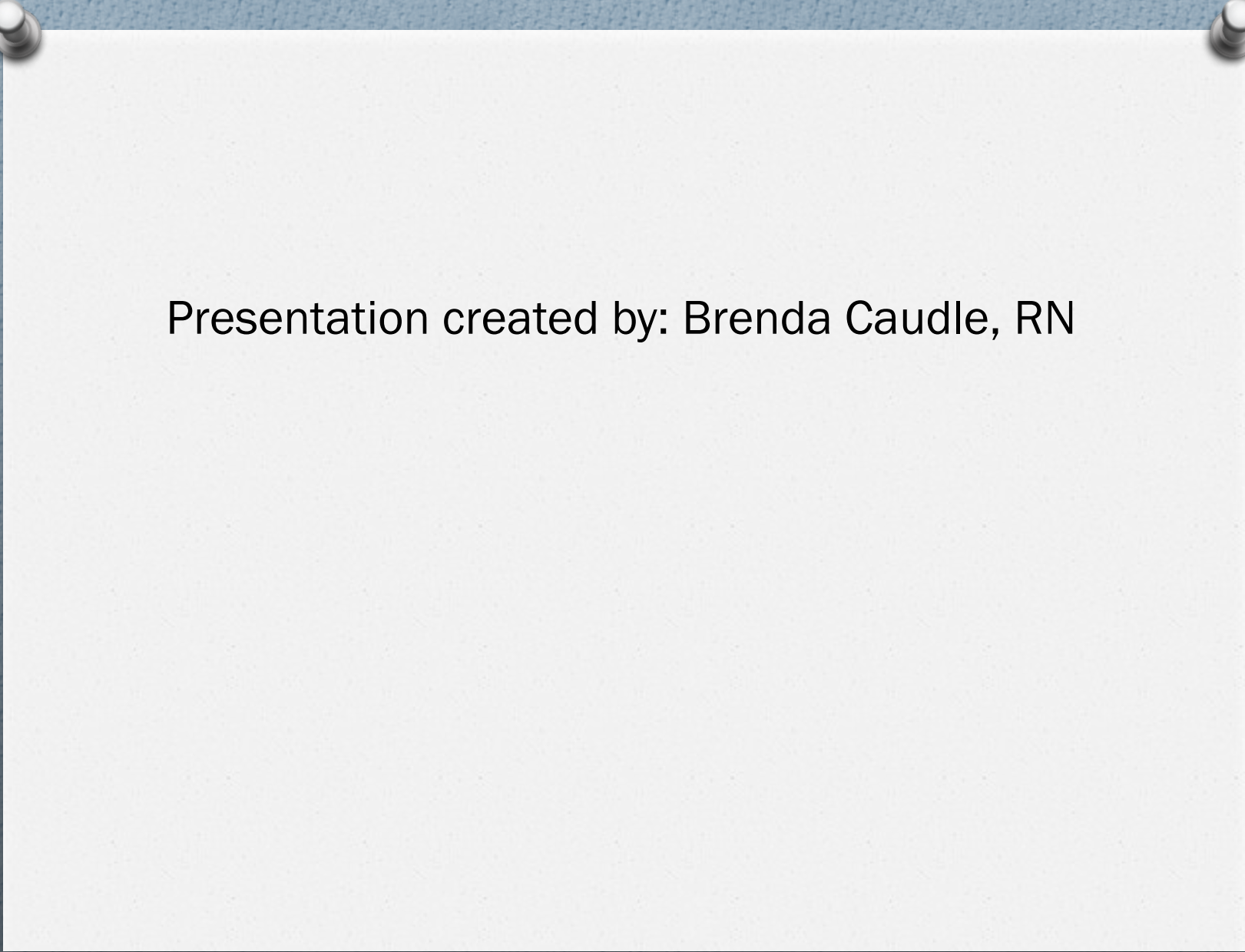
a. True ?

b. False?

Answer: a & b

How can the answer be both true & false?

It is true if you follow “Standard Precautions”
and it is **false** if you don’t!



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