

Salt Lake City School District 5th and 6th grade

BLOODBORNE PATHOGENS EDUCATION CURRICULUM

As part of the Healthy Lifestyles Curriculum, the State Office of Education has developed an AIDS Education Curriculum for grades 3-12. Teachers are mandated by State Law to teach this curriculum. The SLC School District has expanded this curriculum to include other bloodborne pathogens, particularly Hepatitis B (HBV) and Hepatitis C (HCV). The following is the state outline for 3rd – 6th grades. The lesson will be taught by a registered school nurse, using a SLCSO approved DVD, and PowerPoint presentation, followed by a question and answer session. If you would like to preview the material to be used please contact your school nurse.

Students will develop a basic understanding of communicable diseases and the immune system, and how diseases caused by bloodborne pathogens compare and differ with other diseases.

1. Define viruses, tell how they transmit disease and list diseases that are caused by viruses.
2. Discuss how people infected with a virus can infect others yet have no symptoms.
3. Develop a definition for bloodborne disease.
4. Define opportunistic diseases.
5. Define the term epidemic and pandemic and explain why AIDS is pandemic.
6. List the primary modes of transmission of bloodborne diseases.
7. Describe ways bloodborne diseases cannot be transmitted.
8. Discuss strategies for disease prevention such as decision making skills and potential consequences for risky behaviors.

Education about bloodborne pathogens at the intermediate grade level is designed to provide information to form a framework for more advanced discussion material at the secondary level.

The primary emphasis of this portion of the curriculum is to explain to students the physiology of bloodborne diseases, i.e., what a virus is, what opportunistic diseases are, what the primary modes of transmission are, etc. In presenting this information, nurses should recognize that students are likely to be:

- Aware of sexual feelings and desires and confused about these feelings.
- Increasingly sensitive to media and peer pressure.
- Capable of concern for others.
- Exploring sex roles.
- In different stages of pre-puberty and early puberty and, therefore, very interested in learning about sexuality and relationships.
- Quite comfortable discussing human sexuality.
- Confused between fact and fantasy, between hypothesis and reality.
- Able to internalize rules and to know what is right or wrong according to those rules.

This portion of the curriculum is recommended by the Centers for Disease Control as appropriate for the intermediate grades. These objectives are not complex and should focus on the physiology of the disease and attempt again to eliminate the fears and fallacies children have concerning bloodborne diseases.

SAMPLE LESSON PLAN FOR 5TH AND 6TH GRADERS

1. Define the diseases AIDS, HIV, HBV, HCV. For example:

A Acquired (Something you get)
I Immune (A system in your body that fights disease)
D Deficiency (You are lacking or missing something)
S Syndrome (A whole collection of signs and symptoms)
H Human (It is a disease in humans only)
I Immunodeficiency (Refer to definition above)
V Virus (The germ that causes HIV is a virus)

2. Define Epidemic and Pandemic

- Epidemic: 100's or 1000's in a small area infected with a disease.
For example: Head lice might be epidemic in your school.
- Pandemic: Millions, worldwide, AIDS is pandemic

3. Two types of microbes (tiny living things, germs) that cause disease:

Bacteria: Are single celled organisms that live all around us. They cause diseases such as strep throat and pink eye, which can be treated with antibiotics.

Viruses: Cause diseases such as the common cold, flu, and chicken pox that cannot be treated with antibiotics.

- Viruses can cause serious illness. Once a virus gets into a cell, the virus can make hundreds of copies of itself to overpower our body's natural defenses and make us sick.
- The incubation period of viruses vary in length, making it difficult to determine with certainty whether or not a person is infected. An infected person might not show any symptoms for months and possibly even years, but still be contagious.

How do people typically become infected?

- Sneezing
- Sharing utensils and drinking glasses
- Breathing in the bacteria or virus
- Touching a contaminated surface, then touching your eyes, mouth, or nose
- Touching a rash or sore and putting your hand in your mouth or eyes
- Not washing your hands after going to the bathroom or before eating

4. Discuss how a healthy immune system is the body's defense against infection.

5. Discuss the ways that people can be exposed to bloodborne diseases.

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- Coming in contact with other people's blood and other body fluids, for example: during sexual contact, sharing needles during IV drug use, unprofessional body piercing, tattooing, fighting, and picking up used needles on the playground, etc.
 - An HIV positive mother could pass it on to her unborn child.
 - Blood transfusions, tissue and organ transplants, and donating blood is safe.
6. List ways bloodborne pathogens cannot be contracted:
- Sneezing
 - Sharing utensils and drinking glasses
 - Sitting next to someone with the disease
 - Taking care of someone with the disease
 - Eating in a restaurant where the cook has the disease
 - Living in the same house with someone who has the disease
 - Touching someone with the disease
 - Holding hands
 - Playing sports with someone who has the disease
7. Bloodborne diseases are difficult to contract. You have to engage in risky behaviors in order to get them. It is up to you to protect yourself from bloodborne diseases.
8. How do you protect yourself from getting a bloodborne disease?
- Never touch anyone's blood or bodily fluids. If someone needs first aid get an adult to help.
 - Don't pick up needles or syringes anywhere, instead get an adult to help.
 - Do not put your hands in trash cans.
 - Abstinence from sexual contact.
 - DON'T DO DRUGS.
 - Avoid fighting.

5th and 6th Questions

1. AIDS is a disease caused by what bloodborne virus?
2. HIV weakens the immune system, allowing opportunistic infections to occur. T/F
3. You can tell if someone has a bloodborne disease because they look sick. T/F
4. Diseases caused by bloodborne pathogens are passed from person to person by_____.

 - Hugging
 - Sneezing
 - Sexual Contact
 - Drug use

5. Illnesses caused by both bacteria and viruses can be cured with medication. T/F
6. AIDS is a Pandemic. T/F
7. AIDS and other diseases caused by bloodborne pathogens are easy to catch. T/F