

LESSON: Learning about HIV/AIDS

CONTENT AREA: Family Health and Sexuality

GRADE LEVEL: Grades 4-5

Synopsis

Students observe a demonstration of how disease is transmitted, then work in small groups to develop "news reports" about HIV infection that include facts about the cause and spread of HIV.

About this Lesson

Key Concepts

Causes of HIV/AIDS
Transmission of HIV

NHES Alignments

Common Core: English Language Arts (ELA) Alignments

- ▶ Reading: Integration of Knowledge
- ▶ Reading: Key Ideas and Details
- ▶ Speaking and Listening: Comprehension and Collaboration
- ▶ Speaking and Listening: Presentation of Knowledge and Ideas
- ▶ Writing: Text Types and Purposes

Gifted and Talented Alignments

- ▶ Apply editing skills on work produced in academic disciplines

Gifted and Talented Alignments

- ▶ Report on new knowledge using accepted domain specific language

Objectives

Students will discuss the cause and transmission of HIV infection.

Students will identify valid sources for information about HIV infection.



Skill Emphasis

- ▶ Accessing Information

Preparation

Time Requirements

One or two 35-minute sessions.

Materials & Preparation

Teacher Tip: When teaching sensitive subjects such as reproductive health, it is essential to follow state and district guidelines for notification of parents and to provide opportunities for community members to preview materials.

Make visual_aids:

Facts about HIV

Copy student page (one for each student):

What Do You Know about HIV?

Have an overhead projector.

Background Information

Demonstrating the Transmission of Disease

Teaching Steps

Brainstorm ways to prevent disease.

Define the word "prevent." Have students brainstorm ways they can prevent themselves from getting diseases. List student responses on the board. Have students identify from the list, actions that really prevent diseases. Draw a circle around these actions.

Demonstrate the transmission of disease.

Teacher Page: Demonstrating the Transmission of Disease

Conduct the demonstration according to the directions on the teacher page. Explain that the plastic



wrap represents the skin that protects the body, and the holes in the plastic wrap represent breaks in the skin. The water represents the environment outside the body, and the iodine represents germs that cause disease. The change in color of the cornstarch mixture represents a disease.

CONCEPTS

- ▶ Germs can get inside the body through openings in the skin.
- ▶ Once inside the body, the germs can make a person sick.
- ▶ Some diseases can be passed from one person to another.
- ▶ The skin protects against many diseases.
- ▶ Most germs must get into the body to cause disease.

Discuss facts about HIV infection.

Visual Aid: Facts about HIV

Conduct a discussion about HIV infection.

CONCEPTS

- ▶ HIV infection is caused by a virus.
- ▶ HIV is spread by the virus getting inside the body.
- ▶ HIV infection cannot be cured, but it can be prevented.
- ▶ Persons with HIV need compassion.
- ▶ Resources for information and support around HIV infection include books, pamphlets, the internet and community organizations.

Students answer questions about HIV infection.

Student page: What Do You Know about HIV?

Teacher Tip: All statements are *true*. Ask for volunteers to share their answers to questions on the student page. Instruct students to correct any incorrect answers.

Reflect, summarize, and discuss.

Review the cause, transmission and incurable nature of HIV infection. Discuss types and sources of support for people living with HIV or AIDS.

CONCEPTS



- ▶ The skin protects us from many diseases.
- ▶ HIV must get into the body to cause disease.
- ▶ HIV infection is hard to get.

SKILL DEVELOPMENT

- ▶ Local resources for HIV infection include government agencies and nonprofit organizations.

Assessment

Divide class into small groups. Ask groups to develop "news reports" about HIV infection. The news report may be oral or written. Reports must include the following information:

The cause of HIV

How HIV is spread

Ways in which HIV cannot be spread

Two sources for valid information about HIV infection.

Assessment Criteria

CONCEPTS

Student work demonstrates proficiency by showing the ability to:

- ▶ Explain how HIV is transmitted.

ACCESSING INFORMATION

Student work demonstrates proficiency by showing the ability to:

- ▶ Identify valid sources for information about HIV infection which includes the following criteria: identifies why the source as being reliable (from an expert source), identifies why the source is valid (the information is correct and can be trusted).

Need Help?





HIV infection and AIDS are caused by a virus.

The virus must get into the body to make someone sick.

A person cannot get HIV infection from being around someone who has the virus.

There is no cure for HIV infection.

People who have HIV infection need love and support.



Name: _____



Directions: Decide whether these statements about HIV infection are true or false. Write T for True and F for False in the blank. Then write two places for information about HIV.

1. ____ HIV cannot be spread by hugging someone who has HIV infection.
2. ____ There is no cure for HIV infection at this time.
3. ____ AIDS is caused by the virus known as HIV.
4. ____ A person can only get HIV infection if the virus gets inside the body.
5. ____ People who have HIV infection need love and support.
6. Name two places to get information or help for HIV

infection. _____



Name: _____



Directions: Gather the following items:

cornstarch
plastic wrap
water
two twist ties
two glass beakers
iodine
a large needle

Place cornstarch inside two pieces of plastic wrap. Secure the plastic-wrapped bags at the top with twist ties. Make sure the cornstarch does not leak out. Use a needle to make several holes in one of the bags. Place each bag of cornstarch into a glass beaker filled with water. Be sure the top of the bags stays out of the water to prevent leakage into the beaker. Put several drops of iodine into the water of each beaker.

