# **Learning about HIV**

A Lesson Plan from Rights, Respect, Responsibility: A K-12 Curriculum Fostering respect and responsibility through age-appropriate sexuality education.

#### **NSES ALIGNMENT:**

By the end of 5th grade, students will be able to:

**SH.5.CC.1** – Define HIV and identify some age-appropriate methods of transmission, as well as ways to prevent transmission.

TARGET GRADE: Grade 5 Lesson 3

TIME: 40 Minutes

### **MATERIALS NEEDED:**

- · Newsprint/Board
- Markers/chalk
- Handout: "Facts about HIV" one per student
- "Teacher's Resource: HIV Infection and AIDS" – one copy for the teacher
- "Facts about HIV Answer Key"
   one copy for the teacher

### **ADVANCE PREPARATION FOR LESSON:**

It is helpful for students to have a basic understanding of the human immune system and how it works, and the concept of germs. The teacher should also review the teacher's resource included with this lesson to make sure to be up to date on information about HIV and AIDS. Finally, the teacher should also be prepared not to discuss explicit sexual situations but to refer a student with such a question to ask an adult family member.

### **LEARNING OBJECTIVES:**

By the end of this lesson, students will be able to:

- 1. Define HIV as a virus that is transmitted through bodily fluids that weakens your immune system. [Knowledge]
- 2. Identify at least two ways in which HIV can be transmitted. [Knowledge]
- 3. Identify at least two ways in which HIV is not transmitted. [Knowledge]
- 4. Identify at least one way to prevent HIV transmission. [Knowledge]
- 5. Identify at least one treatment for HIV. [Knowledge]

### **PROCEDURE:**

STEP 1: Begin the activity by introducing the difference between communicable and non-communicable disease. Explain that communicable diseases are diseases that one person can give to another; or get from someone else. Ask students to raise their hands and give examples of communicable diseases (some responses may include: the common cold, stomach virus, the flu) Say "Communicable diseases are caused by tiny organisms or germs that are contagious. Not all infections, however, are contagious. Then say, "Noncommunicable diseases are those that cannot be spread from one person to another." Ask for examples of non-communicable diseases, or infections (Some responses may include: appendicitis, an infected finger, asthma, cancer.) (3 minutes)

**STEP 2:** Tell students you are going to name some different medical problems people may have and they should tell you whether they are communicable or not. Ask:

- Can you get a sore throat from someone? (YES)
- Can you get allergies from someone? (NO)
- Can you get a broken arm from someone? (NO)



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- Can you get lice from someone? (YES)
- Can you get cavities from someone? (NO)

Ask students if they have any questions about whether a certain illness is communicable (contagious). Respond to students' questions by giving the correct answer and then explaining why (if it is non-communicable, either it is caused by a germ that is not contagious or it is not caused by a germ at all.) If you are unsure, tell the student you are unsure and that you will find out and let them know. (3 minutes)

STEP 3: Tell students that today you want to talk about a particular communicable infection called HIV. Ask students what have they heard of HIV. As you write "human immunodeficiency" on the board, say, "'HIV' stands for 'Human Immunodeficiency Virus.' That's a big name, so let's break it down a bit. 'Human' means it is a people disease. You can't get it from a pet or give it to a pet. 'Immunodeficiency' is really two words put together. 'Immuno' refers to the immune system, or the system that enables us to fight diseases. A 'deficiency' refers to when something is lacking – so basically, HIV is a virus – a microscopic organism – that attacks our immune system and makes it weak so it's harder for the body to fight off other infections. HIV is the virus that causes AIDS." (5 minutes)

STEP 4: Tell students that the way we usually keep people from getting a virus is by giving them a vaccine, which is an injection or a shot that they get that protects them from getting a particular infection for many years. Say "Just like a lot of people get a flu vaccine, a lot of children get a vaccine for the chicken pox and for the measles." Explain that there is not a vaccine for HIV. Tell students that there are some effective treatments, called antiretroviral therapy, that can reduce the likelihood of transmitting HIV to others, slow the way HIV grows in a person's body and prolong the life of someone living with HIV. There are also treatments for the illnesses that HIV can cause. But once someone is living with HIV, there currently is no way to rid the body completely of HIV, although with treatment, people living with HIV can have a normal life expectancy. Since there is no vaccine to prevent HIV and there is no way to rid the body of HIV once someone has it, it is very important to know how HIV is transmitted—so we can know how to avoid getting it or manage the virus if we were born with it." (3 minutes)

**STEP 5:** Say: "Luckily, HIV is hard to get. It is not an easy infection to transmit like a cold or the flu. HIV is in some bodily fluids, like blood, and not in others, like sweat, tears, saliva or urine. HIV can only be transmitted through one of the infected body fluids. HIV can be passed through blood, semen or vaginal fluids. In addition, it can be passed through breastmilk if someone is breastfeeding an infant."

Say, "It is very important to remember that HIV can only be passed from a person who is living with HIV. If two people are not infected then neither one can give it to the other." (6 minutes)

**STEP 6:** Distribute the handout, "Facts about HIV." Have students work in pairs to complete the worksheet. Allow 8 minutes for students to do this. Once all have been completed, review the questions with the class. All answers are TRUE. For each question, provide the answer as well as an explanation for why it is true (See teacher's guide with explanations.) (16 minutes)

**STEP 7:** Tell students, "Now that you know that HIV is not easy to transmit, can anyone give an example of some things you can do with a friend or a family member who is infected with



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HIV that are perfectly safe, meaning they can't transmit HIV?" Provide the first few examples so students understand what you are asking. Say, "For example, you can hug someone with HIV, you can give someone a kiss on the cheek, you can share food with them. Who wants to give us another example?" (Possible responses can include a wide range of behaviors including sitting on a toilet someone with HIV has sat on, swimming in a pool together, sitting next to an HIV-positive person, going to school with someone who has HIV, etc.) (3 minutes)

STEP 8: Conclude the lesson by saying "HIV is a serious infection and it is communicable but it is also very difficult to catch. As long as we know how HIV is and is not transmitted, we can protect ourselves and be good friends, family members to people we know with HIV or AIDS. All people are at some risk of HIV and the only way to know for sure if someone has HIV is to get tested." (1 minute)

## RECOMMENDED ASSESSMENT OF LEARNING OBJECTIVES AT CONCLUSION OF LESSON:

The worksheet "Facts about HIV" is designed to assess Objectives one, two, three and five.

Additionally, through step eight, the teacher can further assess student understanding of HIV transmission by their responses to ways they can safely interact with people with HIV to assess objective four.

### **HOMEWORK:**

None.



# FACTS ABOUT HIV (TRUE OR FALSE)

Directions: Write TRUE next to those statements that are true, and FALSE next to those statements that are false.

1. You cannot get HIV by being in the same room with a person who is living with HIV. (True: HIV is not transmissible through the air)

2. So far, there is no vaccine to prevent HIV.

(True: Researchers are working on a vaccine and there will likely be one in the future. There is an injection a person can take every day that can make it harder to contract HIV but it is not a vaccine)

3. HIV cannot be transmitted by sneezing.

(True: HIV is not transmissible through the air through sneezing or coughing)

4. HIV is a communicable (contagious) disease. (True: But it is not an easy infection to transmit)

5. You cannot get HIV from sharing a drink.

(True: HIV is not found in saliva)

6. HIV affects the body's immune system.

(True: HIV attacks the immune system and makes it weaker, making it harder to fight infections)

7. AIDS and HIV are two different things.

(True: AIDS describes when a person with HIV gets sick because their immune system can no longer fight off infections. It can take years, some times as much as 10 years for a person with HIV to develop AIDS).

8. If you come into contact with the blood of someone who is NOT living with HIV you cannot get HIV.

(True: HIV can only be transmitted from a person who already is infected. If two people are not infected, then neither one can transmit it to the other.)

9. Someone who uses the same needle as someone who is living with HIV to use drugs, can contract HIV.

(True: Sharing needles for drug use with someone living with HIV is one of the easiest ways to get HIV. Stopping injection drug use can lower the chances of getting HIV a lot as can using new, sterile needles instead of sharing needles. The only certain way to prevent HIV and other STDs is abstinence from sexual activity and drug use.)

10. If someone with HIV is bleeding, they can transmit HIV to someone else (True: HIV infection is transmissible from infected blood. The other person would need to have a cut on their own skin, however, in order for the virus to get into their body.)



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 6. HIV affects the body's immune system.
 7. AIDS and HIV are two different things.
 8. If you come into contact with the blood of someone who is NOT living with HIV you cannot get HIV.
 9. Someone who uses the same needle as someone who is living with HIV to use drugs, can contract HIV.
10. If someone with HIV is bleeding, they can transmit HIV to someone else.



NOTE: This Is for your use only, it Is not a Handout. DO NOT DISTRIBUTE TO THE CHILDREN.

### STDs and HIV - CDC Fact Sheet









People who have STDs are more likely to get HIV, when compared to people who do not have STDs.





#### Are some STDs associated with HIV?

Yes. In the United States, people who get syphilis, gonorrhea, and herpes often also have HIV, or are more likely to get HIV in the future

### Why does having an STD put me more at risk for getting HIV?

If you get an STD you are more likely to get HIV than someone who is STD-free. This is because the same behaviors and circumstances that may put you at risk for getting an STD can also put you at greater risk for getting HIV. In addition, having a sore or break in the skin from an STD may allow HIV to more easily enter your body.

### What activities can put me at risk for both STDs and HIV?

- · Having anal, vaginal, or oral sex without a condom;
- · Having multiple sex partners;
- · Having anonymous sex partners;
- Having sex while under the influence of drugs or alcohol can lower inhibitions and result in greater sexual risk-taking.

### What can I do to prevent getting STDs and HIV?

The only way to avoid STDs is to not have vaginal, anal, or oral sex. If you are sexually active, you can do the following things to lower your chances of getting STDs and HIV:

- · Choose less risky sexual behaviors.
- · Use condoms consistently and correctly.
- Reduce the number of people with whom you have sex.
- · Limit or eliminate drug and alcohol use before and during sex.
- Have an honest and open talk with your healthcare provider and ask whether you should be tested for STDs and HIV.
- Talk to your healthcare provider and find out if pre-exposure prophylaxis, or PrEP, is a good option for you to prevent HIV infection.

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Division of STD Prevention





### If I already have HIV, and then I get an STD, does that put my sex partner(s) at an increased risk for getting HIV?

It can. If you already have HIV, and then get another STD, it can put your HIV-negative partners at greater risk of getting HIV from you.

Your sex partners are less likely to get HIV from you if you

- Use antiretroviral therapy (ART). ART reduces the amount of virus (viral load) in your blood and body fluids. ART can keep you healthy for many years, and greatly reduce your chance of transmitting HIV to sex partners, if taken consistently.
- · Choose less risky sexual behaviors.
- · Use condoms consistently and correctly.

The risk of getting HIV may also be reduced if your partner takes preexposure prophylaxis, or PrEP, after discussing this option with his or her healthcare provider and determining whether it is appropriate.

### Will treating STDs prevent me from getting HIV?

No. It's not enough.

If you get treated for an STD, this will help to prevent its complications, and prevent spreading STDs to your sex partners. Treatment for an STD other than HIV does not prevent the spread of HIV.

If you are diagnosed with an STD, talk to your doctor about ways to protect yourself and your partner(s) from getting reinfected with the same STD, or getting HIV.

### Where can I get more information?

Sexually Transmitted Diseases www.cdc.gov/std/

HIV/AIDS and STDs www.cdc.gov/std/hiv/

PrEP (pre-exposure prophylaxis) www.cdc.gov/hiv/risk/prep/

CDC-INFO Contact Center 1-800-CDC-INFO (1-800-232-4636) TTY: (888) 232-6348 https://wwwn.cdc.gov/ dcs/ContactUs/Form

CDC National Prevention Information Network (NPIN) npin.cdc.gov/disease/stds P.O. Box 6003 Rockville, MD 20849-6003 E-mail: npin-info@cdc.gov

American Sexual Health
Association (ASHA)

www.ashasexualhealth.org/
stdsstis/
P. O. Box 13827

Research Triangle Park, NC
27709-3827
1-800-783-9877

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