

# HIV Now – Testing and Treatment

*A Lesson Plan from Rights, Respect, Responsibility: A K-12 Curriculum*

*Fostering responsibility by respecting young people's rights to honest sexuality education.*

*This lesson was created by staff at San Diego Unified School District. We thank them for allowing us to re-print it for the CA-version.*

## **NSES ALIGNMENT:**

Students will be able to:

**SH.12.CC.1** – Describe common symptoms of and treatments for STDs, including HIV.

**SH.12.AI.2** – Access medically-accurate prevention information about STDs, including HIV.

**TARGET GRADE:** High School  
– Lesson 6

**TIME:** 50 Minutes

## **MATERIALS NEEDED:**

- Projector and screen
- Computer with Internet access and audio equipment
- White board and markers
- *HIV Now – Testing and Treatment Today!* - one per student
- *HIV 101, PEP Information Sheet and PrEP Information Sheet* - one per student
- *HIV Now - Testing and Treatment Today! Answer Key* - one per teacher

## **ADVANCE PREPARATION FOR LESSON:**

- Log into YouTube using your district ID and password.
- Access the following website and preview it prior to instruction.
- <https://www.youtube.com/watch?v=9CmnJvGJFGY>

## **LEARNING OBJECTIVES:**

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

1. Define HIV, AIDS, PrEP, PEP and ART.
2. List at least two modes of transmission for HIV.
3. Identify at least three medical advances regarding the prevention of and treatment for HIV.
4. Recall at least two stereotypes about people living with HIV.

## **A NOTE ABOUT LANGUAGE:**

Language is really important and we've intentionally been very careful about our language throughout this curriculum. You may notice language throughout the curriculum that seems less familiar - using the pronoun "they" instead of "her" or "him," using gender neutral names in scenarios and role-plays and referring to "someone with a vulva" vs. a girl or woman. This is intended to make the curriculum inclusive of all genders and gender identities. You will need to determine for yourself how much and how often you can do this in your own school and classroom and should make adjustments accordingly.

## **PROCEDURE:**

**STEP 1:** Say, "Today's lesson is about HIV; the Human Immunodeficiency Virus; and all of the medical advances related to preventing and treating the infection. Since scientific advances are happening so quickly, even though you may have heard about HIV before, it's important to get an update on new information."

Explain that students will be given a worksheet with a list of research questions about HIV and three fact sheets. Explain they will work in small groups to find the answers to the research questions on the fact sheets.

Explain that when the groups are done, there will be time to review the information together as a class to make sure everyone found the correct answer and to ask any other questions students might have about HIV. Distribute the four worksheets and divide students into

## HIV & AIDS

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small groups of three or four students each. Give students 15 minutes to complete the worksheet together.

**Note to the Teacher:** *Mingle around to each group ensuring they are staying on task and clarifying any questions they might have as they are working. (20 minutes)*

**STEP 2:** When 15 minutes has passed, let students know they should complete their work and gather their attention as a large group. Review the answers to each question by having each group provide an answer to one question in a round-robin fashion. Use the Answer Key to correct any misinformation or clarify as needed. *(15 minutes)*

**STEP 3:** Next, ask students to verbally brainstorm anything they have heard about what it's like to live with HIV probing for existing stereotypes that might exist. Once you have solicited a few responses, ask students the following, "Now that you know correct information about HIV, why do you think people believe those myths and stereotypes about it?" Probe for people being afraid of becoming infected with HIV, people being confused or uneducated about how it's transmitted, people having dated information about the infection, etc. *(5 minutes)*

**STEP 4:** Say, "HIV is an issue impacting people around the world. There are international efforts to try and reduce the number of people living with HIV and help those already infected live longer and healthier lives. UNICEF is an international organization that works on issues related to HIV and they partnered with Katy Perry to create a music video related to the topic." Play the song and music video found here:

<https://www.youtube.com/watch?v=9CmnJvGJFGY>

Process by asking the following questions or having them turn and talk with someone seated next them:

- **What was it like to hear/see that music video?**
- **What was (insert student responses) about it?**
- **Did you notice anything about the young people in the music videos and/or their messages?**
- **How are these young people similar to people you might know or see in your community?**
- **Since there are myths about people living with HIV and how HIV is transmitted, how could seeing people living with HIV help dispel some of these myths?**
- **How could you help dispel some of the myths about people living with HIV?**

*(10 minutes)*

### **RECOMMENDED ASSESSMENT OF LEARNING OBJECTIVES AT THE CONCLUSION OF THIS LESSON:**

The HIV Testing and Treatment Now worksheet will assess learning objectives one, two and three while the discussion after the music video will assess learning objective four.

### **HOMEWORK:**

None.

## HIV NOW – TESTING AND TREATMENT TODAY!

Name \_\_\_\_\_ Date \_\_\_\_\_

HIV and AIDS are terms that you might have heard before and you might already know a bit about them! Did you know that people living with HIV—with the help of medication—can lead happy healthy lives and have normal life expectancies? There has been a lot of progress in HIV prevention and treatment over the past couple of decades! For example, medication called Antiretroviral Therapy (or ART) can dramatically prolong lives of many people living with HIV and reduce the likelihood of transmitting HIV to others.

### Instructions:

1. Please use the handouts provided by your teacher to answer the questions about HIV below:

**Research:** (Please write the answer to your questions on another sheet of paper.)

1. What is HIV?
2. If a person gets HIV, what does it do to their body?
3. How does someone know if they have HIV?
4. Is there a cure for HIV?
5. How does HIV get passed from one person to another?
6. What are some of the highest risk behaviors for spreading HIV from one person to another?
7. Can a person get HIV from injecting drugs?
8. If someone does inject drugs, what can they do to lower their risk of getting HIV?
9. What are some ways in which you cannot get HIV?
10. There are only two certain ways to avoid getting HIV: Abstinence from injection drug use and abstinence from \_\_\_\_\_.
11. What kinds of HIV tests are available?
12. What is PrEP and who should consider taking this medication?

*IT'S A FACT – In California, anyone 12 years old and older can consent to PrEP without notifying parents if they do not wish to.*

13. What is PEP and who should consider taking this medication?
14. What is some medical advice given to people living with HIV?
15. What is antiretroviral therapy (or ART) and what can it do for people living with HIV?

# HIV 101

Without treatment, HIV (human immunodeficiency virus) can make a person very sick and even cause death. Learning the basics about HIV can keep you healthy and prevent transmission.

## HIV Can Be Transmitted By



Sexual Contact



Sharing Needles to Inject Drugs



Mother to Baby during pregnancy, birth, or breastfeeding

## HIV Is **NOT** Transmitted By



Air or Water



Saliva, Sweat, Tears, or Closed-Mouth Kissing



Insects or Pets



Sharing Toilets, Food, or Drinks

## Protect Yourself From HIV

- Get tested at least once or more often if you are at risk.
- Use condoms the right way every time you have anal or vaginal sex.
- Choose activities with little to no risk like oral sex.
- Limit your number of sex partners.
- Don't inject drugs, or if you do, don't share needles or works.



- If you are at very high risk for HIV, ask your health care provider if pre-exposure prophylaxis (PrEP) is right for you.
- If you think you've been exposed to HIV within the last 3 days, ask a health care provider about post-exposure prophylaxis (PEP) right away. PEP can prevent HIV, but it must be started within 72 hours.
- Get tested and treated for other STDs.



## Keep Yourself Healthy And Protect Others If You Are Living With HIV

- Find HIV care. It can keep you healthy and greatly reduce your chance of transmitting HIV.
- Take your medicines the right way every day.
- Stay in HIV care.



- Tell your sex or drug-using partners that you are living with HIV. Use condoms the right way every time you have sex, and talk to your partners about PrEP.
- Get tested and treated for other STDs.



For more information please visit [www.cdc.gov/hiv](http://www.cdc.gov/hiv)

## Pre-exposure Prophylaxis (PrEP) for HIV Prevention

### Frequently Asked Questions

#### What is PrEP?

“PrEP” stands for preexposure prophylaxis. The word “prophylaxis” (pronounced pro fil ak sis) means to prevent or control the spread of an infection or disease. The goal of PrEP is to prevent HIV infection from taking hold if you are exposed to the virus. This is done by taking a pill that contains 2 HIV medications every day. These are the same medicines used to stop the virus from growing in people who are already infected.

#### Why take PrEP?

The HIV epidemic in the United States is growing. About 50,000 people get infected with HIV each year. More of these infections are happening in some groups of people and some areas of the country than in others.

#### Is PrEP a vaccine?

No. PrEP medication does not work the same way as a vaccine. When you take a vaccine, it trains the body’s immune system to fight off infection for years. You will need to take a pill every day by mouth for PrEP medications to protect you from infection. PrEP does not work after you stop taking it. The medication that was shown to be safe and to help block HIV infection is called “Truvada” (pronounced tru va duh). Truvada is a combination of 2 drugs (tenofovir and emtricitabine). These medicines work by blocking important pathways that the HIV virus uses to set up an infection. If you take Truvada as PrEP daily, the presence of the medication in your bloodstream can often stop the HIV virus from establishing itself and spreading in your body. If you do not take the Truvada pills every day, there may not be enough medicine in your blood stream to block the virus.

#### Should I consider taking PrEP?

PrEP is not for everyone. Doctors prescribe PrEP for some patients who have a very high risk of coming in contact with HIV by not using a condom when they have sex with a person who has HIV infection. You should consider PrEP if you are a man or woman who sometimes has sex without using a condom, especially if you have a sex partner who you know has HIV infection. You should also consider PrEP if you don’t know whether your partner has HIV infection but you know that your partner is at risk (for example, your partner inject drugs or is having sex with other people in addition to you) or if you have recently been told by a health care provider that you had a sexually transmitted infection. If your partner has HIV infection, PrEP may be an option to help protect you from getting HIV infection while you try to get pregnant, during pregnancy, or while breastfeeding.

#### How well does PrEP work?

PrEP was tested in several large studies with men who have sex with men, men who have sex with women, and women who have sex with men. All people in these studies (1) were tested at the beginning of the trial to be sure that they did not have HIV infection, (2) agreed to take an oral PrEP tablet daily, (3) received intensive counseling on safer-sex behavior, (4) were tested regularly for sexually transmitted infections, and (5) were given a regular supply of condoms.

Several studies showed that PrEP reduced the risk of getting HIV infection.

- Men who have sex with men who were given PrEP medication to take, were 44% less likely to get HIV infection than were those men who took a pill without any PrEP medicine in it (a placebo). Forty-four percent was an average that included men who didn't take the medicine every day and those who did. Among the men who said they took most of their daily doses, PrEP reduced the risk of HIV infection by 73% or more, up to 92% for some.
- Among men and women in couples in which one partner had HIV infection and the other partner initially did not ("HIV-discordant" couples), those who received PrEP medication were 75% less likely to become infected than those who took a pill without any medicine in it (a placebo). Among those who said they took most of their daily doses, PrEP reduced the risk of HIV infection by up to 90%.
- In one study of men and women who entered the study as individuals (not as a couple), PrEP worked for both men and women in one study: those who received the medication were 62% less likely to get HIV infection; those who said they took most of their daily doses, were 85% less likely to get HIV infection. But in another study, only about 1 in 4 women (<26%) had PrEP medication found in their blood when it was checked. This indicated that few women were actually taking their medication and that study found no protection against HIV infection.

More information on the details of these studies can be found at [www.cdc.gov/hiv/prep](http://www.cdc.gov/hiv/prep).

## Is PrEP safe?

The clinical trials also provided safety information on PrEP. Some people in the trials had early side effects such as an upset stomach or loss of appetite but these were mild and usually went away within the first month. Some people also had a mild headache. No serious side effects were observed. You should tell your doctor if these or other symptoms become severe or do not go away.

## How can I start PrEP?

If you think you may be at high risk for HIV, talk to your doctor about PrEP. If you and your doctor agree that PrEP might reduce your risk of getting HIV infection, you will need to come in for a general health physical, blood tests for HIV, and tests for other infections that you can get from sex partners. Your blood will also be tested to see if your kidneys and liver are functioning well. If these tests show that PrEP medicines are likely to be safe for you to take and that you might benefit from PrEP, your doctor may give you a prescription after discussing it with you.

Taking PrEP medicines will require you to follow-up regularly with your doctor. You will receive counseling on sexual behaviors and blood tests for HIV infection and to see if your body is reacting well to Truvada. You should take your medicine every day as prescribed, and your doctor will advise you about ways to help you take it regularly so that it stands the best chance to help you avoid HIV infection. Tell your doctor if you are having trouble remembering to take your medicine or if you want to stop PrEP.

## If I take PrEP can I stop using condoms when I have sex?

You should not stop using condoms because you are taking PrEP. If PrEP is taken daily, it offers a lot of protection against HIV infection, but not 100%. Condoms also offer a lot of protection against HIV infection if they are used correctly every time you have sex, but not 100%. PrEP medications don't give you any protection from other infections you can get during sex, but condoms do. So you will get the most protection from HIV and other sexual infections if you consistently take PrEP medication and consistently use condoms during sex.

## How long do I need to take PrEP?

You should discuss this with your doctor. There are several reasons that people stop taking PrEP. If your risk of getting HIV infections becomes low because of changes that occur in your life, you may want to stop taking PrEP. If you find you don't want to take a pill every day or often forget to take your pills, other ways of protecting yourself from HIV infection may work better for you. If you have side effects from the medication that are interfering with your life or if blood tests show that your body is reacting to PrEP in unsafe ways, your doctor may stop prescribing PrEP for you.

# PEP 101

If you may have been exposed to HIV\* in the last 72 hours, talk to your health care provider, an emergency room doctor, or your local health department about PEP right away. PEP can reduce your chance of becoming HIV-positive.

## What Is PEP?

- PEP, or post-exposure prophylaxis, means taking medicines after you may have been exposed to HIV to prevent becoming infected.
- **PEP must be started within 72 hours (3 days) after you may have been exposed to HIV.** But the sooner you start PEP, the better. Every hour counts!
- If your health care provider prescribes PEP, you'll need to take it once or twice daily for 28 days.
- PEP is effective in preventing HIV, but not 100%. Always use condoms with sex partners and use safe injection practices.



## Is PEP Right For You?

If you're HIV-negative or don't know your HIV status, and in the last **72 hours** you

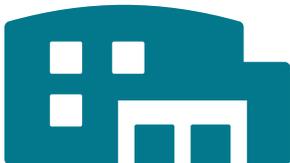


- May have been exposed to HIV during sex (for example, if the condom broke),
- Shared needles and works to prepare drugs, or
- Were sexually assaulted,



Talk to your health care provider, an emergency room doctor, or your local health department about PEP right away.

## Can I Take a Round of PEP Every Time I Have Sex Without a Condom?



- No. PEP should be used only in emergency situations.
- If you are at very high risk for HIV, ask your health care provider about daily medicine to prevent HIV, called pre-exposure prophylaxis (PrEP).



*\* People are exposed to HIV by coming into contact with certain body fluids of a person with HIV, including blood, semen, and vaginal fluids. This usually happens through vaginal or anal sex or by sharing needles.*

For more information please visit [www.cdc.gov/hiv](http://www.cdc.gov/hiv)

## HIV NOW – TESTING AND TREATMENT TODAY!

### ANSWER KEY

**1) What is HIV?**

HIV is a virus spread through certain body fluids that attacks the body's immune system, specifically the CD4 cells, often called T cells.

**2) If a person gets HIV, what does it do to their body?**

Over time, if untreated, HIV can destroy so many T cells that the body can't fight off infections and disease. Opportunistic infections or cancers take advantage of a very weak immune system and signal that the person has AIDS.

**3) How does someone know if they have HIV?**

The only way to know for sure whether you have HIV is to get tested.

**4) Is there a cure for HIV?**

No effective cure currently exists for HIV. But with proper medical care, HIV can be controlled. Treatment for HIV is called antiretroviral therapy or ART. If taken the right way, every day, ART can dramatically prolong the lives of many people infected with HIV, keep them healthy, and greatly lower their chance of infecting others

**5) How does HIV get passed from one person to another?**

Only certain body fluids—blood, semen, pre-seminal fluid (pre-cum), rectal fluids, vaginal fluids, and breast milk—from a person who has HIV can transmit HIV. These fluids must come in contact with a mucous membrane or damaged tissue or be directly injected into the bloodstream (from a needle or syringe) for transmission to occur. Mucous membranes are found inside the rectum, vagina, penis, and mouth.

**6) What are some of the highest risk behaviors for spreading HIV from one person to another?**

The highest risk behaviors for spreading HIV are having unprotected anal or vaginal sex with someone who has HIV or sharing needles or syringes with someone who has HIV.

**7) Can a person get HIV from injecting drugs?**

Yes. A person's risk for getting HIV is very high if they use needles or works (such as cookers, cotton, or water) after someone with HIV has used them.

**8) If someone does inject drugs, what can they do to lower their risk of getting HIV?**

If someone injects drugs, they can lower their risk for getting HIV by using only new, sterile needles and works each time they inject.

*(Continued on back.)*

### ANSWER KEY

**9) What are some ways in which you cannot get HIV?**

HIV is not transmitted through saliva, tears, or sweat; by mosquitoes, ticks, or other blood-sucking insects; through the air or food; or by casual contact with another person such as hugging or shaking hands.

**10) There are only two certain ways to avoid getting HIV: Abstinence from injection drug use and abstinence from sexual intercourse including anal, vaginal, and oral sex.**

**11) What kinds of HIV tests are available?**

There are three types of tests available: antibody tests, combination or fourth-generation tests, and nucleic acid tests (NAT). HIV tests may be performed on blood, oral fluid, or urine. For the rapid antibody screening test, results are ready in 30 minutes or less. The other tests take 1-2 weeks for results.

**12) What is PrEP and who should consider taking this medication?**

Pre-exposure prophylaxis (or PrEP) is when people at very high risk for HIV take HIV medicines daily to lower their chances of getting infected. PrEP helps prevent an HIV-negative person from getting HIV from a sexual or injection-drug-using partner who's HIV-positive.

*IT'S A FACT – In California, anyone 12 years old and older can consent to PrEP without notifying parents if they do not wish to.*

**13) What is PEP and who should consider taking this medication?**

PEP (post-exposure prophylaxis) means taking antiretroviral medicines (ART) after being potentially exposed to HIV to prevent becoming infected. PEP should be used only in emergency situations and must be started within 72 hours after a recent possible exposure to HIV.

**14) What is some medical advice given to people living with HIV?**

Start medical care and begin HIV treatment as soon as possible; visit your health care provider regularly; always take your medicine as directed; disclose HIV status to your sex and needle-sharing partners; seek emotional support.

**15) What is antiretroviral therapy (or ART) and what can it do for people living with HIV?**

Treatment for HIV is called antiretroviral therapy or ART. If taken the right way, every day, ART can dramatically prolong the lives of many people infected with HIV, keep them healthy, and greatly lower their chance of infecting others.