Lesson 20: HIV & AIDS

OBJECTIVES

1. Students will be able to define the following terms: HIV, AIDS, and STI.
2. Students will be able to distinguish between HIV and AIDS.
3. Students will understand the magnitude of HIV infection and the AIDS pandemic internationally, nationally, and locally.
4. Students will acknowledge that HIV infection and AIDS have an impact on a broad range of people including males and females of all ages.
5. Students will be able to describe routes of HIV transmission.
6. Students will be able to identify behaviors that can lead to HIV transmission

AGENDA

5 minutes  Do Now
10 minutes  HIV/AIDS: PowerPoint Presentation (part 1)
10 minutes  HIV Transmission and Body Fluid Activity
10 minutes  HIV/AIDS: PowerPoint Presentation (part 2)
10 minutes  HIV/AIDS Myth Busters Activity
5 minutes  Prepare students to meet guest speakers who are living with HIV/AIDS
Homework  HIV Hotline or HIV: Think it through

MATERIALS

☐ Vocabulary Reference List  ☐ Activity Cards: Body Fluids and Body Openings Mismatch
☐ HIV & AIDS: PowerPoint Slide Notes  ☐ Teacher Key: HIV/AIDS Mythbusters
☐ Worksheet: HIV & AIDS  ☐ Homework: HIV Hotline

CALIFORNIA HEALTH EDUCATION STANDARDS

1.4.G Identify why abstinence is the most effective method for the prevention of HIV, other STDs, and pregnancy.
1.7.G Describe the short- and long-term effects of HIV, AIDS, and other STDs.
1.12.G Evaluate the safety and effectiveness (including success and failure rates) of FDA approved condoms and other contraceptives in preventing HIV, other STDs, and pregnancy.
3.3.G Compare the success and failure rates of FDA-approved condoms and other contraceptives in preventing HIV, other STDs, and pregnancy.
5.4.G Evaluate the risks and consequences associated with sexual activities, including HIV, other STDs, and pregnancy.
8.2.G Advocate the respect for and the dignity of persons living with HIV or AIDS.

Be Real. Be Ready.
Lesson 20: HIV & AIDS

DO NOW ACTIVITY 5 minutes

Materials
- Every student needs a notebook, journal, or paper and a pen
- Flipchart or whiteboard and markers
- PowerPoint slides #1 – 2

Activity
Write on board and have students complete the following questions.

What is one thing you’ve heard about HIV?

Ask a few students to read their answers. After the student has shared what they have hear, ask the student or the class if that statement is true or false. Correct any misconceptions.

POWERPOINT SLIDES: HIV/AIDS (part 1) 10 minutes

Materials
- PowerPoint slides #3 – 21
- Worksheet: HIV & AIDS

Activity
Let students know that you will be reviewing information about HIV and AIDS

The PowerPoint slides contain notes to assist you in presenting this material. Please refer to the notes in the slides for more information about the topics presented.

Suggested Script:
Today we will be learning about HIV and AIDS, we will cover what body systems are affected by the virus and disease. We will also learn about the human immune system and how it protects our bodies from bacteria and viruses.

Suggested Script:
HIV is an STI (sexually transmitted infection). It is the virus that can cause AIDS. If HIV is not kept under control, it can weaken a person’s immune system making it more difficult for them to stay healthy. AIDS is the diagnosis someone would get if HIV has weakened the person’s immune system so that it cannot fight off infection. Today, we have drugs and medication that help keep HIV under control so that someone who is HIV-positive (has HIV) can live a longer, healthier life than ever before. We will learn about HIV and AIDS, the implications of HIV and AIDS, how these affect the human body, how the HIV virus is transmitted, and how transmission can be prevented.
Lesson 20: HIV & AIDS

Have students follow along with the slides by taking notes on the HIV & AIDS worksheet.

The slides cover various topics. Here is the breakdown for topics and corresponding slide numbers.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Slides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vocabulary</td>
<td>3-5</td>
</tr>
<tr>
<td>Implications of HIV</td>
<td>6-10</td>
</tr>
<tr>
<td>How HIV affects the body</td>
<td>11-15</td>
</tr>
<tr>
<td>HIV Transmission</td>
<td>16-21</td>
</tr>
</tbody>
</table>

**HIV TRANSMISSION & BODY FLUIDS ACTIVITY** 10 minutes

**Materials**
- Activity Cards: Body Fluids and Body Openings Mismatch

**Activity**
Review the fluids that transmit HIV: blood, semen, pre-cum, vaginal fluids, and breast milk.

**Suggested Script:**
*It is important to remember how to avoid contact with HIV: by keeping infected blood, semen, vaginal fluids, or breast milk out of your own or another person’s mouth, genitals, anus, or broken skin. By avoiding the activities that put people in contact with these fluids or by taking measures to avoid contact with these fluids during those activities we can reduce the chances of HIV infections occurring.*

Lead the class in the Body Fluids and Body Openings Mismatch activity. Use this activity to check for understanding.

- Distribute copies of the Body Fluids and Body Openings cards to students. Ask students to make a body fluid/opening pair with someone else.
- Ask students to examine the match they have made between body opening and fluid, and discuss whether this match could transmit HIV.
- When the match could lead to HIV transmission, ask students to discuss how the risk of transmission could be reduced or eliminated (i.e. using barriers, knowing status, etc.)
- If time allows, have students make new matches and discuss each new match.

**POWERPOINT SLIDES: HIV/AIDS (part 2)** 10 minutes

**Materials**
- PowerPoint slides #23 – 29

*Be Real. Be Ready.*
Lesson 20: HIV & AIDS

Activity
Continue reviewing the PowerPoint slides. The PowerPoint slides contain notes to assist you in presenting this material. Please refer to the notes in the slides for more information about the topics presented.

The slides cover various topics. Here is the breakdown for topics and slide numbers.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Slides</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to reduce the risk</td>
<td>23 – 26</td>
</tr>
<tr>
<td>Testing &amp; window period</td>
<td>27 – 29</td>
</tr>
</tbody>
</table>

HIV & AIDS MYTHBUSTERS 10 minutes

Materials
- Worksheet: HIV & AIDS Mythbusters
- Teacher Key: HIV & AIDS Mythbusters

Activity

Suggested Script:
There are many contradictory messages out there about HIV—what it is, how it’s spread, etc. This true/false activity will help to bring out some of these messages and allow the class to break some of the most common HIV myths.

Pass out the HIV/AIDS Mythbusters worksheet and give students a few minutes to fill it out.

After students complete the worksheet, go through each of the questions to discuss. Read each question out loud and ask a few students to share why they picked this answer. Provide correct information.

Teacher Tip:
If there is not enough time to complete this in class have students complete it for homework.

PREPARE STUDENTS FOR HIV+ SPEAKER 5 minutes

Activity
Let students know that you will be having an HIV-positive speaker come to class and remind them of the classroom rules.

Suggested Script:
Next class, we will have guest speakers who are living with HIV. Let’s remember our classroom rules for guest speakers and the importance of being respectful to guests. This speaker is giving us the unique opportunity to hear someone’s true story about HIV and how they are affected by HIV. We need to all agree to keep what the speaker says confidential – this means you cannot share this person’s story with anyone else. It would be ok to share how the speaker’s story makes you feel, but it would be inappropriate and wrong to share any personal information about the speaker with anyone from outside of this class.

Be Real. Be Ready.
If an HIV-positive speaker is not available to come to the class, let students know that in the next class you will be watching a movie made by MTV about how HIV can affect people's lives.

**HOMEWORK**

**HIV Hotline**

**HIV: Think it through** *(If you are completing the 15-lesson series and will not be doing lessons #21 or #22, have students watch the MTV film, Think HIV: This is Me, and complete the HIV: Think it through worksheet as homework found in lesson #22a)*
Lesson 20: Vocabulary

1. **AIDS (Acquired Immune Deficiency Syndrome):** A combination of symptoms and/or illnesses caused by HIV. HIV weakens the immune system and can cause AIDS. When a person has AIDS, their body cannot fight off diseases. AIDS is a later stage of the HIV infection.

2. **Epidemic:** A widespread outbreak of an infectious disease.

3. **HIV (Human Immunodeficiency Virus):** An STI that attacks a person's immune system. This is the virus that causes AIDS. There are medications available to help a person with HIV live a healthier, longer life.

4. **HIV Status:** The medical test results a person receives after being tested for HIV. If a person's HIV status is **positive (+)**, they **do** have HIV. If a person's HIV status is **negative (-)**, they **do not** have HIV.

5. **Immune system:** The network of cells, tissues, and organs in the body that work together to defend the body against infection.

6. **Pre-ejaculate (pre-cum):** The clear fluid that comes out of the penis before ejaculation to clean out the urethra.

7. **Semen:** The fluid that comes out of the penis during ejaculation. It contains sperm and fluids from the seminal vesicle and prostate gland.

8. **STI (Sexually Transmitted Infection):** An infection, or disease, which is passed from person to person through sexual contact.

9. **T-Cells:** A type of white blood cell that is an important part of the immune system. HIV attacks these cells, which causes damage to the immune system.

10. **Transmission:** When an infection is passed from person to person.

11. **Vaginal fluids:** The fluids that are naturally produced in the vagina.

12. **Window period:** The period of time an infection needs to be in someone’s body before it can be detected by a medical test. After the body has been exposed to HIV, the window period for this virus is two weeks to six months.
Lesson 20: HIV & AIDS

Worksheet: HIV & AIDS

Name: ___________________________ Date: ________ Period: ________

Directions: Follow along with the PowerPoint slides to fill in the answers below.

1. What does HIV stand for?
   - H ______________________________
   - I ______________________________
   - V ______________________________

2. What does AIDS stand for?
   - A ______________________________
   - I ______________________________
   - D ______________________________
   - S ______________________________

3. What does STI stand for?
   - S ______________________________
   - T ______________________________
   - I ______________________________
4. What system in the body does HIV attack? ________________________________

5. What 4 fluids can transmit HIV?
   1. ________________________________________________________________
   2. ________________________________________________________________
   3. ________________________________________________________________
   4. ________________________________________________________________

6. Name 3 ways HIV can be transmitted:
   1. ________________________________________________________________
   2. ________________________________________________________________
   3. ________________________________________________________________
HIV Transmission & Body Fluid Activity Cards

Eye
Ear
Vagina
Nose
Anus
Mouth

Be Real. Be Ready.
<table>
<thead>
<tr>
<th>Vaginal Fluids</th>
<th>Semen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood</td>
<td>Tears</td>
</tr>
<tr>
<td>Breast milk</td>
<td>Sweat</td>
</tr>
</tbody>
</table>
Worksheet: HIV/AIDS Mythbusters

Name: ____________________________________________________________
Period: ___________________________ Date: __________________________

Directions: For each statement, write in the blank space whether you think the statement is a myth or a fact.

1. Someone can get HIV from sharing swimming pools & hot tubs with HIV-positive people.
   _______

2. Someone is very likely to get HIV from having a blood transfusion.
   _______

3. Someone can get HIV from having oral sex.
   _______

4. You can tell if someone has HIV or AIDS just by looking at them.
   _______

5. If someone gets HIV, they will most likely die very soon from the infection.
   _______

6. Only gay people get HIV.
   _______

7. It is not possible to get HIV from insects that have bitten an infected person.
   _______

8. The “window period” for HIV detection can be from 2 weeks to 6 months.
   _______

9. HIV can be transmitted through sweat, tears, or spit.
   _______

10. There is a cure for HIV.
    _______

What other myths have you heard of about HIV or AIDS?
Myth 1. Someone can get HIV from sharing swimming pools & hot tubs with infected people.

The chemical used in swimming pools and hot tubs would instantly kill any HIV, if the water hadn't killed it already. However, some people think that this means they don't need to use a condom if they are having sex in a pool or hot tub, which is not true. If sexual fluids meet inside the body (either vaginal or anal sex), they can transmit HIV, even in water.

Myth 2. Someone is very likely to get HIV from having a blood transfusion. It is highly unlikely. In the US, all donated blood has been tested for HIV since 1985. Today the American blood supply is extremely safe. Donors are asked if they have practiced behaviors that place them at increased risk for HIV. If they have, they are not allowed to donate blood.

Fact 3. Someone can get HIV from having oral sex. Yes, it is possible for someone to become infected with HIV through oral sex. The exact degree of risk of transmitting HIV during oral sex is not clearly known. It is known that someone is less likely to contract (get) HIV from oral sex than from vaginal or anal sex. The risk of getting HIV during oral sex increases when there is a cut or opening of any kind inside the mouth. Cells in the mucous lining of the mouth may carry HIV into the lymph nodes or the bloodstream. Someone can get HIV by having oral sex on a vagina or a penis, which is why it is safer to use a latex barrier during oral sex (condom or dental dam). Keep in mind, it is possible to get other STIs through unprotected oral sex as well.

Myth 4. You can tell if someone has HIV or AIDS just by looking at them. Most people don’t show any external symptoms for about the first 8-10 years of having the virus. And even then, it is nearly impossible to tell whether someone has AIDS just by looking at them.

Myth 5. If someone gets HIV, they will most likely die very soon from the infection. People are living with HIV longer today than ever before. Medications, treatment programs, and a better understanding of HIV allows people living with HIV to live longer and healthier lives.
Myth 6. Only gay people get HIV. Anyone can be susceptible to HIV/AIDS, regardless of their sexual orientation. Anyone who engages in behaviors that could transmit HIV is at risk. In fact, worldwide, HIV is spread most often through heterosexual (male-female) contact.

Fact 7. It is not possible to get HIV from insects that have bitten an infected person. Mosquitoes, flies, ticks, fleas, bees or wasps do not transmit HIV. If a bloodsucking insect bites someone with HIV, the virus dies almost instantly in the insect's stomach as it digests the blood. HIV can live only in human cells.

Fact 8. The “window period” for HIV detection can be from 2 weeks to 6 months. The window period is the amount of time it takes for HIV to be detectable after someone has become infected. This can last from 2 weeks to 6 months after exposure, so it is important to know that getting tested right after a possible exposure (such as having unprotected sex or sharing needles) will not necessarily show whether someone has contracted HIV. If someone is concerned about a specific incident, they would need to go back and get tested 6 months after the incident and be sure to use protection in the meantime, so they don't unintentionally transmit it to someone else.

Myth 9. HIV can be transmitted through sweat, tears, or spit. None of these fluids can transmit HIV. Casual contact with someone who is HIV-positive does not pose any risk of HIV transmission.
Myth 10. There is a cure for HIV. As of right now, there is no cure for HIV, but there are medical advancements that are bringing us closer to vaccines, medical prevention measures, and a cure. There are many medications and treatment available to manage someone’s HIV infection – but these are not cures. Teacher’s Note: Here is more information if students ask about recent stories in the news of people being cured of HIV.

- Timothy Brown, also known as “the Berlin Patient,” was cured of HIV when he received a bone-marrow transplant from a donor who was genetically resistant to HIV. Brown, who was HIV-positive and had leukemia, received an experimental bone-marrow transplant to treat both conditions in 2009. The outcome was that there was no longer HIV in his body. While his story is an example of medical advancement toward a cure for HIV, this type of treatment is not a viable solution or cure for most people. Bone-marrow transplants are expensive, only a fraction of people have the gene mutation that makes them resistant to HIV, and only a fraction of those people are bone-marrow donors.

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Homework: HIV Hotline

Name:_________________________________________________________
Period:______________________ Date:_____________________

Directions: Imagine you work on an HIV Hotline. Pick and answer three of the questions below from your callers. Circle the numbers of the callers you are answering. You may ask the person more questions if you need to. Write what you would ask them and your answer to their questions on the back of this page.

Caller #1: Female, age 19
“I just found out my girlfriend of three years has been sleeping with a guy. We don’t use dental dams because we were only supposed to have sex with each other. Do I need an HIV test? What should I do?”

Caller #2: Male, age 18
“I am straight, but sometimes my guy friends and I, you know, play around. I have had anal sex with a few other guys and sometimes we use condoms, but sometimes we don’t. Do I need an HIV test? What should I do?”

Caller #3: Female, age 17
“I’ve been going out with a man who’s a lot older than me. We haven’t gone all the way yet, but we have done a lot of touching and a little…um, oral sex. I just found out that he shoots drugs. Do I need an HIV test? What should I do?”

Caller #4: Male, age 18
“My girlfriend and I have an open relationship, and we always use condoms with other people. She finally told me a condom broke with this other guy a week ago, but we’ve already had unprotected sex. Do I need an HIV test? What should I do?”

Caller #5: Male, age 17
“My boyfriend and I have been together for 9 months. We have only been with each other and we do not have sex with other people. I just learned that oral and anal sex can transmit HIV. Do I need an HIV test? What should I do?”

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Lesson 20: HIV & AIDS Slide Notes

Slide 1:

HIV & AIDS

Slide 2:

Do Now

What is one thing you have heard about HIV?

Slide 3:

What is HIV?

- Human
- Immunodeficiency
- Virus

Ask students what they think HIV stands for. Click to reveal the answers.

- Human = this is a disease in human beings, not in other animals
- Immunodeficiency
  - What system is affected by this disease? The immune system
  - What is the function of the immune system? To prevent infections by bacteria and viruses
  - What does “deficiency” mean? Not enough of something
  - What does “immune deficiency” mean? The immune system is not strong enough to combat other infections
- Virus = this is a microscopic living thing which causes infections

Sum it up: HIV is a virus that attacks the immune system in humans, and makes the immune system weaker so it is more difficult to stay healthy and fight off other infections.
Lesson 20: HIV & AIDS

**Slide 4:**

**What is AIDS?**

- Acquired
- Immune
- Deficiency
- Syndrome

Ask students what they think AIDS stands for. Click to reveal the answers.

- Acquired = from somewhere else, not from inside
- Immune = able to fight off infection
- Deficiency = not enough of something
- Syndrome = a combination of signs and symptoms characteristic of a particular disease

**AIDS is:**

- Another way of saying that someone’s immune system is very weak or that they are quite sick as a result of HIV infection.
- A combination of symptoms and/or specific illnesses caused by the inability of the immune system to fight off infections (which is caused by HIV).
- AIDS often occurs as a later stage of HIV infection, often occurring eight or more years after a person is infected with HIV. Depending on when someone is diagnosed, the medications they are on, and other factors, AIDS may not develop for quite a few years.
- Because AIDS is a syndrome, not an infection, people cannot transmit AIDS to each other. HIV is the virus that someone could get or give to another person. Over time, the virus can diminish or weaken the immune system and the person can develop AIDS.

**Slide 5:**

**HIV vs. AIDS?**

- HIV is an STI.
- HIV is the virus that causes AIDS.
- HIV can be transmitted from one person to another.
- AIDS cannot be transmitted.

Review the important points about HIV and AIDS.

**Suggested Script:**

*HIV is an STI. It is the virus that can cause AIDS. If HIV is not kept under control with medication, it can weaken a person’s immune system making it more difficult for them to stay healthy. AIDS is the diagnosis someone would get if HIV has weakened the person’s immune system so that it cannot fight off infection. Today, we have drugs and medication that help keep HIV under control so that someone who is HIV-positive (has HIV) can live a longer, healthier life than ever before.*
**Lesson 20: HIV & AIDS**

**Slide 6:**

<table>
<thead>
<tr>
<th>Implications of HIV &amp; AIDS</th>
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<tbody>
<tr>
<td>HISTORY AND IMPACT OF THE VIRUS</td>
</tr>
</tbody>
</table>

Let students know that, compared to other infections, HIV has not been around for that long. Ask students: when did the US first report seeing patients with AIDS? The first reported case of AIDS in the US was in 1981.

About 30 years later 34 million people are now living with HIV. While HIV is still a serious virus, it has become a disease many people can live with, and there are many people in the world who have it. However, the ability to live a healthy life with HIV varies depending on the person, where they live, the healthcare they have access to, and more.

**NOTE:**

**Origin of HIV:** No one knows the exact origins of HIV but it is thought that it crossed over from Chimpanzees to Humans, somewhere in West Africa. One theory is that a hunter got cut while butchering a dead chimpanzee and the animal’s blood got into the human’s body where the virus was then able to adapt to a human host. (If students are especially interested in this topic, you can refer them to a Radiolab podcast discussing the origins of HIV. It is available for free download at [http://www.radiolab.org/2011/nov/14/]())

**HIV and Gay Community:** Some people think HIV only affects people who are gay. This is incorrect – HIV affects all people – no matter their sex, gender, or sexual orientation. Some people think that HIV only affects gay people because HIV was first identified in the US primarily in gay communities in LA, SF, and NYC.

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**Slide 7:**

<table>
<thead>
<tr>
<th>Which countries have the most people living with HIV?</th>
</tr>
</thead>
</table>

- HIV affects people all over the world.
- Which countries have the highest number of people living with HIV? South Africa, Nigeria, India, Ethiopia, Kenya, Mozambique, Tanzania, Uganda, Zimbabwe, and the United States of America
- How does the US compare with other regions of the world in terms of the numbers of people living with HIV? The US has a fairly high number of people living with HIV compared to other countries in North America and Europe.

**Possible Discussion Questions**

- Why do you think there are different rates of HIV around the world?
- What do you think might affect the rates of HIV?

*Be Real. Be Ready.*
### Slide 8:

**Ending HIV is Possible:**
1. **Prevent:** HIV-related infections
2. **Test:** People living with HIV<br>Become a partner in your care and treatment
3. **Support people living with HIV<br>Because treatment = prevention and undetectable viral load = untransmittable

- People with HIV are living longer and healthier lives than ever before because we have more information about HIV and more effective medications and treatments. While there is medication available to help keep HIV-positive people healthy, there are still many people who don’t have access to these medications, or who can’t afford them, since they can be very expensive.

- UNDECTABLE VIRAL LOAD= a person who is HIV+ and maintaining access to care to control and suppress HIV in their bodies making them uninfectious to others

- There are also now medications to PREVENT HIV infection 1. before exposure (PrEP: Pre Exposure Prophylaxis) 2. after exposure (PEP: Post Exposure Prophylaxis)

### Understanding HIV status:

1. Status Unknown = Never tested or not tested since last possible exposure to HIV
2. HIV Negative = No HIV detected on last test
3. HIV Negative and on PrEP = No HIV detected on last test
4. HIV Positive = HIV detected during last HIV test
5. HIV Positive and Undetectable = HIV detected on last HIV test and treatment used daily to prevent transmission to others

### Possible Discussion Questions

- Why do you think some groups are disproportionately affected by HIV?
- Why do you think so many people are unaware of their infection status?
- How can knowing your status prevent HIV transmission?

### Slide 10:

- Over 1 million people are living with HIV in the US. 1 out of every 5 of those people (20%) do not know they have HIV. HIV affects as many women as it does men. However, some groups are disproportionately affected (meaning they have higher rates of HIV than other groups). This includes youth (especially young females), LGBT people, African Americans, and Latinos.

**Possible Discussion Questions**

- Why do you think some groups are disproportionately affected by HIV?
- Why do you think so many people are unaware of their infection status?
- How can knowing your status prevent HIV transmission?

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Every 9 ½ minutes someone in the US becomes infected with HIV. 40% of new infections in the US are among youth ages 13-29

*Be Real. Be Ready.*
<table>
<thead>
<tr>
<th>Slide 11:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How HIV Affects the Body</strong></td>
</tr>
</tbody>
</table>

Let students know that you will now review how HIV affects the body.

<table>
<thead>
<tr>
<th>Slide 12:</th>
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<tbody>
<tr>
<td>HIV enters the body. (Later, we will talk more about the ways in which that can happen.)</td>
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</tbody>
</table>

HIV takes over cells in the body and starts to reproduce. The cells that HIV hijacks are called T-cells, which are an important part of the body’s immune system.

<table>
<thead>
<tr>
<th>Slide 13:</th>
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</thead>
<tbody>
<tr>
<td>The body reacts by producing antibodies which try to fight HIV. The antibodies may cause the body to run a fever or experience flu-like symptoms during the first few days of HIV infection. The symptoms will go away, but the HIV is still in the body.</td>
</tr>
</tbody>
</table>

HIV destroys the T-cells that it takes over and prevents them from protecting the body from other diseases. This means that someone who has HIV will have fewer and fewer T-cells over time if they have no treatment.

<table>
<thead>
<tr>
<th>Slide 14:</th>
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</thead>
<tbody>
<tr>
<td>A person with a healthy body has about 600-1000 T-cells per mm3 of blood. A person will be considered to have AIDS if their T-cell count is 200 or below.</td>
</tr>
</tbody>
</table>

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Slide 15:

Symptoms of HIV may not appear for years. However, a person can spread the virus to others whether or not they have symptoms. Symptomatic HIV may include diarrhea, headaches, weight loss, night sweats, fever, tiredness, and swollen lymph glands.

After a number of years without any treatment, AIDS-defining illnesses and infections may begin to occur. These illnesses can include various cancers and infections. These illnesses are often called ‘opportunistic infections’ because they take advantage of a person’s weakened immune system.

Slide 16:

Transmission

How HIV can get from one body into another

Slide 17:

HIV can only be transmitted through these bodily fluids:
- Blood
- Semen (cum)
- Pre-seminal fluid (pre-cum/pre-ejaculate)
- Vaginal fluids
- Breast milk

HIV cannot be transmitted through sweat, tears, spit, or urine.
Lesson 20: HIV & AIDS

Slide 18:
HIV can be transmitted when one of these fluids from someone who is living with HIV enters the body of another person. This can happen through their:
- Anus or rectum
- Vagina and/or cervix
- Opening of the penis (urethral opening)
- Mouth with cuts or sores
- Cuts or sores on the skin

Slide 19:
- HIV can be transmitted through sexual contact, injection drug use, from mother to child through childbirth and breastfeeding, and through occupational exposure (such as a health care provider getting an accidental needle stick). HIV is now rarely transmitted through blood or organ transplant. In the US, the risk of contracting HIV through blood or organ transplant is extremely low since the blood supply here is regularly tested for HIV.
- The most common ways that HIV is transmitted are through vaginal and anal sex, and sharing needles or injection equipment. In the US, pregnant mothers are screened for HIV and treated with medicine to reduce the risk of transmission to the baby during delivery and through breastfeeding.
- It is possible to transmit HIV through contaminated equipment used for piercings and tattoos. It is recommended to use single-use supplies for tattoos and piercings and avoid sharing needles and equipment.
- Someone CANNOT get HIV through kissing, non-sexual massage, masturbation, or ‘dry humping’ (rubbing against each other with clothes on).

Slide 20:

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Slide 21:

These activities carry no risk of HIV transmission:

- hugging
- kissing
- high fives
- cuddling
- masturbation
- non-sexual massage
- sharing water bottles or food
- dry humping
- loving someone with HIV
- sharing a bathroom with someone who has HIV
- insect bites
- and many more...

Slide 22:

Play the HIV Transmission & Body Fluid Activity

Slide 23:

How to Reduce the Risk

Harm Reduction Strategies for HIV Prevention

Be Real. Be Ready.
There are many ways to reduce the risk of HIV transmission. Here are a few:

- **Using barrier methods** – Barrier methods prevent the sharing of bodily fluids. Preventing fluid contact can be done by using barrier methods such as condoms, internal condoms, dental dams, latex or nitrile gloves, or Saran/plastic wrap.

- **Knowing the status of sex partner(s)** – Before engaging in sexual activities, someone can ask their partner what their HIV status is. Remember, that 20% of people who are living with HIV, do not know that they have the virus. It is recommended that anyone who is sexually active or engaging in behaviors that could transmit HIV (including vaginal, anal, and oral sex, or sharing needles) get tested for HIV every 3-6 months to know what their status is.

- **Avoid sharing needles** – Blood can be shared if needles are shared for tattoos, piercings, or injection drug use. Always use “clean” needles. If you or someone you know is using injection drugs, please speak to a parent, guardian or trusted adult. The staff at the wellness center can help.

- **PrEP** - Pre-exposure prophylaxis, or PrEP, is a way for people who do not have HIV but who are at substantial risk of getting it to prevent HIV infection by taking a pill (brand name Truvada) every day. When someone is exposed to HIV through sex or injection drug use, these medicines can work to keep the virus from establishing a permanent infection. When taken consistently, PrEP has been shown to reduce the risk of HIV infection in people who are at high risk by up to 92%. PrEP is much less effective if it is not taken consistently. PrEP is a powerful HIV prevention tool and can be combined with condoms and other prevention methods to provide even greater protection than when used alone. But people who use PrEP must commit to taking the drug every day and seeing their health care provider for follow-up every 3 months.

Make sure all students understand what PrEP is and let them know that they can find out more at PleasePrepMe.org

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Be Real. Be Ready.
<table>
<thead>
<tr>
<th>Slide 26:</th>
<th><a href="http://www.cdc.gov">www.cdc.gov</a> is another great resource for PrEP and PEP information</th>
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</thead>
<tbody>
<tr>
<td>Slide 27:</td>
<td><strong>Practice Universal Precautions</strong> – In school or other public places, if there is exposed blood, use a barrier between it and your skin like a rubber glove. Avoid touching someone else's blood directly.</td>
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<td>Slide 28:</td>
<td><strong>Get tested</strong> – An HIV test requires a finger stick, drawing blood, or an oral swab. Local teen clinics offer free HIV testing. Usually, someone can get the results by the end of the visit.</td>
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<td>Slide 29:</td>
<td><strong>Window period</strong> – HIV tests are not looking for the HIV, the virus that causes AIDS, they are looking for the body’s response to the virus – antibodies. Since it can take a while for the body to make these antibodies, HIV tests will not be accurate immediately after exposure to HIV. There is a window period. The window period is 2 weeks to 6 months after exposure for an HIV test to accurately determine if someone has been exposed to HIV or not.</td>
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Slide 30:

- If someone had unprotected sex on January 1st when is the earliest that an HIV test could detect HIV antibodies? Two weeks later – January 15th
- When would this person be sure that a negative test result is completely accurate if they were exposed to HIV on January 1st? About 6 months later – July 1st.
- Remind students that if someone has another potential exposure in between the tests, then that person will need to re-test.