## HIV & AIDS PREVENTION

#### 7th Grade

Broken Arrow Public Schools

#### Sources:

- Centers for Disease Control and Prevention <a href="https://www.cdc.gov/hiv/default.html">https://www.cdc.gov/hiv/default.html</a>
- National Library of Medicine <a href="https://medlineplus.gov/hivaids.html">https://medlineplus.gov/hivaids.html</a>
- American Academy of Pediatrics-
  - $\underline{ https://www.healthychildren.org/English/health-issues/conditions/sexually-transmitted/Pages/HIV-and-AIDS.aspx}$
- Nemours Children's Health https://kidshealth.org/en/kids/hiv.html
- Oklahoma State Department of Health-

https://oklahoma.gov/health/services/personal-health/sexual-health-and-harm-reduction-service/hiv-education-trainina-het.html



## **Ground Rules**



- Participate seriously
- Use appropriate terms
- Please be respectful of others
- Notecards Don't be afraid to ask appropriate questions related to the topic

## HIV and AIDS

What will we learn today?

- Definition
- Transmission
- Symptoms
- Diagnosis
- Treatment
- Prevention

## What is our immune system?

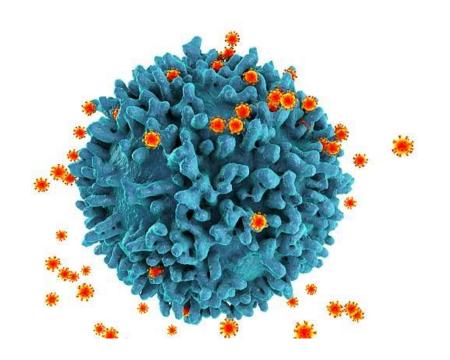
- Protects our body from outside invaders
  - Germs (such as bacteria, viruses, and fungi)
  - Toxins (chemicals made by microbes)
- Made up of organs, cells, and proteins that work together



### What is HIV?

#### Human Immunodeficiency Virus

- Virus that attacks the immune system
- Destroys CD4 cells (also called T cells)
  - These cells fight germs and help prevent some kinds of cancers
- Immune system becomes weaker, making it harder for the body to fight off infections and some kinds of cancers
- No cure, but medicines can help prevent HIV from becoming even more serious



### What is AIDS?

#### Acquired Immune Deficiency Syndrome

- Can develop AFTER someone has been infected with HIV
- Immune system becomes very weak serious infections and health problems often occur
- No cure can result in death



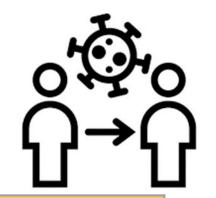
## HIV/AIDS Statistics



- As of 2021, HIV/AIDS claimed 40.1 million lives around the world
- In 2019, estimated 1.2 million people in the United States aged 13+ had HIV in the U.S.
- In 2019, 1 in 7 people with HIV in the U.S. didn't know they had it

### How is HIV transmitted?

HIV is passed from person to person through the exchange of body fluids (blood, semen, vaginal and rectal fluids, breastmilk)

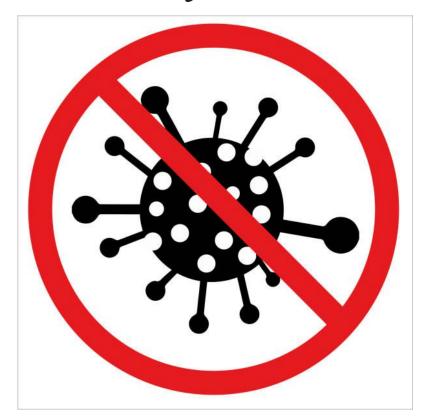


Sexual Contact with HIV+ Person	Blood to Blood Contact	Mother to Baby
<ul><li>Vaginal Sex</li><li>Anal Sex</li><li>Oral Sex</li></ul>	<ul> <li>Sharing needles, syringes, or other drug injection equipment</li> <li>Unsterilized tattoo or piercing equipment</li> </ul>	<ul> <li>During pregnancy, birth, or breastfeeding</li> <li>Most common way that children get HIV</li> <li>If mother is tested and treated, less likely to transmit to her baby</li> </ul>
80% of All Transmissions	10% of All Transmissions	10% of All Transmissions

## How does HIV enter the body?

The main ways the virus enters the bloodstream are:

- By injecting into the bloodstream with needles or injecting equipment that's been shared with other people
- Through the thin lining on or inside the anus, vagina and genitals
- Through the thin lining of the mouth and eyes
- Through cuts and sores in the skin



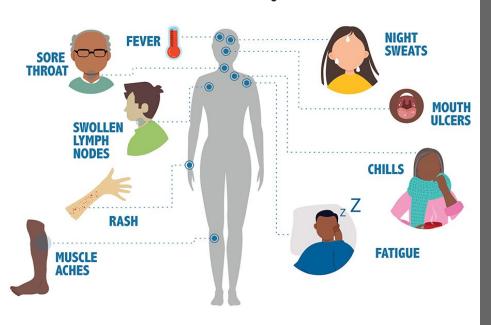
### What are some ways that HIV is <u>NOT</u> transmitted?

HIV does not survive long outside the human body (such as on surfaces), and it cannot reproduce outside a human host. It is not transmitted:

- By mosquitoes, ticks, or other insects
- Through saliva, tears, or sweat
- By hugging, shaking hands, sharing toilets, sharing dishes, sharing water fountains, or closed-mouth kissing with someone who has HIV
- Through the air by coughing or sneezing



## Symptoms of HIV



- Most people have flu-like symptoms within 2 to 4 weeks after infection
- Symptoms may last for a few days or several weeks
- These symptoms alone doesn't mean you have HIV - Other illnesses can cause similar symptoms
- Some experience no symptoms at all
- Only way to know is to get tested

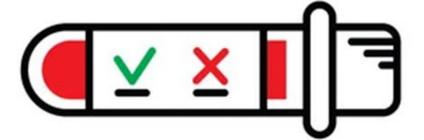
### What are the stages of HIV?

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	Stage 1	<ul> <li>Acute HIV Infection</li> <li>People have a large amount of HIV in their blood and are very contagious.</li> <li>Many people have flu-like symptoms.</li> <li>If someone has flu-like symptoms and thinks they may have been exposed to HIV, they should get tested.</li> </ul>	
	Stage 2	<ul> <li>Chronic HIV Infection</li> <li>This stage is also called asymptomatic HIV infection.</li> <li>HIV is still active and continues to reproduce in the body.</li> <li>People may not have any symptoms or get sick during this phase but can transmit HIV.</li> <li>People who take HIV treatment as prescribed may never move into Stage 3 (AIDS).</li> <li>Without HIV treatment, this stage may last a decade or longer, or may progress faster. At the end of this stage, the amount of HIV in the blood (viral load) goes up and the person may move into Stage 3 (AIDS).</li> </ul>	
	Stage 3	<ul> <li>AIDS</li> <li>The most severe stage of HIV infection.</li> <li>People with AIDS can have a high viral load and may easily transmit HIV to others.</li> <li>People with AIDS have badly damaged immune systems. They can get an increasing number of opportunistic infections or other serious illnesses.</li> <li>Without HIV treatment, people with AIDS typically survive about three years.</li> </ul>	

## How is HIV diagnosed?

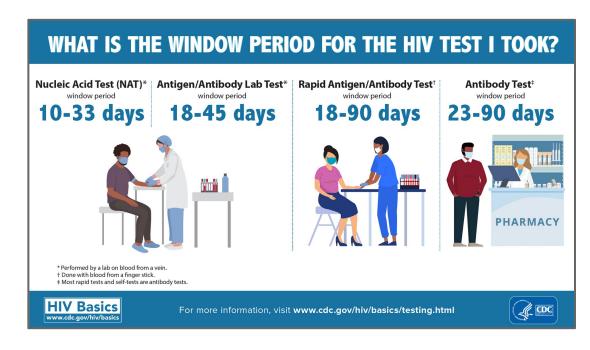
Testing is the only way to diagnose HIV. Tests are available for free or at a reduced cost and can be done by your doctor, the local health department, or through the purchase of a self-test.

Positive Test Result	Negative Test Result
HIV antibody found	No HIV antibody found
<ul> <li>Have the HIV virus and can transmit to others</li> <li>Need to begin treatment IMMEDIATELY</li> </ul>	<ul> <li>MAY not have the HIV virus (consider the window period)</li> </ul>
	Retest in 3 months



### What is an HIV window period?

- Refers to the time between HIV exposure and when a test can detect HIV in the body
- Window period depends on the type of HIV test used
- If a person receives a negative test result after a potential HIV exposure, he/she should be tested again after the window period ends



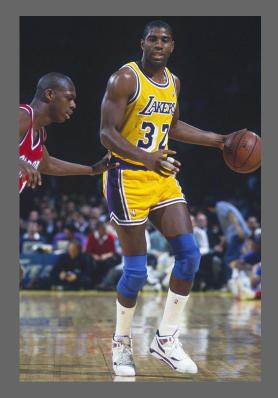
### How is HIV treated?

- No cure for HIV, but can be controlled with HIV treatment
- Treatment should be started as soon as possible – delaying allows HIV to continue to harm immune system and puts person at higher risk of developing AIDS
- Antiretroviral therapy (ART) Involves taking medicine as prescribed by health care provider
- HIV treatment reduces amount of HIV in the body and helps a person stay healthy



# Living with HIV

People diagnosed with HIV are living longer and with a better quality of life because of new and improved methods of treatment.



Magic Johnson, former LA Lakers point guard living with HIV since 1991

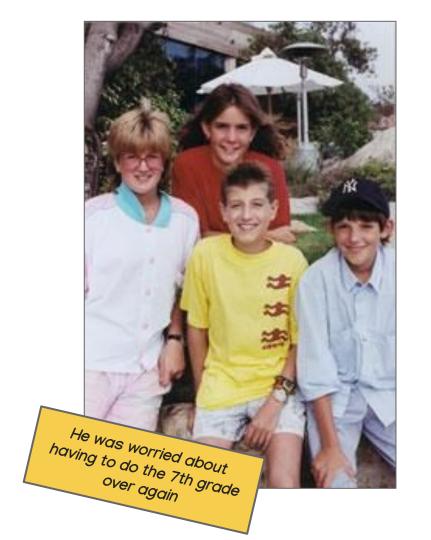
## Ryan White's Legacy

- Diagnosed with AIDS in 1984 at the age of 13.
- One of the first children with hemophilia to be diagnosed with AIDS (Hemophilia is a genetic blood disorder in which the blood doesn't clot normally. Treatments can include injections of clotting factor and plasma.)
- Ryan's case led CDC in 1985 to begin screening blood and blood products for the HIV antibody to prevent transmission through blood transfusions
- All donated blood is now screened



## Ryan White's Legacy

- Became famous because of his fight to go to school
- At the time, information about HIV and AIDS was so new and constantly changing, there was a lot of controversy surrounding anyone that was positive
- Was expelled from his middle school because of his diagnosis
- Was only given 3-6 months to live, but lived 5 years longer than expected - Died just one month before his high school graduation
- Ryan White Comprehensive AIDS Resources Emergency Act passed Aug. 1990 just months after he died.
- The Ryan White HIV/AIDS program provides a comprehensive system of HIV primary medical care, essential support services, and medications for low-income people living with HIV.



## Fact or Fiction...

Put Your Knowledge to the Test!

A person can be infected with HIV by hanging out others with who are HIV positive.





A person's life is over once they receive a positive HIV diagnosis.





A person can look healthy on the outside and still be HIV positive.





A person can be sexually active and not worry about HIV infection as long as they don't also inject drugs.





Any kind of sexual contact increases a person's risk of becoming infected with HIV.





### ABSTINENCE = PREVENTION



### HIV and AIDS Prevention Resources...

- Oklahoma HIV/AIDS
   Hotline: 1-800-535-2537
- www.cdc.gov
- www.health.ok.gov



## Questions?