



# Understanding HIV/AIDS

For Community Health Workers



Approved by Texas Department of State Health Services for 1 hr – Knowledge for  
Community Health Workers - Basic  
Developed in Spring 2016

# Objectives

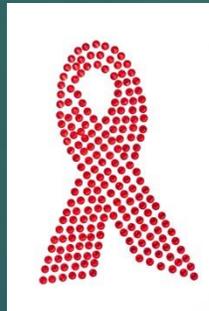
- ▶ Explain what HIV and AIDS are to a community member.
- ▶ Explain how HIV affects the body.
- ▶ List three ways that HIV is passed from person to person.
- ▶ Describe the recommendation for getting tested for HIV.
- ▶ List at least four behaviors that increase the risk for getting HIV.
- ▶ Describe ways a person can prevent HIV from spreading.

# What is **HIV**?

**H**uman

**I**mmunodeficiency

**V**irus



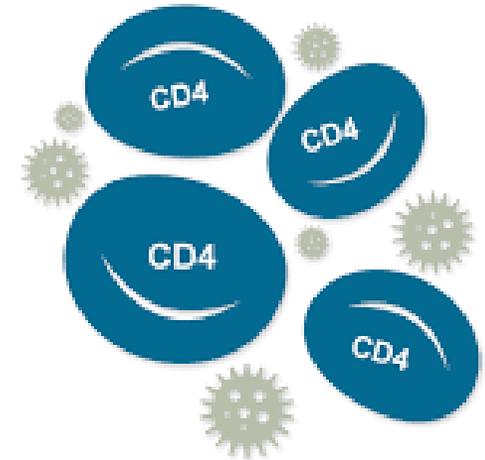
- ▶ **HIV** is a virus that is spread through body fluids.
- ▶ This virus affects **H**umans.
- ▶ **I**mmunodeficiency is when the body cannot defend itself against disease well.
- ▶ The **V**irus enters your body but does not go away like viruses for colds or the flu.
- ▶ There is treatment, but not a cure.

# How long has HIV been around where did it come from?

- ▶ One key theory is that HIV came from a virus that was first seen in chimpanzees in Africa. The virus changed to a human form that we have now. No one is sure when humans first had the virus, but it came to the United States in the 1970s.

# What does the virus do?

- ▶ HIV is a “retrovirus” which means it uses the body’s cells to reproduce. It cannot reproduce outside of the human body.
- ▶ The cells it uses to reproduce are the white blood cells that fight infection. These are called CD4 a type of T cell.
- ▶ When there is a lot of HIV in the body and not as many CD4 cells, the body has a hard time fighting infections.



CD4 cells are a type of white blood cells that play a major role in protecting your body from infection.

# Opportunistic Infections

A person with a healthy immune system can be exposed to some viruses and have no reaction to them.

It can be very serious for a person with HIV to be exposed to the same viruses.

Because the immune system is weakened, the person living with HIV can get what is called an **opportunistic infection**.

That is why it is important for a person to get treatment as soon as possible after testing positive for HIV to keep their immune system as strong as possible.

# What are the symptoms of HIV?

- ▶ Doctors do NOT use symptoms to diagnose HIV. A person must have a test to diagnose HIV.
- ▶ Some people may have flu-like symptoms within 2-4 weeks of getting the infection, but many people have NO symptoms.
  - ▶ Possible flu-like symptoms that could happen in someone who has been recently infected:
    - Fever
    - Chills
    - Rash
    - Night sweats
    - Muscle aches
    - Sore throat
    - Fatigue
    - Swollen lymph glands
    - Mouth ulcers

# How does the virus enter the body?

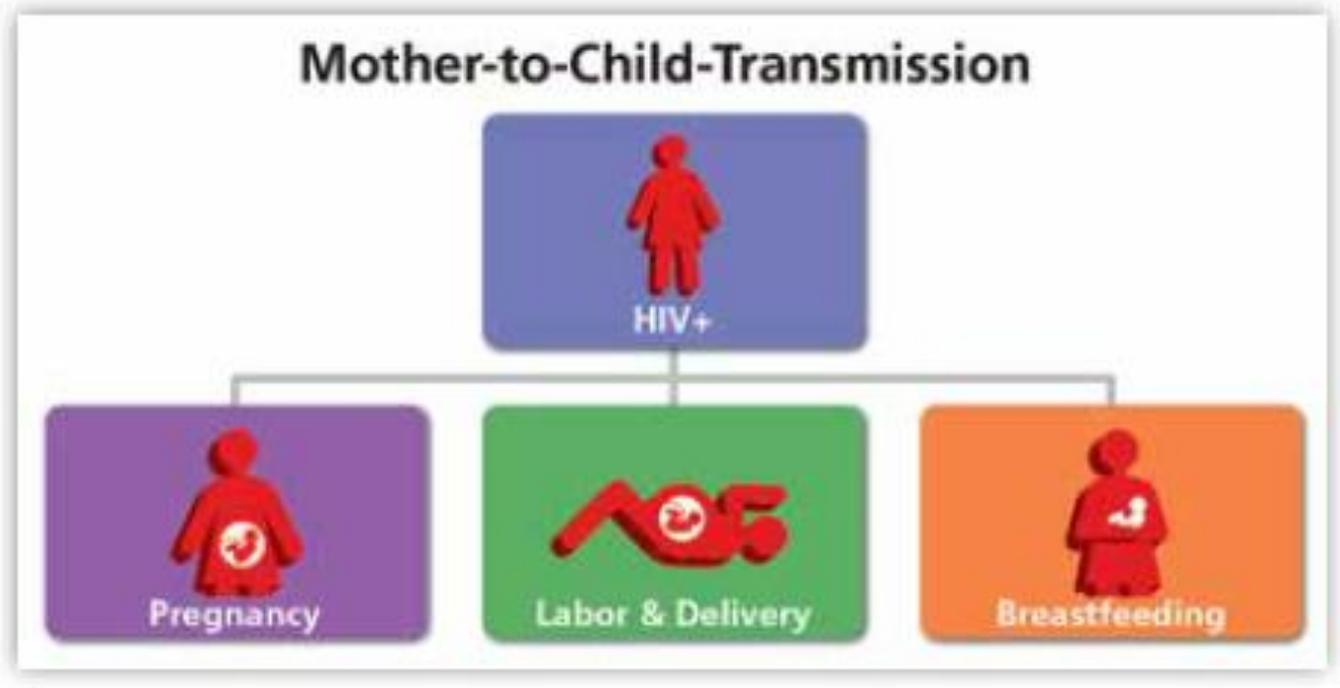
HIV enters the body through certain body fluids.

- ▶ Blood
- ▶ Semen and Pre-seminal fluid
- ▶ Rectal fluids
- ▶ Vaginal Fluids
- ▶ Breast Milk

## **3 Main Ways HIV is passed from person to person through body fluids.**

- 1. Having sex without protection (anal, vaginal, or oral).**
- 2. Sharing needles and syringes.**
- 3. Pregnancy, childbirth or breastfeeding.**

- ▶ A pregnant woman with HIV can pass the virus to her baby during pregnancy, when she delivers the baby, or when she breastfeeds the baby.
- ▶ Taking **ART**, antiretroviral therapy, can help prevent the baby from getting HIV.



## **HIV** can enter the body through:

▶ **Mouth**

▶ **Nose**

▶ **Eyes**

▶ **Ears**

▶ **Vagina**

▶ **Penis**

▶ **Anus**

▶ **Break in the skin**

There are NO reported cases of HIV being transmitted by these fluids:

- ▶ Saliva
- ▶ Sweat
- ▶ Tears
- ▶ Urine (pee)
- ▶ Feces (poop)

# HIV is NOT spread by

- ▶ Shaking hands
- ▶ Living together in the same house
- ▶ Sharing clothes
- ▶ Sharing toilets
- ▶ Eating together
- ▶ Through mosquito bites
- ▶ Sharing equipment

# What is AIDS?

Acquired  
Immuno  
Deficiency  
Syndrome

- ▶ **AIDS** is a late stage of HIV infection.
- ▶ It is a **diagnosis** given by a doctor when the body has reached a point where it is very hard to fight disease and some cancers.
- ▶ The doctor will look at the patient's viral load, CD4 count, and presence of specific cancers or infections when diagnosing a person with AIDS.
- ▶ There is treatment for AIDS, but no cure.

# What is the “Viral Load” and “CD4”?

- ▶ **Viral Load:** Amount of HIV in the blood.
- ▶ **CD4 Count:** Number of white blood cells in the blood.
- ▶ The goal of treatment is to keep the viral load down and the CD4 count up.

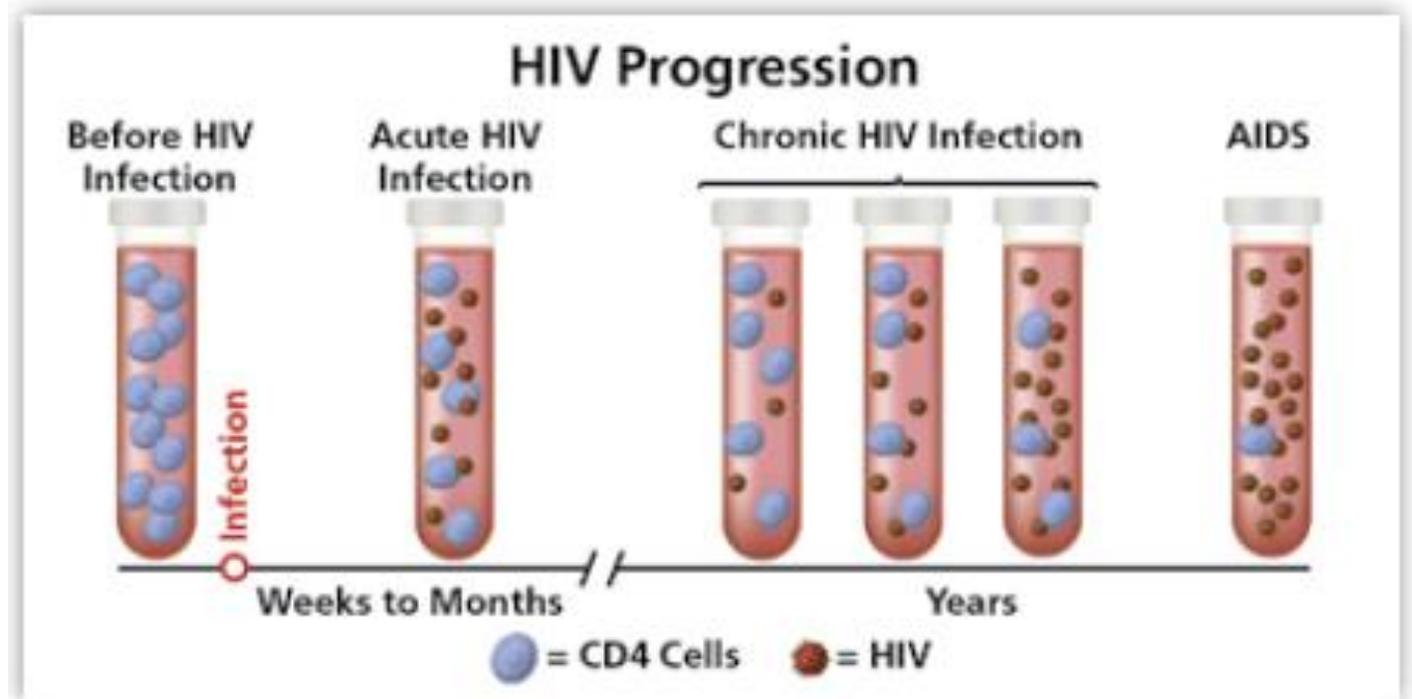


Figure 1

# HIV → AIDS

Individual  
without HIV

Gets infected  
with HIV

With 4<sup>th</sup>  
generation  
testing, may  
take about 16  
days to test  
positive after  
initial exposure.

Tests Positive for  
HIV

A person is  
diagnosed with  
AIDS.  
  
This may take  
many years to  
develop with  
treatment!

# What are the symptoms of AIDS?

- ▶ A person who develops AIDS may have the following symptoms:
  - ▶ Rapid weight loss
  - ▶ Fever that keeps coming back
  - ▶ Night sweats
  - ▶ Extreme tiredness
  - ▶ Swelling of lymph glands in the armpits, groin, or neck
  - ▶ Sores of the mouth, anus, or genitals
  - ▶ Pneumonia
  - ▶ Blotches under the skin or in the mouth, nose, or eyelids
  - ▶ Memory loss and depression

These symptoms are often the result of opportunistic infections.

# How many people in the U.S. are living with HIV?

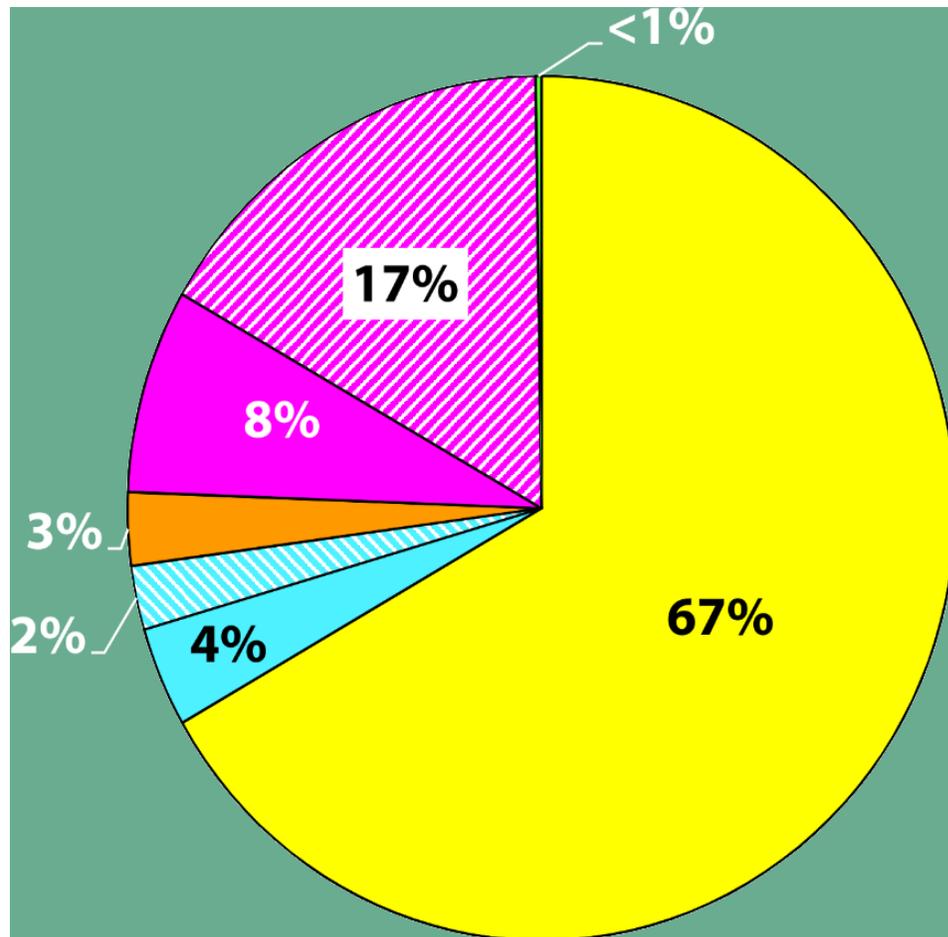
- ▶ About 1,200,000 people in the U.S. are living with HIV.
- ▶ Between 12 and 14%, or around 1 of every 8, do not know they are infected with HIV.
- ▶ The guideline is that any person age 13-64 should be tested at least once.
- ▶ However, if a person of any age is doing risky behaviors, they should be tested more often and educated about prevention.



44,609 in the U.S. were diagnosed with HIV in 2014.

- ▶ **93%** were spread through **sexual contact**.
- ▶ **6%** were from Injected Drug Use (IDU).
- ▶ **Less than 1%** was spread by passing from the mother to the baby.

Diagnoses of HIV Infection among Adults and Adolescents for 2014  
United States and 6 Other Areas  
N = 44,609



- Male-to-male sexual contact
- Injection drug use (IDU) – Males
- IDU – Females
- Male-to-male sexual contact and IDU
- Heterosexual contact<sup>a</sup> – Males
- Heterosexual contact<sup>a</sup> – Females
- Other<sup>b</sup>

# Teaching Tip!



When talking about the ways the virus is spread, it is best to describe the behavior that resulted in spread of the disease without using labels for people.

For example, the term Men Who Have Sex With Men (**MSM**) focuses on the behavior and does not label the men as “gay”. Some men who have sex with men may not consider themselves “gay”.

Also, it is best to say “people who inject drugs” instead of “drug addicts”.

This lets the person know it is the behavior that puts them at risk, and not a label.

# How do you know if someone is infected with **HIV**?

- ▶ Testing is the only way a person knows if they are positive for HIV!
- ▶ A person who is infected with HIV may not have any symptoms for 10 years or more.
- ▶ There are many places where a person can get tested, including your doctor. To find out how to get free, fast, and confidential testing in your area, go to:

<https://gettested.cdc.gov/>

- ▶ In Texas, you can also contact <http://www.dshs.texas.gov/hivstd/services/>
- ▶ Testing should be with pre and post test counseling.

**GET TESTED**

# Who should get tested for HIV?

- ▶ Every person between ages 13 and 64 should get tested at least once as part of routine health care.
- ▶ People with risk factors such as unprotected sex and those who share injection needles should be tested more often.

# What is the treatment for HIV and AIDS?

- ▶ There is not a cure for HIV and AIDS, but treatment can help a person live longer.
- ▶ The treatment is called Anti Retroviral Treatment (**ART**).
- ▶ The CDC recommends starting **ART** immediately after a positive HIV test.
- ▶ **ART** can prolong life a great deal.
- ▶ **ART** is a life long treatment and staying in care is very important. Free or low cost HIV/AIDS care is available to everyone who is HIV positive in the U.S. Even the medications for HIV are free or low cost for everyone including undocumented residents.
- ▶ The purpose of **ART** is to get a person into care as soon as possible so to live a long and healthy life.
- ▶ When the number of cells with HIV are low, this is called **viral suppression**.

# Are there any medications that can reduce the risk of getting HIV?

## PrEP

- **PrEP** stands for Pre-exposure Prophylaxis.
- This medicine can help a person without HIV from getting it from a sex partner who has HIV, or from sharing needles during injected drug use with someone who has HIV.
- It is very important to use the medicine correctly which is one pill everyday.
- This drug is usually prescribed for people who have increased risk factors for getting HIV and do not want to get infected.
- A person should talk to their doctor to see if **PrEP** is right for them.
- [https://wwwn.cdc.gov/hivrisk/decreased\\_risk/medicines/pep.html](https://wwwn.cdc.gov/hivrisk/decreased_risk/medicines/pep.html)

## PEP

- **PEP** stands for Post-exposure Prophylaxis.
- **PEP** is for emergencies only.
- It must be started within 72 hours of a recent possible exposure to HIV. A person will be tested first to make sure they do not already have HIV.
- A person should go to the local hospital emergency room right away if they think they have been exposed to HIV!
- [https://wwwn.cdc.gov/hivrisk/decreased\\_risk/medicines/pep.html](https://wwwn.cdc.gov/hivrisk/decreased_risk/medicines/pep.html)

Neither **PrEP** or **PEP** are 100% effective.

# What is the HIV Care Continuum

- ▶ The HIV Care Continuum is a way to tell how HIV is being managed in a group of people.
- ▶ KEY points:
  - ▶ Not everyone with HIV knows they have it.
  - ▶ Some people who test positive for HIV do not get medical care.
  - ▶ Some people living with HIV do not stay in care.
  - ▶ Some people living with HIV are not taking the drugs that help.

# Steps in the HIV Care Continuum



**DX**

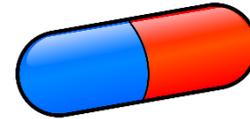
**Diagnosed  
with HIV**



**Linked to  
care**



**Retained in  
care**

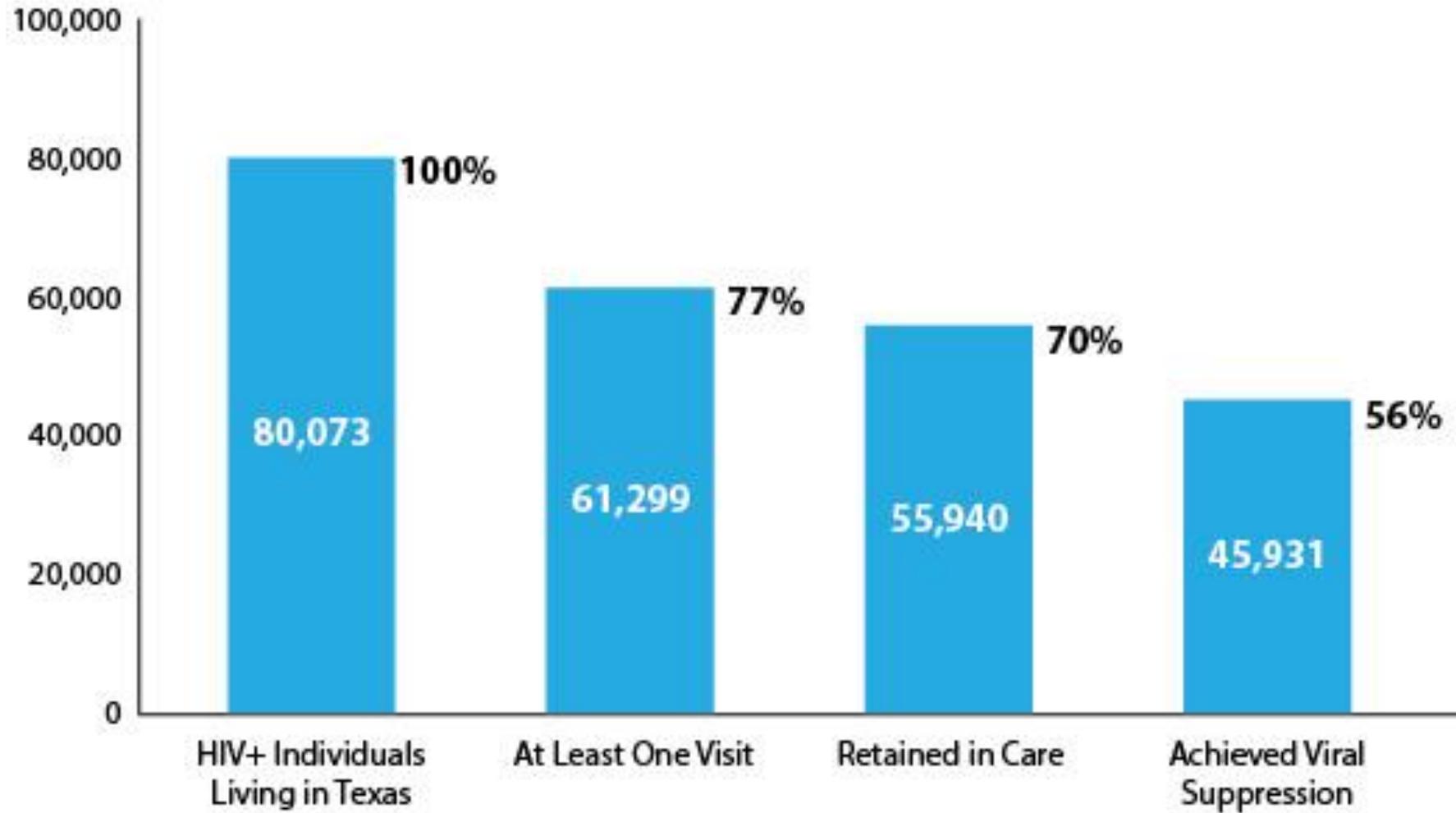


**Prescribed  
ART**



**Virally  
Suppressed**

## Texas HIV Treatment Cascade 2014



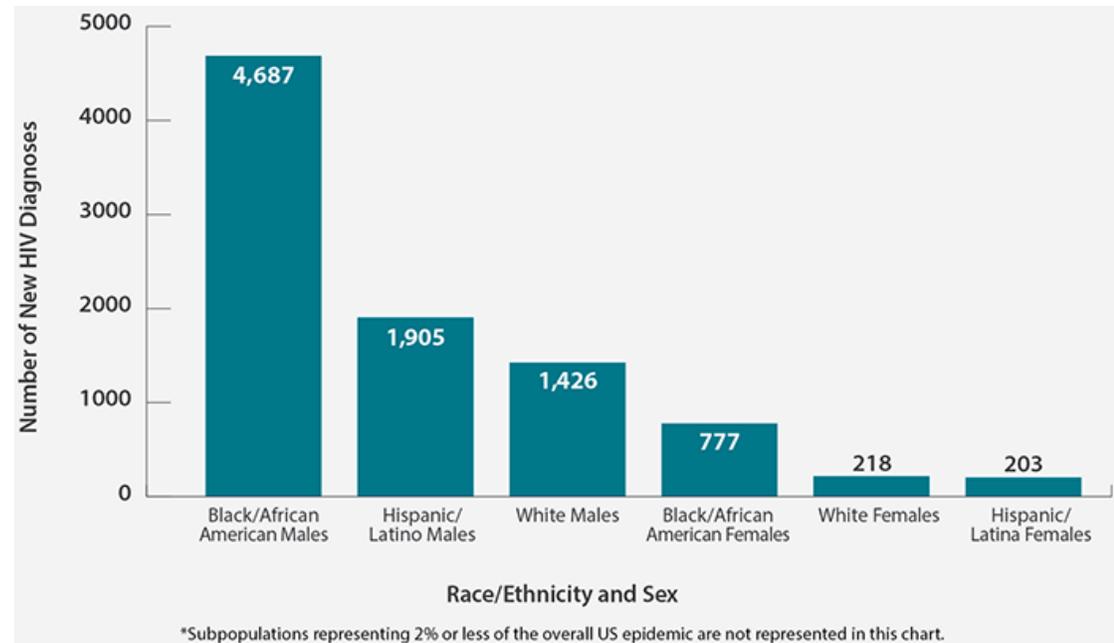
<http://dshs.texas.gov/hivstd/reports/epiprofile/sec11.shtm>

# Youth

- ▶ In 2014, about 20% of the new infections were in youth aged 13 – 24.
- ▶ The guideline is that any person age 13-64 should be tested at least once.
- ▶ However, if a young person is doing risky behaviors, they should be tested more often and educated about prevention.

<http://www.cdc.gov/hiv/group/age/youth/index.html>

Estimated New HIV Diagnoses Among Youth Aged 13-24 in the United States, by Race/Ethnicity and Sex, 2014



# What can a person do to reduce their risk of getting HIV?

The way people get HIV has been studied and is well known.

There are many things a person can do to prevent getting and spreading the virus.

# Behaviors that reduce the risk of getting HIV

- ▶ Abstinence – Do not have anal, vaginal, or oral sex.
- ▶ Choose less risky sexual activities. - Anal sex is the most risky, followed by vaginal sex, oral sex, and touching.
- ▶ Use condoms. – Condoms work well when used correctly and every time. There are male and female condoms.
- ▶ Have sex with fewer partners.
- ▶ Talk with your sex partners.
- ▶ Do not share injected drug equipment such as needles and syringes with other people.

# Remember...

- ▶ HIV is spread mostly through blood with sexual contact and sharing needles during drug use. Although not as common, HIV can spread from mother to baby during childbirth or when breastfeeding.
- ▶ HIV can be spread between:
  - ▶ Men who have sex with men
  - ▶ Men and women who have sex with each other
  - ▶ People who share injection materials. Blood can be left on the needle or in the syringe.

# Teaching Tip!



A person of any age can get infected with HIV! People of all ages need education about how to reduce the risk of getting HIV.

# How can people living with HIV get help to live better lives?

- ▶ There are many resources to help people manage their HIV.
- ▶ Most doctors can treat people living with HIV. Often the doctor can refer the person to other services. There is free and low cost care and medication for people living with HIV throughout the U.S., even if you are not a citizen.
- ▶ There are online and in-person support groups.

# Important abbreviations

- ▶ **HIV** – Human Immunodeficiency Virus
- ▶ **AIDS** – Acquired Immuno Deficiency Syndrome
- ▶ **PLWHA** – People Living With HIV/AIDS
- ▶ **ART** – AntiRetroviral Therapy
- ▶ **MSM** – Men who have Sex with Men
- ▶ **IDU** – Injected Drug Use

# Resources for Safer Sex

## Male Condoms

- ▶ [http://www.cdc.gov/condomeffectiveness/docs/condoms\\_and\\_stds.pdf](http://www.cdc.gov/condomeffectiveness/docs/condoms_and_stds.pdf) (accessed 7/1/2016)
- ▶ <http://www.cdc.gov/condomeffectiveness/male-condom-use.html> (accessed 7/1/2016)

## Female Condoms

- ▶ <http://www.aidsmap.com/Female-condoms/page/1065758/> (accessed 7/1/2016)
- ▶ <https://www.aids.gov/hiv-aids-basics/prevention/reduce-your-risk/using-condoms/> (accessed 7/1/2016)

# Texas Department of State Health Services

- ▶ <https://www.dshs.state.tx.us/hivstd/info/edmat.shtm#facts> – There are pamphlets, posters, Fact Sheets, and videos. They are not kept as up-to-date as other websites.
- ▶ <https://www.dshs.state.tx.us/hivstd/default.shtm> - This is the page where you will find a lot of information about HIV. Some is very high level.
- ▶ <https://www.dshs.state.tx.us/hivstd/info/hiv/default.shtm> - This page has links to HIV/AIDS resources.
- ▶ You can email the HIV/STD program at [hivstd@dshs.state.tx.us](mailto:hivstd@dshs.state.tx.us) or call 512-533-3000
- ▶ [https://www.dshs.state.tx.us/hivstd/contractor/pap\\_consumer.shtm](https://www.dshs.state.tx.us/hivstd/contractor/pap_consumer.shtm) HIV Co-pay and Patient Assistance Programs. This takes you to a list of drug companies that provide assistance for people living with HIV.
- ▶ <https://www.dshs.state.tx.us/hivstd/services/service.shtm> -This website has a list of providers where you can get tested for HIV and other STDs (sexually transmitted diseases).

# Additional Resources

- ▶ <https://www.aids.gov/>
- ▶ <http://www.cdc.gov/hiv/default.html/>