



# HIV 101

# What is HIV

- Human Immunodeficiency Virus (HIV) is a virus that attacks the body's immune system, specifically the CD4 or T Cells.
- HIV can destroy the human immune system. Making it difficult for the immune system to fight off infections and other diseases.
- There is currently no cure for HIV. However, with proper treatment of antiretroviral therapy of ARV.
- If left untreated HIV can transform to Acquired Immunodeficiency Syndrome or AIDS.

# What is AIDS

- AIDS is the last stage of the HIV infection. Not everyone who has HIV will advance to AIDS
- HIV transitions to AIDS when one of two things occurs
  - When the patients CD4 count falls below 200 cells per cubic millimeter of blood
  - When the patient contracts an opportunistic infection
    - *Encephalopathy*, HIV-related
    - *Tuberculosis*
    - *Pneumocystis carinii pneumonia (PCP)*
    - *Candidiasis* of bronchi, trachea, esophagus, or lungs (Thrush)

# Symptoms of HIV/AIDS

- ▶ Early symptoms of HIV are similar to that of the Flu:
  - ▶ Fever, rash, chills, night sweats
  - ▶ muscle aches and pains, fatigue, and swollen lymph nodes.
- ▶ Advance symptoms of HIV are:
  - ▶ Rapid weight loss, recurring fever ,unexplained tiredness
  - ▶ Prolonged diarrhea, sores in the mouth, anus, and/or genitals
  - ▶ Pneumonia, memory loss

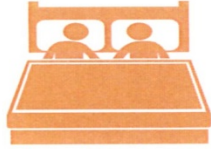


# HIV Transition

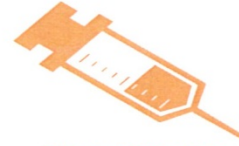
## HIV 101

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)

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# Who has the greatest risk of contracting HIV

- ▶ Anyone who is sexually active or uses IV drugs is at risk of contracting HIV
- ▶ The groups at greatest risk are:
  - ▶ Gay and Bisexual Men
  - ▶ Transgender Men and Women
  - ▶ African Americans
  - ▶ Hispanics/Latinos
  - ▶ Youth between 13-24
- ▶ The CDC website has a Risk Reduction Tool to assist people in knowing and reducing their risk of contracting HIV
  - ▶ <https://wwwn.cdc.gov/hivrisk/>

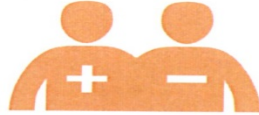
# Testing

## HIV Testing 101

Many HIV tests are now quick, FREE, and painless.

### Should I Get Tested For HIV?

- Everyone ages 13 to 64 should get tested for HIV at least once.
- If you're pregnant or planning to get pregnant, get tested as early as possible to protect yourself and your baby.
- You should get tested at least once a year if:
  - You're a sexually active gay or bisexual man. Some sexually active gay and bisexual men may benefit from more frequent testing (every 3 to 6 months).
  - You've had sex with an HIV-positive partner.
  - You've had more than one partner since your last HIV test.
  - You've shared needles or works to inject drugs.
  - You've exchanged sex for drugs or money.
  - You have another sexually transmitted disease, hepatitis, or tuberculosis.
  - You've had sex with anyone who has done anything listed above or with someone whose sexual history you don't know.



### Where Can I Get Tested?



Ask your doctor for an HIV test, or find a testing site near you by

- visiting [gettested.cdc.gov](http://gettested.cdc.gov),
- texting your ZIP code to KNOW IT (566948), or
- calling 1-800-CDC-INFO (232-4636).

Many testing locations are FREE and confidential. You can also buy a home testing kit at a pharmacy or online. Most HIV tests are covered by health insurance.



### What If My Test Result Is Negative?

- You could still have HIV. Ask your doctor about the "window period," a period of time after a person is infected during which they won't test positive.
- To stay negative, take actions to prevent HIV. Visit [www.cdc.gov/hiv/basics](http://www.cdc.gov/hiv/basics) to learn more.



### What If My Test Result Is Positive?

You may be given a follow-up test to confirm the result.

- Finding out you have HIV can be scary, but you can still live a healthy life if you take action.
- If you have HIV, start medical care right away. HIV treatment can keep you healthy for many years and reduce your chance of transmitting the virus to others. Learn more at [www.cdc.gov/HIVTreatmentWorks](http://www.cdc.gov/HIVTreatmentWorks).



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



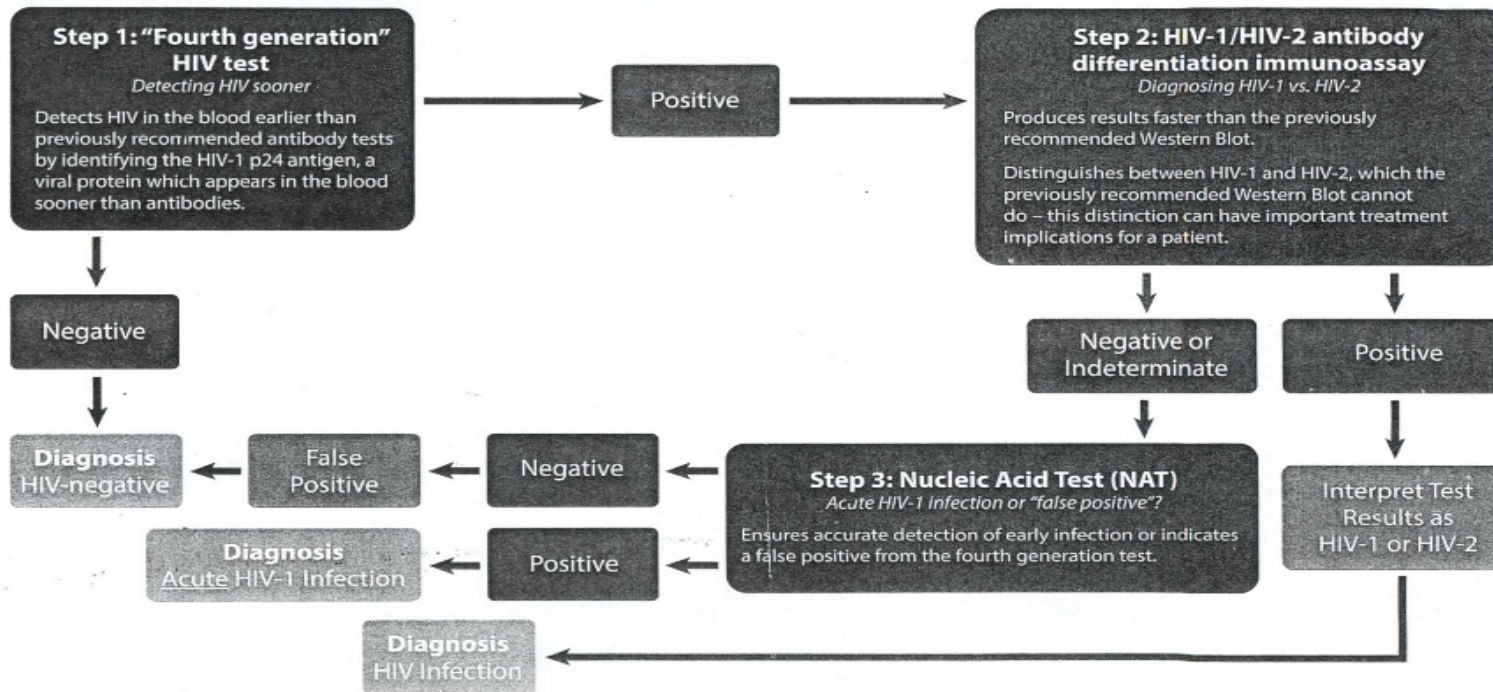
# CDC Testing Recommendations

## New CDC Recommendations for HIV Testing in Laboratories

*A step-by-step account of the approach*

CDC's new recommendations for HIV testing in laboratories capitalize on the latest available technologies to help diagnose HIV infections earlier – as much as 3–4 weeks sooner than the previous testing approach. Early diagnosis is critical since many new infections are transmitted by people in the earliest (“acute”) stage of infection.

By putting the latest testing technology to work in laboratories across the United States, we can help address a critical gap in the nation's HIV prevention efforts.



This graphic is designed to illustrate key concepts of the new testing approach in laboratories. For more detail, please see the full guidelines here: <http://www.cdc.gov/hiv/pdf/HIVtestingAlgorithmRecommendation-Final.pdf>.



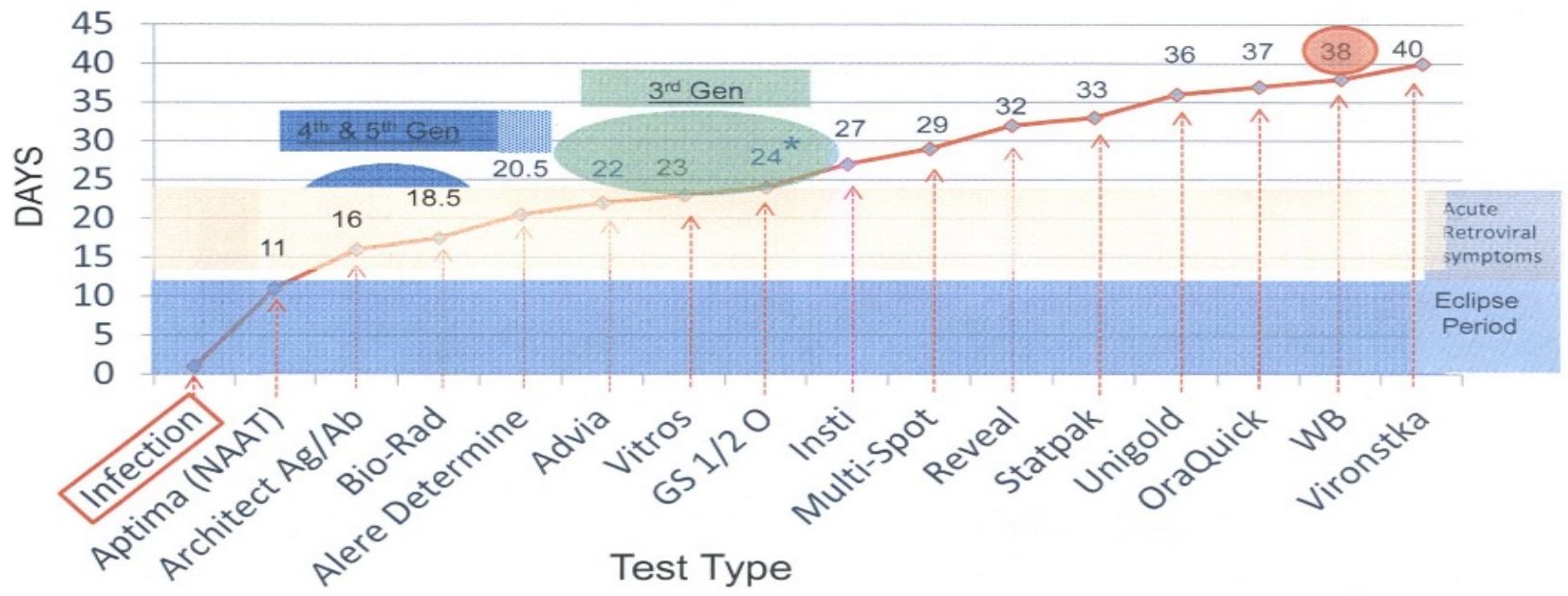
U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention

[www.cdc.gov/nchstp/newsroom](http://www.cdc.gov/nchstp/newsroom)

JUNE 2014

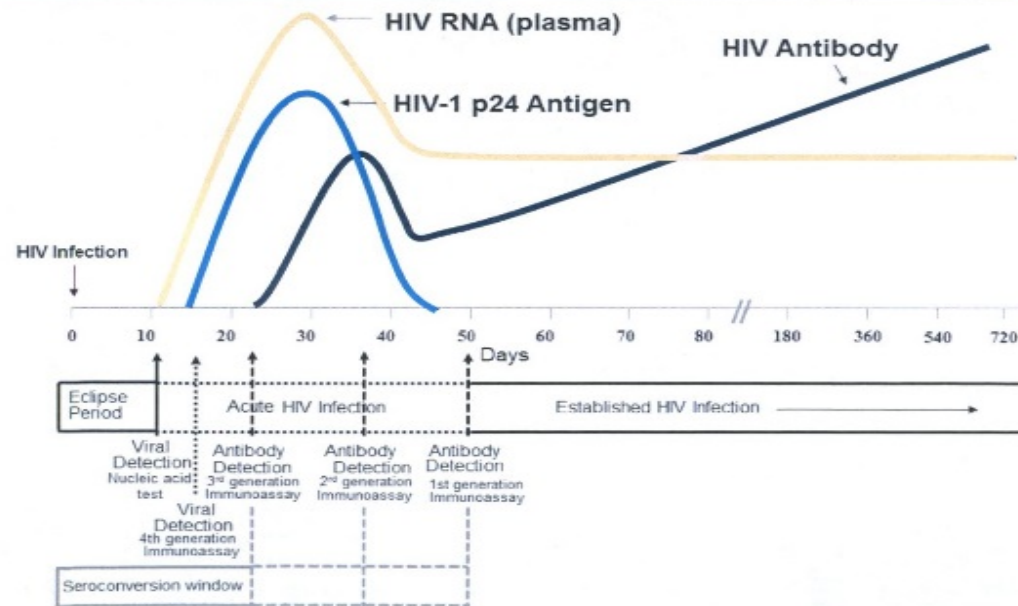


# Detection of HIV by Test



\* Western Blot result may be indeterminate beginning at day 24 post infection

# What are we measuring?



Centers for Disease Control and Prevention and Association of Public Health Laboratories. Laboratory Testing for the Diagnosis of HIV Infection: Updated Recommendations. Available at <http://www.cdc.gov/hiv/pdf/hivtestingalgorithmrecommendation-final.pdf>. Published June 27, 2014. Accessed April

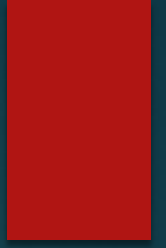
# HIV Testing Time Table for Pregnant Women



<b>When to Test</b>
First Prenatal Visit
Third Trimester
Delivery
Newborn Tests



# HIV Reporting



# Reporting Results

- ▶ Labs report all HIV related testing
  - ▶ HIV Screening with positive or negative results
  - ▶ HIV Conformation Testing with positive or negative results
  - ▶ HIV RNC/PCR (NAT)
  - ▶ HIV Genotypes
  - ▶ CD4
  - ▶ Viral Loads
  - ▶ Viral Logs
- ▶ Providers report
  - ▶ All new cases
  - ▶ Patients who have recently located to Texas
  - ▶ Patients who have a CD4 count less than 200 or an opportunistic infection

# Time Lines for reporting

- ▶ All ACUTE HIV infection need to be reported within 1 working day
- ▶ All Non acute HIV infection need to be reported within 7 working days



# What information is needed when reporting

- ▶ Demographic Information
  - ▶ Name
  - ▶ DOB
  - ▶ Address/Phone Number
  - ▶ Ethnicity/Race
  - ▶ SSN/DL number
  - ▶ Country of Birth
  - ▶ Marital Status
  - ▶ ER Contact
  - ▶ Employer
  - ▶ Medical Record number

# What information is needed when reporting Continued

- ▶ What prompted provider to test for HIV
- ▶ Did the patient have any signs or symptoms of HIV
- ▶ Any negative HIV test within the last 24 months
- ▶ Other STD preformed
- ▶ Is the patient aware of results
- ▶ Was the patient provided a referral to care
- ▶ How did the patient contract HIV ie MSM IV drug use


# Reporting Pregnant Patients

- ▶ When was patient diagnosed
- ▶ How many weeks pregnant is the patients
- ▶ OB/GYN during pregnancy
- ▶ Expected delivery date
- ▶ Expected delivery facility



# Reporting a Previous Positive patient from Out of State

- ▶ Where was patient diagnosed
- ▶ When was patient diagnosed
- ▶ How did patient contract HIV
- ▶ Medication patient is taking



# HIV by the numbers

# Global Statistics

- ▶ At the end of 2015 there were 36.7 million people living with HIV/AIDS
- ▶ Of the 36.7 million 1.8 million were children under the age of 15.
- ▶ It is estimated that 2.1 million people were newly infected in 2015.
- ▶ Of the 2.1 million people newly infected 150,000 were children. Most of these children reside in sub-Saharan Africa
- ▶ Currently it is estimated that only 60 percent of people living with HIV are aware of their status

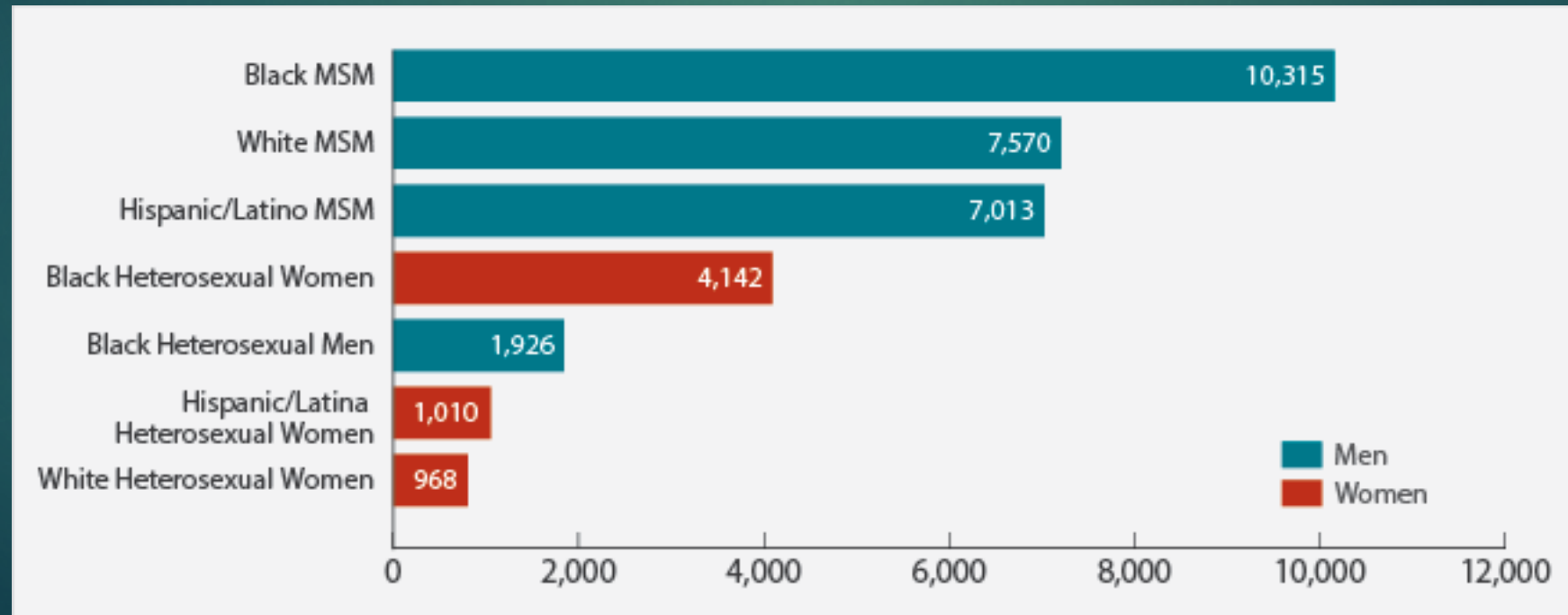
(statistics from AIDS.gov)



# US Statistics

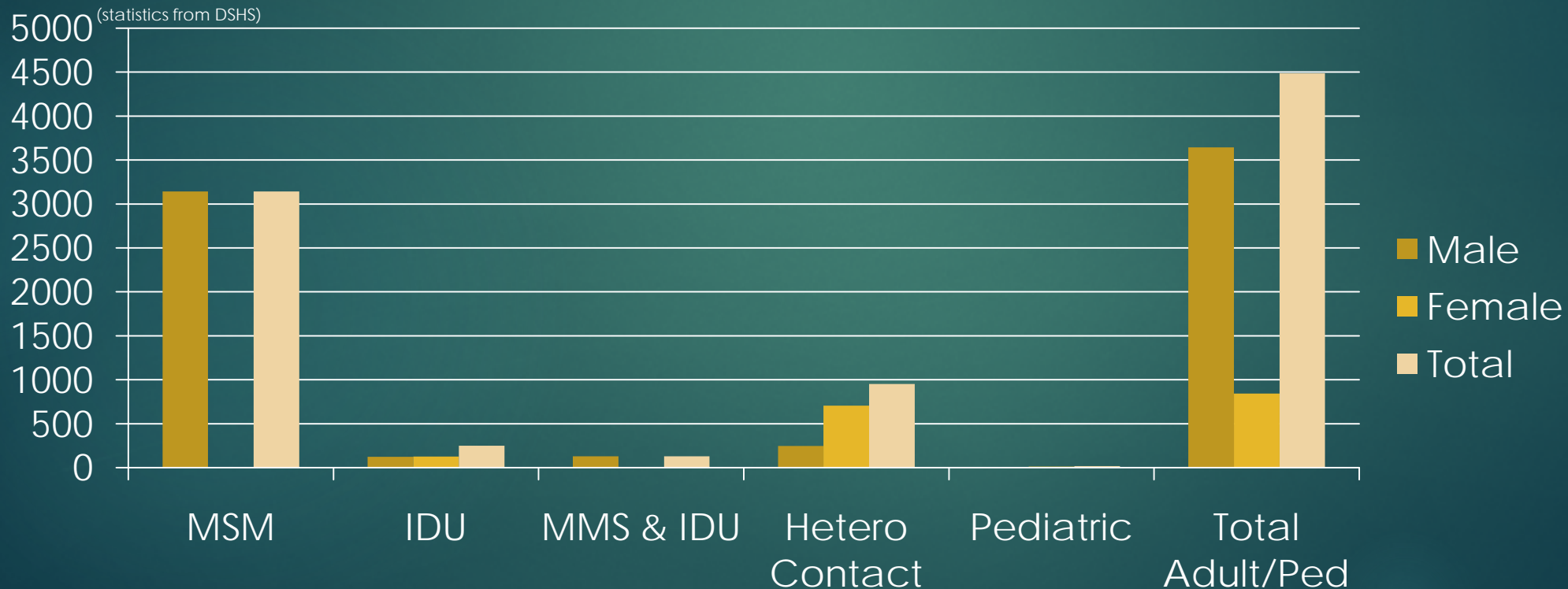
- ▶ There are more than 1.2 million people in the US living with HIV. 1 in 8 people are not aware of their status
- ▶ In 2015 39,513 were newly diagnosed with HIV in the US

(Statistics and graph from CDC.gov)



# Texans Living with HIV

- ▶ At the end of 2015 there were 82,745 Texans living with HIV
- ▶ This has increased about 18 percent over the last 5 years.



# HIV in the DFW Metroplex

- ▶ Of the top 25 counties with the highest HIV rate 4 reside in the DFW area.
- ▶ With Dallas County being second in the state
- ▶ (Statistics from DSHS)

Rank	HIV Diagnoses		AIDS		People Living with HIV	
	County	Cases	County	Cases	County	Cases
1	Harris	1,231	Harris	537	Harris	23,846
2	Dallas	791	Dallas	401	Dallas	16,387
3	Bexar	363	Bexar	139	Bexar	5,763
4	Travis	288	Tarrant	124	Tarrant	5,038
5	Tarrant	264	Travis	99	Travis	4,422
6	El Paso	99	Hidalgo	50	El Paso	2,023
7	Hidalgo	79	El Paso	45	Collin	1,544
8	Denton	76	Cameron	37	Fort Bend	1,274
9	Collin	76	Collin	31	Hidalgo	1,203
10	Fort Bend	62	Fort Bend	29	Denton	1,157
11	Cameron	61	Galveston	28	Galveston	923
12	Galveston	54	Denton	25	Jefferson	836
13	Lubbock	44	Jefferson	24	Cameron	776
14	Nueces	39	Webb	20	Montgomery	690
15	Jefferson	38	Nueces	20	Bell	645
16	Montgomery	37	Lubbock	17	Williamson	622
17	Gregg	34	Montgomery	15	Nueces	620
18	Bell	33	Gregg	14	Brazoria	547
19	Webb	26	Brazos	14	Gregg	459
20	Potter	26	Bell	12	Lubbock	454
21	Brazoria	26	Smith	11	McLennan	411
22	Brazos	23	Johnson	9	Webb	397
23	McLennan	22	Potter	8	Smith	395
24	Williamson	21	McLennan	8	Brazos	352
25	Smith	20	Brazoria	8	Hays	272





# HIV Prevention

## PrEP & PEP

# PrEP

Pre-Exposure Prophylaxis

## PrEP 101

Are you HIV-negative but at very high risk for HIV? Taken every day, PrEP can help keep you free from HIV.

### What Is PrEP?

- PrEP, or pre-exposure prophylaxis, is daily medicine that can reduce your chance of getting HIV.
- PrEP can stop HIV from taking hold and spreading throughout your body.
- Daily PrEP reduces the risk of getting HIV from sex by more than 90%. Among people who inject drugs, it reduces the risk by more than 70%.
- Your risk of getting HIV from sex can be even lower if you combine PrEP with condoms and other prevention methods.



### Is PrEP Right For You?

PrEP may benefit you if you are HIV-negative and **ANY** of the following apply to you.

#### You are a gay/bisexual man and

- have an HIV-positive partner.
- have multiple partners, a partner with multiple partners, or a partner whose HIV status is unknown—and you also
  - have anal sex without a condom, or
  - recently had a sexually transmitted disease (STD).



#### You are a heterosexual and

- have an HIV-positive partner.
- have multiple partners, a partner with multiple partners, or a partner whose HIV status is unknown—and you also
  - don't always use a condom for sex with people who inject drugs, or
  - don't always use a condom for sex with bisexual men.

#### You inject drugs and

- share needles or equipment to inject drugs.
- recently went to a drug treatment program.
- are at risk for getting HIV from sex.

### Visit Your Doctor

- To find out if PrEP is right for you.
- Every 3 months, if you take PrEP, for repeat HIV tests, prescription refills, and follow-up.
- If you have any symptoms while taking PrEP that become severe or don't go away.



### How Can You Get Help To Pay For PrEP?

- Most private and state Medicaid plans cover PrEP. If you are on Medicaid, check with your benefits counselor.
- If you have health insurance, you may receive co-pay assistance from drug manufacturers or patient advocacy foundations.
- If you are without medical insurance, consider enrolling in an insurance marketplace, manufacturer patient assistance program, or your state's Medicaid plan, if you are eligible for it.
- Learn more about paying for PrEP at [www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-paying-for-prep.pdf](http://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-paying-for-prep.pdf).

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

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# PrEP Provider Locator

- ▶ The Greater than AIDS website has a PrEP provider locator
  - ▶ <https://www.greaterthan.org/get-prep/>
- ▶ Provider in the DFW
  - ▶ Tarrant County Public Health
  - ▶ Uptown Physician Group
  - ▶ AIDS ARMS Peabody Health Center



# PEP

## Post-exposure prophylaxis

- ▶ PEP is an antiretroviral medication or ART for patients who were potentially exposed to HIV
- ▶ PEP must be started within 72 hours after exposure to be effective
- ▶ PEP is taken once or twice daily for 28 days
- ▶ In clinical trials PEP was 70 percent effective

# Who should take PEP

- ▶ Exposed to HIV during sex
  - ▶ Broken or no condom use
- ▶ Sexually assaulted
- ▶ Sharing needles
- ▶ Health Care worker exposed by Needle stick or other methods
- ▶ Clinicians with questions can call the PEPLine at 1-888-448-4911

# Resources

- ▶ AIDS.gov - <https://www.aids.gov/hiv-aids-basics/>
- ▶ CDC- HIV/AIDS- <https://www.cdc.gov/hiv/basics/index.html>
- ▶ CDC-PrEP- <https://www.cdc.gov/hiv/basics/prep.html>
- ▶ CDC-PEP- <https://www.cdc.gov/hiv/basics/pep.html>
- ▶ Greater than AIDS- <https://www.greaterthan.org/>
- ▶ Truvada- [https://start.truvada.com/?\\_ga=1.135404470.669163137.1484857134](https://start.truvada.com/?_ga=1.135404470.669163137.1484857134)
- ▶ Department of State Health Services HIV-STD program- <http://www.dshs.texas.gov/hivstd/>
- ▶ Department of State Health Services Laws, Rules, and Authorization- <http://www.dshs.texas.gov/hivstd/policy/laws.shtm>
- ▶ Department of State Health Services PrEP- <http://www.dshs.texas.gov/hivstd/prep/>
- ▶ AIDS Information- <https://aidsinfo.nih.gov/>



