HIV & AIDS & STD/STI

OKLAHOMA State Department of Health

HIV & AIDS

OKLAHOMA State Department of Health



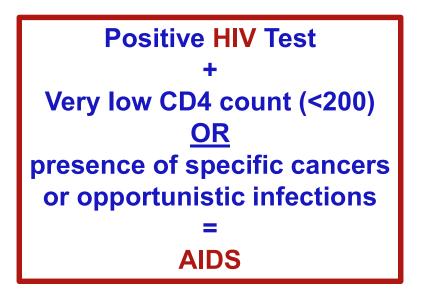
Human Immunodeficiency Virus

- A virus spread through body fluids and affects specific cells of the immune system, called CD4 cells or T cells.
- A virus that kills the CD4 cells (T cells) damaging the immune system.
- A virus that replicates inside the human body, so it must invade a healthy cell in the body to survive.



What is AIDS?



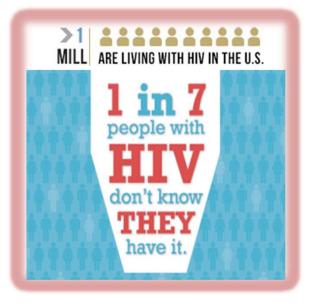


- AIDS occurs in the late stages of the HIV infection process.
- Once diagnosed, the body has a **hard time fighting** diseases and certain cancers.
- **<u>NO cure</u>** for AIDS, but there is **treatment**.

Why is This Important? In the U.S. (2018)

• 36,400 people diagnosed with HIV.

• 17,032 people diagnosed with AIDS.





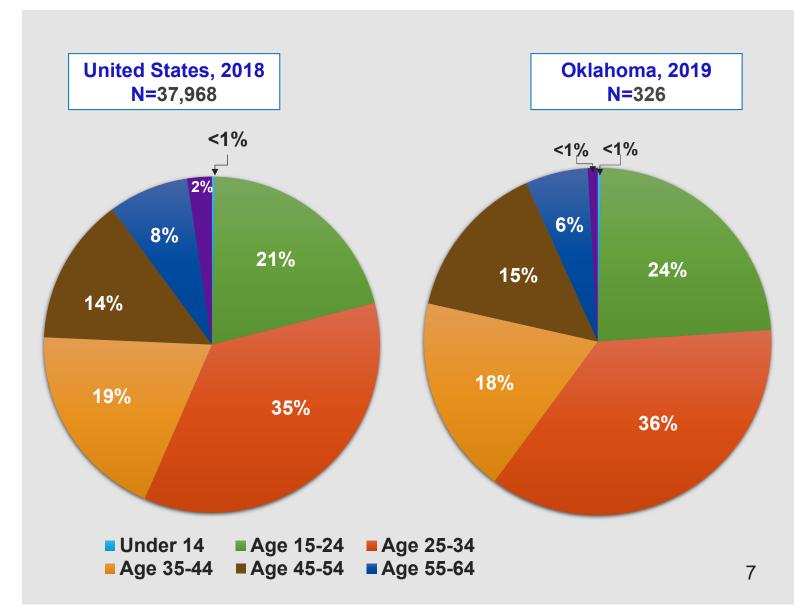


True or False?

- 1. I'm HIV-positive, now my life is **OVER**.
- 2. I CAN get HIV by being around people who are HIV-positive.
- 3. I would **NOT** be able to tell if my partner or I were HIV-positive.
- 4. I CANNOT get HIV from mosquitos.
- 5. I'm straight and don't inject drugs, so I **CANNOT** get HIV.
- 6. I CAN get HIV from oral sex.
- 7. My partner and I are both HIV-positive, so there is **NO NEED** to use condoms.

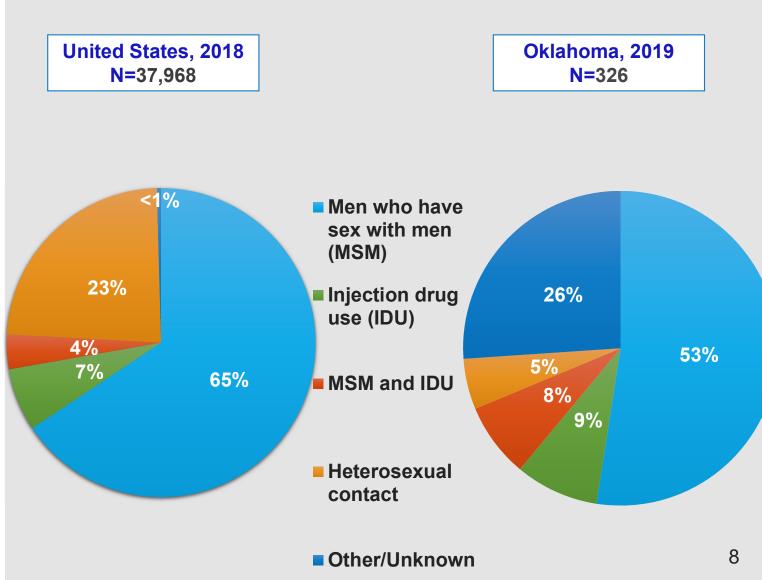


Diagnoses of HIV Cases, by Age



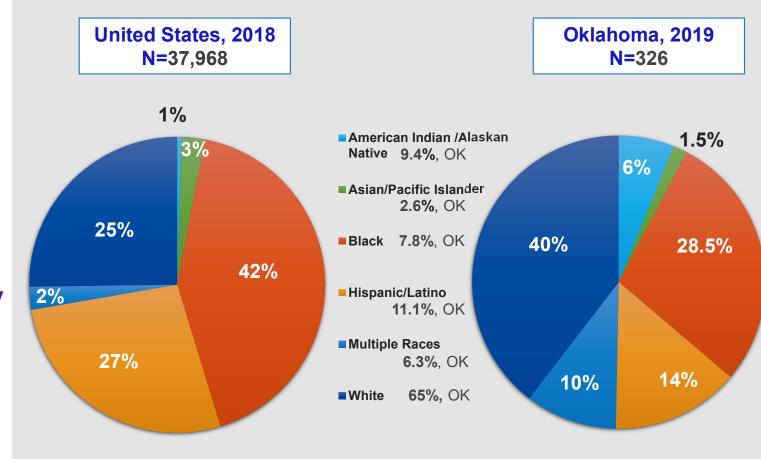


Diagnoses of HIV Cases, by Transmission





Diagnoses of HIV Cases, by Race/Ethnicity





9



HIV is passed from person to person through the exchange of body fluids. <u>3 Ways</u>:

1. <u>Unprotected sex</u> (anal, vaginal, or oral) with People Living With HIV (PLWH)

2. <u>Blood to blood contact</u>

3. Exposure to HIV <u>before or during birth</u> or <u>through breastfeeding</u>



What Fluids Can Transmit HIV?





How does HIV Enter the Body?

Mouth	Vagina
Nose	Penis
Eyes	Anus
Open	Skin



Symptoms of HIV

Many people who have HIV have NO symptoms at all for <u>10</u> years or more.

It is estimated <u>300,000-500,000 people</u> in U.S. have HIV, but do not know it.

Symptoms vary from person to person. Some people who have HIV report having flu-like symptoms 2-4 weeks

after exposure.



13

Viral Load & CD4 Count

CD4 (T4) Count

Number of <u>white blood</u> <u>cells</u> in the blood

Viral Load Amount of <u>HIV</u> in the blood THE HIGHER YOUR CD4 COUNT, THE BETTER Able you are to fight hiv and other infections.

Your CD4 count helps show how well

your immune system is working.



Window Period

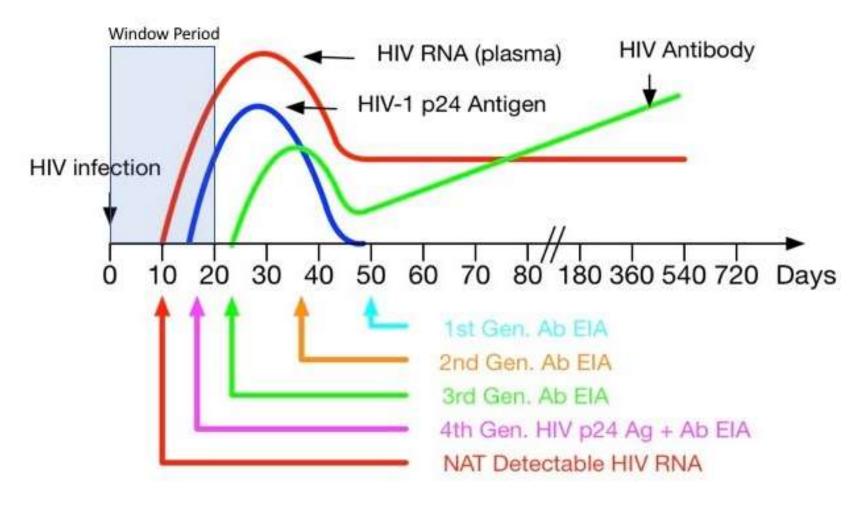


The period of time after someone may have been exposed to HIV, but before a test can detect it (up to 3 months).

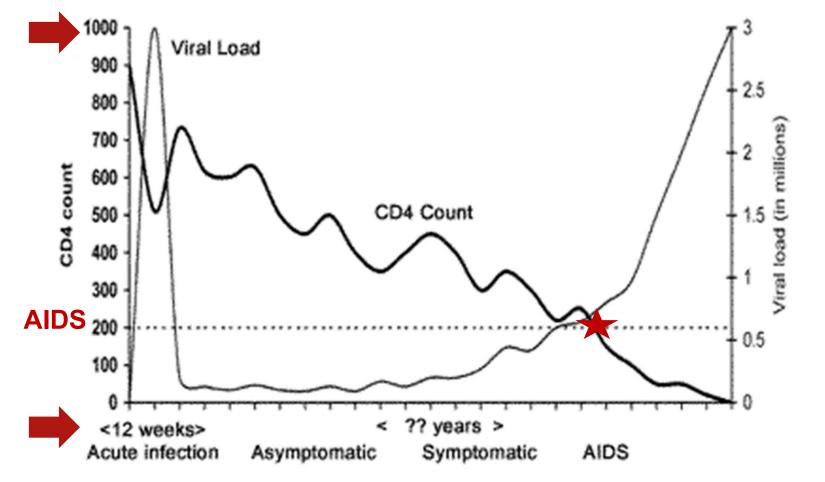
IMMEDIATELY INFECTIOUS



What is the Window Period ?



Viral Load & CD4 Count Graph



17

What does a HIV Test Mean?



- •HIV antibody found.
- Have the virus and can pass to others.
- •Need to begin treatment immediately.



- No HIV antibody found.
- <u>May</u> not have HIV (consider the window period).
- <u>Retest</u> in three months.



Opportunistic Infections (Ols)

People with healthy immune systems can be exposed to certain viruses and have no reaction. HOWEVER... PLWH can face serious threats from the same viruses.

Opportunistic Infections (OIs) are infections that occur more frequently and are more severe in individuals with weakened immune systems including people living with HIV.









The presence of a STI increases the possibility of

Acquiring HIV & Transmitting HIV.

<u>WHY</u>?

Compromised immune system
 Additional STIs

Irritation/inflammation of mucus membranes



HIV Treatment Newly Diagnosed? START TREATMENT!



<u>Treatment benefits</u> your own health and the health of others

Because of **better treatments**, PLWH are now **living longer** and with a **better quality of life** than ever before.



Treatment as Prevention

PLWH with an undetectable viral load cannot transmit HIV to others!

BUT, Medication CAN be:

Expensive - \$379,668 Lifetime (60% discount) (\$597,300 undiscounted)

Complicated - may take **multiple pills** at different times of the day

Toxic - negative **side effects** may occur

Ineffective - not all strains **respond** the same



U=U <u>UNDETECTABLE = UNTRANSMITTABLE</u>

- ✓ Launched in 2016 by PLWH.
- Promotes control of HIV by preventing HIV transmission, and reducing stigma towards PLWH.
- VPLWH and taking ART are considered undetectable when levels of virus in the body are too low to detect, by lab tests.*
- As long as people stick to their treatment and are consistently monitored, PLWH are unable to transmit virus to others, after 6 months of viral suppression, through sex.



*The person still has HIV.



Reducing the Risk

NO RISK

Abstinence from Sex

Abstinence from Injection Drugs

Mutual Monogamy w/Negative Partner

REDUCED RISK



Protected Sex "Correctly and Consistently" Fewer Sexual Partners Never Sharing Needles or "Works" Regular HIV/STI Testing



PrEP

Pre-Exposure Prophylaxis (PrEP): daily medicine can prevent HIV from making copies of itself in the body.

PrEP is only prescribed for people who are HIV-negative and who are at <u>ongoing substantial risk</u> of getting HIV.

PrEP reduces the risk of getting HIV when taken consistently:

- ✓ by about <u>99%</u> through sex
- ✓ at least <u>74%</u> among People Who Inject Drugs (PWID)





PEP

<u>Post-Exposure Prophylaxis (PEP)</u>: a 28-day regimen of HIV medicine, started within 72 hours, of possible exposure to HIV to prevent the virus from making copies of itself in the body.

- PEP is only prescribed for HIV-negative individuals who believe they were exposed to HIV, such as, during sex, shared needles (works), or were sexually assaulted.
- PEP is effective in preventing HIV, but not 100%.
 - ✓ Every time use condoms.
 - Always use safe injection practices.





PrEP

What is PrEP?

- Pre-Exposure Prophylaxis (PrEP) when taken daily, by people who are HIV negative, can reduce the risk of getting HIV from sex by over 90%, and reduces the risk by more than 70%, among people who inject drugs.
- PrEP works by preventing HIV from entering and using the immune system to spread throughout your body.

The risk of getting HIV can be lowered even further by taking PrEP and using condoms. Who Needs PrEP?

PREP MAY BE HELPFUL IF:

You identify as a gay or bisexual male, or a man who has sex with men, AND

- · Have a HIV positive sex partner,
- · Have multiple sex partners, or a sex partner with multiple sex partners (including people who may exchange sex for money, drugs or life needs),
- · Have anal sex without a condom (both as the receiver and giver), or
- Have recently had a STD/STI (in last 6 months).

You identify as a heterosexual male or female, AND ...

- · Have a HIV positive sex partner, Have a HIV positive sex partner and are considering getting pregnant, • Have multiple sex partners, or a partner with
- multiple sex partners (including people who may exchange sex for money, drugs or life needs), or Do not <u>always</u> use a condom during sex with people who inject drugs, men who have sex with
- men or a sex partner with unknown HIV status.

You use injection drugs, AND...

- Share needles or equipment used to inject drugs, also called "works" (in last 6 months), Have been in drug treatment (in last 6 months),
- · Identify with any of the additional items listed
- above.

For more information visit: https://www.cdc.gov/hiv/risk/prep/index.html

What is PEP?

PEP

- Post-Exposure Prophylaxis (PEP) is used to prevent HIV after possible exposure to the virus. PEP must be started within 72 hours of the expo-
- PEP is effective in preventing HIV, but not 100%.

Who Needs PEP? IF, IN THE LAST 72 HOURS,

- YOU HAVE:
- Possibly been exposed to HIV during sex (for example - a condom broke during sex with a partner who is living with HIV),
- Shared needles and/or works to prepare drugs, or
- · Have been sexually assaulted, then

Talk to a healthcare provider or emergency room care provider about starting PEP.

×

https://www.cdc.gov/hiv/risk/pep/index.html

Visit a Healthcare Provider

You must be HIV negative to use PrEP or PEP. If you think PrEP or PEP may be right for you, a healthcare provider can provide more information on the cost, how to use it, and how to avoid activities which may lead to HIV exposure.



PrEP

- Ashley N. Muckala, DO | Internal Medicine 900 N Porter Ave, Ste. 310, Norman, OK 73071 | 405-366-7373 Clifford Wlodaver, MD | Internal Medicine & Infectious Disease 8121 National Ave, Ste. 310, Midwest City, OK 73110 | 405-737-3100
- Faith Family Physicians | Waddah Nassar, MD; Janie Howard, PA-C; Susan Ogden, ARNP 7221 W Hefner Rd, Oldahoma City, OK 73162 | 405-470-6900
- Fulcrum Clinic | Mark G. Fergeson, FNP | fulcrum-clinic.com 1601 W 89th St, Ste. D-100, Oklahoma City, OK 73159 | 405-546-7888
- OU Health Sciences Center Infectious Diseases Institute (IDI)
 OU Health Sciences Center Infectious Diseases Institute (IDI) ton L Young Blvd, Suite 430, Oklahoma City, OK 73104 | 405-2
- Oklahoma City Indian Clinic | Must have a CDIB Card from a Federally Recognized Tribe for Services. 4913 W Reno Ave, Oklahoma City, OK 73127 | 405-948-4900
- Rapid Start-OSDH | April Jewell, APRN-CNP, AAHIVS; Ameika Miller, APRN-CNP sase email your request to RapidStart health.ok.gov or call -632-8400
- SSM Health St. Anthony Healthplex | Terry Rimmer, MD | www.ssmhealth.com 13401 N Western Ave, Ste. 200, Oklahoma City, OK 73114 | Phone: 405-252-3450 Fax: 405-252-3499
- Diversity Family Health | Russell Rooms, APRN-CNP | www.diversityfamilyhealth.com 1211 N Shartel Ave. Ste. 606, Oldahoma City, OK 73103 | Phone: 405-848-0026
- Guiding Right, Inc. | Jennifer Le, APRN, FNP-C | www.guidingright.org 1420 NE 23rd St. Okłahoma City, OK 73111 | Phone: 405-703-0771 242 NW 39th St. Okłahoma City, OK 73112 | Phone: 405-601-7686
- Healing Hands Health Care Services | Pyria Samant, MD | www.communityhealthok.org 411 NW 11th St. Oklahoma City, OK 73103 | Phone: 405-272-0476
- Infectious Diseases Consultants of OKC | Andrea Scott, DO 4221 S Western Ave, Oklahoma City, OK 73109 | 405-644-6464
- Mary Mahoney Memorial Health Center | Tierra Page, APRN-CNP | www.communityhealthok.org 12716 NE 36th St. Spencer, OK 73084| Phone: 405-769-3301
- New Hope Wellness Center | Jennifer Le, APRN, FNP-C | www.nhwellnesscenter.org 2809 NW 31st St. Oklahoma City, OK 73112 | Phone: 405-730-0771
- OU Family Medicine | Shawn Fitzgerald, DO 900 NE 10th St, Oklahoma City, OK 73104 | 405-271-4311
- Perry A. Klaassen Family Medical Center | Mac Boatner, PA | www.communityhealthok.org Metro Technology Center: 1901 Springlake Dr., Oklahoma City, OK 73111 | 405-419-9800
- Planned Parenthood Great Plains 619 NW 23rd St, Oldahoma City, OK 73103 | 405-528-2157 3431 S Blvd, Ste. 108, Edmond, OK 73013 | 405-348-9904
- Variety Care | Phillip Burke, PA-C, MBA, RHIA | VarietyCare.org/you 4000 W Reno Ave. Oklahoma City, OK 73139 | 405-632-6688

Central Oklahoma

Updated February 17, 2021

MAY PRESCRIBE PrEP MAY PRESCRIBE PrEP & PEP If this information needs to be updated, please contact us at condoms@health.ok.gov or 405-426-8400.

PEP

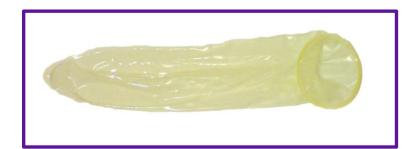


27

External (Male) Condoms

More than 98% effective when used <u>correctly</u> and <u>consistently</u>







Latex: Most common and effective Non-Latex: Polyurethane, Polyisoprene Natural Membrane: Lambskin (not protect against HIV and STIs)



Incorrect External Condom Use 1

<u>DO NOT</u>:

- Reuse a condom.
- Use **expired** condoms.
- Unroll the condom **before** putting it on the penis.
- Leave condoms in hot or extreme cold places (wallet, car, etc).







Incorrect External Condom Use 2

DO NOT:

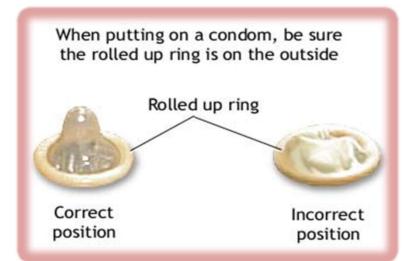
- Use oil-based products (baby or cooking oils, hand lotion, Vaseline, or natural oils, i.e. coconut oil) as lubricants with latex condoms.
- Use your **fingernails**, **scissors or teeth** to open the wrapper.
- Use more than one condom at a time, including an internal AND external condom ('double wrapping').





30

Correct External Condom Use



- Keep condoms in a cool, dry place.
- Put condom on an erect/hard penis before genital contact.
- Hold the condom in place at the base of the penis **before** withdrawing (pulling out), after sex.
- Throw the condom away after it has been used.
- Use lubrication to reduce potential tears.
 - <u>Water-based</u> or <u>Silicone</u> and apply as often as needed

Internal (Female) Condom



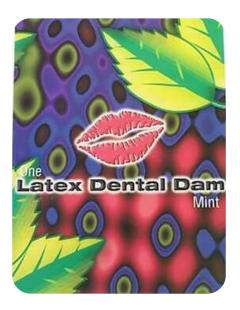


- Worn inside the vagina or anus
- Thicker, more tear-resistant
- Always latex-free
- Wider opening covers more of the external area



Dental Dams





- Thin, square pieces of latex
- Used for oral sex (NOT on a penis)
- Could make your own dental dam (from a condom, latex glove, or <u>non-microwavable</u> plastic wrap)



Where to Get Tested?

https://gettested.cdc.gov www.stdcheck.com www.gytnow.org





Community-Based Organizations

Local Health Departments www.health.ok.gov

Check out these Apps: "STI Info, Symptoms & Testing" "STI Testing Centers Locator"



Resources

<u>www.cdc.gov</u> <u>www.health.ok.gov</u> <u>www.hiv.gov</u> <u>www.healthfinder.gov</u> <u>www.plannedparenthood.org</u> <u>www.sexetc.org</u> www.gytnow.org www.stophiv.org www.asexualhealth.org www.iwannaknow.org www.nakedtruth.org www.rhtp.org

Oklahoma HIV/AIDS Hotline: 1-800-535-2437







STI/STD

OKLAHOMA State Department of Health



What is an STI/STD?

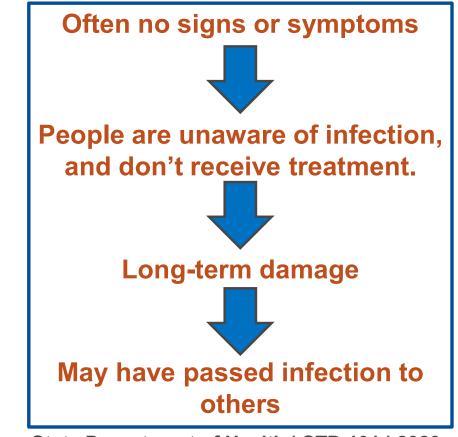
an infection that can be transmitted through sexual contact with an infected individual. They are sometimes called sexually transmitted infections (STIs).

STDs can be transmitted many different ways, but most can be passed by:

- 1. Vaginal sex
- 2. Anal sex
- 3. Oral sex
- 4. Skin-to-skin contact
- 5. Infected Mother to child



Why Is This Important?



Oklahoma State Department of Health | STD 101 | 2020

20 million new infections every year in the U.S.

More than 50% of all people will have an STD at some point in their lifetime.

True or False?

- 1. You CANNOT get an STI from oral sex.
- 2. Birth control protects against pregnancy and STIs.
- 3. Once you've had an STI, you CANNOT get it again.
- 4. Anal sex has a higher risk of spreading STIs than many other types of sexual activity.
- 5. You CANNOT get an STI if your partner is a virgin.
- 6. Only promiscuous or "trashy" people get STIs.
- 7. You CANNOT have two STIs at once.
- 8. You can get an STI from a toilet seat.
- 9. Women are more likely to get tested for STIs.
- **10. Lesbians CANNOT get STIs.**

11. If my partner has an STI, I'll know/see it. % Oklahoma State Department of Health | STD 101 | 2020

Are STDs Curable?

Antibiotics can cure bacterial STDs, but cannot reverse the long-term damage:

- Chlamydia
- Gonorrhea
- Syphilis
- Trichomoniasis*
 - * (parasitic protozoan)

👯 Oklahoma State Department of Health | STD 101 | 2020

Treatment can improve the lives of many people living with <u>viral</u> STDs, but there is NO CURE.

- HIV
- Herpes
- HPV
- Hepatitis B

Chlamydia

In the U.S.

Most frequently reported STD

• Estimated 1.76 million new cases in 2018 Could fill the OU Football Stadium 20x.

How is it Spread?

- 1. Vaginal, anal, or oral sex with someone who has chlamydia.
- 2. Infected pregnant women can pass it to their baby during pregnancy or childbirth.

Chlamydia

The "Silent" Disease!!!

Possible symptoms include:

- Abnormal vaginal/penile discharge
- Burning sensation when urinating
- Rectal pain, discharge, or bleeding
- Pain/swelling in one or both testicles (less common)

Can lead to:

- Sterility or infertility
- Infection of tube that carries sperm to/from the testicles (pain and/or fever)
- Pelvic Inflammatory Disease (PID)
 - Long-term abdominal/pelvic pain
 - Scar tissue formation in fallopian tubes
 - Ectopic pregnancy

Gonorrhea

In the U.S.

- 2nd most common disease reported
- Estimated 583,405 new cases in 2018

How is it Spread?

- 1. Vaginal, anal, or oral sex with someone who has gonorrhea.
- 2. A pregnant woman can give the infection to her baby during childbirth.

Gonorrhea Symptons

Possible symptoms include:

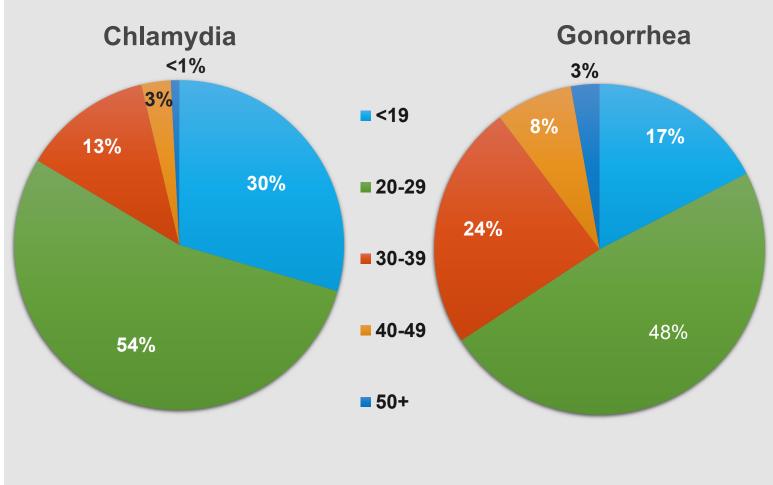
- Painful or burning sensation when urinating
- Abnormal vaginal/penile discharge (white, yellow, or green)
- Rectal discharge, itching, soreness, bleeding
- Vaginal bleeding between periods
- Painful or swollen testicles (less common)

Can lead to:

- Sterility or infertility
- Disseminated infection (rash, arthritis, fever, meningitis, etc.)
- Painful infection of tubes attached to the testicles
- Pelvic Inflammatory Disease (PID)
 - Scar tissue formation in fallopian tubes
 - Ectopic pregnancy
 - Inability to get pregnant
 - Long-term pelvic/abdominal pain

Diagnoses of Chlamydia and Gonorrhea **Cases in** Oklahoma, by Age

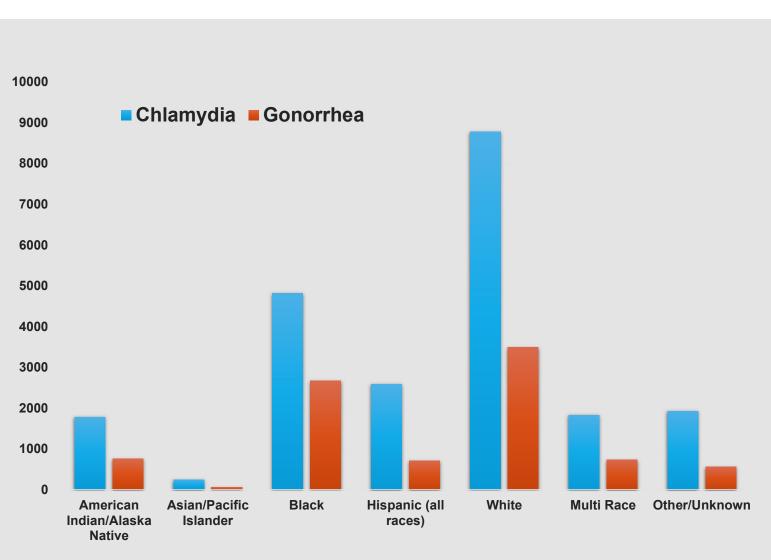
Oklahoma State Department of Health | STD 101 | 2020



46

Diagnoses of Chlamydia and Gonorrhea Cases in Oklahoma, by Race/Ethnicity





47

Primary & Secondary Syphilis

"The Great Imitator" affected approximately 35,063 people in 2018 in the U.S.

How is Syphilis Spread?

- Direct contact with a syphilis sore (chancre) during vaginal, anal, or oral sex.
- Can be spread from an infected mother to her unborn baby.



Primary Syphilis

Chancre - syphilis sore

• Firm, round, and painless



- Appears within 2-6 weeks after exposure usually but possibly up to 3 months
- Found on the part of the body exposed to the infection (penis, vagina, anus, lips, in rectum, or in mouth)
- Typically disappear after a few weeks without treatment (still progresses to next stage)

Secondary Syphilis

- Appears about 4 weeks after chancre heals.
- Will go away without treatment, but infection will progress.







non-itchy RASH with rough red or reddish brown spots

Alopecia or patchy hair loss

Mucous Patches usually in the mouth, vagina, or anus

Condylomata lata (C. lata) or "fleshy warts" in anogenital region

Late (Tertiary) Syphilis

Typically Occurs 10-30 years after infection begins!

- Can damage almost any part of the body including the heart, brain, spinal cord, eyes and bones
- Can result in mental illness, blindness, deafness, heart disease and death
- Gumma: soft, gummy tumor

Types

- Cardiovascular Syphilis
- Late Benign Syphilis
- Neurosyphilis Syphilis
 - occurs sooner among HIV co-infected







Congenital Syphilis

40% will be stillborn or die in the hospital.

Transmission can occur during any stage of syphilis and during any trimester of pregnancy.

Can cause:

- Prematurity
- Birth defects
- Hutchinson's teeth
- Osteochondritis
- Developmental delays







Trichomoniasis

Estimated 3.7 million in United States

Parasite passed during vaginal sex. 70% of infected people have <u>no signs/symptoms.</u>

Possible symptoms include:

- Itching, burning, redness or soreness of the genitals
- Burning with urination or ejaculation
- Thin discharge: can be clear, white, yellowish, or greenish Can produce unusual or foul smell

Infection usually occurs:

• Lower genital tract (vulva, vagina, penis or urethra)

Greatly increases the risk of getting/spreading other STIs. Oklahoma State Department of Health | STD 101 | 2020

Genital Herpes (HSV-1 and HSV-2)

How is it Spread?

Vaginal, oral, or anal sex OR skin-to-skin contact with someone who has the virus.

Symptoms:

• One or more blisters on or around the genitals, rectum, or mouth.

- Blisters break & leave painful sores that take weeks to heal.
 - Symptoms are sometimes called "Having an outbreak".

Usually characterized by NO or very mild symptoms... NO CURE.

1 in 8 people aged 14-49 years old have genital herpes. Many Do Not Know It.

Human Papillomavirus (HPV)

- Mainly transmitted through <u>vaginal & anal sex</u>, but can also occur through oral sex and skin-to-skin contact.
 - Most people with HPV do not know they are infected and never develop symptoms or health problems.
 - There is No treatment for HPV, but, there are treatments for the health problems that HPV causes:
 - Genital warts
 - Cervical pre-cancer
 - Other HPV-related cancers

HPV is VERY common.

Estimated 80% sexually-active men and women will get at least one type of HPV at some point in their lives.

Hepatitis

"Inflammation of the liver"

	Hepatitis A	Hepatitis B	Hepatitis C
How is it spread?	Person ingests infected <u>fecal matter</u> —even in very small amounts— from contact with contaminated objects, food, drinks.	Blood, semen, or other body fluids from a person with the virus - even in very small amounts - enters the body of a non-infected person.	<u>Blood</u> from a person infected with the virus - even in very small amounts - enters the body of a non-infected person.
How long does it last?	A few weeks to several months.	Mild illness (a few weeks) but Lifelong or chronic condition.	Mild illness (a few weeks) but Lifelong.
How serious is it?	Most recover from mild illness with no lasting liver damage, but death can occur (although rare).	15-20% develop chronic liver disease including cirrhosis, liver failure, or liver cancer.	75-85% develop chronic liver disease, 5-20% develop cirrhosis and 1-5% will die.

State Department of Health | STD 101 | 2020

Reducing the Risk

NO RISK

Abstinence from Sex

Abstinence from Injection Drugs

Mutual Monogamy w/Negative Partner

REDUCED RISK



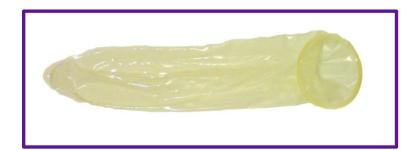
Protected Sex "Correctly and Consistently" Fewer Sexual Partners Never Sharing Needles or "Works" Regular HIV/STI Testing



External (Male) Condoms

More than 98% effective when used <u>correctly</u> and <u>consistently</u>







Latex: Most common and effective Non-Latex: Polyurethane, Polyisoprene Natural Membrane: Lambskin (not protect against HIV and STIs)



Incorrect External Condom Use 1

<u>DO NOT</u>:

- Reuse a condom.
- Use **expired** condoms.
- Unroll the condom **before** putting it on the penis.
- Leave condoms in hot or extreme cold places (wallet, car, etc).







Incorrect External Condom Use 2

DO NOT:

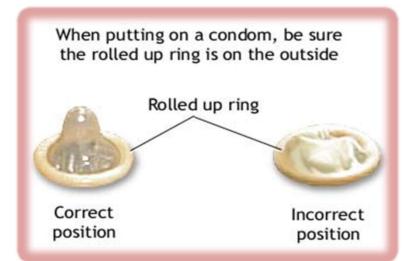
- Use oil-based products (baby or cooking oils, hand lotion, Vaseline, or natural oils, i.e. coconut oil) as lubricants with latex condoms.
- Use your **fingernails**, **scissors or teeth** to open the wrapper.
- Use more than one condom at a time, including an internal AND external condom ('double wrapping').





60

Correct External Condom Use



- Keep condoms in a cool, dry place.
- Put condom on an erect/hard penis before genital contact.
- Hold the condom in place at the base of the penis **before** withdrawing (pulling out), after sex.
- Throw the condom away after it has been used.
- Use lubrication to reduce potential tears.
 - <u>Water-based</u> or <u>Silicone</u> and apply as often as needed

Internal (Female) Condom



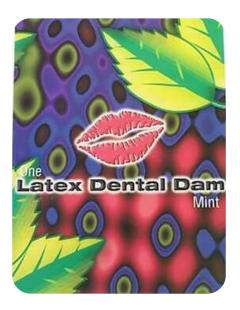


- Worn inside the vagina or anus
- Thicker, more tear-resistant
- Always latex-free
- Wider opening covers more of the external area



Dental Dams





- Thin, square pieces of latex
- Used for oral sex (NOT on a penis)
- Could make your own dental dam (from a condom, latex glove, or <u>non-microwavable</u> plastic wrap)



Where to Get Tested?

https://gettested.cdc.gov www.stdcheck.com www.gytnow.org





Community-Based Organizations

Local Health Departments www.health.ok.gov

Check out these Apps: "STI Info, Symptoms & Testing" "STI Testing Centers Locator"



Resources

<u>www.cdc.gov</u> <u>www.health.ok.gov</u> <u>www.hiv.gov</u> <u>www.healthfinder.gov</u> <u>www.plannedparenthood.org</u> <u>www.sexetc.org</u> www.gytnow.org www.stophiv.org www.asexualhealth.org www.iwannaknow.org www.nakedtruth.org www.rhtp.org

Oklahoma HIV/AIDS Hotline: 1-800-535-2437





