

Sexually Transmitted Infections (STIs):  
What a nurse should know

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**Overview**

1. Importance of STIs in healthcare
2. Taking a sexual health history
2. Review of common STIs
3. Prevention of STIs

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**Importance of STIs**

20 Million new infections every year in the US

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

There's an upswing in cases of Chlamydia, Gonorrhea and Syphilis in the US and it includes older adults

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graph TD; A[Often no signs or symptoms] --> B[People are unaware of infection, and don't receive treatment.]; B --> C[Long-term damage]; C --> D[May have passed infection to others];
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All sexually active people are at risk for STIs

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**Anyone can get an STI, but some groups are more affected**

- \* Young persons aged 15-24
- \* Pregnant People
- \* Gay, bisexual and other men who have sex with men
- \* Racial and ethnic minority groups

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**NO Risk**

- \* Abstinence (sex): not having oral, vaginal or anal sex
- \* Abstinence (drugs): not using drugs (HIV, HCV). No genital contact since some are spread by touch (HPV, HSV)
- \* Mutual monogamy between non-infected partners

**Reduced Risk**

- \* Protected sex: "correct and consistent" use of condoms/barriers
- \* Regular HIV/STI testing: at least once a year
- \* Fewer sexual partners
- \* Never sharing needles or "works" (HIV, Hepatitis)
- \* Disease preventable vaccines
- \* PrEP to prevent HIV
- \* DoxyPEP to prevent chlamydia gonorrhea & syphilis

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**Get Tested!**

<b>HIV</b>	<b>Chlamydia &amp; Gonorrhea</b>	<b>Syphilis</b>
<ul style="list-style-type: none"> <li>Everyone aged 15-64 should get tested at least once</li> <li>People who have occasional exposure to HIV risks=at least once a year</li> <li>People who are at high risk for HIV infection=3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>Age 24 or younger and having sex=once every year</li> <li>Age 25 or older=if you have had more than one sex partner or with a new sex partner</li> </ul>	<ul style="list-style-type: none"> <li>if you are pregnant</li> <li>Are a man who has sex with other men (MSM)</li> <li>Have sex for drugs or money</li> <li>Have HIV or another STI</li> <li>Had sex with someone who tested positive for syphilis</li> </ul>

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**Taking a Sexual History**

- Create a welcoming environment (Name/preferred pronouns/sexual orientation/gender identity)
- Establish rapport and consent before addressing sensitive topics
- Avoid moral or religious judgement
- Respect the patients right to decline answering questions/sharing information
- Use a sensitive tone
- Avoid terms that make assumptions about sexual behavior or orientation (e.g. "How many partners have you had in the past year?" rather than "Are you monogamous?")
- Start with "May I ask you a few questions about your sexual health and sexual practices?" I understand that these questions are personal, but they are important for your overall health.

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**The Five P's**

- Partners:** Do you have sex with men? women? Transgender person? How many sexual partners have you had sex within the past month? Past year? Lifetime?
  - Could any of your sexual partners have been in another sexual relationship while they were with you?
- Practices:** What type of sexual activity do you engage in? What parts of the body are involved when you have sex?
  - Receptive or insertive anal sex? Top or bottom ? Versatile?
  - Receptive or insertive oral sex?
  - Receptive or insertive vaginal sex?
  - Receptive or insertive analingus? Use of sex toys.
- Protection:** Do you use condoms? Do you use condoms with sex workers?
- Pain/Problems:** Have you or your partners used drugs?
- Partner's Health:** Have you exchanged sex for your needs (money, housing , drugs, etc?)

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### The Five P's Continued

**3. Protection from STIs:** Need to determine appropriate level of risk reduction counseling for each patient: (mutually monogamous, abstinence, not having sex, number of sex partners, condom use, the patient's perception of their own risk and their partner's risk and STI testing. It is important not to assume risk or lack of risk for any patient.

Do you and your partner(s) discuss STI prevention or talk about sexual health?

If you use prevention tools, what methods do you use? Condoms? (male/female), dental dams, if use condoms, how often do you use them? Every time? Sometimes? Rarely? Never?

What makes you not use a condom in situations? When you have sex do you use alcohol? Marijuana? Crystal Meth/Heroin/ecstasy/etc.

Are you aware of PrEP? DoxyPEP? Have you received HPV, Hepatitis A, or Hepatitis B vaccinations?

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### The Five P's Continued

**4. Past History of STIs:** Have you ever been tested for STIs/HIV? Would you like to be tested?

Have you been diagnosed with an STI in the past? When? Did you get treatment?

Have you had any symptoms that keep coming back?

Has your current partner or any former partners ever been diagnosed or treated for an STI?

Were you tested for the same STIs?

Do you know your partner(s) HIV status?

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### The Five P's Continued

**5. Pregnancy Intention:** Do you think you would like to have (more) children in the future?

How important is it to you to prevent pregnancy (until then)?

Are you or your partner using contraception or practicing any form of birth control?

Would you like to talk about ways to prevent pregnancy?

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### Are STIs Curable?

Antibiotics can cure BACTERIAL STIs but cannot reverse the long-term damage if any.

- Chlamydia
- Gonorrhea\*
- Syphilis
- Trichomoniasis
- Mycoplasma genitalium
- BV\*\*

\* While gonorrhea is curable with antibiotics, a growing number of strains are non-resistant to PCN and other drugs used in treatment.

\*\* BV are not listed as STIs but are associated with other STIs

Treatment can improve the lives of many people living with VIRAL STIs, (but no cure)

- HIV
- Herpes
- HPV
- Hepatitis B
- Hepatitis C-Cure available
- Hepatitis A-self limiting but can cause significant morbidity/mortality

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### Expedited Partner Treatment

- EPT is the clinical practice of treating the sex partners of patients diagnosed with chlamydia or gonorrhea by providing prescriptions or medications to the patient to take to his/her partner without the health care provider first examining the partner.
- EPT is an effective treatment option to increase the likelihood of treatment for sex partners, thus reducing re-infection rates and overall, sexually transmitted disease (STD) rates in a community.

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### Chlamydia

Most common reportable bacterial STI in the US

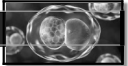
- 1.6M in the US reported in 2021 Know as the Silent Disease typically no symptoms

How is it spread?

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

Testing:

- Anal, Vaginal, Throat swab, Urine



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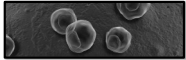
## Chlamydia

**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
- Epididymitis
- Pelvic Inflammatory Disease (PID)
  - Long term abdominal/pelvic pain
  - Scar tissue formation in the fallopian tubes
  - Ectopic pregnancy



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## Chlamydia

**Female: (~66% of infections)**

- 75% of women with chlamydia infections are **asymptomatic**
- The CDC reports that women have reported rates of chlamydia infection 2x higher than men.
- Untreated chlamydia can spread to your uterus and fallopian tubes causing pelvic inflammatory disease (PID).

**Male: (~34% of infections)**

- Men rarely have health problems linked to chlamydia. Infection sometimes spreads to the vas deferens tube that carries sperm from the testicles, causing pain and fever. Rarely, chlamydia can prevent a man from being able to have children.
- Men and women can also get infected with chlamydia in their rectum, either by having receptive anal sex, or by spread from another infected site (such as the vagina). While these infections often cause no symptoms, they can cause:
  - Rectal pain
  - Discharge
  - Bleeding

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## Chlamydia Treatment

Treating prevents adverse reproductive health complications and continued sexual transmission.

**Recommended Regimens for Chlamydial Infection Among Adolescents and Adults**

Doxycycline 100 mg orally 2 times/day for 7 days

**Alternative Regimens**

Azithromycin 1 g orally in a single dose  
OR  
Levofloxacin 500 mg orally once daily for 7 days

<https://www.cdc.gov/std/treatment-guidelines/chlamydia.htm>

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### Gonorrhea

• Most common reportable bacterial STI in the US—710,151 cases in 2021


- Age group 20-24 years had the highest rates of gonorrhea among both males and females

How is it spread?

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

Testing:

- Anal, Vaginal, Throat swab, Urine



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### Gonorrhea

**Asymptomatic OR 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.)
- Pelvic Inflammatory Disease (PID)
  - Scar tissue formation in fallopian tubes
  - Ectopic pregnancy
  - Inability to get pregnant
  - Long-term pelvic/abdominal pain



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### Gonorrhea

Rectal infections of gonorrhea may either cause no symptoms or cause symptoms in both men and women that may include:

- Discharge
- Anal itching
- Painful bowel movements
- Untreated gonorrhea may also increase your chances of getting or giving HIV.
- Rarely, untreated gonorrhea can also spread to your blood or joints.
- Most men and women with gonorrhea do not have any symptoms. When a woman has symptoms, they are often mild and can be mistaken for a bladder or vaginal infection.

- Soreness
- Bleeding



21

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### Gonorrhea Treatment

**Recommended Regimen for Uncomplicated Gonococcal Infection of the Cervix, Urethra, or Rectum Among Adults and Adolescents**

Ceftriaxone 500 mg\* IM in a single dose for persons weighing <150 kg

If chlamydial infection has not been excluded, treat for chlamydia with doxycycline 100 mg orally 2 times/day for 7 days.

\* For persons weighing ≥150 kg, 1 g ceftriaxone should be administered.

**Recommended Regimen for Uncomplicated Gonococcal Infection of the Pharynx Among Adolescents and Adults**

Ceftriaxone 500 mg\* IM in a single dose for persons weighing <150 kg

\* For persons weighing ≥150 kg, 1 g ceftriaxone should be administered.

- ❖ Test of cure is unnecessary for persons with urogenital or rectal gonorrhea
- ❖ Persons with pharyngeal gonorrhea should return 7-14 days from initial treatment for test of cure

<https://www.cdc.gov/std/treatment-guidelines/gonorrhea.htm>

22

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### Trichomoniasis

Most common curable STI in young sexually active women in the U.S.

- Parasite passed during vaginal sex
- 70% of infected people have no signs/symptoms
- Treatment is inexpensive and effective.

How is it spread?

- Vaginal sex with someone who has Trichomoniasis
- Greatly increases the risk of getting or spreading other STIs!
- In pregnant women, Trichomoniasis may lead to a premature delivery.

Testing:

- Vaginal

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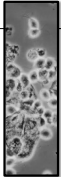
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### Trichomoniasis

**Asymptomatic OR Possible symptoms include:**

- Itching, burning, redness or soreness of the genitals
- Burning with urination or ejaculation
- Thin discharge-clear, white, yellowish, or greenish
  - Can produce unusual or foul smell
  - Infection usually occurs in the lower genital tract (vulva, vagina, penis or urethra)



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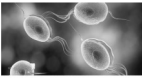
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### Trichomoniasis

- When trichomoniasis does cause symptoms, they can range from mild irritation to severe inflammation.
- Some people with symptoms get them within 5 to 28 days after being infected, but others do not develop symptoms until much later. Symptoms can come and go.
- Having trichomoniasis can make it feel unpleasant to have sex. Without treatment, the infection can last for months or even years.
- It is not common for the parasite to infect other body parts, like the hands, mouth, or anus.
- Trichomoniasis can increase the risk of getting or spreading other sexually transmitted infections.
  - For example, trichomoniasis can cause genital inflammation that makes it easier to get infected with the HIV virus, or to pass the HIV virus on to a sex partner.



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### Trichomoniasis Treatment

- High rate of reinfection among women
- Retesting is recommended for all sexually active women 3 months after initial treatment

<b>Recommended Regimen for Trichomoniasis Among Women</b>
Metronidazole 500 mg 2 times/day for 7 days
<b>Recommended Regimen for Trichomoniasis Among Men</b>
Metronidazole 2 g orally in a single dose
<b>Alternative Regimen for Women and Men</b>
Tinidazole 2 g orally in a single dose

<https://www.cdc.gov/std/treatment-guidelines/trichomoniasis.htm>

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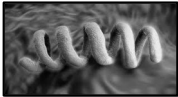
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### Syphilis-

**"The Great Imitator"**

Spread via direct contact with a syphilis sore (chancre) during vaginal, anal or oral sex.

Three phases of syphilis  
 Primary → Secondary → Tertiary



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### Primary Syphilis

- Chancre- syphilis sore
- Firm, round and painless
- Appears within 2-6weeks after exposure (could take up to 3m)
- Found on the part of the body exposed to the infection (penis, vagina, anus, lips, in rectum or in mouth)
- Typically disappears after a few weeks without treatment (still progresses to next stage)



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### Secondary Syphilis

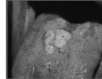
- Appears about 4 weeks after chancre health
- Will go away without treatment, but infection will progress



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 or "fleshy warts" in anogenital region

<https://www.cdc.gov/std/syphilis/default.htm>

29

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### 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
- Cardiovascular Syphilis, Late Benign Syphilis
- Neurosyphilis

<https://www.cdc.gov/std/syphilis/default.htm>

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### Neurosyphilis

- Usually occurs during late syphilis but can occur at anytime during the infection

**Symptoms:**

- Difficulty coordinating muscle movements
- Paralysis(not able to move certain parts of your body)
- Numbness
- Blindness
- Dementia
- Damage to internal organs
- Can result in death

- More likely to occur early in the disease process if HIV infection is also present

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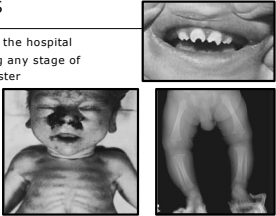
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### Congenital Syphilis

- 40% will be stillborn or die in the hospital
- Transmission can occur during any stage of syphilis and during any trimester

**Can cause:**

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



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### Syphilis Treatment

- Penicillin G, administered parenterally, is preferred drug for treating patients in all stages of syphilis
- Preparation used, dosage, and length of treatment depend on the stage and clinical manifestations of the disease

**Refer pt to ID for diagnosis & treatment**



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**HSV**

- Genital herpes is a chronic, lifelong viral infection
- Two types of HSV can cause genital herpes: HSV 1 and HSV 2
- Most cases of recurrent genital herpes are caused by HSV 2
- Majority of people infected with HSV 2 are undiagnosed, many of whom have mild or unrecognized infections but shed virus intermittently via vaginal, oral or anal sex or skin-to-skin contact
- Many infections are transmitted by persons unaware they have the infection or are asymptomatic when transmission occurs

**Symptoms:**

- One or more blisters on or around the genital, rectum or mouth
- The blisters break and leave painful sores that take weeks to heal

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**HSV-1**

- mainly transmitted by oral-to-oral contact
- periodic appearance of "cold sores" or painful ulcers around the mouth area
- Infected persons will often experience a tingling, itching or burning sensation around their mouth, before the appearance of sores
- can also be transmitted to the genitals through oral-genital contact, leading to genital herpes.



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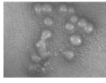
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**HSV-2**



- Women are more susceptible
- Can cause genital herpes (one or more genital or anal blisters or open sores called ulcers)
- Mainly spread during sex through skin-to-skin contact (through contact with genital surfaces, skin, sores or fluids of someone infected with the virus)
- The occasional appearance of painful genital ulcers.
- Symptoms of new genital herpes infections often include fever, body aches, and swollen lymph nodes.
- **There is no cure for herpes.** However, there are medicines that can prevent or shorten outbreaks. One of these herpes medicines can be taken daily and makes it less likely that you will pass the infection on to your sex partner(s).

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**HSV 2 Treatment**

- **First Initial Episode**

**Recommended Regimens\***

Acyclovir† 400 mg orally 3 times/day for 7–10 days  
 OR  
 Famciclovir 250 mg orally 3 times/day for 7–10 days  
 OR  
 Valacyclovir 1 gm orally 2 times/day for 7–10 days

\* Treatment can be extended if healing is incomplete after 10 days of therapy.  
 †Acyclovir 200 mg orally five times/day is also effective but is not recommended because of the frequency of dosing.

<https://www.cdc.gov/std/treatment-guidelines/candidiasis.htm>

37

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**HSV 2 Treatment**

- **Episodic treatment**

**Recommended Regimens for Episodic Therapy for Recurrent HSV-2 Genital Herpes\***

Acyclovir 800 mg orally 2 times/day for 5 days  
 Acyclovir 800 mg orally 3 times/day for 2 days  
 Famciclovir 1 gm orally 2 times/day for 1 day  
 Famciclovir 500 mg once, followed by 250 mg 2 times/day for 2 days  
 Famciclovir 125 mg 2 times/day for 5 days  
 Valacyclovir 500 mg orally 2 times/day for 3 days  
 Valacyclovir 1 gm orally once daily for 5 days

\*Acyclovir 400 mg orally 3 times/day is also effective, but are not recommended because of frequency of dosing.

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**HSV 2 Treatment**

- **Suppressive therapy** reduces frequency of genital recurrences by 70-80% among patients who have frequent recurrences. Often patients reported no symptomatic outbreaks.
- **Quality of life is improved for many patients with frequent recurrences who receive suppressive therapy vs episodic.**

**Recommended Regimens**

Acyclovir 400 mg orally 2 times/day  
 Valacyclovir 500 mg orally once a day†  
 Valacyclovir 1 gm orally once a day  
 Famciclovir 250 mg orally 2 times/day

\* Valacyclovir 500 mg once a day might be less effective than other valacyclovir or acyclovir dosing regimens for persons who have frequent recurrences (i.e., ≥10 episodes/year).

Famciclovir appears somewhat less effective for suppression of viral shedding (47%). Ease of administration and cost also are key considerations for prolonged treatment.

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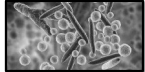
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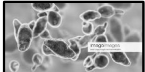
### Mycoplasma Genitalium (M.Gen)

- CDC now considers this an STI
- Transmitted via intercourse
- Can have no symptoms



**Men**

- Watery discharge from penis
- Burning, stinging or pain during urination



**Women**

- Vaginal discharge
- Pain with sex
- Bleeding after sex
- Bleeding between periods
- Pain in pelvic area below belly button

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### Mycoplasma genitalium (M. gen):

A Prevalent, Often Misdiagnosed STI

HOLOGIC

	Trichomoniasis	Bacterial Vaginosis	Yeast Infection	Chlamydia	Gonorrhea	Mycoplasma genitalium
Abnormal Discharge	☑	☑	☑	☑	☑	☑
Vaginal Odor	☑	☑				
Vaginal Irritation	☑	☑	☑	☑	☑	☑
Pain During Urination/sex	☑		☑	☑	☑	☑

- Prevalence ~10% in women<sup>1</sup>
- Rates higher than gonorrhea, and at times as high as chlamydia<sup>2</sup>
- Exhibits similar clinical presentation to trichomonas, chlamydia and gonorrhea<sup>3</sup>

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### M. gen Can Lead to Health Consequences for Females

- Detected in 10-30% of women with clinical cervicitis.<sup>1</sup>
- Identified in up to 22% of pelvic inflammatory disease (PID) cases.<sup>1</sup>
- Persons <34 years of age are the most likely to be affected by M. genitalium.<sup>2</sup>

2x

Twofold increased risk of cervicitis, PID, infertility and adverse pregnancy outcomes with M. genitalium infection.<sup>3,4</sup>

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**M. gen Can Lead to Health Consequences for Males** HOLOGIC

- More likely to exhibit symptoms of an *M. genitalium* infection<sup>1</sup>
- Responsible for 30% of persistent or recurrent urethritis in men<sup>2</sup>
- 73% of *M. gen* positive men show symptoms of urethritis<sup>3</sup>

**25%** *M. gen* present in up to 25% of men with acute NGU and over >33% of men with NONGU<sup>4</sup>

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Medical Education

43

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### Mycoplasma Genitalium

- Nucleic acid amplification test can be performed on

<p><b>Males</b></p> <p>Symptomatic and asymptomatic urethritis Men with recurrent NGU should be tested</p>	<p><b>Women</b></p> <p>Associated with cervicitis, PID, preterm delivery, spontaneous abortion and infertility Women should be tested with recurrent cervicitis, PID</p>
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- No test of cure is recommended

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### M. Gen Treatment

- *M. Genitalium* lacks a cell wall, thus antibiotics targeting cell-wall biosynthesis are ineffective against this organism
- Two-stage therapy approach ideally using resistance-guided therapy

**Recommended Regimens if *M. genitalium* Resistance Testing is Available**

If *macrolide sensitive*: Doxycycline 100 mg orally 2 times/day for 7 days, followed by azithromycin 1 g orally initial dose, followed by 500 mg orally once daily for 3 additional days (2.5 g total)

If *macrolide resistant*: Doxycycline 100 mg orally 2 times/day for 7 days followed by moxifloxacin 400 mg orally once daily for 7 days

**Recommended Regimens if *M. genitalium* Resistance Testing is Not Available**

If *M. genitalium* is detected by an FDA-cleared NAAT: Doxycycline 100 mg orally 2 times/day for 7 days, followed by moxifloxacin 400 mg orally once daily for 7 days

<https://www.cdc.gov/dpdx/mga/clinical/mycoplasma/index.html>

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**Hepatitis** "inflammation of the liver"

	Hepatitis A	Hepatitis B	Hepatitis C
How is it spread?	Person ingests infected <b>fecal matter</b> —even in very small amounts—from contact with contaminated objects, food, drinks	<b>Blood, semen, or other body fluids</b> from a person with the virus - even in very small amounts - enters the body of a non-infected person	<b>Blood</b> 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) - Lifelong or chronic condition	Mild illness (a few weeks) - 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

46

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**Get Tested!**

HIV	Chlamydia & Gonorrhea	Syphilis
<ul style="list-style-type: none"> <li>Everyone aged 15-64 should get tested at least once</li> <li>People who have occasional exposure to HIV risks—at least once a year</li> <li>People who are at high risk for HIV infection= 3-6 months</li> </ul>	<ul style="list-style-type: none"> <li>Age 24 or younger and having sex=once every year</li> <li>Age 25 or older—if you have had more than one sex partner or with a new sex partner</li> </ul>	<ul style="list-style-type: none"> <li>if you are pregnant</li> <li>Are a man who has sex with other men (MSM)</li> <li>Have sex for drugs or money</li> <li>Have HIV or another STI</li> <li>Had sex with someone who tested positive for syphilis</li> </ul>

<https://www.cdc.gov/std/treatment-guidelines/screening-recommendation.htm>

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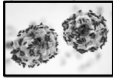
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**Bacterial Vaginitis**

- BV is the most common vaginal condition in women ages 15-44.
- Highly prevalent condition and the most common cause of vaginal discharge
- Replacement of normal hydrogen peroxide and lactic-acid-producing Lactobacillus species in the vagina with high concentrations of anaerobic bacteria (change in natural flora)
- Thin white or gray homogeneous, milk-like discharge and fishy odor are hallmark signs; pain, itching or burning in the vagina; itching around the outside of the vagina.
- Women can also be asymptomatic
- BV increases risk for STI acquisition



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### Bacterial Vaginosis Treatment

- BV associated bacteria can be identified on male genitalia, however treatment of male sex partners has not been beneficial in preventing recurrence.
- BV treatment is recommended for women with symptoms
- Advised to refrain from sexual activity or use condoms during treatment regimen.
- Douching might increase the risk for relapse
- No follow up is required after treatment.

**Recommended Regimens for Bacterial Vaginosis**

Metronidazole 500 mg orally 2 times/day for 7 days  
OR  
 Metronidazole gel 0.75% one full applicator (5 g) intravaginally, once a day for 5 days  
OR  
 Clindamycin cream 2% one full applicator (5 g) intravaginally at bedtime for 7 days

<https://www.cdc.gov/std/bv/default.htm>

49

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### IL STI/STD Reporting

IDPH Reportable Disease Poster

- Must report positive STIs to the local health department within 7 days.
- Inform the pt we are mandated reporters to their local health department should an STI results return confirmed positive.
- Illinois' National Electronic Disease Surveillance System (I-NEDSS) is a secure, Web-based application available to health care providers and other reporters for input of demographic, medical and exposure information on patients diagnosed with reportable conditions.
- Once a report is entered, it is immediately routed to the appropriate local health department for additional follow-up.
- Local Health Departments
- IDPH Confidential Morbidity Report of STDs

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STI Prevention and control strategies

- Abstinence, reduction in number of partners, mutual monogamy, condom use, avoiding drug use, getting tested for STIs.
- Assess risk and educate and counsel individuals regarding ways to avoid STIs through changes in sexual behaviors and use of recommended prevention services.
- Advise pre-exposure vaccination for vaccine preventable STIs (HPV, Hepatitis A, Hepatitis B, Meningitis, MPox)
- Identify individuals with asymptomatic infection and those who have symptoms associated with an STI.
- Diagnose, treat, counsel and follow up with individuals infected with an STI.
- Discuss PrEP and DoxyPEP with at risk individuals.

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**What is PrEP?**

-PrEP, or pre-exposure prophylaxis, is medicine people at risk for HIV take to prevent getting HIV from sex or injection drug use.

-PrEP can stop HIV from taking hold and spreading throughout your body.

-Currently, there are two FDA-approved daily oral medications for PrEP (Truvada and Descovy) and a long-acting injectable form of PrEP (Apretude) has also been approved by the FDA.

-PrEP is highly effective at preventing HIV when taken as indicated.

-PrEP reduces the risk of getting HIV from sex by about 99% when taken as prescribed. Among people who inject drugs, it reduces the risk by at least 74% when taken as prescribed.

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**What is DoxyPEP?**

-DoxyPEP is like the morning after pill that helps prevent STIs in gay men and cisgender women. Instead of preventing pregnancy within hours of unprotected sex, DoxyPEP can prevent STIs such as chlamydia, gonorrhea, and syphilis by two thirds.

-Patients take 200mg of doxycycline within 24hrs but no later than 72hrs after condomless oral, anal or vaginal sex.

-Doxycycline can be taken every day depending on frequency of sexual activity. However, patients should not take more than 200mg within a 24hr period.

-LFTs, renal function and CBC should be checked periodically in patients taking doxycycline for a prolong period. Consider checking these laboratory parameters annually.

-Screen every three months for gonorrhea, and chlamydia at all anatomic sites of exposure, syphilis, and HIV.

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Randomized controlled trials on the use of doxycycline as PEP to reduce bacterial STIs

Design	Participants	Intervention	Primary Outcomes	Findings	Limitations	Quality of Evidence
PRIS 154 Phase 3 (2018)	Men who have sex with men (MSM) at high risk of HIV	Doxycycline 200mg daily for 7 days after sex with a partner	Reduction in HIV incidence	Reduction in HIV incidence (OR 0.19, 95% CI 0.05-0.70) and other bacterial STIs (OR 0.19, 95% CI 0.05-0.70) compared to placebo	Open-label, unblinded	High
Doxycycline 100 mg CAP (2023)	Men who have sex with men (MSM) at high risk of HIV	Doxycycline 100mg daily for 7 days after sex with a partner	Reduction in HIV incidence	Reduction in HIV incidence (OR 0.19, 95% CI 0.05-0.70) and other bacterial STIs (OR 0.19, 95% CI 0.05-0.70) compared to placebo	Open-label, unblinded	High
DOXY-PEP Phase 3 (2023)	Men who have sex with men (MSM) at high risk of HIV	Doxycycline 100mg daily for 7 days after sex with a partner	Reduction in HIV incidence	Reduction in HIV incidence (OR 0.19, 95% CI 0.05-0.70) and other bacterial STIs (OR 0.19, 95% CI 0.05-0.70) compared to placebo	Open-label, unblinded	High
PEP Phase 3 (2024)	Men who have sex with men (MSM) at high risk of HIV	Doxycycline 100mg daily for 7 days after sex with a partner	Reduction in HIV incidence	Reduction in HIV incidence (OR 0.19, 95% CI 0.05-0.70) and other bacterial STIs (OR 0.19, 95% CI 0.05-0.70) compared to placebo	Open-label, unblinded	High

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Thank you!!! Any questions???

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### Resources

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- <https://cookcountypublichealth.org/communicable-diseases/condom-request-form/>
- [https://www.cdc.gov/std/healthcomm/fact\\_sheets.htm](https://www.cdc.gov/std/healthcomm/fact_sheets.htm)
- <https://www.nsvrc.org/organizations/sex-etc>
- <https://www.cdc.gov/std/treatment-guidelines/default.htm>
- <https://www.cdc.gov/std/training/clinicalslides/slides-dl.htm>
- <https://www.cdc.gov/std/treatment/sexualhistory.htm>
- For uninsured or underinsured: <https://findahealthcenter.hrsa.gov/>

58

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### Resources

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- <https://nccc.ucsf.edu/> For clinician to clinician advise
- <https://www.cdc.gov/std/treatment/guidelines-for-doxycycline.htm>
- [https://www.youtube.com/watch?v=2hYvrrK\\_W58](https://www.youtube.com/watch?v=2hYvrrK_W58) on DoxyPEP
- <https://www.cdc.gov/hiv/pdf/library/consumer-info-sheets/cdc-hiv-consumer-info-sheet-pep-101.pdf>
- <https://www.sidemia.com/news/nyu-2023/ulks-vaccine-body-recommends-hiv-hiv-hiv-pep-101.pdf>
- <https://www.nyc.gov/assets/doh/downloads/pdf/std/dear-colleague-doxy-PEP-to-prevent-bacterial-STI-11092023.pdf>

59

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