# Sexually Transmitted Infections

Sexually transmitted infections (STIs) are infections that pass from one person to another during sex.

Most types of sex can spread a STI. It can be penis to vagina sex, penis to anus sex, or oral sex (mouth to penis, mouth to vagina). Sometimes STIs can pass from just rubbing an infected penis or vagina against another person's genitals.

Signs caused by STIs include pain during sex, unusual discharge from the vagina, penis, or anus, or bumps, sores, or blisters on the genitals.

It is very common to have a STI and have no signs at all. Even if there are no signs, the STIs can pass from one person



It is hard to talk about sex! Helping people protect themselves, get testing, and find treatment will stop STIs from spreading.

to another. A lab test done in a clinic (page 3) is the best way to find out if you have a STI and find the right treatment to cure it. Help any person you have had sex with to also get tested and treated. If both of you do not get treated, you will get infected again and infect other people. In places where testing for STIs is not available, it is still important to treat infections right away.

Most STIs are cured after treatment with antibiotics. Other STIs do not go away but can be managed with medicine. There are also treatments to reduce pain and help with discomfort while the medicine takes effect (see How to feel better while you heal from a STI, page 19).

Not having sex or being certain your sex partner does not have a STI are the best ways to prevent STIs. Because this is not always possible, prevent infections from sex by using condoms every time as another way to make getting a STI less likely (page 21). Health workers can play an important role by treating people with STIs with respect and dignity (see page 26).

# Why STIs are a serious problem

Because sex is normal and common, STIs are also common. When STIs are not treated, they can harm adults and children. STIs can cause:

• infertility.

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- babies born too early, too small, blind, sick, or dead.
- death from severe infection.
- lasting pain.
- cancer of the cervix or throat or anus.
- increased risk of getting other STIs, including HIV.

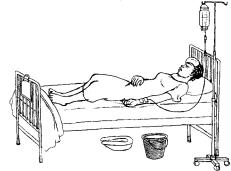
# How STIs pass to partners through sex

Sex that involves the genitals touching and oral sex (using the mouth on the genitals), can both pass STIs. The person on the receiving end of sexual intercourse, getting penetrated in the vagina or anus, is more at risk. If no condom is used, semen which may carry infection stays inside the vagina, anus, or mouth. The action of penetration can rub and open the skin inside the vagina or anus, increasing the possibility that an infection enters the body. This happens even if the person doesn't notice there are sores inside the vagina or anus. Sores or irritation on the outside part of the genitals can also pass STIs, including HIV, more easily.

# What to do if you might have a STI

- · Get tested if testing is available
- Get treated for the infection right away, do not wait to become more ill.
- Help your partner get treated at the same time. That way you will not get the infection again if you have sex together.







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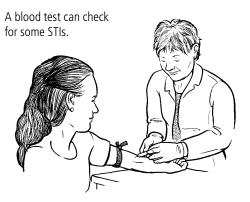
# Do I Have a Sexually Transmitted Infection?

Signs of STIs include discharge, pain, and sores in the genitals. But many STIs cause no signs. Even without signs, STIs can pass from one person to another during sex without condoms. To know if there is a STI and what type it is, you may need a blood or urine test, or a test using a sample taken by swabbing the affected part of the body. Tests are also part of regular health care to find and treat STIs that cause no signs.

# **Testing for STIs**

To test for STIs, the health worker takes a sample from the person and may use a test kit or look for the infection using a microscope. Types of STI tests include:

• Using a swab on the genital area gives a sample to test for chlamydia, gonorrhea, genital herpes, chancroid, or trichomonas. Swabbing the inside of the mouth can test for HIV. Swabbing the



throat or anus is sometimes needed to test for a STI from oral or anal sex. Swabbing the cervix can test for HPV.

- Urine tests can detect chlamydia and gonorrhea.
- Blood tests can detect syphilis, genital herpes, hepatitis, and HIV.

Testing for STIs is a good idea for all people who are sexually active. How often can depend on if you have a new partner, more than one partner, or have a reason to think you may have a STI. If you are pregnant, it is common to test for STIs that can harm the baby or cause harm to you.

If you have a STI, get tested as well for other common STIs because 2 or more are often passed at the same time.

# Signs that could be a STI

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	Pain or unusual discharge from the vagina			
?	Is there pain in the lower belly or pain during sex?	This could be <b>pelvic inflammatory</b> disease (PID), see page 11.		
?	Is there pain or burning while urinating?	This could be a urinary infection, not a STI (see Difficulties With Urinating, in development). Or, this could be trichomonas, gonorrhea, or chlamydia, see page 9.		
?	Is the discharge white or gray and smell bad or like fish, especially after sex?	This could be bacterial vaginosis. See page 6. Or less commonly, trichomonas, see page 9.		
?	Is the discharge yellow or green?	This could be gonorrhea or chlamydia, see page 9. It could also be an infection of trichomonas, see page 9.		
?	Is the discharge white, looks like cottage cheese or buttermilk, and smells like mold, mildew or baking bread?	This could be a <b>yeast</b> infection, which is not a STI, see page 7.		

Pain or unusual discharge from the penis			
<b>?</b> Is there pain or burning while urinating?	This could be gonorrhea or chlamydia, see page 9. Or less commonly, trichomonas, see page 9.		
<b>?</b> Is there pain or painful swelling in the testicles?	This could be gonorrhea or chlamydia, see page 9. Other causes also need treatment so talk to a health worker.		
<b>?</b> Is there discharge from the penis that just drips and drips?	This could be gonorrhea, see page 9.		



?	Is there a painless open sore, with raised edges?	➡ This could be <b>syphilis</b> , see page 12.
?	ls it 1 or more painful sores that are puffy and bleed easily?	➡ This could be chancroid, see page 12.
?	Are there small blisters that burst and form painful, open sores?	➡ This could be herpes, see page 14.

#### Other signs on the genitals or anus

**Itching of the anus or pain passing stool** can sometimes be the sign of a STI. Also if you notice discharge coming out of your anus or that it is slippery when you wipe your bottom, this could be a sign of **gonorrhea**, or **chlamydia**, see page 9.

**Get medical help** for signs of a more serious infection that include discharge from the vagina, penis or anus that is bloody or brown.

**Itching of the genitals.** Itching on the thighs or where urine comes out could be **yeast** (see page 7) or if around the opening of the vagina it could be either yeast or **trichomonas** (see page 9).

Itchy genitals could also be pubic lice or scabies, caused by very tiny bugs that live on the skin, often treated with medicated skin creams, such as those with permethrin. Scabies is spread easily between family members, is common in children, and affects many parts of the body.

Itching can also be caused by soaps, perfumes, or chemicals put on or in the genitals. Rinse the outside of the genitals with plain water to see if the itching goes away.

#### Fluid from the vagina

It is normal to have wetness and some fluid come from the vagina in between menstrual periods. This is the way the vagina cleans itself. The fluid changes during the days of the monthly cycle and also during pregnancy. Fluid that is clear, milky or slightly yellow is normal, but if there is more than usual, or it is deep yellow, green or thick white, has a bad smell or has itching or irritation, then it is called an "abnormal discharge" and could be a STI. Get help for unusual signs or discomfort.

Many good types of bacteria grow in the vagina to keep it healthy. Too much stress, taking antibiotics, being pregnant, and other conditions affect the bacteria and make vaginal infections more likely. Prevent infections in the vagina by washing the outside area of the vagina daily,, and avoiding perfumes, perfumed soaps, douches, or sprays on the genital area or inside the vagina. Limiting coffee, alcohol and sugary foods or drinks may decrease vaginal infections.

# **Bacterial Vaginosis (BV, gardnerella)**

Bacterial vaginosis is a bacterial infection of the vagina. Soaps, perfumes, or deodorants that get in the vagina can make this infection easier to get. If sex irritates the vagina, it makes getting bacterial vaginosis more likely. It is not usually dangerous, but can cause someone who is pregnant to have their baby early.

#### <u>SIGNS</u>

- more discharge than usual
- a bad, fishy smell from the vagina, especially after sex
- mild itching

#### **TREATMENT**

Take one of these: metronidazole (page 35) by mouth, tinidazole by mouth (page 36), or clindamycin (page 32) by mouth or inserted vaginally. If you are pregnant, use metronidazole by mouth, taking the smaller dose for 7 days instead of a single dose (page 35).

Check if the medicine is meant to be taken by mouth or put into the vagina.



# Yeast (moniliasis, candida, thrush)

Yeast affects the genitals and that makes people think it is a STI, but yeast is not usually passed through sex. Usually yeast is not dangerous but it can be very uncomfortable. You are most likely to have a yeast infection when you are pregnant, taking antibiotics, or have some other illness such as diabetes or HIV infection. Yeast infections in the vagina are common, causing discharge and itching, but they can affect the penis too, causing inflammation of the head of the penis and itching of the scrotum. When yeast infects the throat, it is called thrush.

Yeast can also appear on the inner thighs, armpits, under the breasts, or around the anus. Yeast is most common where body parts touch each other and are covered, conditions that let skin stay moist.



#### SIGNS IN THE VAGINA

- white, lumpy discharge from the vagina, like milk curd or yogurt
- red, irritated skin outside and inside the vagina which may bleed
- · feeling very itchy inside or outside the vagina
- a burning feeling when passing urine

#### **SIGNS ON THE PENIS**

- a thick, white discharge collects in skin folds and under the foreskin of the penis
- patches of red bumps on the head of the penis
- itching, burning, or redness on the penis or scrotum

#### **TREATMENT**

Mild yeast infections will sometimes go away without medicines. Rinsing with or sitting in a pan of warm clean water may reduce itching. If it helps you feel better, do this 2 times a day.

#### Treatment with medicines:

Use one of these: Miconazole cream (page 38), nystatin cream (page 38), or clotrimazole (page 37) cream or tablets inside the vagina or on the penis

or scrotum each night. Check the instructions for how long to use as this varies by the strength and medicine used. These medicines are safe to put in the vagina during pregnancy.

#### **PREVENTION**

Wear loose clothing and underclothes to let air reach the genitals. This helps prevent yeast. Wash or change underclothes often. Do not put soap in the vagina when bathing. Do not douche. If you have diabetes or HIV, taking your medicines correctly and caring for your health helps avoid yeast problems.







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# Trichomonas (trich)

Trichomonas is an infection caused by a parasite. In the vagina, it is very uncomfortable and itchy. When the infection affects the penis, there are often no signs. If the infection is inside the penis, it can pass to the other person during sex without a condom.

Trichomonas is not dangerous but can irritate the vagina. When the vagina is irritated, getting other STIs, including HIV, is more likely.

#### SIGNS IN THE VAGINA

- · discharge that is gray, yellow, or green
- bad-smelling discharge
- · red and itchy vagina
- pain or burning while urinating

#### **TREATMENT**

Take metronidazole (page 35) or tinidazole (page 36) by mouth. Do not take tinidazole during pregnancy.

Your sexual partner or partners will need to be treated with the same medicine.

To feel better, sit in a pan of clean, warm water for 15 minutes as often as possible. Avoid sex until you and your partner are finished with treatment and all the signs are gone.

# **Gonorrhea and Chlamydia**

Anyone can have gonorrhea or chlamydia without showing signs or feeling symptoms. When there are no signs, tests are needed to know if there is an infection. If gonorrhea or chlamydia is not treated, either can lead to severe infection or infertility.

Always test for gonorrhea and chlamydia during pregnancy because these infections can pass to the baby during childbirth. If the test shows gonorrhea or chlamydia or both, both the person who is pregnant and her partner should be treated. If either partner has signs of infection, but testing is not available, they should be treated anyway. Gonorrhea and chlamydia have similar signs.



Bad-smelling discharge from the vagina is often trichomonas.

#### **SIGNS IN THE VAGINA**

- yellow or green discharge from the vagina or anus
- pain in the lower belly
- fever

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- pain during sex
- pain or burning while urinating

If a woman has gonorrhea or chlamydia and also has fever and pain in the lower belly, she may have pelvic inflammatory disease (see page 11).

#### **SIGNS IN THE TESTICLES OR PENIS**

- drip of pus from the penis or anus
- pain or burning while urinating
- · sometimes there is also painful swelling of the testicles

In a man, the first signs begin 2 to 5 days (or up to 3 weeks or more) after sexual contact with an infected person. In a woman, signs may not show up for weeks or months. But a person who does not have any signs can still pass the disease to someone else, starting a few days after infection.



#### **TREATMENT**

Treatment works best when started early. Be sure to take all the medicine, even if you begin to feel better. Your partner or partners will need treatment with the same medicine.

It is best to treat for both gonorrhea and chlamydia unless tests confirm that the person only has one. Using a combination of 2 medicines for gonorrhea will also treat chlamydia. If a test shows that there is chlamydia but no gonorrhea, only one medicine is needed. The chart on page 41 shows different combinations and treatment depending on available medicines.

Because gonorrhea is becoming increasingly resistant to antibiotics, it is best to seek local advice about which medicines are effective, available, and affordable in your area. If the drip and pain have not gone away in 2 or 3 days after starting treatment, it could mean the gonorrhea is resistant to the medicine and a different medicine is needed.

# **Pelvic Inflammatory Disease (PID)**

Pelvic Inflammatory Disease or PID is the name for an infection of any of the female reproductive parts in the lower belly area near and including the womb. It is sometimes called a "pelvic infection."

PID is most often caused by an untreated STI infection – usually gonorrhea, chlamydia, or both.

The germs that cause pelvic infection travel from the vagina through the cervix and into the womb, tubes, and ovaries. If the infection is not treated in time, it can cause chronic pain, infertility, serious illness, or death.

#### SIGNS (YOU MAY HAVE ONE OR MORE OF THESE)

- pain in the lower belly (pelvis) it can be mild or severe
- pain or bleeding during sex
- tenderness when you press on the lower belly
- fever
- feeling very ill and weak
- unusual bleeding or bad-smelling discharge from the vagina

#### **TREATMENT**

If you are very ill with a high fever or vomiting, or if you are pregnant, go to a health center or hospital immediately. You will need medicines given in the vein (IV).

If the signs are beginning and not yet severe, the treatment may be an injection and medicines by mouth. This infection is usually caused by a mix of germs, so more than one medicine is needed. See Medicine Combinations to treat Pelvic Infection (PID) on page 42. Start treatment right away. If you do not feel better after 2 days, get medical help.

If you have PID, your partner will need to be tested and treated for infection.



# **Syphilis and Chancroid**

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Syphilis is a serious STI that over time affects the whole body. The first sign is a painless sore that goes away. If the person does not notice it and does not get treated, the syphilis will stay in the body. Anyone pregnant should be tested for syphilis and treated so it does not pass to the baby and cause the baby to be born too early, deformed, or dead. If you have HIV or another STI, often a health worker will test you for syphilis too.

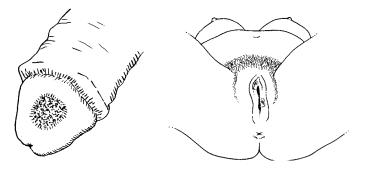
Chancroid is a STI caused by bacteria that causes painful sores on the genitals and enlarged, very painful lymph nodes. Like syphilis, if treated early it can be cured with medicines. In some countries, treating all possible cases has made chancroid less common than before.

If you are not sure whether a person has one or the other or both syphilis and chancroid, treat for both. Also treat for both if a test shows both or if both are very common in your area. See Medicines to treat syphilis and chancroid, on page 43. Treat the person's partner or partners with the same medicines.

Other infections can easily pass through a sore on the genitals, especially hepatitis B, HIV, and other STIs. To prevent spreading or getting these infections, get treatment and avoid sex until the sores heal.

Keep the sores clean while they are healing. Wash them every day with soap and water, and dry carefully. Do not let anyone else use the cloth you dry with.

Syphilis or chancroid on the genitals.



Although syphilis and chancroid both start with sores, sores from syphilis usually are not painful. A chancroid sore is usually painful.



#### SIGNS OF SYPHILIS

The first sign is usually a small, painless sore, called a chancre, which appears 2 to 5 weeks after sexual contact with a person who has syphilis. The chancre at first looks like a bump, then it breaks open to form a sore. It usually appears in the genital area but may also appear on the mouth or anus. If the sore is inside the vagina, it might not be noticed.

The sore lasts a few days to a few weeks and then goes away without treatment. Weeks or months later, you might get a rash (especially on the palms of the hands and soles of the feet), sore throat, mild fever, or mouth sores. Any strange rash or skin condition that shows up days or weeks after a sore on the genitals may be syphilis. Get tested and treated quickly. Without treatment, syphilis can spread to other parts of the body, causing heart disease, paralysis, mental impairment, and even death. Because syphilis is so dangerous, many countries have free testing programs.

#### TREATMENT FOR SYPHILIS

The best treatment is benzathine penicillin injected in the muscle (page 30). if this is not available or the person has an allergy to penicillin, then use doxycycline by mouth (page 33). Erythromycin (page 34) can be used but it is not as effective and the size of the dose can upset the stomach. Anyone who is pregnant should get help with treatment in a clinic or hospital.

#### SIGNS OF CHANCROID

The sores from syphilis and chancroid can look the same but if the sore is painful and bleeds easily, it may be chancroid. Swollen glands in the groin is another sign.

#### TREATMENT FOR CHANCROID

The best treatment is azithromycin by mouth (page 30). Or use one of these: ceftriaxone injected in the muscle (page 31), or by mouth, ciprofloxacin (page 32), or erythromycin (page 34).

# **Genital herpes**

Genital herpes is caused by a virus resulting in painful sores on the genitals or anus that come and go. There is no cure for herpes, but treatment can make herpes less painful.

Herpes spreads when the skin touches the skin especially between sexual partners. Herpes passes to others most easily when there are sores but can also pass to others when there are no sores. People often don't know right away that they have been infected. Other infections spread through genital sores, especially other STIs such as hepatitis B and HIV.

Herpes can be passed to a baby if the person giving birth has herpes sores in the vagina during childbirth. Treatment during the last month of pregnancy can prevent sores from passing herpes during birth. You can plan to give birth in a hospital in case a cesarean section (c-section) is needed.

#### <u>SIGNS</u>

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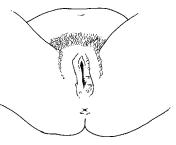
- tingling, itching, or painful feeling of skin on the genitals or, less commonly, on the thighs
- small blisters that burst and form painful, open sores on the genitals

The first time you get herpes sores, they can last for 3 weeks or more. You can have fever, headache, body ache, chills, or swollen lymph nodes in the groin. The next time that sores appear, they are usually not as bad as the first time. Once a person has the virus, sores may come and go many times. Even when there are no sores visible, the infection remains in the person's body. To relieve the pain of herpes sores, see How to feel better while you heal from a STI, page 19.

#### **TREATMENT**

There is no cure for herpes, but acyclovir (page 39) makes the infection milder and less painful. Use acyclovir as soon as signs appear.

Herpes virus can cause sores on the mouth (cold sores), also called oral herpes. Kissing someone or 2 children putting the same thing in their mouth are common ways oral herpes spreads. Oral herpes can become genital herpes if passed from a sore on the mouth to the genitals during oral sex.



blisters from genital herpes



#### **PREVENTION**

Reduce the spread of herpes by not having sex when you have a sore and avoiding skin to skin touching. Use condoms (on the penis or internal condoms for the vagina), even when you have no sore.

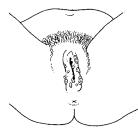
Always wash your hands with soap and water after touching a sore so your fingers do not spread the infection to other people in your family.

# **Genital warts**

Warts are caused by a virus. Warts on the genitals are softer than warts on other parts of the body and there are usually more of them. It is possible to have warts inside the vagina or inside the tip of the penis and not know it. While warts may eventually go away, usually they continue to get worse and should be treated. Test for syphilis before treating for genital warts because the early signs of syphilis can look like warts (page 13). If it turns out to be syphilis, treat it right away.

Warts grow faster during pregnancy and can bleed during childbirth. If you are pregnant and have warts, consult a health worker to see if you should give birth in a hospital by caesarean surgery (C-section).

#### <u>SIGNS</u>

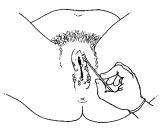


- small, firm, whitish or brownish skin growths that have a rough surface. They grow on the lips of the vagina, inside the vagina, on the penis or scrotum, or around the anus.
- sometimes the warts itch.

#### **TREATMENT**

Several treatments given once a week are usually necessary. The health worker usually applies the first treatment and may show you how to treat at home or have you return for treatments. Medicines include trichloroacetic acid (TCA), bichloracetic acid (BCA), or podofilox, see pages 39 to 40.





#### PREVENTION

Wear a condom during sex if you or your partner has genital warts or avoid sex until they are gone. The vaccine that prevents human papilloma virus (HPV, page 16) helps prevent genital warts.

# Human papilloma virus (HPV)

There are many kinds of human papilloma virus (HPV). Some types of HPV cause genital warts (page 15). A few types of HPV are more dangerous and can cause cancer of the cervix, cancer of the throat. or cancer in the anus. Most people with HPV have no visible signs of the virus.

Simple screening tests, such as a health worker looking at the cervix after applying vinegar, can show if there are abnormal cells on the cervix caused by HPV. But even if tests find HPV, it does not mean there is cancer.

A safe and painless treatment called cryotherapy freezes and kills the abnormal cells on the cervix so they do not develop into cancer. For more information about



testing for and treating cancer of the cervix, see is used to test for HPV. the chapter on Cancer, page 12.

There are vaccines that protect against the most dangerous types of HPV, including the types that cause most genital warts. This vaccine is given in a series, usually to children and young people between the ages of 9 and 26 years, to prevent getting or spreading HPV infections that can lead to cancers. See the chapter Vaccines Prevent Illness, page 10.

# **Hepatitis B and Hepatitis C**

Hepatitis is an inflammation of the liver, often caused by a virus. There are many types of hepatitis, but hepatitis B and hepatitis C can be spread through sex or blood. Hepatitis B spreads very easily from one person to another, especially during sex. Hepatitis C is more likely to be spread through unclean needles or by touching infected blood and is less likely to be spread by sex alone. Sex when menstruating or when there is another STI, especially HIV, make it more likely to pass hepatitis C through sex. Hepatitis B and C can lead to permanent damage to the liver (cirrhosis), liver cancer, and even death. Hepatitis C is a major cause of death for people with HIV/AIDS.

Both hepatitis B and C can pass to a baby in the womb.

#### SIGNS OF HEPATITIS B

- no appetite
- tired and weak feeling
- yellow eyes and sometimes yellow skin (especially the palms of the hands and soles of the feet)
- pain in the belly or nausea
- brown, cola-colored urine, and whitishcolored stools

# LIVER

There may be no signs with hepatitis B and hepatitis C for many years but these infections cause serious damage to the liver.

#### SIGNS OF HEPATITIS C

Same as the signs of hepatitis B or there might be no signs until many years after getting infected.

Many people do not even know they have it until they are tested.

#### **TREATMENT**

There are now medicines that treat hepatitis B and can cure hepatitis C. Getting cured of hepatitis C doesn't prevent you from getting it again if you are exposed to it again. Get tested at your health center to find out what kind of hepatitis you might have and what medicines are available. Even without medicines, you can still feel better and help your liver heal by getting plenty of rest, and drinking juices, broths or vegetable soups. To control nausea and vomiting, sip sodas, ginger drinks, or teas such as chamomile. However, do not drink any alcohol. Even a little alcohol will further harm the liver and make you feel worse. Do not use paracetamol (acetaminophen or Tylenol) or medicines that have it as an ingredient because it can be harmful for an inflamed liver. If needed, take ibuprofen or aspirin instead. There is more information about caring for the liver with hepatitis in the chapter Belly Pain, Diarrhea, and Worms, pages 17 to 19.

#### **PREVENTION**

Always use a condom during sex, and do not share needles or other supplies when injecting drugs. Use fresh ink and make sure tools for tattooing, scarring, piercing, or cutting the skin are always sterilized before use because the hepatitis C virus can live on open surfaces or in liquid for 3 weeks. Hepatitis C can even be spread by sharing toothbrushes or razors. Do not share these with other people either.

The vaccine that prevents hepatitis B is a series of 3 injections for infants, usually given along with other vaccinations during the first 6 months of life. If the mother has been vaccinated, a baby will not get the virus during birth. Older children and adults that were not vaccinated as infants can still be vaccinated.

**NEW WHERE THERE IS NO DOCTOR:** ADVANCE CHAPTERS CHAPTER 17: SEXUALLY TRANSMITTED INFECTIONS

# HIV

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HIV (Human Immunodeficiency Virus) is a STI that can pass from one person to another through sex, through unclean needles, and by touching infected blood. HIV can also spread to a newborn baby if the person giving birth has HIV and is not being treated. HIV is not spread through everyday contact such as shaking hands, hugging, or kissing, from living, playing, or eating together, or from sleeping next to each other. Also, it is not spread by food, water, insects, toilet seats, or sharing cups. HIV and AIDS are not the same, AIDS is an illness that develops later, after a person has been infected with HIV for some time without receiving treatment. If a person with HIV never gets treatment, they will develop AIDS which eventually leads to serious illnesses that can kill them, including tuberculosis, pneumonia and cancer.

#### <u>SIGNS</u>

A person can look and feel healthy but still have and spread HIV. HIV usually does not have any signs at the beginning. The person might briefly have a fever, headache, rash, or upset stomach within a few weeks of infection, but those signs are common in other illnesses. More often, it takes years for the first signs of illness to appear. Over time, as HIV grows in the body, it slowly makes the person less able to fight off illness. The person might have swollen lymph nodes, a way the body shows it is fighting a serious infection. Also, people with HIV may get more coughs or diarrhea than usual, and lose weight. Because these signs can also be caused by other problems, the only way to know for sure whether you have HIV is to get an HIV test. Tests are available at many health centers at low or no cost.

#### **TREATMENT**

There is no cure for HIV, but it can be treated. The antiretroviral medicines (ARVs) that treat HIV need to be taken every day for life. ARVs are now more widely available and cause fewer side effects than in the past. People taking ARVs will not develop AIDS but instead can stay healthy and lead long, healthy lives. The medicine reduces the amount of virus in their body to very low levels which also helps prevent HIV from passing to other people.

If there is a chance you could have gotten HIV, get tested so you can start treatment as soon as possible.

#### **PREVENTION**

To prevent HIV and AIDS, always use a condom during sex and do not share needles or other supplies when injecting drugs. Testing anyone pregnant for HIV so they can get treatment if needed can prevent HIV from being passed to a baby during childbirth. Medicines that treat HIV can also be used to prevent it. Learn more about this use, called PEP and PrEP, on page 25.

www.hesperian.org

# How To Feel Better While You Heal From a STI

The sooner you begin treatment for your STI, the sooner you will feel better. Take all the medicine you were given, even if you start to feel better before you finish the pills. To get relief from the discomfort of a STI before you are cured:

If you have sores or itching of the genitals, sit in a pan of clean, warm water for 15 minutes, 2 or more times a day.

If you have painful herpes or other genital sores, try one of these:

- Wrap a piece of ice in a clean cloth. Put it directly on the sore for 20 minutes as soon as you feel the sore developing.
- Make a compress by soaking cloth in cooled black tea and put it on the sore. A compress made from aluminum acetate solution is also soothing.
- Sit in a pan or bath of clean, cool water.
- Mix water and baking soda or corn starch into a paste and put it on the sore area.

If you have genital ulcers and it is painful to pass urine, pour clean water over your genital area while you urinate. Or sit in a pan of cool water while you urinate.

If you have pain, take a pain medicine such as aspirin, ibuprofen, or paracetamol (acetaminophen).

Wear loose underclothes and pants. This lets air circulate around your genitals which will help you heal.

**Change your underclothes once a day** and dry them in the sun after washing them. This kills germs that can cause infection.

**Do not have sex until you feel better** and signs have disappeared. If you do have sex, use a condom with lubrication.







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# **Pregnancy and STIs**

If you have a STI while you are pregnant, your baby can be exposed to the infection through your blood during pregnancy, during birth when the baby passes through the vagina, or in breastmilk.

An untreated or uncontrolled STI can harm both you and your baby. Babies can be born too early or too small, and they can be born sick or get sick later on. Testing for a STI can either let you know that you do not have it and don't need to worry about it, or can help you get the right treatment during pregnancy or birth. Treatment can cure you and the baby, and treatment will cure your partner too.



#### Gonorrhea and chlamydia

Gonorrhea or chlamydia can pass to the baby during birth and can cause eye infections, blindness, or serious lung problems. To prevent eye infections and blindness, put erythromycin ointment in the baby's eyes right after birth (See the chapter Newborn Babies and Breastfeeding, page 27).

#### **Syphilis**

Syphilis can pass to the baby in the womb, causing it to be born too early, deformed, or dead. Get tested and treatment during pregnancy.

#### Herpes

Herpes can pass to a baby during birth if you have sores on the genitals. If you are newly diagnosed with herpes or have sores, it is best to give birth in a hospital. They might deliver the baby through an operation (C-section) and treat the baby after birth.

#### Warts

Warts will not usually pass to a baby, but they can bother you during pregnancy. Treat warts (see pages 39 and 40) or wait until after birth to treat them. Because warts may bleed during birth, consult a health worker about your options for giving birth in a hospital.





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#### Hepatitis **B**

Hepatitis B can pass to a baby during pregnancy. The baby will need the HepB vaccine right after birth and other treatment to prevent hepatitis B infection.

#### HIV

Testing for HIV when pregnant means you can get medicines to prevent passing it to the baby. HIV medicines will protect you and the baby.

# **Prevent Infections From Sex**

Sexually transmitted infections (STIs) are passed from person to person during sex. This happens when there is contact with the skin of or fluids from the vagina, penis, anus, or mouth. Anyone can get a STI, but STIs are less likely to spread when people practice safer sex, treat and cure infections, and work to change the conditions that have allowed STIs to become such a serious problem.

You are more likely to get an STI if:

- your partner has signs of an STI. They can easily pass the STI to you, or could have passed it already, even if you have no signs.
- you have more than one partner.
- you have a new partner who may have an STI from their previous partner.
- your partner has other partners who may have STIs.
- you and your partner do not use condoms.
- you have sex with someone who shares drug injection needles, or if you share needles to inject drugs.

Where testing is available, test often if getting a STI is possible. Testing for STIs every 6 to 12 months is a good idea for both women and men who have unprotected sex with more than one partner, with a partner who has sex with others, or because one person injects drugs.

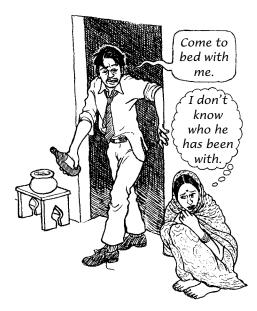
# Women face more risks

Women face more obstacles to protecting themselves from STIs and getting adequate treatment, especially in communities where:

- child marriage is common.
- women are denied sexual health services and information.
- men are expected to have many partners.
- there is discrimination against people who are trans, making it harder for them to get health services.
- education is denied to girls and women.
- no one talks about sexual abuse or how to stop it.
- women are in situations where it is difficult or dangerous to refuse sex.
- sex work is criminalized.



• sex and sexuality are considered shameful, even though they are normal, and no one talks about sex openly.

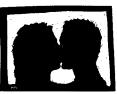


# Safer sex

What is safer sex and how can you make sex more safe for you? This may not be easy but often there is something you can do. Practicing safer sex can prevent you from getting or spreading a STI.

Here are some ways to have safer sex:

- **Do not have sex.** This is also called abstinence. If you do not have sex, you will not get a STI. Everyone can do this for a short while, but for most people this choice is not what they want for the rest of their lives.
- Have sex with only one partner if you can both agree to have sex only with each other. Get tested together to make sure neither of you has a STI from a previous partner. Being faithful to each other and avoiding other ways of getting a STI will protect you both.
- Do not have sex with someone who has signs of a STI. Help them get tested and treated before you have sex with them. Unless the person gets tested, it is hard to know who has a STI and who does not. STIs can spread even if a person has no signs.
- Have sex with no penetration of the vagina or anus. There are many ways to give and get pleasure without penetration, including kissing, rubbing, or massaging different parts of the body, and touching each other's genitals with the hands (mutual masturbation) or mouth (oral sex).
- Use condoms every time. Put on a latex condom before your partner's genitals touch yours, every time, even with a long-term partner. Internal (female) condoms protect best against STIs because they cover more of the genital area. If you are trying to get pregnant, only have sexual intercourse without a condom during your fertile time. Use external (male) or internal (female) condoms (or dental dams or plastic wrap) during oral sex. Also use a condom with sex toys that more than one person has shared.



Kissing is safe



Touching is safe



Oral sex is less safe than touching but safer with a condom



Vaginal sex is riskier than oral sex but safer with a condom

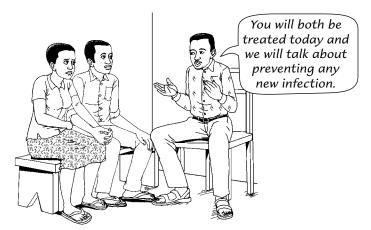


Anal sex is very risky but safer with a condom

# Talking about sex with a partner

Convincing your partner to have sex in ways that reduce STIs can be hard. Most people are taught not to talk about sex, even with the people they have sex with. Here are some suggestions:

- Focus on health. If you want safer sex, your partner may think you do not trust them. But the issue is health and safety, not trust, because a person can have a STI without knowing it. Safer sex is a good idea for every couple, even if both partners have sex only with each other.
- Focus on preventing unwanted pregnancy. If you don't want to have a child now, you and your partner can talk mostly about how condoms prevent pregnancy although they also prevent STIs.
- **Practice talking with a friend.** Ask a friend to pretend to be your partner and then practice what you want to say. Think of how your partner might respond, and practice for each possibility. It is likely you both will feel nervous talking about sex, so think of ways to make the conversation easier for each of you.
- Find a good time to talk. Do not wait until you are about to have sex. Choose a time when you are both relaxed and feeling good about each other. If you have stopped having sex because you have a new baby, or were being treated for a STI, try to talk before you have sex again. If you and your partner live far apart or one or both must travel often, talk about how to protect your sexual health before you get back together.
- Learn more about risks and how to have safer sex. People who do not know much about STIs, how they are spread, and their long-term health effects, cannot understand the risks involved in unsafe sex. Information can help you convince them of the need to practice safer sex.



# **Treatment as prevention**

Most STIs can be cured with treatment, especially when treatment starts as soon as possible. Having one STI makes getting infected with HIV or other STIs more likely, but after treatment, people usually don't spread STIs to others.

**Treat right away.** Health workers know their community and whether the person who has come to get help for a STI is likely to return for more care. That will help them decide which treatment or treatments to start with.

**Treat partners.** When you tell someone they have a STI, other people they had sex with will need to get tested and treated. If it is difficult for you to speak with former partners, health workers and STI programs can help contact the people so they get tested. If it is safe to speak with former partners, insist that they avoid all sexual contact until they are tested, treated, and cured.

**Testing during pregnancy and treating quickly** prevents passing the infection and the problems it can cause to the baby (see page 20).

#### Preventive medicines for some STIs

Post Exposure Prophylaxis (PEP) is a way to use the medicines used to treat HIV, called antiretroviral treatment, to prevent a person from getting an HIV infection. When a person is exposed to HIV (for example, from rape or sex without a condom, or from syringe needles or contact with blood), taking HIV medicines as soon as possible within 3 days can prevent getting HIV.

When HIV medicines are taken daily by people without HIV to prevent getting HIV, this is called Pre-Exposure Prophylaxis (PrEP). See the chapter on HIV and AIDS (in development) for more information.

A full series of hepatitis B vaccine and hepatitis B immune globulin (HBIG), started as soon as possible after an exposure, can prevent hepatitis B infection.

#### STI screening, testing, and treatment programs belong everywhere

When health centers provide STI testing and treatment as part of family planning services, pregnancy check-ups, and other health services, testing and treatment become more accessible to everyone. Everyone, especially young people, need accessible, affordable, and respectful services. Add services to school-based clinics or hold special events to offer testing and counseling at street fairs, bars, dance halls, or anywhere else to reach people who do not regularly get health care. Wherever people already go is a good place to bring STI information and services.

#### How health workers make a difference in STI prevention and care

Show how talking about sex is normal. Everyone worries if something seems wrong with their genitals. And people often are fearful to seek help, especially if the problem seems related to having sex. You can show compassion to people in this situation. Treat them well and they will feel relieved and not ashamed that they came to you. Your positive attitude helps not only that person but also others who might not seek testing or treatment for fear of being judged.

**Health information is private.** When a person comes to you for help, keep what they told you private. If you don't, they may not look to the health system for treatment again.

**Criticizing does not cure.** Honest answers to questions, along with needed tests and medicines are the best way to help. If you cannot treat the STI, help find low-cost care nearby.

# Respect people's sexuality and gender identity.

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Remember that the person you help could be gay, lesbian, or bisexual, even if they don't tell you this. You can find words for sexual partners that could include either a man or a woman. Also be welcoming to trans (transgender) people and respect what any person tells you about being a man, a woman, or having another



name for their gender. During a genital exam, do not show surprise if the person does not have the body parts you associate with their gender. Focus on how to treat the person's condition, and only talk about their gender if they want to. Everyone's health is better when you can help anyone with a health problem.

**Helping young people.** STIs are a serious and growing problem for young people, especially young women. Young people are more likely to talk to others their own age who share their values, plans, and choices. Many times young people cannot rely on their families for support. You can support young people by providing gathering places that are safe, where no one will criticize them, and where they can find correct information about health, sex, sexual health services, and their other concerns.

Everyone has sex. Your job as a health worker is not to judge or make decisions for people but rather to treat them now and support their ability to make safer, healthier choices for themselves.

#### To make services more helpful for young people:

- Make your services available where youth already go, such as schools, markets, and community centers.
- Reserve "youth only" hours in a clinic in the late afternoon, evening, or weekends.
- Reassure young people that health workers will treat them with respect and will not share their information with anyone else.
- Train young people as peer counselors.
- Make services and condoms free or as low-cost as possible.





## End shame and stigma about STIs

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Share information about condoms and how to use them. Many clinics, government programs and non-governmental organizations provide free condoms to people who need them.

Work with your community. Talk and teach about sex. People are more likely to prevent STIs when they can talk about sex openly and have access to information, services, and condoms as well as testing and treatment for STIs. On the other hand, where sex is considered shameful, it is more difficult for people to learn about STIs or seek help. Hesperian's *Health Actions for Women* has many activities and ideas to start conversations and solve problems related to sexual health.



If couples with same sex relationships (between 2 men, or between 2 women) are discriminated against or hidden, people will have a harder time talking with their partners about safer sex, testing, or seeing a health worker.

Stigma or discrimination against sex workers, people who inject drugs, have dark skin, or are members of a "lower" class or caste, make it that much harder for the community to prevent STIs.

Health centers can help lessen the stigma of having a STI by providing testing and treatment as a routine part of health care for all adults and young people. For people to be comfortable with STI testing, they need to know they will be treated with respect and privacy.

In the long run, STIs can best be prevented by fighting for fairer social and economic conditions. When families do not need to separate to find work, when people need not trade their bodies for food, shelter or money, and when young people have access to education and a future, there will be fewer cases of sexually transmitted infections.

# Sexually Transmitted Infections: Medicines

Most STIs can be successfully treated with antibiotics. Anti-fungal medicines and medicines to relieve pain are also used. Although not curable, HIV and herpes can be controlled with medicines that will help you feel better and stay healthy. To learn about medicines for HIV, see the chapter HIV and AIDS (in development).

STI medicines only work when you take all the medicine as recommended. Even if your signs go away, you will not be cured until all the medicine has time to work. If the signs do not begin to go away by 3 days after you started to take the medicines, see a health worker. Pain or vaginal discharge could also be caused by another problem, or you may need a different medicine.

Note: All doses given are for adults and children over 12 years old.

# Antibiotics

Antibiotic medicines fight infection from bacteria. Different antibiotics will fight different bacteria.

Antibiotics that share the same chemical make-up are said to be from the same family. It is important to know about the families of antibiotics because:

- 1. Antibiotics from the same family can often treat the same problems. This means you can sometimes use a different medicine from the same family.
- 2. If you are allergic to an antibiotic, you will also be allergic to the other members of the same family of antibiotics. This means you will have to take not just a different medicine, but a medicine from a different family instead.

Antibiotics must be given for their full course. Stopping early, even if you feel better, can make the infection return in a form that is even harder to stop. Do not stop taking the antibiotic because of uncomfortable side effects such as nausea or diarrhea. However, you can ask a health worker if changing medicines would be better. A severe allergic reaction to any medicine, such as trouble breathing or a swollen tongue, is a medical emergency.

# Azithromycin

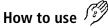
Azithromycin is an antibiotic of the macrolide family used to treat many STIs. It is safe during pregnancy and breastfeeding.

## Side effects

Azithromycin can cause diarrhea, nausea, vomiting, abdominal pain.

#### Important **A**

Do not use this antibiotic if you have allergies to erythromycin or other antibiotics of the macrolide family.



#### For gonorrhea, chlamydia, or chancroid:

→ Give 1 gram (1000 mg) by mouth 1 time only. (To treat gonorrhea, also give ceftriaxone or another medicine, see page 41.)

#### For pelvic inflammatory disease (PID):

→ Give 1 gram (1000 mg) by mouth as a single dose. (To treat PID, also give ceftriaxone or cefixime, see page 42.)

# Benzathine penicillin

Benzathine penicillin is a long-acting antibiotic of the penicillin family used to treat syphilis. It is always given as an injection into muscle.

#### Important **A**

Do not take if you are allergic to medicines of the penicillin family. Have epinephrine on hand whenever you inject penicillin. Watch for allergic reactions and allergic shock which could start within 30 minutes.

## How to use 🍠

The injection can be painful. Mix with 1% lidocaine if you know how.

#### For syphilis:

→ If there is a sore or body rash or another sign of syphilis in the early stages, inject 2.4 million Units into muscle 1 time only. A person who had a test result showing no syphilis and then a test showing syphilis less than a year later also needs this dose.

If it is likely that the person has had syphilis for more than a year or has mental or other problems that come after many years of syphilis, a single dose will not be enough. When a test shows syphilis and it is possible that infection was at least 2 years ago or more, inject 2.4 million Units into muscle once a week for 3 weeks. Help the person get the right tests and treatment from an experienced health worker.

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# Cefixime

Cefixime is an antibiotic of the cephalosporin family used to treat many infections, including gonorrhea.

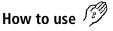
Side effects

Cefixime can cause upset stomach, diarrhea, headaches.

#### Important **A**

Do not give this medicine to someone who is allergic to other cephalosporin antibiotics.

People who have liver problems should be careful when taking cefixime.



#### For gonorrhea:

→ Give 400 mg by mouth 1 time only. (To treat gonorrhea, also give azithromycin or another medicine, see page 41.)

#### For pelvic inflammatory infection:

→ Give 400 mg by mouth 1 time only. (To treat PID, also give doxycycline or another medicine, see page 42)

# Ceftriaxone

Ceftriaxone is an antibiotic of the cephalosporin family that is injected into muscle or vein. It is used for many infections, including gonorrhea and pelvic inflammatory disease (PID).

#### Important **A**

Do not give this medicine to someone who is allergic to other cephalosporin antibiotics.

## How to use 🍠

Ceftriaxone cannot be taken by mouth. When injecting, put the needle deep in the muscle. The injection can be painful, so mix with 1% lidocaine if you know how.

#### For gonorrhea in adults:

→ Inject 250 mg into muscle 1 time only. (To treat gonorrhea, also give azithromycin or another medicine, see page 41.) In some countries, 500 mg may be recommended instead of 250 mg.

#### For pelvic inflammatory disease (PID):

→ Inject 250 mg into muscle 1 time only. (To treat PID, also give doxycycline or another medicine, see page 42). In some countries, 500 mg may be recommended instead of 250 mg.

#### For chancroid:

→ Inject 250 mg into muscle 1 time only

# Ciprofloxacin

Ciprofloxacin is an antibiotic of the quinolone family that is used for different infections including chancroid.

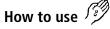
Side effects

Ciprofloxacin can cause nausea, diarrhea, vomiting, headache.

#### Important **A**

Do not use if you are pregnant, breastfeeding or younger than 16 years old.

Do not take with dairy products.



Drink a glass of water after taking this medicine.

#### For chancroid:

→ Give 500 mg by mouth, 2 times a day for 3 days. Give for 7 days if the person also has HIV.

# Clindamycin

Clindamycin is an antibiotic used for different infections including bacterial vaginosis.

# Side effects

Nausea, vomiting, and diarrhea can happen within a few weeks of using clindamycin. If you get a skin rash, stop using it and see your health worker to get a different treatment.

#### Important **A**

If you are breastfeeding and this medicine gives your baby diarrhea, stop using it.

Using for more than 30 days can lead to thrush and yeast infections, and harm people with kidney or liver problems. The vaginal cream can weaken condoms for up to 3 days after use.

How to use 🔊 🖛

It comes in both capsules to take by mouth and as a vaginal cream.

#### For bacterial vaginosis:

Give 300 mg by mouth, 2 times a day for 7 days
OR
Insert 5 a of 20( stream (1 full applicator) bick in the variant each night for 7 day

Insert 5 g of 2% cream (1 full applicator) high in the vagina each night for 7 days

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# Doxycycline

Doxycycline is an antibiotic of the tetracycline family used to treat some STIs. It can be used in place of tetracycline and is easier to use because it is taken fewer times each day.

# Side effects 🖉

Doxycycline can cause diarrhea or upset stomach. Some people get a rash after staying a long time in the sun.

#### Important **A**

Do not take if allergic to antibiotics of the tetracycline family.

Do not take doxycycline if pregnant and try to avoid if breastfeeding.

# How to use 🔊

Avoid milk, iron pills, and antacids for 2 hours before or after taking.

Do not take just before lying down. Sit up while taking pills and drink lots of water to prevent the irritation that swallowing this medicine can cause.

#### For gonorrhea or chlamydia:

→ Give 100 mg by mouth, 2 times a day for 7 days (this will treat chlamydia but to also treat gonorrhea an additional medicine is needed, see page 41).

#### For syphilis in its early stages (with chancre sore or body rash), see page 13.

→ Give 100 mg by mouth, 2 times a day for 14 days. It is better to use benzathine penicillin for syphilis unless it is not available or the person is allergic to penicillin.

#### For pelvic inflammatory disease (PID):

→ Give 100 mg by mouth, 2 times a day for 14 days. (To treat PID, also give ceftriaxone or cefixime, see page 42.)

# Erythromycin

Erythromycin is an antibiotic of the macrolide family used to treat many infections, including some STIs. It is safe to use during pregnancy and is widely available, but for most STIs it is no longer as effective as other antibiotics.

# Side effects

Erythromycin may upset stomach or cause nausea, vomiting, and diarrhea.

#### Important 🛦

Do not use if you are allergic to antibiotics of the macrolide family.

# How to use 🔊

Erythromycin works best when taken 1 hour before or 2 hours after a meal. If this upsets your stomach too much, take with a little food. Do not break up tablets because they are coated to protect it against strong stomach juices before it can begin to work in the intestine.

#### For chlamydia:

→ Give 500 mg by mouth, 4 times a day for 7 days

#### For chancroid:

→ Give 500 mg by mouth, 4 times a day for 7 days

#### For syphilis:

→ Give 500 mg by mouth, 4 times a day for 15 days. It is better to use benzathine penicillin for syphilis unless it is not available or the person is allergic to penicillin. Or, if available, doxycycline will work better for syphilis than erythromycin.

#### For pelvic inflammatory disease (PID):

→ Give 500 mg by mouth 4 times a day for 14 days. (To treat PID, also give ceftriaxone or cefixime, see page 42.)

# Metronidazole

Metronidazole is an antibiotic used to treat bacterial vaginosis (BV), trichomonas, or PID.

#### Side effects

Metronidazole can cause a metallic taste in mouth, dark urine, upset stomach or nausea, and headaches.

#### Important **A**

Do not take this medicine if you have jaundice (yellow eyes) or other liver problems.

Stop taking it if you feel numbness, burning, tingling, or pain in the arms, hands, legs, or feet.

Do not drink alcohol, not even 1 beer, while you are taking metronidazole. It will make you feel very nauseous.

# How to use

It comes as tablets to take by mouth.

#### For bacterial vaginosis or trichomonas (or to treat for both at the same time):

 → Give 2 grams (2000 mg) by mouth 1 time only (not recommended during pregnancy. Instead use the smaller dose shown below for 7 days.)
OR

Give 400 to 500 mg by mouth, 2 times a day for 7 days

#### For pelvic inflammatory disease (PID):

→ Give 400 to 500 mg by mouth, 3 times a day for 14 days. (To treat PID, also give 2 other medicines, see page 42.)

# Spectinomycin

Spectinomycin is an aminocyclitol antibiotic used to treat gonorrhea, but it does not work for gonorrhea of the throat. It is useful for people allergic to penicillin and cephalosporin antibiotics.

Side effects

It can cause chills, pain or redness at injection site, dizziness, and nausea.

How to use 🍠

It comes in vials for injection of 2 g.

#### For gonorrhea:

→ Inject 2 g (2000 mg) into muscle 1 time only. (For other treatments for gonorrhea and how to treat chlamydia at the same time, see page 42.)

# Tinidazole

Tinidazole is an antibiotic, similar to metronidazole, used to treat some vaginal infections.



Tinidazole can cause a metallic taste in mouth, upset stomach or nausea, or headache.

#### Important 🛦

Avoid this medicine if pregnant, especially in the first 3 months. Do not drink alcohol, not even one beer, while you are taking tinidazole or for 3 days after. It will make you feel very nauseous.

#### How to use

Drink a glass of water after taking this medicine.

#### For bacterial vaginosis or trichomonas (or to treat for both at the same time):

 Give 2 grams (2000 mg) by mouth 1 time only OR

Give 500 mg by mouth 2 times a day for 5 days

With trichomonas, also treat the person's sexual partner but this is not necessary if you know it is bacterial vaginosis and the other person has no symptoms.



# **Anti-fungal medicines**

# Clotrimazole

Clotrimazole is an anti-fungal medicine used to treat yeast and other fungus infections in the vagina, penis, mouth, and skin.

# Side effects

Clotrimazole may irritate the skin. Stop using if you get a rash.

#### How to use <

It comes as inserts for the vagina and as cream.

#### For yeast infections of the vagina

→ If using 1% cream: Insert 5 g of cream high in the vagina every night for 7 nights OR

If using 2% cream: Insert 5 g of cream high in the vagina every night for 3 nights  $\ensuremath{\mathsf{OR}}$ 

If using inserts, put one high in the vagina every night, including during menstruation. The strength of the dose determines how many nights you need to use. Use 100 mg inserts for 7 nights, 200 mg inserts for 3 nights, or a 500 mg insert for 1 night only.

#### For yeast infections of the penis:

→ Apply 1% cream to the affected skin of the penis, every night for 7 nights

# Miconazole

Miconazole is an anti-fungal medicine used to treat yeast and other fungus infections of the vagina, penis, and skin.

Side effects

Miconazole may irritate the skin. Stop using if you get a rash.

#### How to use <

It comes as inserts for the vagina and as cream.

#### For yeast infections of the vagina:

 If using 2% cream: Insert 5 g in the vagina every night for 7 days OR

If using inserts: put one high in the vagina every night, including during menstruation. Use 100 mg inserts for 7 days, or 200 mg inserts for 3 days.

#### For yeast infection of the penis:

→ Apply 2% cream to the affected skin of the penis, 2 times a day for 7 to 14 days

# Nystatin

Nystatin is an anti-fungal medicine used to treat yeast infections of the vagina, penis, mouth, and skin.

Side effects

Nystatin may irritate the skin. Stop using if you get a rash.

#### How to use <

It comes as inserts for the vagina and as cream.

#### For yeast infections of the vagina:

→ If using cream: Insert cream inside the vagina twice daily for 10 to 14 days. OR

If using inserts: Moisten first and then put 100,000 IU insert high in the vagina, each night for 14 nights, including during menstruation.

#### For yeast infection of the penis:

→ Apply cream to the affected skin of the penis, 2 times a day for 7 to 14 days



# **Antiviral medicines**

# Acyclovir

Acyclovir is a medicine used to fight herpes viruses. Acyclovir does not cure herpes, but it makes the sores less painful and keeps them from spreading.

# Side effects

Acyclovir may sometimes cause headache, dizziness, nausea, vomiting.

#### Important **A**

Do not take if you have kidney problems.

# How to use 🗐

Start acyclovir as soon as signs start to appear.

For first time outbreak of genital herpes:

→ Give 400 mg by mouth, 3 times a day for 7 to 10 days

#### If you have had a herpes outbreak before:

→ Give 400 mg by mouth, 3 times a day for 5 days

If you have 6 or more outbreaks in a year, talk with an experienced health worker to see if taking acyclovir for a longer period will help.

# **Medicines for genital warts**

# Podofilox

Podofilox comes as a liquid to treat warts around the genitals and as a gel to treat warts around the anus or the genitals. Don't confuse it with podophyllin, also used for genital warts, but more harmful if not used correctly. Podofilox is safer to use.

The health worker can apply it for the first time in the clinic to show how to do it. The person may need help using podofilox if the warts are hard to see or to reach. Apply the liquid with a cotton swab or the gel with a finger. Wash hands after use. Wait until it dries before putting clothes on.



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Podofilox can irritate skin, causing it to thin, break, and bleed.

#### Important **A**

Do not use this if you are pregnant or breastfeeding.

If severe skin irritation occurs, do not use it again.

## How to use

#### For genital warts:

→ Using liquid or gel, treat the warts twice a day (morning and evening) for 3 days. Then stop using for 4 days. Repeat the 3 days of treatment and 4 days without treatment up to 4 weeks total. Stop when the warts are gone. If the warts remain after 4 weeks, do not keep using podofilix. See a health worker to get a different treatment.

# Trichloroacetic acid and bichloroacetic acid

Trichloroacetic acid or bichloroacetic acid are acids applied directly on genital warts to shrink them. An experienced health worker can do this to avoid serious burns.

#### Important **A**

Trichloroacetic acid and bichloracetic acid will hurt or destroy normal skin. Apply it very carefully to the warts directly so that any scar that remains after treatment is small.

#### How to use 🖉

They come as liquids in strengths of 10% to 35%.

#### For genital warts:

→ First protect the area around the wart with petroleum gel. Then use a cotton swab or clean cloth rolled to a fine point to apply small amounts of trichloroacetic acid or bichloroacetic acid only to warts bit by bit until they turn white. Apply once a week for 1 to 3 weeks, as needed.

It will hurt for 15 to 30 minutes. If it touches healthy skin, wash it off right away with soap and water.

If the treatment is working, a painful sore will appear where the wart used to be. Stop treatment. If there is too much irritation, wait longer before the next treatment. Sores should heal within a week or two. Keep sores clean and dry and watch for infection.

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# Medicine combinations to treat gonorrhea and chlamydia

Gonorrhea and chlamydia often occur together, so they are both treated at the same time even if you don't know which one it is. To do this, use 2 medicines, one from each section below. For each section, the best choices are listed first and in order of next best after that. For example, the best combination is ceftriaxone and azithromycin.

Medicine	How much to give	How to use
ceftriaxone	250 mg (In some countries, 500 mg may be recommended instead)	inject into muscle 1 time only
<b>or</b> cefixime	400 mg	by mouth 1 time only
<b>or</b> spectinomycin	2 grams (2000 mg)	inject into muscle 1 time only
AND		
azithromycin	1 gram (1000 mg)	by mouth 1 time only
or doxycycline	100 mg	by mouth 2 times a day for
(do not use doxycycline if you are pregnant and avoid using it if you are breastfeeding)		7 days
or erythromycin	500 mg	by mouth 4 times a day for 7 days

Also treat the person's sexual partner or partners with the same medicines.

# Medicine combinations to treat Pelvic Infection (PID)

See page 11 for signs of PID. If the person is very ill with a high fever or vomiting, or pregnant, go to a health center or hospital immediately. You will need medicines given in the vein (IV).

If the signs are beginning and not yet severe, the treatment may be an injection and medicines by mouth. This infection is usually caused by a mix of germs, so more than one medicine is needed. Choose 1 medicine from each of the first two boxes below. Also give metronidazole (box 3). The best choices in each box are listed in order. For example, the best combination is to give ceftriaxone, doxycycline, and metronidazole. After 2 days, if the medicines do not seem to be working, get medical help.

Also treat the person's sexual partner or partners using the medicines for gonorrhea and chlamydia (see page 41).

Medicine for infections from gonorrhea. Use one.	How much to give	How to use	
ceftriaxone	250 mg (In some countries, 500 mg may be recommended instead)	inject into muscle as a single dose	
or cefixime	400 mg	by mouth, 1 time only	
AND			
Medicines for infections from chlamydia. Use one.	How much to give	How to use	
doxycycline (do not use doxycycline if pregnant and avoid using it if you are breastfeeding)	100 mg	by mouth, 2 times a day for 14 days	
or azithromycin (safe during pregnancy)	1 gram (1000 mg)	by mouth, 1 time only	
or erythromycin (safe during pregnancy)	500 mg	by mouth, 4 times a day for 14 days	
AND			
Medicine for other infections (use if it is available).	How much to give	How to use	
metronidazole	400 to 500 mg	by mouth, 2 times a day for 14 days	
<b>IMPORTANT!</b> Do not drink alcohol while you are taking metronidazole.			

# Medicines to treat syphilis and chancroid

#### Medicines to treat syphilis

The best choice is listed first. For example, benzathine penicillin is the best treatment for syphilis.

Use one	How much to give	How to use
benzathine penicillin (safe during pregnancy)	2.4 million Units	inject into muscle, one time only
or doxycycline	100 mg	by mouth, 2 times a day
(do not use if pregnant and avoid use if breastfeeding)		for 14 days
or erythromycin	500 mg	by mouth, 4 times a day
(only use this if you are pregnant or breastfeeding and allergic to penicillin. It will treat your syphilis, but after the birth the baby will need additional treatment)		for 14 days

#### Medicines to treat chancroid

The best choice is listed first and in order of next best after that. Azithromycin is the best treatment for chancroid.

Use one	How much to give	How to use
azithromycin	1 gram (1000 mg)	by mouth, one time only
or ceftriaxone	250 mg	inject into muscle, one time only
or ciprofloxacin (do not use if pregnant or breastfeeding or under age 16)	500 mg	by mouth, 2 times a day for 3 days
or erythromycin	500 mg	by mouth, 4 times a day for 7 days

#### Medicine combinations to treat both syphilis and chancroid

It is not always possible to tell the difference between chancroid and syphilis. If you are not sure whether the person has one or the other or both, it is best to treat both infections at the same time, especially if you know there is chancroid where you live. Choose 1 medicine from each box. The best combination is benzathine penicillin and azithromycin. If using erythromycin to treat syphilis, don't use azithromycin or erythromycin for chancroid.