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 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. In places where testing for STIs is not available, it is still important to treat infections right away. 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.

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 women, men, and children. STIs can cause:

- infertility in both women and men.
- 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

Both men and women can get STIs. But the person on the receiving end of intercourse, getting penetrated in the vagina or anus, is more at risk. Without a condom, 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.
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. Tests of samples of blood, urine, or swabbing the affected part of the body are used to know which STI a person has. 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

### Pain or unusual discharge from the vagina

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

### Pain or unusual discharge from the penis

<table>
<thead>
<tr>
<th>Question</th>
<th>Possible Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>? Is there pain or burning while urinating?</td>
<td>This could be <strong>gonorrhea</strong> or <strong>chlamydia</strong>, see page 9. Or less commonly, <strong>trichomonas</strong>, see page 9.</td>
</tr>
<tr>
<td>? Is there pain or painful swelling in the testicles?</td>
<td>This could be <strong>gonorrhea</strong> or <strong>chlamydia</strong>, see page 9. Other causes also need treatment so talk to a health worker.</td>
</tr>
<tr>
<td>? Is there discharge from the penis that just drips and drips?</td>
<td>This could be <strong>gonorrhea</strong>, see page 9.</td>
</tr>
</tbody>
</table>
**Ulcers, sores and growths on the genitals or near the anus**

- **Is there a painless open sore, with raised edges?**
  - This could be **syphilis**, see page 12.

- **Is 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 in 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 around the opening of the vagina, on the thighs or where urine comes out could be **yeast** (see page 7) or, for women, a sign of **trichomonas** (see page 9).

Itchy genitals could also be pubic lice or scabies, which are very tiny bugs that live on the skin, treated with medicines put on the skin, such as those with permethrin (see Skin Problems, in development). Scabies are spread easily between family members, are common in children, and affect 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.
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 BV more likely. It is not usually dangerous, but can cause pregnant women to have their babies early or get an infection after giving birth.

**SIGNS**

- 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 or inserted vaginally, tinidazole by mouth (page 37), or clindamycin (page 33) by mouth or inserted vaginally. If you are pregnant, use metronidazole by mouth.

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 is most common in women but men can get yeast infections too. In men it can lead to inflammation of the head of the penis and itching of the scrotum. Both men and women can get thrush infections of the throat.

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

SIGNS IN MEN
• 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. Natural treatments can reduce the itching.

Natural treatments:
Rinsing off the discharge with clean water will help. Or mix plain yogurt (with no sugar or flavors) or 1/4 cup of vinegar into a pan of clean warm water. Sit in this liquid for 20 to 30 minutes. If it helps you feel better, do this 2 times a day.
OR Mix 3 tablespoons of vinegar with 1 liter of boiled cool water. Soak a piece of clean cotton wool in this mixture and insert the cotton into the vagina every night for 3 nights. Remove the cotton each morning. Men can use the cotton prepared the same way to bathe the penis or scrotum.

**Treatment with medicines:**

Use one of these:

- Gentian violet liquid (page 38) on the vagina, penis, or scrotum each night for 7 nights

  OR

- Miconazole cream (page 39), nystatin cream (page 39), or clotrimazole (page 38) cream or tablets on or inside the vagina or on the penis or scrotum, each night for 7 nights. These medicines are safe to put on the vagina during pregnancy.

  Men may take longer to treat.

**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.
Trichomonas (trich)

Trichomonas is an infection caused by a parasite. For women, it is very uncomfortable and itchy. Men usually have no signs. If the infection is inside the penis, it can pass to a woman during sex without a condom.

Trichomonas is not dangerous but can irritate the vagina, which makes it easier for a woman to get other STIs, including HIV.

**SIGNS**

- 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 37) by mouth. Pregnant women should not take tinidazole.

Treat the person’s partner or partners with the same medicine.

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

Gonorrhea and Chlamydia

Both women and men can have gonorrhea and chlamydia, even if they have no signs. If gonorrhea or chlamydia is not treated, either can lead to severe infection or infertility in women and men.

Every pregnant woman should be tested for gonorrhea and chlamydia because her baby can get these infections during childbirth. If the test shows she has gonorrhea or chlamydia or both, both she and her partner should be treated. If she or her partner has signs of infection, but testing is not available, they should be treated anyway. Gonorrhea and chlamydia have similar signs.
SIGN IN WOMEN

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

SIGN IN MEN

- drip of pus from the penis or anus
- painful swelling of the testicles
- pain or burning while urinating

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. Treat the person’s partner or partners 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 42 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 reproductive parts in a woman’s lower belly. It is often called a “pelvic infection.”

Pelvic infection can develop if you have had a STI that was not cured, especially gonorrhea or chlamydia. But not all PID is from a STI. Other causes of PID include infection after birth, miscarriage, and abortion, or, rarely, because an IUD (Intra-Uterine Device) was put in the uterus without following the necessary sterile procedures.

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 or recently had an abortion or gave birth, 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, use medicines by mouth to treat. This infection is usually caused by a mix of germs, so at least 2 kinds of medicines are needed. See Medicine combinations to treat Pelvic Infection (PID) on page 43. Start treatment right away. If you do not feel better after 2 days, get medical help.

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

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. All pregnant women 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.

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 Medicine combinations to treat both syphilis and chancroid, on page 44. 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.

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. In women, the sore might be inside the vagina and not 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 31). 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. Women who are 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. Other signs of chancroid are swollen glands in the groin and low fever.

**TREATMENT FOR CHANCROID**

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

Genital herpes is a STI caused by a virus. There is no cure for herpes, but treatment can make herpes less painful.

Genital herpes produces painful sores on the genitals or anus that come and go for months or years. The sores can spread to the mouth during oral sex. (Some mouth sores—called cold sores—are caused by a different type of herpes.)

Herpes can be passed from mother to baby if the mother has herpes sores in the vagina during childbirth. A woman in labor with a herpes sore should give birth in a hospital, usually by caesarean surgery (C-section). Treat the mother during the last month of her pregnancy to prevent sores from passing during birth.

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

**SIGNS**

- 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 infections are usually not as bad as the first one. Once a person has the virus, sores may reappear many times. 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 40) makes the infection milder and less painful. Use acyclovir as soon as signs appear.

**PREVENTION**

Reduce the spread of herpes by not having sex when you have a sore. Using a condom that covers the sore may reduce spreading. Condoms for women may work even better because they cover more of the genitals.

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. Because genital warts can look like an early sign of syphilis, test for syphilis before treating for warts, and if it is syphilis, treat it right away.

Warts grow faster during pregnancy and might bleed during childbirth, which could infect the baby. A pregnant woman with warts should consult a health worker to see if she should give birth in a hospital by caesarean surgery (C-section).

**SIGNS**

- small, firm, whitish or brownish skin growths that have a rough surface. In women they grow on the lips of the vagina, inside the vagina, or around the anus. In men they usually grow on the penis but also may grow on the scrotum or 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 40 to 41.

**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) 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 a woman’s cervix so they do not develop into cancer. For more information about testing for and treating cancer of the cervix, see the chapter on Cancer, page 12.

A vaccine can protect against the most dangerous types of HPV, including the types that cause most genital warts. A series of vaccinations, given usually between the ages of 9 and 26 years old, prevents 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 blood to blood contact 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 whitish-colored stools

**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 C, and can even cure hepatitis C. Getting cured of hepatitis C doesn’t prevent you from getting it again if you are exposed. 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.
HIV

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 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. Although people often think HIV and AIDS are the same, AIDS is an illness that develops later, after a person has been infected with HIV for some time without receiving treatment for it.

HIV does not have any signs at the beginning. Someone who looks and feels completely healthy can have and spread HIV. It may take years for the first signs of illness to appear. The only way to know for sure whether or not you have HIV is to get an HIV test. Tests are available at many health centers at low or no cost.

Treatment for HIV/AIDS (antiretroviral medicines) is now much more widely available and has fewer side effects. Although they are not cured, people taking HIV medicines will not develop AIDS but instead will stay healthy and lead normal and long lives. The medicine limits the virus in their body and this helps prevent HIV 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. For more information about HIV, see the chapter on HIV and AIDS (in development).
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 a yeast infection, you can add a small amount of lemon juice, vinegar, yogurt (without sugar or flavors), or sour (fermented) milk to the warm water.

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

- 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.

Wash your underclothes once a day and dry them in the sun. 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.
Pregnancy and STIs

When a pregnant woman has a STI, her baby can be exposed to the infection through the mother’s blood during pregnancy, during birth when the baby passes through the vagina, or in breastmilk.

An untreated or uncontrolled STI can harm both the woman and her 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 mother and child, and treat the woman’s 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 Newborns 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 the mother has 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 40 and 41) 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.
**Hepatitis B**

A pregnant woman can pass her hepatitis B to her baby. 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 the mother and the baby.

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**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.

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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.
- 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.** Choose a person you know for certain has sex only with you. 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. 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 male or 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.
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 safety.** If you want safer sex, your partner may think you do not trust them. But the issue is 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 about how condoms prevent STIs and also prevent pregnancy.

- **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.

- **Do not wait until you are about to have sex to talk about it!** 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 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 a person finds out that he or she has 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 you can safely speak with former partners, insist that they avoid all sexual contact until they are tested, treated, and cured.

**Treating pregnant women 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. 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 transgender people and respect what they tell 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 judge 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

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. See the chapter on Family Planning (p. 8) for more about how to use condoms for men and women.

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. Hesperian’s *Health Actions for Women* has many activities and ideas to start conversations and solve problems related to sexual health.

Where people are taught that sex is shameful, it is more difficult to seek help for a STI. 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 taking 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. However, if there are serious side effects from the antibiotic, like frequent diarrhea or an itchy rash that spreads throughout the body quickly, you may need to stop using the antibiotic. For help deciding, see a health worker right away.
Amoxicillin

Amoxicillin is an antibiotic of the penicillin family used to treat STIs and other infections. Because of drug resistance, it is less useful than previously.

**Side effects**

Amoxicillin may cause diarrhea, rash, nausea, or vomiting. It may cause yeast infection in women or diaper rash in children.

**Important**

Do not use if allergic to medicines of the penicillin family.

If you do not start to get better in 3 days, you may need a different medicine.

**How to use**

Take with food.

<table>
<thead>
<tr>
<th>For chlamydia:</th>
</tr>
</thead>
<tbody>
<tr>
<td>➣ Give 500 mg by mouth 3 times a day for 7 days. Do not use amoxicillin to treat chlamydia unless neither azithromycin or doxycycline is available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>For pelvic inflammatory disease (PID):</th>
</tr>
</thead>
<tbody>
<tr>
<td>➣ Give 500 mg by mouth 3 times a day for 14 days (also give ceftriaxone or spectinomycin to treat PID, see page 43). Do not use amoxicillin to treat PID unless none of the following is available: azithromycin, doxycycline, or erythromycin.</td>
</tr>
</tbody>
</table>

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, and abdominal pain.

**Important**

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

**How to use**

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 42.) |

For pelvic inflammatory disease (PID):

| ➣ Give 1 gram (1000 mg) by mouth as a single dose. Give a second dose 1 week later. (To treat PID, also give ceftriaxone or spectinomycin, see page 43.) |
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 ⚠**

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 🔄**

Can be painful to inject. 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.

Cefixime

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

**Side effects 🤢**

Cefixime can cause upset stomach, diarrhea, and headaches.

**Important ⚠**

Do not take if you are allergic to medicines of the cephalosporin family. Watch for allergic reaction. Always be prepared to treat for allergic reaction and shock when injecting antibiotics.

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

**How to use 🔄**

**For gonorrhea:**

- Give 400 mg by mouth 1 time only. (To treat gonorrhea, also give azithromycin 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**

Do not take if you are allergic to medicines of the cephalosporin family. Watch for allergic reaction. Always be prepared to treat for allergic reaction and shock when injecting antibiotics.

**How to use**

Can be painful to inject. 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 42.)

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

- Inject 250 mg into muscle 1 time only. (To treat PID, also give doxycycline or another medicine, see page 43).

**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, or headache.

**Important**

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

Do not take with dairy products.

**How to use**

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.

**Important !**

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 cream.

For bacterial vaginosis:

- Give 300 mg by mouth, 2 times a day for 7 days
- OR
- 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 many different 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 !**

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 42)

For early syphilis:
- 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 spectinomycin, see page 43.)

**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 spectinomycin, see page 43.)
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!

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 inserts for the vagina and tablets to take by mouth.

For bacterial vaginosis or trichomonas:

- Give 2 grams (2000 mg) by mouth 1 time only (not recommended for pregnant women)
  OR
  - Give 400 to 500 mg by mouth, 2 times a day for 7 days
  OR
  - Insert one 500 mg insert high in the vagina, every night for 7 nights

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 43.)
Spectinomycin

Spectinomycin is an aminocyclitol antibiotic used to treat PID and gonorrhea, but it does not work for gonorrhea of the throat. It is especially 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 or pelvic inflammatory disease (PID):**

Inject 2 g (2000 mg) into muscle 1 time only. (To treat PID, also give doxycycline or another medicine, see page 43.)

Tetracycline

Tetracycline is an antibiotic of the tetracycline family, used to treat many infections including chlamydia. Doxycycline works for the same infections, may cost less, and is easier to take.

**Side effects**

If you spend time in the sun, it can cause skin rashes. It may cause diarrhea or upset stomach.

**Important**

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

Do not use tetracycline if you are pregnant or breastfeeding.

**How to use**

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

**For chlamydia:**

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

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

**Side effects 🍀**

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

**Important ⚠️**

Do not take this medicine if pregnant.
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:**

- 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.
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
- OR
- If using inserts, put one high in the vagina every night, including during menstruation. 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

**Gentian violet (GV, methylrosanilinium chloride)**

Gentian violet is a disinfectant used to help fight infections of the vagina, mouth, and skin.

**Important ⚠️**
Gentian violet turns everything purple. It fades off the skin in a few days but can permanently stain clothing.

**How to use** 🌱
**For yeast infections of the vagina:**
- Soak clean cotton with 1% liquid and place high in the vagina overnight for 3 nights. Be sure to remove the cotton every morning. If the infection does not start to heal within a couple of days, try something else.
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, and vomiting.

Important

Do not take if you have kidney problems.

How to use

Start acyclovir as soon as signs start to appear.

For first time infection of genital herpes:

- Give 200 mg by mouth, 5 times a day for 7 days
  - OR
  - Give 400 mg by mouth, 3 times a day for 7 days

If you have had herpes infection before:

- Give 200 mg by mouth, 5 times a day for 5 days
  - OR
  - 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.
Side effects
Podofilox can irritate skin, causing it to thin, break, and bleed.

Important
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 podofilox. See a health worker for 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.

Side effects
Trichloroacetic acid and bichloroacetic acid will hurt or destroy normal skin when they touch it.

Important
Use very carefully. It will burn and can cause a scar.

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.
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.

Also treat the person’s partner with the same medicines.

<table>
<thead>
<tr>
<th>Medicine</th>
<th>How much to give</th>
<th>How to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>ceftriaxone</td>
<td>250 mg</td>
<td>inject into muscle 1 time only</td>
</tr>
<tr>
<td>or cefixime</td>
<td>400 mg</td>
<td>by mouth 1 time only</td>
</tr>
<tr>
<td>or spectinomycin</td>
<td>2 grams (2000 mg)</td>
<td>inject into muscle 1 time only</td>
</tr>
</tbody>
</table>

AND

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>azithromycin</td>
<td>1 gram (1000 mg)</td>
<td>by mouth 1 time only</td>
</tr>
<tr>
<td>or doxycycline</td>
<td>100 mg</td>
<td>by mouth 2 times a day for 7 days</td>
</tr>
<tr>
<td>(do not use doxycycline if you are pregnant and avoid using it if you are breastfeeding)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or erythromycin</td>
<td>500 mg</td>
<td>by mouth 4 times a day for 7 days</td>
</tr>
<tr>
<td>or tetracycline</td>
<td>500 mg</td>
<td>by mouth 4 times a day for 7 days</td>
</tr>
<tr>
<td>(do not use tetracycline if you are pregnant or breastfeeding)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or amoxicillin</td>
<td>500 mg</td>
<td>by mouth 3 times a day for 7 days</td>
</tr>
<tr>
<td>(amoxicillin can be used if you are pregnant and azithromycin and erythromycin are not available)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Medicine combinations to treat Pelvic Infection (PID)

If the signs are for Pelvic Inflammatory Disease (PID, see page 11) and are severe or the woman is pregnant, she will need medicines given in the vein (IV).

If the signs are beginning and not yet severe, use medicines by mouth to treat. This infection is usually caused by a mix of germs, so at least 2 kinds of medicines are needed to cure it. 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 partner using the medicines for gonorrhea and chlamydia (see page 42).

### Medicine for infections from gonorrhea. Use one.

<table>
<thead>
<tr>
<th>Medicine</th>
<th>How much to give</th>
<th>How to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>ceftriaxone</td>
<td>250 mg</td>
<td>inject into muscle as a single dose</td>
</tr>
<tr>
<td>or spectinomycin</td>
<td>2 grams (2000 mg)</td>
<td>inject into muscle as a single dose</td>
</tr>
</tbody>
</table>

### Medicine for infections from chlamydia. Use one.

<table>
<thead>
<tr>
<th>Medicine</th>
<th>How much to give</th>
<th>How to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>doxycycline</td>
<td>100 mg</td>
<td>by mouth, 2 times a day for 14 days</td>
</tr>
<tr>
<td>(do not use doxycycline if pregnant and avoid using it if you are breastfeeding)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or azithromycin</td>
<td>1 gram (1000 mg)</td>
<td>by mouth as a single dose, and a second dose 1 week later</td>
</tr>
<tr>
<td>(take azithromycin with food, safe during pregnancy)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or erythromycin</td>
<td>500 mg</td>
<td>by mouth, 4 times a day for 14 days</td>
</tr>
<tr>
<td>(safe during pregnancy)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or amoxicillin</td>
<td>500 mg</td>
<td>by mouth, 3 times a day for 14 days</td>
</tr>
<tr>
<td>(amoxicillin can be used if you are pregnant and azithromycin and erythromycin are not available)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Medicine for other infections (use if it is available).

<table>
<thead>
<tr>
<th>Medicine</th>
<th>How much to give</th>
<th>How to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>metronidazole</td>
<td>400 to 500 mg</td>
<td>by mouth, 3 times a day for 14 days</td>
</tr>
</tbody>
</table>

**IMPORTANT!** Do not drink alcohol while you are taking metronidazole.
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. Choose 1 medicine from each box. For each section, the best choices are listed first and in order of next best after that. For example, the best combination is benzathine penicillin and azithromycin. If using erythromycin to treat syphilis, don’t use azithromycin or erythromycin for chancroid.

<table>
<thead>
<tr>
<th>Medicine to treat syphilis. Use one.</th>
<th>How much to give</th>
<th>How to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>benzathine penicillin <em>(can be used if pregnant)</em></td>
<td>2.4 million Units</td>
<td>inject into muscle, one time only</td>
</tr>
<tr>
<td>or doxycycline <em>(do not use if pregnant and avoid use if breastfeeding)</em></td>
<td>100 mg</td>
<td>by mouth, 2 times a day for 14 days</td>
</tr>
<tr>
<td>or erythromycin <em>(only use this if you are pregnant or breastfeeding and allergic to penicillin. It will treat syphilis in the mother, but after the birth the baby will need additional treatment)</em></td>
<td>500 mg</td>
<td>by mouth, 4 times a day for 15 days</td>
</tr>
</tbody>
</table>

**AND**

<table>
<thead>
<tr>
<th>Medicine to treat chancroid. Use one.</th>
<th>How much to give</th>
<th>How to use</th>
</tr>
</thead>
<tbody>
<tr>
<td>azithromycin</td>
<td>1 gram (1000 mg)</td>
<td>by mouth, one time only</td>
</tr>
<tr>
<td>or ceftriaxone</td>
<td>250 mg</td>
<td>inject into muscle, one time only</td>
</tr>
<tr>
<td>or ciprofloxacin <em>(do not use if pregnant or breastfeeding or under age 16)</em></td>
<td>500 mg</td>
<td>by mouth, 2 times a day for 3 days</td>
</tr>
<tr>
<td>or erythromycin</td>
<td>500 mg</td>
<td>by mouth, 4 times a day for 7 days</td>
</tr>
</tbody>
</table>