

Chapter 23

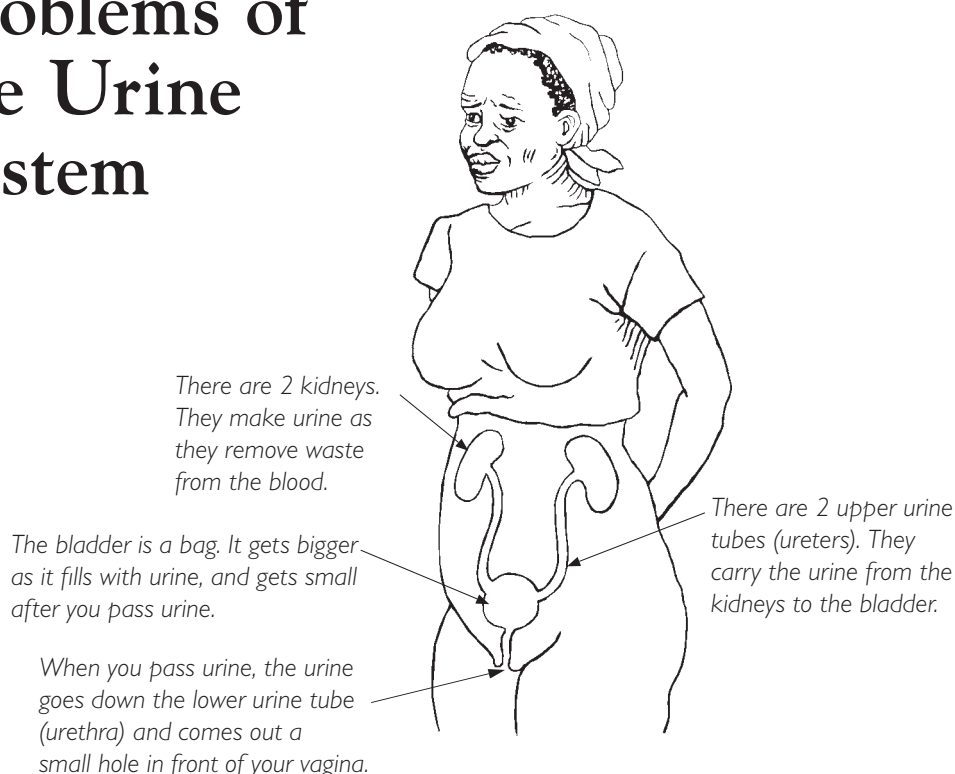
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How to use this chapter:

Why are infections of the urine system such a common problem for people with vaginas? Mostly because the urine tube (urethra) next to the vagina is very short, only about $\frac{1}{5}$ as long as the urine tube in the penis, making infections much more likely. Another reason is because the opening of the urine tube above the vagina is closer than the opening in the penis to body areas that harbor germs, such as the vagina and the anus. This chapter describes the causes, symptoms, and treatments for urine system problems and when to seek care from a health worker.

Problems of the Urine System



This chapter describes the most common problems that affect the urine system. Sometimes these problems are difficult to tell apart. If your problem seems different from those described here, get medical help. You may need special tests to find out what the problem is.

If you can identify the problem, it may be possible to treat it at home—especially if treatment is started right away. But remember that some serious problems begin with signs that do not seem very bad. These problems can quickly become painful and dangerous. So if you do not feel better within 2 to 3 days, get medical help.

Female genital cutting

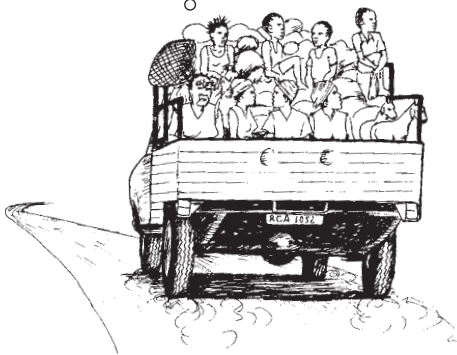
This can damage the urine system and cause serious, lifelong health problems. If you have been cut and have problems passing urine, or infections that return again and again, talk to a health worker. Surgery may be able to correct the problem. For more information, see Chapter 30, “Female Genital Cutting,” page 459.

Infections of the Urine System



A girl or woman of any age—even a small baby—can get an infection of her urine system.

I hope the truck stops soon. I really need to go!



► Teach children to wipe from the vagina toward the anus, front to back, after urinating or passing stool.



There are 2 main kinds of urine system infections. A bladder infection is the most common and the easiest to treat. A kidney infection is very serious. It can lead to permanent damage to the kidney and even death.

WHAT CAUSES BLADDER AND KIDNEY INFECTIONS?

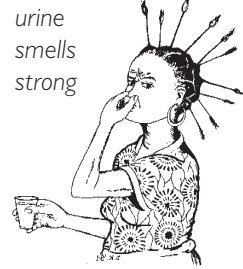
Infections of the urine system are caused by germs (bacteria). They get into the body from the outside through the urinary opening near the vagina. The lower urine tube that runs next to the vagina is shorter than the urine tube in the penis. This leads to more infections because the germs climb more easily up the short tube into the bladder.

Germs can get inside the body and cause infection because of:

- **sex.** During sex, germs from the penis, vagina, and anus can be pushed through the urinary opening into the urine tube. This is a common cause of bladder infection. It helps prevent infection if you pass urine right after having sex, which washes germs out of the urine tube (but does not prevent pregnancy).
- **not drinking enough water,** especially when working in the hot sun or in a very hot room and sweating a lot. Germs multiply more quickly in an empty bladder. Try to drink at least 8 glasses or cups (2 liters) of liquid a day. When it is very hot, you need to drink even more.
- **not urinating for a long time** (for example, when traveling or working). Not flushing out the urine system by urinating allows germs there to multiply which can cause an infection. Try to drink enough to pass urine every 3 to 4 hours.
- **difficulties keeping clean.** Try to wash the outside of the genitals every day, and always wipe from front to back after passing stool (see page 154). Wiping forward can spread germs from the anus into the urinary opening.
- **period supplies.** Keep the cloths and pads used for your menstrual periods very clean between uses.
- **disability,** especially those from spinal cord injuries that cause a loss of feeling in the lower body. For more information, see the books *Where There Is No Doctor* and *A Health Handbook for Women with Disabilities*.
- **having HIV.** When *HIV* is not well-controlled by ART, other infections are harder to fight off.

SIGNS AND TREATMENT**Bladder infection signs:**

- constantly feeling the need to urinate, even just after urinating
- pain or a burning feeling while passing urine
- pain in the lower belly just after passing urine
- urine smells strong, looks cloudy, or has blood in it, see page 269. Dark urine can be a sign of *hepatitis*.

**Kidney infection signs:**

- any signs of bladder infection (see above)
- fever and chills
- pain, often severe, that begins in the lower back and can spread to the front and sides of the body
- nausea and vomiting
- feeling very ill and weak

Don't worry Lihua. I will help you get to the health center.



A kidney infection can cause severe pain and illness. This can be very frightening. Have a family member or neighbor go with you to a health center or to see a health worker.

IMPORTANT Hospital treatment may be needed for a kidney infection. See a health worker right away to get the correct medicines (see page 368).

If you think you are getting a bladder infection:

- **Drink a lot of water.** Try to drink at least one cup of water every 30 minutes. This will make you pass urine often. Sometimes the germs will wash out of your urine system before the infection gets worse. a steaming cup next to some plants
- **Stop having sex** for a few days or until the signs have gone away.
- If available where you live, **make a tea** from flowers, seeds, and leaves that are known to help cure urine infections.



If you think you have a bladder infection, try these approaches for 1 to 2 days. If the signs do not improve or get worse, start antibiotic medicines (page 368). A bladder infection can quickly become dangerous if it moves up the urine tubes to the kidneys.

► STIs, especially *chlamydia* (see page 268), can cause a burning feeling when you pass urine.

Treatment with antibiotics

If you do not feel better in 1 to 2 days, start taking one of the medicines in the box below. A health worker will know the best medicine for where you live, advise if you possibly have a sexually transmitted infection instead (see page 263), and check for signs of a more serious kidney infection.

IMPORTANT See the “Medicines Pages” at the end of this book before giving this or any medicine.

Bladder Infection Medicines

Medicine	How much to take	When and how to take
cotrimoxazole	960 mg	by mouth, 2 times a day for 3 days (cotrimoxazole combines trimethoprim and sulfamethoxazole)
OR		
nitrofurantoin	100 mg	by mouth, 2 times a day for 5 days
If you do not start to feel better in 2 days (48 hours), the germs where you live may be resistant.		

Treatment for a kidney infection:

If you have signs of a kidney infection, such as fever, chills, back pain, or vomiting (see page 367), it is very important to talk to a health worker and start antibiotic treatment right away. Very serious kidney infections are treated in a health center or hospital.

Kidney Infection Medicines

Unless laboratory tests show the germs can be treated with only one antibiotic, use 2 medicines. You will need a single injection of ceftriaxone and then one of the antibiotics below, taken by mouth. If ceftriaxone is not available, use ciprofloxacin instead of cotrimoxazole. If your signs do not improve, return to the health center.

Medicine	How much to take	When and how to take
ceftriaxone	1 gram (1000 mg)	IM, 1 time only
AND		
ciprofloxacin	500 mg	by mouth, 2 times a day for 7 days
OR		
cotrimoxazole	960 mg	by mouth, 2 times a day for 10 days (cotrimoxazole combines trimethoprim and sulfamethoxazole)

BLOOD IN THE URINE

If your urine has blood in it, and if there are no other signs of a bladder or kidney infection, you may have bladder or kidney stones (see below). Or you may have one of these diseases, if they are common in your community:

- **Bilharzia (blood flukes, schistosomiasis)** can cause permanent damage to the urine system if it is not treated early enough. See a health worker trained in problems of the urine system for treatment, and to learn how to prevent bilharzia from happening again. For more information about bilharzia, see *Where There Is No Doctor* or another general medical book.
- **Tuberculosis (TB)** can damage the bladder and kidneys.

KIDNEY OR BLADDER STONES

These are small hard stones that form in the kidney. If they leave the kidney and move through the urine system, they can get stuck and block the flow of urine. This can be painful.

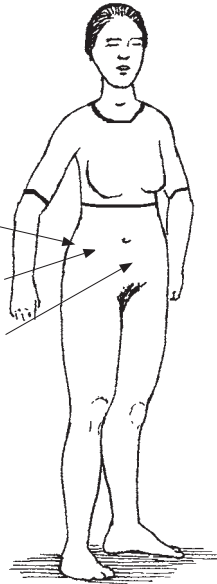
Signs:

- Sudden, very bad pain:

in the low back
where the kidneys
are

or in the side

or in the lower
abdomen, near
the urine tubes
or bladder



Other signs are:

- Blood in the urine. This can happen if the stones injure the inside of the urine system.
- Difficulty passing urine. This can happen if a stone blocks the tubes.

Treatment:

- Drink large amounts of liquid (at least 1 or 2 cups every 30 minutes) to help move the stone through the urine system.
- Take a pain medicine (see page 482).
- If you have a fever or other signs of infection, start the medicines for kidney infection (see page 368).

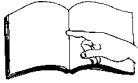
Sometimes blocked urine tubes become infected. If the pain is very bad or infection signs do not improve with antibiotics, get medical help.

Other Problems of the Urine System



tuberculosis

► A particular food (such as citrus or spicy peppers) or caffeine drink (such as tea or coffee) may irritate the bladder and cause you to pass urine often. Avoiding them may help.



growths, 380
diabetes, 174

Stigma and cruelty toward people with fistula is common. Organize to help people find treatment and other support.



NEED TO PASS URINE OFTEN

This may happen because:

- muscles that support the urine system have become weak. The “squeezing exercise” (page 371) may help strengthen these muscles.
- a growth (like a fibroid) in your abdomen is pushing against the bladder so it cannot hold much urine.
- you have a bladder infection.
- you have *diabetes*.
- a medicine you take makes you urinate more, such as some medicines to control high blood pressure.

LEAKING URINE

Less control of urine (incontinence)

Muscles in and around the bladder can weaken after childbirth or from aging. If this happens, urine may leak out when other muscles in the lower belly push on the bladder during sex or while laughing, coughing, sneezing, or lifting. The “squeezing exercise” (page 371) may help.

Urine leaking from the vagina (*fistula*)

When urine leaks all the time from the vagina, there may be a hole between the vagina and bladder. This serious problem can happen when childbirth is difficult and lasts too long. The baby’s head may get stuck and press so long on the skin between the vagina and bladder that a hole (fistula) opens up there. (A fistula can also open between the rectum and the vagina, letting stool leak out. See page 465.)

After the birth, the fistula lets urine leak out all the time. It will not heal or close by itself. To stay dry, the person has to clean themselves continuously, and wear cloths or pads like those for menstruation.

Without an operation or other treatment to repair it (see the next page), fistulas can cause serious problems. Partners, family, and friends may stay away from the person because they smell of urine or stool. People with fistulas may not be able to work and earn money and may feel extremely embarrassed and ashamed.

Rape or violent sexual attacks, such as a weapon being pushed into the vagina, can cause similar injuries and fistulas. Anyone with these types of fistulas will need support and counseling about the sexual violence, as well as surgery to repair the fistula and other injuries to their genitals.

Treatment:

After giving birth, if you are leaking urine, talk with a health worker as soon as possible to find out about hospitals where the fistula can be repaired. **You should get the fistula repaired as soon as possible.** If you are leaking urine and cannot get to the hospital quickly, the health worker may know how to put in a plastic or rubber tube (catheter) through the urine hole into the bladder. This tube will drain the urine and may help the fistula heal. **But you must still go to the hospital.** When you get there, the doctor will examine you to see if you need an operation to repair the fistula.

Because treatment is now available, you do not have to live with fistula!

IMPORTANT To help prevent infection while the tube is in, drink about 10 or 12 cups of water a day. Passing urine often will help flush out germs.

Prevention:

- Getting prenatal care during the pregnancy can help you avoid problems that cause fistula or know ahead of time if it will be best to give birth in a hospital.
- If giving birth at home and labor lasts more than 12 hours, go to a medical center that has the resources to prevent fistula.
- Giving birth with a trained, experienced midwife or health worker makes fistula less likely.
- Waiting more time between one pregnancy and the next lets your muscles get strong again in between births.

► If you have leaking urine or stool after giving birth, seek medical help right away.

► Younger bodies are more likely to have problems giving birth, including fistula. Help young people avoid pregnancy, and delay marriage of girls under 18.



pregnancy

The squeezing exercise

This exercise can help strengthen weak muscles that cause you to leak urine. First, learn how to do it when you are urinating. As the urine comes out, squeeze the muscles in your pelvis until the urine stops. Hold the squeeze for 3 seconds, then relax. Your belly, legs, and buttocks should not move. After you learn which muscles to squeeze, only do the exercise when you are not urinating. Try to do this at least 4 times a day, 10 squeezes each time. Doing the squeezing exercise every day helps keep muscles strong and can prevent problems later in life. This can be done anywhere and no one will know.

If you leak urine and this exercise does not help, get advice from a health worker trained in women's health. You may need surgery or other treatment.

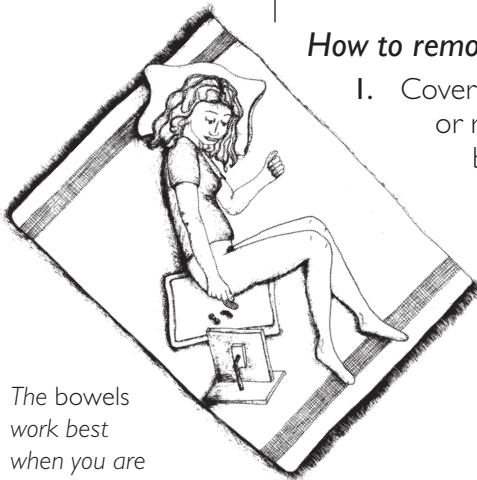


When You Have Problems Passing Stool or Urine

Some people do not have control over when they pass stool or urine. This can happen with a spinal cord injury, with a disability that affects the muscles of the lower body, or to a person near death. This can be inconvenient and embarrassing. It can also cause skin problems and dangerous infections, so it is important to stay clean, dry, and healthy

Difficulty passing stool

If hard stools or difficulty passing stool is a problem, see the box below for how to prevent this. If you need to remove a hard stool, first try when you are sitting on a toilet or pot. If you cannot sit, try to do it lying on your left side.



The bowels work best when you are sitting. If you cannot sit, try lying on your left side.

How to remove stool:

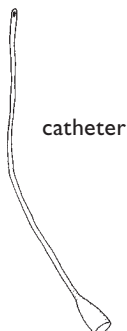
1. Cover your hand with a plastic or rubber glove, or a plastic bag. Put oil on your pointing (index) finger (vegetable or mineral oil both work well).
2. Put your oiled finger into the anus about 2 cm (1 inch). Gently move the finger in circles for about 1 minute, until the muscle relaxes and the stool pushes out.
3. If the stool does not come out by itself, remove as much as you can with your finger.
4. Clean the anus and the skin around it well, and wash your hands.



To keep your finger clean, use a thin rubber glove, or "fingercot," or a plastic bag.

To prevent hard stools (constipation):

- drink lots of water every day.
- eat foods that are high in fiber.
- exercise or move your body every day.
- keep a regular bowel program where you train your body to pass stool once every day at about the same time.



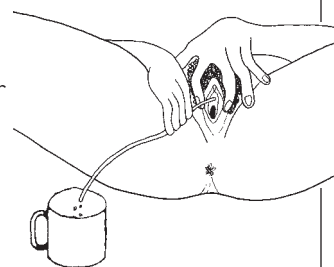
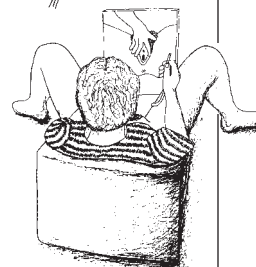
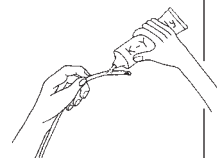
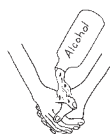
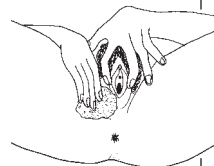
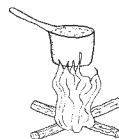
Bladder control

Sometimes it is necessary to remove urine from the bladder by using a rubber or plastic tube called a catheter. **Never use a catheter unless it is absolutely necessary.** Even careful use of a catheter can cause infection of the bladder and kidneys. So it should be used only if someone has a:

- very full, painful bladder and cannot pass urine.
- fistula.
- disability or injury affecting muscles that control urine flow

How to put in a catheter

1. Wash the catheter well with clean, warm water and mild soap. Rinse well with clean, warm water.
2. Wash well with mild soap and clean water the skin around the genitals. Take care to clean the area where urine (pee) comes out and the folds of skin around it (the *labia*). If you do not have mild soap, use only clean water. Strong soap can harm your genitals.
3. Wash your hands. After washing, only touch things that are sterile or very clean.
4. Sit where your genitals are not touching anything, like on the front of a chair or on a clean toilet seat. If you sit on the ground or another solid surface, put clean cloths under and around the genitals.
5. Wash your hands again with alcohol or with mild soap and clean water, or put on sterile gloves.
6. Cover the catheter with a sterile lubricant (slippery cream) that dissolves in water (not oil or petroleum gel). It helps to protect the soft skin of the genitals and urine tube (urethra). If you do not have any lubricant, make sure the catheter is still wet from the boiled water, and be extra gentle when you put it in.
7. If you put the catheter in by yourself, use a mirror to help you see where the urinary opening is, and use your pointing (index) finger and third finger to hold the skin around the vagina open. The urinary opening is below the clitoris almost at the opening to the vagina. After you have done this a few times, you will be able to feel where the opening is and you will not need to use a mirror.
8. Then, with your middle finger, touch below your clitoris. You will feel a sort of small dent or dimple, and right below that is the urinary opening. Keep your middle finger on that spot, and with your other hand, hold the clean catheter 4 to 5 inches from the end, touch the tip to the end of your middle finger, and gently guide the catheter into the opening until urine starts to come out.



You will know if the catheter has gone into the vagina instead of the urinary opening because it will go in easily, but no urine will come out. Also, when you remove it, the catheter will have mucus from the vagina in it. Rinse the catheter in very clean water, and try again.

Make sure the catheter is in a downward position so that the urine can come out.

IMPORTANT To avoid infection when using a catheter, it is important for you to have very clean hands, and to use only a catheter that is very clean (see page 525). If you do get a bladder or kidney infection, get help from a health worker.