



Pelvic Inflammatory Disease (PID)

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What is pelvic inflammatory disease (PID)?

Pelvic inflammatory disease (PID) is an infection of the female reproductive organs. It is a common illness. PID is diagnosed in more than 1 million women each year in the United States.

PID occurs when bacteria move from the **vagina** and **cervix** upward into the **uterus**, **ovaries**, or **fallopian tubes**. The bacteria can lead to an **abscess** in a fallopian tube or ovary. Long-term problems can occur if PID is not treated promptly.

What causes PID?

Two **sexually transmitted infections (STIs)**—**gonorrhea** and **chlamydia**—are the main cause of PID. Gonorrhea and chlamydia may cause vague symptoms or even no symptoms in a woman. When a woman is infected with gonorrhea or chlamydia and does not receive treatment, it can take anywhere from a few days to a few weeks before she develops PID. PID also can be caused by infections that are not sexually transmitted, such as **bacterial vaginosis**.

What are the long-term effects of PID?

PID can lead to serious, long-term problems:

- **Infertility**—One in ten women with PID becomes infertile. PID can cause scarring of the fallopian tubes. This scarring can block the tubes and prevent an egg from being fertilized.
- **Ectopic pregnancy**—Scarring from PID also can prevent a fertilized egg from moving into the uterus. Instead, it can begin to grow in the fallopian tube. The tube may rupture (break) and cause life-threatening bleeding into the abdomen and pelvis. Emergency surgery may be needed if the ectopic pregnancy is not diagnosed early.
- **Chronic pelvic pain**—PID may lead to long-lasting pelvic pain.

Who is at risk of PID?

PID can occur at any age in women who are sexually active. It is most common among young women. Those younger than age 25 years are more likely to develop PID. Women with the following risk factors also are more likely to have PID:

- Infection with an STI, most often gonorrhea or chlamydia
- Multiple sex partners (the more partners, the greater the risk)
- A sex partner who has sex with others
- Past PID

Some research suggests that women who douche frequently are at increased risk of PID. Douching may make it easier for the bacteria that cause PID to grow. It also may push the bacteria upward to the uterus and fallopian tubes from the vagina. For this and other reasons, douching is not recommended.

What are the symptoms of PID?

Some women with PID have only mild symptoms or have no symptoms at all. Because the symptoms can be vague, many cases are not recognized by women or their gynecologists or other health care professionals. Listed are the most common signs and symptoms of PID:

- Abnormal vaginal discharge
- Pain in the lower abdomen (often a mild ache)
- Pain in the upper right abdomen
- Abnormal menstrual bleeding
- Fever and chills
- Painful urination
- Nausea and vomiting
- Painful sexual intercourse

Having one of these signs or symptoms does not mean that you have PID. It could be a sign of another serious problem, such as appendicitis or ectopic pregnancy. You should contact your gynecologist or other health care professional if you have any of these signs or symptoms.

How is PID diagnosed?

To learn if you have PID, your gynecologist or other health care professional will start by asking about your medical history, including your sexual habits, birth control method, and symptoms. If you have PID symptoms, you will need to have a **pelvic exam**. This exam can show if your reproductive organs are tender. A sample of fluid from your cervix will be taken and tested for gonorrhea and chlamydia. Blood tests may be done.

Your gynecologist or other health care professional may order other tests or procedures. They can include **ultrasonography**, **endometrial biopsy**, and in some cases **laparoscopy**.

How is PID treated?

PID can be treated. However, treatment of PID cannot reverse the scarring caused by the infection. The longer the infection goes untreated, the greater the risk for long-term problems, such as infertility.

PID is treated first with **antibiotics**. Antibiotics alone usually can get rid of the infection. Two or more antibiotics may be prescribed. They can be given as pills, through a tube inserted in a vein (**intravenous line**), or by injection. A member of your health care team may schedule a follow-up visit 2–3 days after treatment to check your progress. Sometimes the symptoms go away before the infection is cured. If they do, you still should take all of the medicine for as long as it is prescribed.

Some women may need to be treated in a hospital. Hospitalization may be recommended for women who

- do not have a clear diagnosis
- are pregnant
- must take antibiotics intravenously
- are severely ill
- have nausea and vomiting
- have a high fever
- have an abscess in a fallopian tube or ovary

In certain situations, such as when an abscess is found, surgery may be needed.

A woman's sex partners must be treated. Women with PID may have partners who have gonorrhea or chlamydia. A person can have these STIs even if there are no signs of illness.

How can PID be prevented?

To help prevent PID, take the following steps to avoid STI:

- Use condoms every time you have sex to prevent STIs. Use condoms even if you use other methods of birth control.
- Have sex only with a partner who does not have an STI and who only has sex with you.
- Limit your number of sex partners. If you or your partner has had previous partners, your risk of getting an STI is increased.

Glossary

Abscess: A collection of pus located in a tissue or organ.

Antibiotics: Drugs that treat certain types of infections.

Bacterial Vaginosis: A type of vaginal infection caused by the overgrowth of a number of organisms that are normally found in the vagina.

Cervix: The lower, narrow end of the uterus at the top of the vagina.

Chlamydia: A sexually transmitted infection caused by bacteria that can lead to pelvic inflammatory disease and infertility.

Chronic Pelvic Pain: Persistent pain in the pelvic region that has lasted for at least 6 months.

Ectopic Pregnancy: A pregnancy in which the fertilized egg begins to grow in a place other than inside the uterus, usually in one of the fallopian tubes.

Endometrial Biopsy: A test in which a small amount of the tissue lining the uterus is removed and examined under a microscope.

Fallopian Tubes: Tubes through which an egg travels from the ovary to the uterus.

Gonorrhea: A sexually transmitted infection that may lead to pelvic inflammatory disease, infertility, and arthritis.

Infertility: A condition in which a couple has been unable to get pregnant after 12 months without the use of any form of birth control.

Intravenous Line: A tube inserted into a vein that is used to deliver medication or fluids.

Laparoscopy: A surgical procedure in which an instrument called a laparoscope is inserted into the pelvic cavity through a small incision. The laparoscope is used to view the pelvic organs. Other instruments can be used with it to perform surgery.

Ovaries: The paired organs in the female reproductive system that contain the eggs released at ovulation and produce hormones.

Pelvic Exam: A physical examination of a woman's reproductive organs.

Sexually Transmitted Infections (STIs): An infection that is spread by sexual contact, including chlamydia, gonorrhea, human papillomavirus infection, herpes, syphilis, and infection with human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

Ultrasonography: A test in which sound waves are used to examine internal structures. During pregnancy, it can be used to examine the fetus.

Uterus: A muscular organ located in the female pelvis that contains and nourishes the developing fetus during pregnancy.

Vagina: A tube-like structure surrounded by muscles leading from the uterus to the outside of the body.

If you have further questions, contact your obstetrician–gynecologist.

FAQ077: Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

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