What is PID?

Pelvic inflammatory disease (PID) is a general term that refers to infection of the uterus (womb), fallopian tubes (tubes that carry eggs from the ovaries to the uterus) and other reproductive organs. It is a common and serious complication of some sexually transmitted diseases (STDs), especially chlamydia and gonorrhea. PID can damage the fallopian tubes and tissues in and near the uterus and ovaries. Untreated PID can lead to serious consequences including infertility, ectopic pregnancy (a pregnancy in the fallopian tube or elsewhere outside of the womb), abscess formation, and chronic pelvic pain.

How common is PID?

Each year in the United States, it is estimated that more than 1 million women experience an episode of acute PID. More than 100,000 women become infertile each year as a result of PID, and a large proportion of the ectopic pregnancies occurring every year are due to the consequences of PID. Annually more than 150 women die from PID or its complications.

How is PID diagnosed?

PID is difficult to diagnose because the symptoms are often subtle and mild. Many episodes of PID go undetected because the woman or her health care provider fails to recognize the implications of mild or nonspecific symptoms. Because there are no precise tests for PID, a diagnosis is usually based on clinical findings. If symptoms such as lower abdominal pain are present, a health care provider should perform a physical examination to determine the nature and location of the pain and check for fever, abnormal vaginal or cervical discharge, and for evidence of gonorrheal or chlamydial infection. If the findings suggest PID, treatment is necessary.

The health care provider may also order tests to identify the infection-causing organism (e.g., chlamydial or gonorrheal infection) or to distinguish between PID and other problems with similar symptoms. A pelvic ultrasound is a helpful procedure for diagnosing PID. An ultrasound can view the pelvic area to see whether the fallopian tubes are enlarged or whether an abscess is present. In some cases, a laparoscopy may be necessary to confirm the diagnosis. A laparoscopy is a minor surgical procedure in which a thin, flexible tube with a lighted end (laparoscope) is inserted through a small incision in the lower abdomen. This procedure enables the doctor to view the internal pelvic organs and to take specimens for laboratory studies, if needed.

How do women get PID?

PID occurs when bacteria move upward from a woman's vagina or cervix (opening to the uterus) into her reproductive organs. Many different organisms can cause PID, but many cases are associated with gonorrhea and chlamydia, two very common bacterial STDs. A prior episode of PID increases the risk of another episode because the reproductive organs may be damaged during the initial bout of infection.

Sexually active women in their childbearing years are most at risk, and those under age 25 are more likely to develop PID than those older than 25. This is because the cervix of teenage girls and young women is not fully matured, increasing their susceptibilty to the STDs that are linked to PID.

The more sex partners a woman has, the greater her risk of developing PID. Also, a woman whose partner has more than one sex partner is at greater risk of developing PID, because of the potential for more exposure to infectious agents.

Women who douche may have a higher risk of developing PID compared with women who do not douche. Research has shown that douching changes the vaginal flora (organisms that live in the vagina) in harmful ways, and can force bacteria into the upper reproductive organs from the vagina.

Women who have an intrauterine device (IUD) inserted may have a slightly increased risk of PID near the time of insertion compared with women using other contraceptives or no contraceptive at all. However, this risk is greatly reduced if a woman is tested and, if necessary, treated for STDs before an IUD is inserted.

What are the signs and symptoms of PID?

Symptoms of PID vary from none to severe. When PID is caused by chlamydial infection, a woman may experience mild symptoms or no symptoms at all, while serious damage is being done to her reproductive organs. Because of vague symptoms, PID goes unrecognized by women and their health care providers about two thirds of the time. Women who have symptoms of PID most commonly have lower abdominal pain. Other signs and symptoms include fever, unusual vaginal discharge that may have a foul odor, painful intercourse, painful urination, irregular menstrual bleeding, and pain in the right upper abdomen (rare).

How can PID be prevented?

STD (mainly untreated Chlamydia or gonorrhea) is the main preventable cause of PID. Women can protect themselves from PID by taking action to prevent STDs or by getting early treatment if they do get an STD.

The surest way to avoid transmission of STDs is to abstain from sexual intercourse, or to be in a long-term mutually monogamous relationship with a partner who has been tested and is known to be uninfected.

Latex male condoms, when used consistently and correctly, can reduce the risk of transmission of chlamydia and gonorrhea.

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How can PID be prevented?

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CDC recommends yearly chlamydia testing of all sexually active women age 25 or younger and of older women with risk factors for chlamydial infections (those who have a new sex partner or multiple sex partners). An appropriate sexual risk assessment by a health care provider should always be conducted and may indicate more frequent screening for some women.

Any genital symptoms such as an unusual sore, discharge with odor, burning during urination, or bleeding between menstrual cycles could mean an STD infection. If a woman has any of these symptoms, she should stop having sex and consult a health care provider immediately. Treating STDs early can prevent PID. Women who are told they have an STD and are treated for it should notify all of their recent sex partners so they can see a health care provider and be evaluated for STDs. Sexual activity should not resume until all sex partners have been examined and, if necessary, treated.

What is the treatment for PID?

PID can be cured with several types of antibiotics. A health care provider will determine and prescribe the best therapy. However, antibiotic treatment does not reverse any damage that has already occurred to the reproductive organs. If a woman has pelvic pain and other symptoms of PID, it is critical that she seek care immediately. Prompt antibiotic treatment can prevent severe damage to reproductive organs. The longer a woman delays treatment for PID, the more likely she is to become infertile or to have a future ectopic pregnancy because of damage to the fallopian tubes.

Because of the difficulty in identifying organisms infecting the internal reproductive organs and because more than one organism may be responsible for an episode of PID, PID is usually treated with at least two antibiotics that are effective against a wide range of infectious agents. These antibiotics can be given by mouth or by injection. The symptoms may go away before the infection is cured. Even if symptoms go away, the woman should finish taking all of the prescribed medicine. This will help prevent the infection from returning. Women being treated for PID should be re-evaluated by their health care provider two to three days after starting treatment to be sure the antibiotics are working to cure the infection. In addition, a woman's sex partner(s) should be treated to decrease the risk of re-infection, even if the partner(s) has no symptoms. Although sex partners may have no symptoms, they may still be infected with the organisms that can cause PID.

Hospitalization to treat PID may be recommended if the woman (1) is severely ill (e.g., nausea, vomiting, and high fever); (2) is pregnant; (3) does not respond to or cannot take oral medication and needs intravenous antibiotics; or (4) has an abscess in the fallopian tube or ovary (tubo-ovarian abscess). If symptoms continue or if an abscess does not go away, surgery may be needed. Complications of PID, such as chronic pelvic pain and scarring are difficult to treat, but sometimes they improve with surgery.

What are the complications of PID?

Prompt and appropriate treatment can help prevent complications of PID. Without treatment, PID can cause permanent damage to the female reproductive organs. Infection-causing bacteria can silently invade the fallopian tubes, causing normal tissue to turn into scar tissue. This scar tissue blocks or interrupts the normal movement of eggs into the uterus. If the fallopian tubes are totally blocked by scar tissue, sperm cannot fertilize an egg, and the woman becomes infertile. Infertility also can occur if the fallopian tubes are partially blocked or even slightly damaged. About one in eight women with PID becomes infertile, and if a woman has multiple episodes of PID, her chances of becoming infertile increase.

In addition, a partially blocked or slightly damaged fallopian tube may cause a fertilized egg to remain in the fallopian tube. If this fertilized egg begins to grow in the tube as if it were in the uterus, it is called an ectopic pregnancy. As it grows, an ectopic pregnancy can rupture the fallopian tube causing severe pain, internal bleeding, and even death.

Scarring in the fallopian tubes and other pelvic structures can also cause chronic pelvic pain (pain that lasts for months or even years). Women with repeated episodes of PID are more likely to suffer infertility, ectopic pregnancy, or chronic pelvic pain.

Where can I get more information?

Division of STD Prevention (DSTDP)
Centers for Disease Control and Prevention
http://www.cdc.gov/std
Order Publications Online at www.cdc.gov/std/pubs/

STD information and referrals to STD Clinics
CDC-INFO
1-800-CDC-INFO (800-232-4636)
TTY: 1-888-232-6348
In English, en Español

CDC National Prevention Information Network (NPIN)
P.O. Box 6003
Rockville, MD 20849-6003
1-800-458-5231
1-888-282-7681 Fax
1-800-243-7012 TTY
E-mail: info@cdcnpin.org
www.cdcnpin.org

American Social Health Association (ASHA)
P. O. Box 13827
Research Triangle Park, NC 27709-3827
1-800-783-9877
www.ashastd.org

South Central District Health
Twin Falls 734-5900 Jerome 324-8838
Bellevue 788-4335 Burley 678-8221

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http://www.cdc.gov/std/healthcomm/fact_sheets.htm

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