

Polycystic Ovary Syndrome (PCOS)

What is PCOS?

PCOS is a condition in which a woman's ovaries and, in some cases the adrenal glands, produce more androgens (a type of hormone) than normal. High levels of these hormones interfere with the development and release of eggs as part of ovulation. As a result, fluid-filled sacs or cysts can develop on the ovaries.

Because women with PCOS do not release eggs during ovulation, PCOS is the most common cause of female [infertility](#).

How does PCOS affect fertility?

A woman's ovaries have **follicles**, which are tiny, fluid-filled sacs that hold the eggs. When an egg is mature, the follicle breaks open to release the egg so it can travel to the uterus for fertilization.

In women with PCOS, immature follicles bunch together to form large cysts or lumps. The eggs mature within the bunched follicles, but the follicles don't break open to release them.

As a result, women with PCOS often have [menstrual irregularities](#), such as [amenorrhea](#) (they don't get [menstrual periods](#)) or oligomenorrhea (they only have periods now and then). Because the eggs are not released, most women with PCOS have trouble getting pregnant.

What are the symptoms of PCOS?

In addition to infertility, women with PCOS may also have:

- [Pelvic pain](#)
- Hirsutism, or excess hair growth on the face, chest, stomach, thumbs, or toes
- Male-pattern baldness or thinning hair
- Acne, oily skin, or dandruff
- Patches of thickened and dark brown or black skin

Also, women who are obese are more likely to have PCOS.

Although it is hard for women with PCOS to get pregnant, some do get pregnant, naturally or using assistive reproductive technology. Women with PCOS are at higher risk for miscarriage if they do become pregnant.

Women with PCOS are also at higher risk for associated conditions, such as:

- Diabetes
- Metabolic syndrome—sometimes called a precursor to diabetes, this syndrome indicates that the body has trouble regulating its insulin
- Cardiovascular disease—including heart disease and high blood pressure

What is the treatment for PCOS?

There is no cure for PCOS, but many of the symptoms can often be managed. It is important to have PCOS diagnosed and treated early to help prevent associated problems.

There are medications that can help control the symptoms, such as birth control pills to regulate menstruation, reduce androgen levels, and clear acne. Other medications can reduce cosmetic problems, such as hair growth, and control blood pressure and cholesterol.

Lifestyle changes such as regular exercise can aid weight loss and help reduce blood sugar levels and regulate insulin levels more effectively. Weight loss can help lessen many of the health conditions associated with PCOS and can make symptoms be less severe or even disappear.

Surgical treatment may also be an option, but it is not recommended as the first course of treatment.

NICHD-funded research has also examined the effects of the anti-diabetes drug metformin on fertility in women with PCOS.

How is PCOS diagnosed?

Your health care provider will take a medical history and do a pelvic exam to feel for cysts on your ovaries. He or she may also do a vaginal ultrasound and recommend blood tests to measure hormone levels.

Other tests may include measuring levels of insulin, glucose, cholesterol, and triglycerides.

This information has been provided by the National Institutes of Health, National Institute of Child Health and Human Development.

Last Update: 05/25/2007