

# Polycystic ovary syndrome (PCOS)

Polycystic ovary syndrome (PCOS) is a health problem that affects one in 10 women of childbearing age. Women with PCOS have a hormonal imbalance and metabolism problems that may affect their overall health and appearance. PCOS is also a common and treatable cause of infertility.

## Q: What are the symptoms of PCOS?

**A:** Some of the symptoms of PCOS include:

- **Irregular menstrual cycle.** Women with PCOS may miss periods or have fewer periods (fewer than eight in a year). Or, their periods may come every 21 days or more often. Some women with PCOS stop having menstrual periods.
- **Too much hair** on the face, chin, or parts of the body where men usually have hair. This is called “hirsutism.” Hirsutism affects up to 70 percent of women with PCOS.
- **Acne** on the face, chest, and upper back
- **Thinning hair** or hair loss on the scalp; male-pattern baldness
- **Weight gain** or difficulty losing weight
- **Darkening of skin**, particularly along neck creases, in the groin, and underneath breasts
- **Skin tags**, which are small flaps of excess skin in the armpits or neck area

## Q: What causes PCOS?

**A:** The exact cause of PCOS is not known. Most experts think that several factors, including genetics, play a role:

- **High levels of androgens.** Higher than normal androgen levels in women can prevent the ovaries

from releasing an egg (ovulation) during each menstrual cycle, and can cause extra hair growth and acne.

- **High levels of insulin.** Insulin is a hormone that controls how the food you eat is changed into energy. Insulin resistance is when the body's cells do not respond normally to insulin. As a result, your insulin blood levels become higher than normal. Many women with PCOS have insulin resistance, especially those who are overweight or obese, have unhealthy eating habits, do not get enough physical activity, and have a family history of diabetes (usually type 2 diabetes). Over time, insulin resistance can lead to type 2 diabetes.

## Q: How is PCOS treated?

**A:** There is no cure for PCOS, but you can manage the symptoms of PCOS. You and your doctor will work on a treatment plan based on your symptoms, your plans for children, and your risk for long-term health problems such as diabetes and heart disease. Many women will need a combination of treatments, including:

- **Weight loss.** Losing weight may help to lower your blood glucose levels, improve the way your body uses insulin, and help your hormones reach normal levels. Even a 10 percent loss in body weight (for example, a 150-pound woman losing 15 pounds) can help make your menstrual cycle more regular and improve your chances of getting pregnant.
- **Hair removal or slowing hair growth.** You can try facial hair removal creams, laser hair removal, or electrolysis to remove excess hair. A prescription skin treatment (eflornithine HCl cream) can slow down the growth rate of new hair in unwanted places.

- **Prescription medicines.** Your doctor may prescribe hormonal birth control, such as the pill, patch, shot, vaginal ring, or hormonal intrauterine device (IUD), to improve acne and reduce unwanted hair. Other medicines can block the effect of androgens or lower insulin and androgen levels. If you are trying to get pregnant, your doctor may prescribe medicine to help you ovulate, such as clomiphene (Clomid).
- **In vitro fertilization (IVF).** In IVF, your egg is fertilized with your partner's sperm in a laboratory and then placed in your uterus to implant and develop. Compared with medicine alone, IVF results in higher pregnancy rates and lowers your risk for twins and triplets (by allowing your doctor to transfer a single fertilized egg into your uterus).
- **Surgery.** The outer shell (called the cortex) of ovaries is thickened in women with PCOS and thought to play a role in preventing spontaneous ovulation. Ovarian drilling is a surgery in which the doctor makes a few holes in the surface of your ovary using lasers or a fine needle heated with electricity. Surgery usually restores ovulation, but only for six to eight months.

## For more information...

For more information on PCOS, call the OWH Helpline at 800-994-9662 or contact the following organizations:

**Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), NIH, HHS**  
800-370-2943 • [www.nichd.nih.gov](http://www.nichd.nih.gov)

**American Association of Clinical Endocrinologists**  
904-353-7878 • [www.ace.com](http://www.ace.com)

**American College of Obstetricians and Gynecologists**  
800-673-8444 • [www.acog.org](http://www.acog.org)

**American Society for Reproductive Medicine**  
205-978-5000 • [www.asrm.org](http://www.asrm.org)

**InterNational Council on Infertility Information Dissemination, Inc.**  
703-379-9178 • [www.inciid.org](http://www.inciid.org)

**PCOS Foundation**  
713-487-7267 • [www.pcosfoundation.org](http://www.pcosfoundation.org)

This fact sheet was reviewed by:

Violanda Grigorescu, M.D., M.S.P.H., Chief, Partnerships and Evaluation Branch, Division of Health Informatics and Surveillance, Center for Surveillance, Epidemiology and Laboratory Services, Centers for Disease Control and Prevention

Torie Comeaux Plowden, M.D., M.P.H., Fellow, Reproductive Endocrinology and Infertility, Eunice Kennedy Shriver National Institute of Child Health and Human Development

Lubna Pal, M.B.B.S., M.R.C.O.G., M.S., F.A.C.O.G., Director of the Polycystic Ovary Syndrome (PCOS) Program, Associate Professor, Department of Obstetrics, Gynecology & Reproductive Sciences, Yale School of Medicine

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