



# PCOS

**#1** leading cause of infertility in women.<sup>1</sup>



1 in 10 women are living with PCOS<sup>1</sup>



2 in 10 women remain undiagnosed<sup>2</sup>

## Symptoms

PCOS affects all women differently depending on the underlying hormonal imbalance driving the condition (see next page). Some women will identify with many of the symptoms listed below while others will only recognize a few.

### Irregular ovulation

- Missed, irregular or very light periods
- Infertility

### Ovarian cysts

- Multiple cysts in one or both ovaries on ultrasound

### High androgens (testosterone)

- Weight gain or difficulty losing weight
- Acne or oily skin
- Excess body hair including chest stomach and/or back
- Thinning hair

### Other symptoms

- Mood changes
- Fatigue
- Low sex drive

## What is PCOS?

Polycystic ovarian syndrome (PCOS) is the most common hormonal disorder in women of child-bearing age.<sup>1</sup>

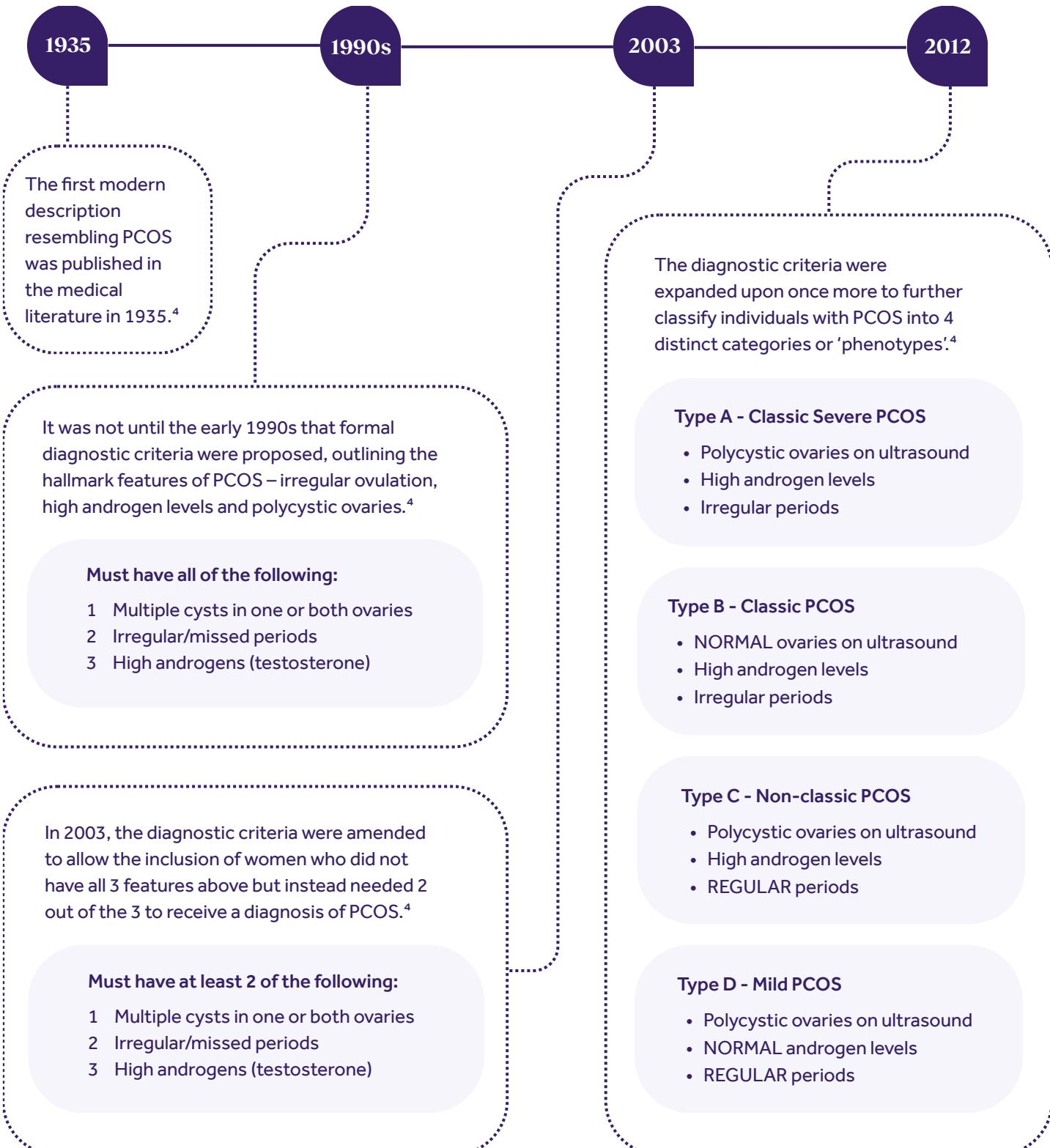
During each cycle, a mature egg is released from one of the ovaries, available for fertilization by a male sperm – this process is known as ovulation. If the egg is not fertilized, it is passed during your period. Women with PCOS have hormonal imbalances that do not always signal for the ovary to ovulate and release an egg, instead the egg remains in the ovary as a small cyst. These small cysts can release hormones of their own, again contributing to further hormonal imbalance.

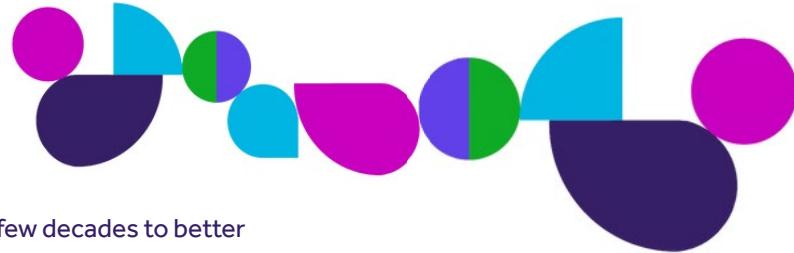
The exact cause of PCOS is unknown and not all women are affected in the same way. The hormonal imbalances seen in PCOS can result in metabolic disturbances, affecting how the body uses and stores energy. This is why many women with PCOS struggle with high blood sugar and increased body weight. Other hormones affected in PCOS are androgen hormones like testosterone – while these hormones are required in low levels in all women, the elevated levels seen in PCOS can result in acne and excess body hair.

This fact sheet will dive a little deeper into the history of PCOS along with the associated diagnostic tools, common misconceptions and health implications all women should be aware of.

# History of PCOS

PCOS has a long and complex history with its earliest description dating back to the beginning of the 16th century.





## Modern view of PCOS

The diagnostic criteria have been further amended over the last few decades to better represent the complex hormonal and metabolic concerns that often accompany PCOS.

As with many other women's health topics, the research into PCOS has lagged and there is still a lot we don't know. What is becoming increasingly clear is that PCOS is not a 'one-size fits all' diagnosis. This means characterizing the condition requires a broader and more fluid approach. While some care providers may still focus on the traditional 2003 diagnostic criteria, others may discuss the concept of the 4 PCOS 'phenotypes'!

### More on the 4 PCOS phenotypes...

Type A is the most common classification, accounting for up to 60% of PCOS cases.<sup>5</sup> Women with type A PCOS are more likely to carry extra weight, have pronounced menstrual irregularities and very high testosterone levels.

Type B accounts for 8.4% of women with PCOS and is also associated with weight gain.<sup>5</sup> Risk of insulin resistance, diabetes and heart disease is highest in these groups.

Women with type C PCOS tend toward a more average weight and lower androgen levels. Interestingly, women with type A PCOS may move into the type C category after losing weight or improving insulin resistance.

Type D is the most controversial type of PCOS and many women with this type would not have met historical diagnostic criteria for the condition. Women in this category tend to be of a normal weight and generally experience mild (if any) insulin resistance and androgen-related concerns.

## Misconceptions of PCOS

1

Myth: All women with PCOS are overweight.

Fact: Some studies suggest up to 40% of women with PCOS are a normal weight or underweight.<sup>7</sup>

2

Myth: You cannot get pregnant if you have PCOS.

Fact: While PCOS is the leading cause of infertility in women, many women will be able to conceive with or without the help of fertility treatments. Women who are using hormonal contraception should plan to allow their body a little extra time to re-adjust before trying to conceive.

3

Myth: All women with PCOS are at risk of associated health complications.

Fact: While PCOS is associated with an increased risk of developing insulin resistance, diabetes and heart disease (see next page), the potential consequences are not the same for all women. Women without any evidence of high androgen levels do NOT have the same risk as women with elevated androgen hormones.

4

Myth: Birth control pills are the only way to manage symptoms of PCOS.

Fact: Most traditional medical doctors agree that birth control pills are the first line treatment for women with PCOS, however there are other natural options and life-style changes that can greatly improve your PCOS symptoms.

## Health risks associated with PCOS

### Diabetes

As previously discussed, PCOS is very closely associated with insulin resistance and diabetes. Diet plays a vital role in maintaining healthy blood sugar levels. Some women may also require medication, namely Metformin, a common diabetes drug, to help reduce their risk of developing diabetes.

### Heart Disease

The link between PCOS and heart disease is likely related to weight and cholesterol. High androgen levels can lead to high cholesterol in women and many women with PCOS are overweight, both known risk factors for heart disease.

### Endometrial Cancer

Women with PCOS have a slightly higher risk of developing endometrial cancer later in life. Normally, endometrial lining is shed in the form of a period every month in regularly menstruating women. For women with PCOS this lining is not sufficiently shed due to infrequent or non-existent periods. Over time, the buildup of this lining may influence the development of endometrial cancer.

### Infertility

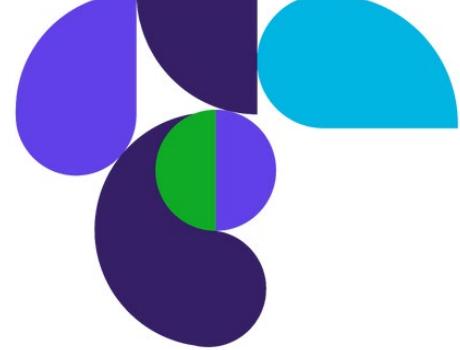
As previously mentioned, PCOS is the leading cause of infertility in women. That said, ovulation inducing medication (see infertility fact sheet) and modern assisted reproductive technologies allow many women with PCOS to conceive. Depending on the type of PCOS, some women will have little to no trouble conceiving naturally as well.

## Treatment

There is no definitive cure for PCOS, and management of the condition depends on symptom severity and fertility goals. For women at risk of further health complications, such as diabetes and heart disease, your doctor may start medication to help mitigate that risk.



## How can Teladoc Health help?



If you are concerned that your menstrual cycle is consistent with the symptoms of PCOS, our Find a Doctor service can locate a general practitioner or gynecologist.

If you are struggling with infertility related to PCOS, our Find a Doctor service can locate a fertility specialist.

If you have been investigated for PCOS and would like a second opinion to discuss diagnosis or treatment options, please reach out to our Expert Medical Opinion team.

If you would like to explore alternative treatment options such as naturopathic medicine or acupuncture, our Personal Health Navigator team will be able to assist you in finding the right resources.

If you are looking for diet advice to help manage your blood sugar levels, our Personal Health Navigator team will be able to assist you in finding a dietician.

PCOS is a life-long condition known to be associated with mood changes. If you feel your symptoms are taking a toll on your mental wellbeing, our Mental Health Navigator services can help you find mental health resources in your community to support your mental health while going through the journey of PCOS diagnosis, treatment or infertility challenges.

This guide is not meant to provide medical advice or service and should not be construed as the professional advice of Teladoc Health. As such, Teladoc Health does not guarantee or assume responsibility for the correctness of the information or its applicability regarding any specific factual situation. Personal health problems should be brought to the attention of physicians and appropriate health care professionals.

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