

Hormonal Contraceptives and Blood Clots

This information sheet has been produced to help you understand more about the benefits and risks of harm from using hormonal contraceptives. It is not a substitute for talking with your doctor, nurse or pharmacist.

The most well known risk of harm in women using hormonal contraceptives is a blood clot.

What is a blood clot?

A blood clot is a normal response to a cut and helps to stop bleeding. However, sometimes blood clots can form inside the body, usually in the leg veins. This is called deep vein thrombosis (DVT) and the blood clots can block the vein.

On rare occasions, pieces of the clot can break off and travel to the lungs. A clot in the lungs is called pulmonary embolism.

Together, deep vein thrombosis and pulmonary embolism are known as venous thromboembolism (VTE).

Who can get a blood clot?

Blood clots can happen to anyone. Two out of every 10,000 healthy, non-pregnant women who are not using a hormonal contraceptive will develop a blood clot each year.

How often do blood clots occur with hormonal contraceptives?

Blood clots only happen very occasionally (rarely) in women using hormonal contraceptives. The risk is higher during the first year of using a hormonal contraceptive.

The risk depends on the type of hormonal contraceptive. However, it is important to remember that all benefits and risks need to be considered when deciding which contraceptive is best for you, and you should discuss this with your doctor.

Combined hormonal contraceptives

Combined hormonal contraceptives contain both an oestrogen and a progestogen. These are available as:

- combined oral contraceptives (also known as COCs or 'the pill')
- vaginal rings.

Risk of developing a blood clot with combined hormonal contraceptives

	Hormones	Examples of some available brands	Risk of developing a blood clot (VTE) in a year
Combined oral contraceptives with low-dose oestrogen	ethinylestradiol + levonorgestrel	Ava 20 ED, Ava 30 ED	About 5–7 out of 10,000 women
	ethinylestradiol + norethisterone	Brevinor, Norimin	About 5–7 out of 10,000 women
	ethinylestradiol + desogestrel	Marvelon, Mercilon	About 9–12 out of 10,000 women
	ethinylestradiol + drospirenone	Yasmin, Yaz	About 9–12 out of 10,000 women
	ethinylestradiol + cyproterone	Ginet, Diane	About 9–12 out of 10,000 women
	estradiol + nomegestrol	Zoely	Not yet known
	estradiol + dienogest	Qlaira	Not yet known
Combined oral contraceptives with high-dose oestrogen	ethinylestradiol + levonorgestrel	Microgynon 50 ED	About 9–12 out of 10,000 women
Contraceptive vaginal ring	ethinylestradiol + etonogestrel	NuvaRing	About 6–12 out of 10,000 women

Progestogen-only contraceptives

Progestogen-only contraceptives contain only a progestogen — they do not contain any oestrogen. These are available as:

- oral tablets (also known as the ‘mini-pill’)
- injections
- implants
- intrauterine devices.

Progestogen-only contraceptives do not appear to be associated with an increased risk of developing blood clots. The risk of developing blood clots with progestogen-only contraceptives is about two to five out of 10,000 women per year.

What else increases the risk of blood clots?

The risk of blood clots increases with:

- being overweight
- age (older than 35 years)
- having a close family member who has had a blood clot in the past (genetic)
- smoking
- childbirth
- pregnancy
- immobility, including being on a long flight and not being able to move around after an injury, illness or operation.

These are also called risk factors. Having more than one risk factor increases the chance of having a blood clot. You should tell your doctor if any of these risk factors apply to you before you start using a hormonal contraceptive.

What are the symptoms of a blood clot?

The symptoms of a blood clot in the leg are swelling, tenderness and pain. Breathlessness and sharp chest pain can occur with a blood clot in the lungs. If you develop any of these symptoms, you should call an ambulance because it is important to get treated as soon as possible.

What are the benefits of using a hormonal contraceptive?

Hormonal contraceptives are 91 percent effective at preventing pregnancy with typical use compared with male condoms, which are 82 percent effective with typical use.

Other benefits include lighter periods, less period pain and an improvement in symptoms of premenstrual syndrome (PMS) or premenstrual tension (PMT). Combined hormonal contraceptives have also been shown to reduce the risk of cancer of the uterus and ovaries.

Where can I find more information on using hormonal contraceptives?

You can find more information in the consumer medicine information section of the Medsafe website: www.medsafe.govt.nz/consumers/cmi/CMIForm.asp

If you have any further questions, discuss these with your doctor, nurse, pharmacist or Family Planning.

www.medsafe.govt.nz