
Types of hormonal contraception

Created 19 Jun 2009 - 9:06am

An overview of different types of hormonal contraception and considerations if you are also on [ARV](#) [1]A medication or other substance which is active against retroviruses such as HIV..

The Pill

The Pill is the most common form of hormonal contraception. It comprises two active synthetic hormones, oestrogen and progesterone, so it is sometimes called the 'combined Pill'.

The Pill is estimated to be over 99% effective in preventing pregnancy, although this may be decreased by other medicines or by gastro-intestinal symptoms like vomiting or diarrhoea. Risks of side effects are increased for smokers. For women who are taking ARV that interacts with the combined Pill, lower dose formulations should be avoided.

The progesterone-only Pill (mini Pill)

The progesterone-only pill (the mini-Pill) contains progesterone only and is a less effective contraceptive being between 96 and 99% effective. The mini-Pill is not a good option for a woman taking ARV unless you are using one of the combinations that does not interact or unless you are doubling up with a barrier method, as it is less effective than the combined Pill to begin with, so any further dilution of potency is more likely to result in unwanted pregnancy.

The Patch

The contraceptive patch is a small (5cm by 5 cm) beige patch that is stuck onto smooth, hair-free skin that delivers a combination of synthetic hormones oestrogen and progesterone into the blood stream, like the combined Pill. If used correctly, it is 99% effective. The patch needs to be changed weekly for three weeks, then for the fourth week of the cycle no patch is worn and break-through bleeding occurs, which mimics a period. As the stomach does not absorb the hormones delivered by the patch, its [efficacy](#) [2](Of a drug or treatment). The maximum ability of a drug or treatment to produce a result regardless of dosage. A drug passes efficacy trials if it is effective at the dose tested and against the illness for which it is prescribed. In the standard procedure, Phase II clinical trials gauge efficacy, and Phase III trials confirm it. is not affected by vomiting/diarrhoea. Unfortunately medications like antiretrovirals will affect blood levels, however.

At the time of writing the patch has not yet been licensed for use in Australia though the application has been made to the [TGA](#) [3][Therapeutic Goods Administration] The federal government body that approves drugs and treatments before they can be prescribed. The injections There are two available forms of injected hormonal contraception that provide longer-lasting protection.

The injections

There are two available forms of injected hormonal contraception that provide longer-lasting protection. Injections are required only every twelve weeks for medroxyprogesterone acetate (Depo-Provera) and every eight weeks for norethisterone enanthate (Noristerat) (the latter is not available in Australia). Each product uses progesterone only.

The side effects associated with the injectable form are the same as for the progesterone-only Pill, including vomiting, nausea, headache, dizziness, breast discomfort and weight changes, in addition to local reactions like

bruising and itching. Women who have had severe depression are cautioned against these products.

Becoming pregnant after having an injectable contraceptive may take longer (up to several months after Depo-Provera, although fertility may also return immediately), so it is not a good option for women who wish to conceive in the relatively near future.

Injected contraceptives are more than 99% effective as long as injections are given at the prescribed intervals and so long as no medicines are taken that decrease blood levels of the active ingredients. For a woman taking ARV that causes an interaction with the contraceptive, the advice is to have the injections 10 weeks apart rather than 12 weekly. This is not a proven strategy, however, and the risks of contraceptive failure and/or increased side effects from the contraceptive from more frequent injections are possible.

The implant

The contraceptive implant Implanon (etonogestrel) is another progesterone-only product. This is a small rod inserted under the skin of the upper [arm](#) [4]Any of the treatment groups in a randomised trial. Most randomised trials have two "arms," but some have three "arms," or even more. (about the size of a match) that slowly releases the hormone. This device provides protection for three years, but is readily reversible if pregnancy is desired or if the side effects are not tolerated. (If you do have the implant removed, you are advised to practice barrier contraception for seven days beforehand, as sperm can live inside your body for seven days).

Intrauterine system

The IUS (Mirena) is a small T-shaped device that is inserted into the womb by a doctor or trained nurse. It slowly releases the hormone progesterone. Unlike all of the other hormonal methods, this one is not affected by other medicines so it should be effective regardless of ARV regimen.

The IUS has the advantage of a local mechanism of action (within the womb) so it is unlikely to be affected by other medicines but, like other hormonal contraceptives, it has side effects. Insertion into the uterus is not going to be appropriate or acceptable to all women especially if you have a history of pelvic inflammatory disease, and some women get an infection within the first 20 days of use.

However the IUS is not associated with pain and heavy bleeding for which other forms of IUD are notorious. Significant advantages of the IUS are improvement of menstrual symptoms, ease of reversibility and long lasting protection. The IUS is also very cost effective compared with oral contraception (the Pill and mini-Pill).

Unlike other intrauterine devices (IUD – formerly called coils) that can cause heavy bleeding and particularly painful periods, the IUS can improve difficult menstrual symptoms, often making periods lighter and less painful. Fertility quickly returns upon removal. Side effects include some irregular bleeding, spotty skin and headaches for the first few months. Harmless cysts may also form on the ovaries.

Emergency contraception

The 'morning after Pill' can be used after a barrier contraceptive fails (a condom comes off, or a diaphragm or cap was incorrectly placed) or if no contraception was used. It consists of a high dose progesterone-only Pill – actually two pills taken together at the same time within 72 hours of unprotected intercourse. If taken within 24 hours it prevents 95% of pregnancies. It is available in pharmacies and some sexual health clinics.

The 'morning after Pill' is affected by ARV drugs in the same way that other oral contraceptives are, so for women taking combinations including agents that lower the blood levels contraceptives (in table 1), it is likely to be less effective. In addition, the longer after intercourse that the pills are taken, the less protection is given. Emergency contraception may stop ovulation or fertilisation of an egg, or stop a fertilised egg from implanting. It does not cause an abortion.

For women needing emergency contraception who are taking ARV that interacts with hormonal contraception, getting some individual medical advice about whether the dosage should be increased is worthwhile. However,

taking the pills as soon as possible is also advisable, so taking the standard dose immediately while waiting for further advice would be better than waiting, if it is impossible to speak to a doctor without delay.

If you need emergency contraception and you are outside the 72-hour window (or if you want to use the most effective option) you can have a copper IUD inserted up to five days after the unprotected sex, or five days after the earliest day upon which you may have ovulated. This is a good option if you think that you might like to use the IUD for ongoing contraception, however copper IUDs are associated with unpleasant menstrual side effects like very heavy and/or painful periods.

Intrauterine device (IUD)

An IUD is a small plastic and copper device that is put into your womb. It has one or two soft threads on the end. These thin threads hang through the opening at the entrance of your womb (cervix) into the top of your vagina. An IUD can stay in for three to ten years, depending on type. It should only be fitted by a trained doctor or nurse. An IUD used to be called a 'coil'.

The IUD is estimated to be about 98-99% effective in preventing pregnancy, but it provides no protection from [STIs](#) [5] [Sexually Transmissible (or Transmitted) Infection] Infections spread by the transfer of organisms from person to person during sexual contact. Also called venereal disease (VD) (an older public health term) or sexually transmitted diseases (STDs). or HIV, and disadvantages include the fact that it is likely to cause heavier, more painful periods. If the device fails and you become pregnant, there is also an increased risk of an ectopic pregnancy.

[ARV interactions with hormonal contraception](#) [6] [up](#) [7] [Surgical options](#) [8]

- [ANET resources](#)
- [drug interactions](#)
- [Sex and relationships](#)

Links:

[1] <http://napwa.org.au/glossary/term/122>

[2] <http://napwa.org.au/glossary/term/486>

[3] <http://napwa.org.au/glossary/term/113>

[4] <http://napwa.org.au/glossary/term/470>

[5] <http://napwa.org.au/glossary/term/188>

[6] <http://napwa.org.au/resource/treat-yourself-right/contraception-and-arv/hormonal-contraception/arv-interactions-with-ho-0>

[7] <http://napwa.org.au/resource/treat-yourself-right/contraception-and-arv/hormonal-contraception>

[8] <http://napwa.org.au/resource/treat-yourself-right/contraception-and-arv/surgical-options>