Making Abortion Safe



RCOG's global initiative to advocate for women's health

Best practice in post-abortion contraception

September 2022

Published by the Royal College of Obstetricians and Gynaecologists, 10-18 Union Street, London, SEI ISZ, UK. www.rcog.org.uk Registered charity no. 213280 © 2022 The Royal College of Obstetricians and Gynaecologists No part of this publication may be reproduced, stored or transmitted in any form or by any means, without the prior written permission of the publisher or, in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency in the UK [www.cla.co.uk]. Enquiries concerning reproduction outside the terms stated here should be sent to the publisher at the UK address

Copyediting and typesetting: Lisa Martin Benjamin (www.lisaamartin.wordpress.com)

Layout & design: Stephanie Williams (www.whitetriangle.agency)

printed on this page.

Contents

Introduction to RCOG Best Practice Papers	4
Acknowledgements	4
Acronyms and abbreviations	5
Background	6
Starting contraception methods at the time of an abortion	6
Initiating a discussion about contraception in a pre-abortion consultation	6
Using a shared decision-making model	7
Facilitating decision-making about choice of conceptive method	7
Gathering information to identify suitable methods	7
Identifying contraindications to contraceptive methods	8
Taking a medical history	8
Medical eligibility criteria	8
Checking drug interactions	10
Sharing information to facilitate decision-making	10
How methods work	10
Method effectiveness	П
Advantages and disadvantages of methods	12
Information for patients before starting methods	15
Progestogen-only implant	15
LNG-IUD	16
Cu-IUD	18
Progestogen-only injection	19
Progestogen-only pill (POP)	20
Combined hormonal contraceptives	22
Sterilisation	25
Diaphragm	25
Condom	25
Fertility awareness methods	25
Starting methods	26
When to seek medical attention	26
Evidence sources	27
Additional literature reviewed	27
Appendix I: Overview of contraceptive methods infographic	29

Introduction to RCOG Best Practice Papers

The Royal College of Obstetricians and Gynaecologists (RCOG) Best Practice Papers are peer-reviewed, easy-to-use, adaptable documents that set out the essential elements for evidence-based clinical practice.

The best practices described are drawn from current evidence-based guidance produced by organisations such as the World Health Organization (WHO), the Faculty of Sexual and Reproductive Healthcare (FSRH) and the National Institute for Health and Care Excellence (NICE).

To be readable and useful to people providing healthcare daily, the papers have been deliberately kept short and succinct. Therefore, the primary evidence for recommendations and the strength of that evidence have been omitted, but this can be found in the original source documents. Very recently published evidence has been assessed to determine whether any recommendations from current guidelines should be amended.

The recommendations may also be used by policy makers as a tool to help improve services.

While Best Practice Papers may be used for reference in any country, local policy and service delivery contexts may necessitate adaptation of some recommendations; however, it is important to maintain evidence-based practice.

For support on adapting the document while maintaining good practice, please contact cfwgh@rcog.org.uk.

Note: globally, most people who have abortions and use contraception are women. However, it is important to acknowledge that it is not only women who may need to access abortion, contraception and other reproductive and sexual health services to maintain their gynaecological health and reproductive wellbeing. Reproductive and sexual health services and delivery of care must therefore be appropriate, inclusive and sensitive to the needs of those individuals whose gender identity does not align with the sex they were assigned at birth.

RCOG guidance disclaimer

The RCOG produces guidelines as an educational aid to good clinical practice. They present recognised methods and techniques of clinical practice, based on published evidence, for consideration by obstetricians, gynaecologists and other relevant health professionals.

It is healthcare providers who must make the ultimate judgement about a particular clinical procedure or treatment plan in the light of clinical data presented by the patient, and the diagnostic and treatment options available. Therefore, RCOG guidelines are unlike protocols or guidelines issued by employers because they are not intended to be prescriptive directions defining a single course of management.

Departure from the local prescriptive protocols or guidelines should be fully documented in the patient's clinical notes at the time of the relevant decision.

www.rcog.org.uk/guidance/rcog-guidelines-disclaimer/

Acknowledgements

This Best Practice Paper was developed by Jayne Kavanagh and Sharon Cameron, and was peer reviewed by Roua Abu Hurayra, Sekinah Bola-Oyebamiji, Alison Edelman, Kristina Gemzell Danielsson, Salma Gerais, Anna Glasier, Corrina Horan, Abbas L. Ibrahim, Patricia A. Lohr and Angelina Namiba.

It was produced as part of the RCOG Making Abortion Safe programme – a 3-year programme working to increase healthcare professionals' capacity to address the barriers to safe abortion care and/or post-abortion care, globally. For more information, visit www.rcog.org.uk/en/global-network/centre-womens-global-health/our-work/making-abortion-safe/

Acronyms and abbreviations

BMD Bone mineral density

CHC Combined hormonal contraception (estrogen and progestogen-containing pills,

vaginal ring and transdermal patch)

Cu-IUD Copper intrauterine device

CVD Cardiovascular disease

DSG Desogestrel

FAM Fertility awareness methods

FSRH Faculty of Sexual and Reproductive Health

IUD Intrauterine device

LNG Levonorgestrel (progestogen)

LNG-IUD Levonorgestrel-containing intrauterine device (hormonal, progestogen-only IUD)

LARC Long-acting reversible contraceptives (IUDs and progestogen-only implant)

MEC Medical eligibility criteria

MI Myocardial infarction

NET Norethisterone

POP Progestogen-only pill

RCOG Royal College of Obstetricians and Gynaecologists

STI Sexually transmitted infection

VTE Venous thromboembolism

WHO World Health Organization

Background

Provided there are no medical contraindications, all methods of contraception are safe and effective when started after an abortion.

One study found that 51% of women had resumed sexual activity within 2 weeks of having an abortion. As ovulation can return as early as 8–10 days after an abortion, it is important that individuals who want to delay or prevent a future pregnancy have access to contraception at the time of an abortion.

Health workers should aim to provide person-centred care when discussing and providing post-abortion contraception. They should also recognise the barriers facing some individuals that might affect their willingness to talk about, start or continue using contraception. Sometimes, it might be appropriate for health workers to discuss how particular barriers could be overcome; however, they should recognise that patients have a right to decline or postpone contraceptive care. This should always be respected; the health worker should never put pressure on patients to discuss or accept contraception.

Starting contraception methods at the time of an abortion

All hormonal and intrauterine contraceptive methods can be started at the time of a surgical abortion. Intrauterine devices can be inserted immediately after the pregnancy has been removed.

For individuals undergoing medical abortion, all hormonal methods, except for the combined hormonal vaginal ring and the levonorgestrel-containing intrauterine device (LNG-IUD), can be started immediately after the first pill of the medical abortion regimen. The combined hormonal vaginal ring, the LNG-IUD and copper intrauterine device (Cu-IUD) can be inserted as soon as the pregnancy has been expelled.

Hormonal contraceptive methods or intrauterine methods started within 5 days of a surgical or medical abortion provide immediate contraceptive protection.

There is some evidence to suggest that if the progestogen-only injection is given at the same time as mifepristone is taken for a medical abortion before II weeks of pregnancy, there is a small increase in the risk of continuing pregnancy. However, research also shows that most patients accept having the injection at the same time as mifepristone because the disadvantage of any loss of efficacy is outweighed by the convenience of accessing contraception while still in the abortion facility. Healthcare providers are advised to tell patients about this possible risk and the need to confirm the success of the abortion, which can be done in the usual ways. It is important that patients are also offered the alternative of receiving the injection after misoprostol, which will not affect the efficacy of the medical abortion.

Initiating a discussion about contraception in a preabortion consultation

To avoid coming across as judgmental and contributing to abortion-related stigma, it is important for health workers to bring up the topic of contraception with patients in a sensitive and timely way. Health workers should consider discussing contraception towards the end of a pre-abortion consultation when they have built up a relationship of trust with the patient and plans for their abortion are in place.

Health workers must avoid making assumptions about whether the patient will want or need contraception after their abortion. Patients who do not want to discuss contraception can be informed about when their fertility will resume after an abortion and advised on how to access contraceptive services if they need them in the future.

Using a shared decision-making model

Using a shared decision-making model to talk about contraception, which centres on patients' specific preferences, helps avoid emphasising one aspect of different methods, such as efficacy, over everything else, and reduces pressure to accept a particular method.

This does not mean that health workers cannot give information on the greater effectiveness, duration and safety of long-acting reversible contraceptive (LARC) methods, just that no pressure should be put on patients to accept them, or any other particular method.

It is important to respect an individual's wishes about not starting a method of contraception. While this can be challenging for health workers, this discussion can still be utilised to inform patients about resumption of fertility after an abortion and to advise them about where they can access contraceptive services, if they wish to, in the future.

Facilitating decision-making about choice of conceptive method

This involves three distinct steps.

- Gathering information to help determine the contraception methods patients think might suit them
- · Identifying any contraindications to methods patients are interested in
- Sharing information about suitable methods so that patients can make an informed choice about the method that is best for them

These steps do not necessarily need to be taken in this order. During a pre-abortion consultation, a medical history will have probably already identified contraindications to certain contraceptive methods before contraception is discussed.

Gathering information to identify suitable methods

It is important not to make assumptions about a person's priorities regarding contraception and to bear in mind there are several different factors that might affect patients' preferences. These include:

- · the effectiveness of methods
- convenience
- wanting to avoid certain disadvantages or to have certain advantages
- future pregnancy plans
- · personal and friends or family members' experiences of using different methods
- concerns about safety and/or side-effects
- discreetness of method (some patients do not want their partners or family to know they are using contraception)

A useful way to start gathering information is to ask patients if they have used contraceptive methods in the past, and if so, what they liked or disliked about these methods and why they stopped using them. This can be followed by asking whether these factors are still important to them, and/or a more general question about what is now important to them in a contraceptive method. Those who have not used contraception before can be directly asked: "what is important to you in a contraceptive method?"

Sometimes, asking more specific questions helps narrow down potential methods, such as:

• Are there any side-effects you are particularly worried about?

- Are you planning to have a child in the next few years?
- What are your periods like?
- Have you had experience of taking a pill every day? How did that go for you?
- Would you like to discuss any non-contraceptive benefits of methods?

By the end of this conversation, health workers should have narrowed down two or three methods the patient is interested in, or even identified the precise method the patient wishes to start.

Identifying contraindications to contraceptive methods

There are three steps to identifying contraindications.

- I. Taking a medical history and, if patients want a combined hormonal method, taking a focused family history of medical conditions that may present a contraindication to the method
- 2. Checking whether any medical conditions identified in the history make it unsafe for patients to use their preferred method
- 3. Checking for any potential interactions between medication the patient is taking and their chosen method

I. Taking a medical history

The provider will have taken a thorough medical history during the pre-abortion consultation to assess eligibility for abortion methods. They should have identified any concurrent medication and significant medical conditions.

Health workers can then tailor additional history-taking to the contraceptive method(s) of interest to the patient. For example, to assess eligibility for combined hormonal contraception, providers should also specifically ask about smoking and migraines, and about family history of cardiovascular disease and venous thromboembolism. For those considering an IUD, asking about menstrual periods is important.

2. Medical eligibility criteria

To check whether any medical conditions make their preferred method(s) of contraception unsafe for patients, providers should refer to guidelines on medical eligibility criteria (MEC).

The World Health Organization (WHO)'s medical eligibility criteria for contraceptive use (WHO MEC) are evidence-based guidelines on the safety and restrictions for contraceptive methods with coexisting conditions.

The WHO MEC have been modified in some countries, including in the UK, where the Faculty of Sexual and Reproductive Health (FRSH) has developed the UK medical eligibility criteria (UK MEC). See Box 1.

WHO MEC, UK MEC and the WHO's associated MEC wheel and app² are freely available online.

Box I WHO (2015) and UK (2016) medical eligibility criteria categories for contraceptive eligibility

- I. A condition for which there is no restriction for the use of the contraceptive method
- 2. A condition for which the advantages of using the method usually outweigh the theoretical or proven risks
- 3. A condition for which the theoretical or proven risks usually outweigh the advantages of the method
- 4. A condition that represents an unacceptable health risk if the contraceptive method is used

¹ https://www.who.int/publications/i/item/9789241549257

² https://www.who.int/news/item/29-08-2019-new-app-for-who-s-medical-eligibility-criteria-for-contraceptive-use

Box 2 UK MEC 4 contraindications for combined hormonal contraception

- Stroke (history of cerebrovascular accident, including transient ischaemic attack (TIA)
- Current and history of ischaemic heart disease
- Vascular disease
- History of, or current venous thromboembolism (VTE)
- Major surgery with prolonged immobilisation
- Complicated valvular and congenital heart disease (e.g., pulmonary hypertension)
- Cardiomyopathy with impaired cardiac function
- Atrial fibrillation
- Known thrombogenic mutations
- Systolic blood pressure ≥160 mmHg or diastolic ≥90–99 mmHg
- Migraine with aura
- Smoking ≥15 cigarettes/day after age 35 years
- Severe decompensated liver cirrhosis
- Benign hepatocellular adenoma
- Malignant hepatocellular carcinoma
- Positive antiphospholipid antibodies
- Systemic lupus erythematosus (SLE) with positive antiphospholipid antibodies
- Current breast cancer

Note that all hormonal methods of contraception are contraindicated (UK MEC 4) for individuals with current breast cancer.

Box 3 UK MEC 4 conditions for LNG-IUD and Cu-IUD

- Unexplained vaginal bleeding
- Post-abortion sepsis
- Awaiting treatment for cervical cancer
- Endometrial cancer
- Gestational trophoblastic disease with persistently elevated human chorionic gonadotrophin (hCG) levels or malignant disease
- Current pelvic inflammatory disease
- Current symptomatic chlamydia
- Current gonorrhoea or purulent cervicitis
- Pelvic tuberculosis
- Current breast cancer

Pregnancy is dangerous for people with certain medical conditions, so the risk of the method should be weighed against that of an unwanted or unplanned pregnancy – especially when other methods are not available or are unacceptable to the patient.

For individuals with any past or current significant medical condition, health workers should check medical eligibility criteria on a case-by-case basis.

Contraceptive use among individuals at high risk of HIV infection

Individuals at high risk of HIV infection are eligible to use all hormonal and intrauterine contraceptive methods without restriction (MEC category I). No contraceptive method, including the progestogen-only injection, is associated with an increased risk of acquiring HIV.

3. Checking drug interactions

Drug interactions can be cross-referenced in national medicines formularies, such as the British National Formulary (BNF), or in local standard treatment guidelines, which are sometimes available as a mobile app. Online drug interaction checkers, such as Stockley's Drug Interactions on the Medicines Complete website (www.medicinescomplete.com/mc/index.htm) or the Liverpool online HIV Drug Interaction Checker (www.hiv-druginteractions.org) can also be used.

For those with no access to online resources or apps can use paper versions of national medicines formularies and/or local standard treatment guidelines.

Enzyme-inducing medication

The efficacy of combined hormonal contraceptive methods, the progestogen-only pill and the contraceptive implant can be affected by enzyme-inducing medications such as:

- some older anticonvulsants, such as carbamazepine, phenytoin and topiramate
- some antiretrovirals, such as emtricitabine and efavirenz
- antituberculosis medication, such as rifampicin
- the herbal remedy, St John's Wort.

The effectiveness of Cu-IUDs, LNG-IUDs and progestogen-only injectables are not affected by enzyme-inducing drugs.

Individuals taking enzyme-inducing medication who are using a combined hormonal contraceptive method, the progestogen-only pill or the contraceptive implant should be warned about the risk of reduced efficacy and offered an alternative method of contraception, whose efficacy is not affected.

Sharing information to facilitate decision-making

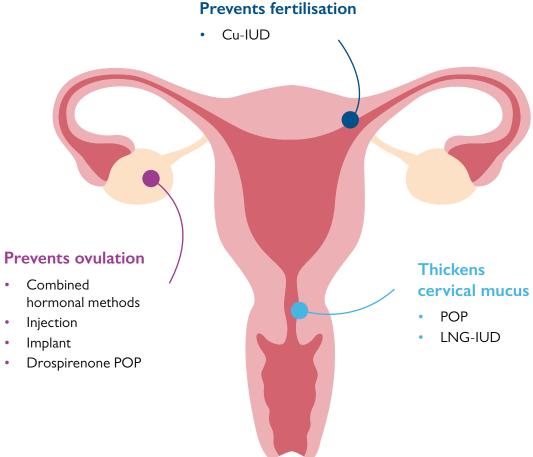
Once patients have narrowed down their contraceptive methods of interest to two or three, health workers can facilitate the final choice of method by explaining the differences between methods. Such differences in methods relate to:

- I. how each method works
- 2. the effectiveness of each method
- 3. the main advantages and disadvantages (and how each might meet a patient's top priorities (e.g., convenience, efficacy, non-contraceptive benefits)
- 4. how each method is taken or fitted.

How methods work

The way in which contraceptive methods work (their mechanism of action) is important to some patients, especially to those who believe moral life begins at conception.

Figure I How contraceptive methods work: primary mechanisms of action



Copper ions released from Cu-IUDs are toxic to sperm, thus prevent fertilisation.

Both Cu-IUD and LNG-IUDs also cause an endometrial inflammatory reaction, which has an anti-implantation effect. There is no evidence that IUDs disrupt an implanted embryo, therefore they are not considered abortifacients. It is important to note that this anti-implantation effect is not the main mechanism of action of either Cu-IUD or LNG-IUDs, both of which prevent fertilisation.

All progestogen-containing methods also thicken the cervical mucus and thin the endometrium.

LNG and norethisterone (NET) progestogen-only pills also inhibit ovulation in at least 50% of cycles.

Method effectiveness

There is an important difference between 'perfect' and 'typical' use effectiveness.

'Perfect use' figures are based on data from studies in which individuals are highly adherent to their methods and have no barriers, such as cost or difficulties accessing or remembering to take their methods. Perfect use therefore represents the lowest failure rate possible using these methods. 'Typical use' is what happens in real life. For some methods, there is a big discrepancy between perfect and typical use effectiveness.

It is important that patients know the typical effectiveness of the methods they are interested in, so that they can make an informed choice (see Table I).

Table I Effectiveness of contraceptive methods during their first year of use (Modified from Hatcher, 2018)

Effectiveness	Method	Typical use (%)	Perfect use (%)
Highly effective methods	Progestogen-only implant	>99	>99
Typically, fewer than 1 in 100 people will get pregnant using	Copper and hormonal IUD	>99	>99
these methods for I year	Sterilisation	>99	>99
Effective methods	Progestogen-only injection	94	>99
Typically, between 1 and 10 in 100 people will get pregnant	Combined hormonal methods	91	>99
using these methods for I year	Progestogen-only pill	91	>99
	Diaphragm	88	94
Less effective methods Typically, more than 10 in 100 people will get pregnant using these methods for 1 year	Condom	79–83	95–98
	Fertility awareness-based methods	75–88	95–99
	Withdrawal (coitus interruptus)	73	96

Advantages and disadvantages of methods

To help patients make decisions about the method of contraception that is right for them, health workers must be able to describe the main advantages and disadvantages of each contraceptive method. See Table 2.

 Table 2 Main advantages and disadvantages of contraceptive methods

Method	Advantages	Disadvantages
Progestogen- only implant	Typical effectiveness >99% Lasts for 3–5 years, depending on which device is inserted Once fitted, users need take no further action	Inserted and removed by a healthcare provider Unpredictable bleeding pattern
LNG-IUD	Typical effectiveness >99% Last for 3–6 years, depending on which device is inserted (longer if inserted after age 45) Fewer or no periods (this is a disadvantage for some)	Inserted and removed by a healthcare provider Insertion can be painful I:1000 risk of perforation I:20 risk of expulsion I:100 risk of infection for 3 weeks after insertion Light, unpredictable vaginal bleeding is common for 3–6 months after insertion

Cu-IUD	Typical effectiveness >99% Lasts for 5–10 years, depending on which device is inserted (longer if inserted after age 40) No hormonal side-effects Effective as soon as it is inserted Immediate return of fertility as soon as it is removed	Inserted and removed by a healthcare provider Insertion can be painful I:1000 risk of perforation I:20 risk of expulsion I:100 risk of infection for 3 weeks after insertion Possible heavier/longer/more painful periods
Progestogen- only injection	Likely to stop periods (this is a disadvantage for some) No need to remember to take it every day	Need to remember to repeat every 2–3 months, depending on which type of injection given Can delay return to fertility (up to 1 year) after stopping Erratic bleeding is common initially Association with weight gain 4% loss of bone mineral density, reversible on stopping
Combined hormonal contraception	Easy to use, controlled by user Regular withdrawal bleed; improves irregular bleeding Helps with premenstrual symptoms and heavy and painful periods Used to treat acne, endometriosis, polycystic ovary syndrome Associated with a reduction in ovarian and endometrial cancer risk	Need to remember to take it correctly Many medical contraindications, e.g., VTE, CVD, migraine with aura Small increase in absolute risk of VTE Small increased risk of breast cancer during use
Progestogen- only pill	Easy to use, controlled by user Very few contraindications, almost everyone can use it	Need to remember to take it every day Unpredictable bleeding
Fallopian tube occlusion (female sterilisation)	Effective immediately Once done, no further action is needed by individuals Does not affect periods	Cannot be easily reversed Requires surgery under general anaesthetic Increased risk of ectopic pregnancy if the sterilisation fails Small risk of serious complications, such as bowel perforation, during the procedure
Vasectomy (male sterilisation)	More effective than tubal occlusion Once it works, no further action is needed by individuals Usually performed under a local anaesthetic Takes the burden of pregnancy prevention off women	Cannot be easily reversed Can take over 12 weeks to work Contraception should be used until it works Some people may experience continuing testicle pain

Diaphragm	Offers some protection against STIs Can be put in up to 3 hours before sex No hormonal side-effects Can have sex more than once with a diaphragm in place (with extra spermicide)	Less effective than hormonal and intrauterine methods Needs to be put in before sex Insertion technique requires practice Must be left in for 6 hours after sex Spermicide can be messy Some spermicides (those containing nonoxyl-9) can increase the risk of HIV transmission
Condom	Protection against most STIs Easy to use, controlled by user Available without needing to see a healthcare provider No hormonal side-effects	Less effective than hormonal and intrauterine methods Can interrupt sex Can reduce pleasure Can be difficult to negotiate using condoms with partner Some feel anxious about keeping an erection Use requires some skill; need to know how to stop condoms splitting or slipping off
Fertility awareness- based methods	No hormonal side-effects Acceptable in most religions and cultures	Less effective than hormonal and intrauterine other methods Takes a few months to monitor patterns Daily monitoring is needed (temperature, thickness of fluid in the vagina) Illness, stress or travel can make it hard to interpret records Difficult to use if cycles are irregular or unpredictable Need to avoid unprotected sex on the most fertile days

It is helpful for health workers to point patients in the direction of good, accessible information on contraception. Such resources include the FPA's contraceptive choices leaflet (which can be downloaded for free at https://www.fpa.org.uk/download/your-guide-to-contraception/), or websites such as Sexwise (https://www.sexwise.org.uk/) and Contraception Choices (https://www.contraceptionchoices.org/).

Sexwise's excellent contraceptive choices poster provides a guide to all the methods of contraception at a glance. This is available to download for free from https://www.sexwise.org.uk/resource/contraceptive-choices-poster-june-2021

Showing patients an infographic summarising key information about different methods of contraception can facilitate their decision-making. See Appendix 1: Overview of contraceptive methods infographic.

Information for patients before starting methods

Before prescribing or fitting the patient's chosen contraceptive method, health workers must ensure the patient understands the following:

- how effective the method is
- how it works
- its main side-effects and risks
- how to take it or how it is fitted
- how long it lasts, and/or what to do if users are late taking or changing it.



Progestogen-only implant

Figure 2 Summary of information to share with patients before fitting the progestogen-only implant

1	Effectiveness	Typical effectiveness: >99%
2	How method works	Prevents ovulation
3	Side effects/risks	 Small scar at insertion site Unpredictable bleeding Insertion risks Potential interacting medication
4	How to fit	 Takes <5 mins to fit by healthcare provider Local anaesthesia Subdermal Non-dominant upper, inner arm
5	How long it lasts	 3 years - single rod etonorgestrel implant 5 years - double rod levonorgestrel implant

Side-effects/risks

Bleeding

Patients should be advised that, usually, changes in bleeding pattern caused by progestogen-only contraceptive methods are not dangerous – although they are potentially inconvenient and annoying.

Individuals considering use of the implant should be advised that a change in bleeding pattern is likely and their future bleeding pattern may be unpredictable, often irregular and may change over time. Prolonged bleeding is more likely in the first few months of use.

Approximately:

- 20–25% of users have no bleeding (amenorrhea)
- 50% of users have irregular bleeding that can be infrequent, prolonged or frequent

Typically, I in 3 users have the implant removed because of irregular bleeding. However, this can sometimes be treated by temporarily adding in a combined hormonal method of contraception.

Other side-effects/risks

Although some patients report having side-effects such as headaches, weight changes, mood changes, depression, acne and breast tenderness, evidence is too limited to confirm or exclude any causative association.

Other side-effects/risks to warn patients about are the risk of bruising after the fitting; the possibility of a deep insertion, which rarely could lead to intravascular insertion and neurovascular damage; and the extremely rare risk of implant migration.

How to fit

The implant is fitted by a health worker under local anaesthesia. It takes less than 5 minutes to fit and sits under the skin in the upper inner aspect of the nondominant arm. Once it is fitted, users need take no further action, until they want it removed or replaced.

How long it lasts

Globally, the commonest implant is the etonorgestrel-containing implant (Implanon® and Nexplanon®). This implant comprises one rod and is licensed for 3 years of continuous use. It is technically easier to insert and remove than the levonorgestrel-containing implant (Jadelle®), which comprises two rods, is licensed for 5 years of use, and is still used in some parts of the world.



LNG-IUD

Figure 3 Summary of information to share with patients before fitting the LNG-IUD

ı	Effectiveness	Typical effectiveness: >99%
2	How method works	Thickens cervical mucus
3	Side effects/risks	Bleeding changesInfectionPerforationExpulsion
4	How to fit	 Fitted by healthcare provider Can be painful to insert Pain relief medication and local anaesthesia helps
5	How long it lasts	 3-6 years Longer if inserted after age 45 (52 mg LNG-IUD only)

Several devices have doses of levonorgestrel ranging from 52 mg (Levosert® and Mirena®), to 19.5 mg (Kyleena®) to 13.5 mg (Jaydess®). The lower-dose devices are smaller than the 52-mg devices.

Side-effects/risks

Bleeding

In the 3–6 months after insertion, it is common for users to experience irregular, prolonged or frequent light bleeding. However, bleeding patterns tend to improve with time. After I year, most users will have infrequent bleeding, and some will have no bleeding at all. Available evidence suggests lower-dose devices may have lower rates of amenorrhoea.

Infection

There is a 1 in 100 risk of infection during the 3 weeks after insertion. Infection risk is not increased after this time. The risk of infection following an IUD insertion may be higher than this for individuals at risk of having an STI.

Expulsion

There is a 1 in 20 risk of the IUD being expelled. This is commonest up to 3 months post-insertion but can occur later.

Perforation

There is a I-2 in 1000 risk that the uterus will be perforated during IUD insertion. This perforation heals within a few weeks and does not affect future fertility; however, if perforation occurs and an IUD is fitted, it can cause the IUD to migrate into the pelvic cavity. If this happens, a laparoscopy is needed to remove it.

Ectopic pregnancy

The risk of ectopic pregnancy in a person using an IUD is <1 in 2000. This is much lower overall than the risk of ectopic pregnancy in a person using no form of contraception. However, if pregnancy does occur with an intrauterine method in situ, the relative risk of an ectopic pregnancy occurring is increased. In some studies, half of the pregnancies that occurred in this situation were ectopic.

How to fit

All IUDs must be fitted by a trained health worker. Insertions can be painful but taking pain relief medication such as ibuprofen before the procedure can help. Applying local anaesthesia to the cervix, especially when insertion is expected to be difficult (for example, if there is a narrow cervical os), can also help relieve pain caused by insertion.

How long it lasts

The LNG-IUD lasts for between 3 and 6 years, depending on the device fitted. The 52-mg devices last for 6 years (Levosert®) or 5 years (Mirena®). Studies suggest that the Mirena® IUD is likely to be effective beyond 5 years and the licensed duration may change. The 19.5-mg device (Kyleena®) lasts for 5 years, and the 13.5-mg device (Jaydess®) lasts for 3 years. If inserted at or after the age of 45, the 52-mg device can be left in situ until the user is postmenopausal.



Cu-IUD

Figure 4 Summary of information to share with patients before fitting the Cu-IUD

I	Effectiveness	Typical effectiveness: >99%
2	How method works	Prevents fertilisation
3	Side effects/risks	Bleeding changesInfectionPerforationExpulsion
4	How to fit	 Fitted by healthcare provider Can be painful to insert Pain relief medication and local anaesthesia helps
5	How long it lasts	5-10 yearsLonger if inserted after age 40

The effectiveness and risks of the Cu-IUD, as well as how to fit, are the same as for the LNG-IUD (see Figure 3).

Side-effects/risks

Bleeding

The main difference between the Cu-IUD and LNG- IUD is the expected change in menstrual bleeding. This factor is often what causes patients to choose between these methods.

While many LNG-IUD users have light bleeding or no bleeding at all, Cu-IUD users can expect slightly heavier, longer, and more painful periods, which may improve over time.

Patients who already have long, heavy, or painful periods may find the lighter bleeding associated with the LNG-IUD to be advantageous.

How long it lasts

Cu-IUDs last for between 5 and 10 years, depending on the device fitted. If fitted after the age of 40 years, it can stay in situ until the user is postmenopausal.



Progestogen-only injection

Figure 5 Summary of information to share with patients before starting the progestogen-only injection

ı	Effectiveness	Typical effectiveness: >94%
2	How method works	Prevents ovulation
3	Side effects/risks	 Bleeding changes Weight gain Delayed fertility return Reversible bone density loss
4	How to fit	 Deep intramuscular: administered by healthcare provider Subcutaneous: self-administered
5	How long it lasts	 Repeat ever 2 or 3 months, depending on type Give date for next injection If late, condoms until 7 days after next injection

Side-effects/risks

Bleeding

Patients should be warned that erratic bleeding is common in the first few months after starting the injection, and that spotting, infrequent or prolonged bleeding may persist However, long-term injection users commonly have no bleeding, and 60% of users have amenorrhoea within I year.

Evidence shows that weight gain is more likely in adolescents with a BMI greater than 30, and usually occurs within 6 months of starting the method. Individuals who gain more than 5% of their baseline bodyweight in the first 6 months of use are likely to experience continued weight gain.

Return of fertility

Return of fertility can be delayed for up to I year after stopping the injection. However, there is no evidence of reduced fertility in the long term. Health workers should ask patients who are considering the injection about their future pregnancy plans.

Bone density

Patients can be reassured that the injection does not cause osteoporosis or increase the risk of fractures. However, there is a small associated loss of bone mineral density (BMD) of around 4% – probably maximal at I-2 years. This BMD loss recovers after stopping the method. Patients should be warned that, with prolonged use of the injection, the loss may be greater and take longer to recover.

In view of this temporary effect on BMD, it is wise to assess significant osteoporosis risk factors before starting the injection, and thereafter every 2 years, by asking about:

- · Current, or history, of eating disorders
- coeliac disease
- long-term steroid use.

Patients with a high risk of osteoporosis can be advised to use another contraceptive method.

How to administer

There are two types of progestogen-only injection: deep intramuscular injections that are administered by a healthcare provider, and subcutaneous injections (Sayana®-Press), which the patient can self-administer.

The deep intramuscular injections are commonly injected into the upper outer quadrant of the buttock but can also be given into the deltoid and upper thigh.

The subcutaneous injections are given into the abdomen or upper thigh. Around 1 in 10 people will develop a small lump or skin dimpling at the injection site, which may improve over time.

How long it lasts

- Deep intramuscular injections containing depot medroxyprogesterone acetate (e.g., Depo-Provera®) and the subcutaneous injection (Sayana®-Press) must be repeated every 13 weeks.
- Deep intramuscular injections containing norethisterone enantate (Noristerat®) must be repeated every 8 weeks.

Health workers should tell patients when their next injection is due, as well as reiterating that repeat injections are time sensitive. A delay of even a few days beyond the scheduled dose means they would need to avoid sexual intercourse or use condoms until their next injection, and for 7 days afterwards.



Progestogen-only pill (POP)

Figure 6 Summary of information to share with patients before starting the progestogen-only pill

1	Effectiveness	Typical effectiveness: 91%
2	How method works	Thickens cervical mucusDrospirenone pills prevent ovulation
3	Side effects/risks	Unpredictable bleedingPotential interacting medication
4	How to take	 I pill per day, no break Drospirenone 24 days/4-day break Not effective if vomits within 2 hours of taking
5	What to do if late	 LNG and NET: 3 hours Desogestrel: 12 hours Drospirenone: 24 hours Condoms until 2 days after resumes pill taking

Side effects/risks

Bleeding

The main side-effect of the POP is an unpredictable change in bleeding pattern.

Patients should be informed that a change in bleeding pattern is common – it is possible to have no periods; infrequent bleeding; regular bleeds; or frequent, prolonged, or irregular bleeding.

Patients can be reassured that these changes are normal and do not mean they have to stop taking the POP. That said, I in I0 users do choose to stop taking the POP because they are unhappy with their bleeding pattern.

Bleeding patterns may change over time and can vary with different POP formulations, so patients should be informed that changing the type of POP may help if their bleeding pattern is problematic.

Patients taking desogestrel pills can be told that:

- 5 in 10 users will experience no or infrequent bleeding
- 4 in 10 users will experience regular bleeding episodes
- I in 10 users will experience frequent bleeding episodes; approximately two episodes per month.

Furthermore, 2 in 10 users will experience prolonged bleeding episodes lasting more than 14 days.

For those taking traditional POPs containing levonorgestrel or norethisterone, frequent and irregular bleeding is commoner, and prolonged bleeding and amenorrhoea are less likely than for those taking a desogestrel pill.

Drospirenone pills have a 4-day hormone-free interval, which is intended to provide a more regular and scheduled bleeding pattern. However, not all users experience scheduled bleeding, and unscheduled bleeding is common. For some, the number of bleeding days may be similar to that experienced when taking desogestrel pills. However, the drospirenone pill provides another option for individuals with problematic bleeding on a DSG, LNG or NET pill.

Other side-effects

Although some POP users report side-effects such as headaches, weight changes, mood changes, depression, acne and breast tenderness, no causal association has been demonstrated.

How to take the POP

Take one pill each day, ideally at the same time of day. With the POP, it is important to emphasise that patients should not take a break from pill-taking, unless using the drospirenone POP.

The POP is not effective if vomiting occurs within 2 hours of taking it.

What to do if late

For desogestrel pills, a pill counts as 'late' if it is taken later than 12 hours after the appointed pill-taking time; that is, more than 36 hours after taking the last pill. Those taking levonorgestrel- or norethisterone-containing pills only have a 3-hour window to remember to take their pill before it counts as late.

Following a late or missed DSG, LNG or NET pill, the next pill should be taken as soon as patients remember. They should continue taking the POP and abstain from sexual intercourse, or use condoms, from the time of the missed pill until 2 days after pill-taking is resumed.

Missed pill advice for drospirenone pills is similar to that given for combined hormonal contraceptive pills (see Figure 7).



Combined hormonal contraceptives

Figure 7 Summary of information to share with patients before starting combined hormonal contraceptive methods (pill, patch and vaginal ring)

l Effectiveness	Typical effectiveness: 91%
2 How method works	Prevents ovulation
3 Side effects/risks	 Venous thromboembolism Arterial disease Breast cancer Potential interacting medication
4 How to take	Pill: take dailyPatch: lasts 1 weekRing: lasts 3 weeks
5 What to do if late	Pill: count as late if more than 24 hours since last pill

Side effects/risks

Venous thromboembolism

Table 3 Risk of venous thromboembolism per 10 000 healthy women

Contraceptive method or pregnancy status	Risk per 10 000 women
No hormonal contraception, not pregnant	2–4
CHC containing ethinylestradiol + levonorgestrel/norgestimate/norethisterone	5–7
Vaginal CHC ring and patch	6–12
CHC containing ethinylestradiol + gestodene/desogestrel/drospirenone	9–12
Pregnancy	29
Immediately postpartum	300–400

It is important to put the VTE risk in context for patients. For example, by explaining that for those using combined hormonal contraception, the risk is around 1 in 1000, while the risk for those who are pregnant is around 3 in 1000.

Patients should be warned to see a doctor immediately if they experience:

- pain, swelling or redness of the calf
- · chest pain or breathlessness, or if they cough up blood

Cardiovascular disease

There is a very small increased risk of myocardial infarction (MI) or stroke associated with using combined hormonal contraception.

The background risk of MI in women not using combined hormonal contraception is 1 in 10 000, and 2 in 10 000 for ischaemic strokes. The overall risk of arterial thrombosis increases by a factor of 1.6 in women using combined contraceptive methods compared with women not using these methods.

The WHO advises that using a combined hormonal contraceptive (CHC) method is an unacceptable health risk (MEC4) for individuals:

- with significant risk factors for arterial disease, including hypertension
- smoking over the age of 35 years
- having migraine with aura, or migraine without aura that is of new onset during CHC use
- having multiple risk factors for cardiovascular disease, including smoking, hypertension, high BMI, dyslipidaemias and diabetes.

Patients should have their blood pressure and BMI recorded before being prescribed CHC, and yearly thereafter.

Breast cancer

There is a small increased risk of breast cancer while taking combined hormonal contraception. This decreases with time after stopping, so that by 10 years after stopping, there is no increased risk.

Patients can be reassured that breast cancer is rare in young women. A slight increase in risk during this time means only a small number of extra cases of breast cancer are diagnosed in individuals using combined hormonal contraception.

In a group of 10 000 women between the ages of 30 and 39 who do not use combined hormonal contraception, about 40 will probably develop breast cancer. Of those who do use combined hormonal contraception during most of their 30s, about 54 in 10 000 will develop breast cancer. So, using combined hormonal contraception during this time is associated with about 14 extra cases of breast cancer in every 10 000 women. Younger patients can be reassured that their risk is even lower.

Patients can also be reminded that combined contraception is associated with a reduction in ovarian and endometrial cancer risk.

Other side-effects

Like other hormonal contraceptive methods, evidence does not support a causal association between combined contraceptive methods and headaches, weight changes, mood changes, depression, acne and breast tenderness.

How to take

Combined hormonal pill

The pill must be taken daily, while the patch lasts for I week and the ring for 3 weeks.

Traditionally a break known as the 'hormone-free interval' is taken for I week following 3 weeks of use of all the combined hormonal contraceptive methods. During this hormone-free interval, users experience a withdrawal bleed for a few days, which is usually lighter than their period.

However, some users can experience heavier bleeding, headaches, including migraines and mood changes during the hormone-free interval. Additionally, if users miss two or more pills either side of the hormone-free interval, they are at risk of pregnancy.

Taking the combined pill continuously (with no break), or a so-called 'tailored' regimen in which pills are taken continuously and then stopped when patients choose to have a hormone-free interval (of no more than 7 days), has the advantage of minimising adverse side-effects in the hormone-free interval. It also decreases pregnancy risk if pills are missed either side of the hormone-free interval.

Combined hormonal patch

The patch can be placed on one of four different places on the body: the abdomen, buttock, upper torso or upper arm. The patch should never be placed on the breasts. The patch should be changed every week, and after 3 weeks, a I-week hormone-free break can be taken.

Combined hormonal ring

The ring is easy to use; it is gently squeezed and put into the vagina, where it will find a comfortable position. It does not need to be put anywhere particular in the vagina. It can be removed during sex but should be reinserted soon afterwards. The ring is used for 3 weeks at a time, before taking a I-week hormone-free break and then changing to a new ring.

What to do if late

Patients should be given reference information on missed pills and late application/insertion of the patch/ring – given all the other information that is shared during the consultation, it can be difficult to remember.

The hormone-free interval should never be extended beyond 8 days. Therefore, if two or more combined pills are missed in the week following the hormone-free interval, or if the patch/ring is applied/inserted more than I day late following the hormone-free interval, then individuals should abstain from sexual intercourse or use condoms for 7 days. They should also seek advice from their healthcare provider as they might need emergency contraception.

If two or more pills are missed in the week before the hormone-free interval, no emergency
contraception is needed provided the next packet of pills is started without taking a hormone-free
break.



Sterilisation is considered as permanent contraception for people who do not want any, or any more, children.

Tubal occlusion

Ideally, after an abortion, a little time should be allowed to elapse before performing tubal occlusion. Patients requesting to undergo tubal occlusion at the time of an abortion should be advised of the possible increased failure rate and risk of regret.

Vasectomy

Can be done under local anaesthetic, is more effective than tubal occlusion and takes the burden of pregnancy prevention off women.



Diaphragm

Diaphragms are unsuitable for use until 6 weeks after a second-trimester abortion. This is because the required size of diaphragm may change as the uterus returns to normal size. Individuals who have previously used a diaphragm may, after an abortion, find that they need to use a different size diaphragm.



Condom

Condoms can be used without restriction at any time after an abortion. This is the only contraceptive method that protects against STIs.



Fertility awareness methods

Fertility awareness methods (FAM) need regular periods and a commitment to intermittent abstinence or condom use. After an abortion, fertility awareness methods should not be relied upon until one menstrual period has occurred, as signs of fertility may be disrupted until then.

The effectiveness of FAM can be improved when a combination of indicators is used.

Starting methods

Patients can be told that all contraceptive methods are immediately effective if started within 5 days of an abortion. However, if a hormonal contraceptive method (including the LNG-IUD) is started more than 5 days after an abortion, patients should avoid sexual intercourse or use condoms for 7 days. The exception to this is when starting the POP; this only requires individuals to use condoms or avoid sexual intercourse for 2 days.

If the abortion provider is unable to provide the patient's chosen method, they should tell them where they can go instead. They should offer a temporary 'bridging' method, such as the progestogen-only pill, which the patient can take until they can obtain their preferred method from another provider.

When to seek medical attention

Patients should be provided with information on when to seek medical attention after starting a contraceptive method. This information varies depending on the method. For example, following an IUD fitting, patients should seek medical attention if they:

- have very heavy bleeding
- develop worsening abdominal pain
- have an unusual-smelling vaginal discharge or fever
- can't feel the IUD threads or can feel the stem of the IUD
- miss a period, or if their bleeding is much lighter than usual (Cu-IUD only).
- pain in the leg, or calf swelling/redness
- · pain in the chest or breathlessness, or cough up blood
- weakness, numbness or bad 'pins and needles' in an arm or leg
- an unusual headache, or migraines that are worse than usual
- sudden problems with their speech or eyesight.

Patients should also be told to let a healthcare worker know if they develop any new medical conditions, so they can check it is safe to continue the method.

Evidence sources

Faculty of Sexual and Reproductive Healthcare (FSRH). Drug Interactions with Hormonal Contraception. London: FSRH; 2022 [https://www.fsrh.org/documents/ceu-clinical-guidance-drug-interactions-with-hormonal/].

Faculty of Sexual and Reproductive Healthcare (FRSH). FSRH Clinical Guideline: Contraception After Pregnancy. London: FSRH; 2017 (amended 2020) [https://www.fsrh.org/standards-and-guidance/documents/contraception-after-pregnancy-guideline-january-2017/].

Faculty of Sexual and Reproductive Healthcare (FRSH). Method Specific (standards and guidance). London: FSRH [https://www.fsrh.org/standards-and-guidance/fsrh-guidelines-and-statements/method-specific/].

Faculty of Sexual and Reproductive Healthcare (FSRH). UK Medical Eligibility Criteria for Contraceptive Use. FSRH UK MEC 2016. London: FSRH; 2016 (amended 2019). [https://www.fsrh.org/ukmec/]

National Institute for Health and Care Excellence (NICE). Abortion Care. NICE guideline NG140. London: NICE; 2019 [https://www.nice.org.uk/guidance/ng140].

World Health Organization (WHO). Abortion care guideline. Geneva: WHO; 2022 [https://www.who.int/publications/i/item/9789240039483].

World Health Organization (WHO). Medical Eligibility Criteria for Contraceptive Use. 5th ed. Geneva: WHO; 2015 [https://www.who.int/publications/i/item/9789241549158].

Additional literature reviewed

American College of Obstetricians and Gynecologists. ACOG Committee Opinion number 833: access to postabortion contraception. Obstet Gynecol 2021;138:e91–5.

American College of Obstetricians and Gynecologists. Patient-centered contraceptive counseling. Obstet Gynecol 2022;139:350–3.

Boesen HC, Rorbye C, Norgaard M, Nilas L. Sexual behavior during the first eight weeks after legal termination of pregnancy. Acta Obstet Gynecol Scand 2004;83:1189–92.

Cameron ST, Glasier A, Chen ZE, Johnstone A, Dunlop C, Heller R. Effect of contraception provided at termination of pregnancy and incidence of subsequent termination of pregnancy. BJOG 2012;119:1074–80.

Contraception Choices [https://www.contraceptionchoices.org/].

Dehlendorf C, Krajewski C, Borrero S. Contraception counseling: best practices to ensure quality communication and enable effective contraceptive use. Clin Obstet Gynaecol 2014;57:659–73.

Family Planning Association (FPA), Sexwise. Contraceptive choices poster June 2021 [https://www.sexwise.org.uk/sites/default/files/resource/2021-06/Contraceptive_Choices_Jun21.pdf].

Family Planning Association (FPA). Your Guide to Contraception. Derby: FPA; 2020.

Hatcher RA. Contraceptive Technology. New York, NY: Ayer Company; 2018.

Hognert H, Kopp Kallner H, Cameron S, Nyrelli C, Jawad I, Heller R, et al. Immediate versus delayed insertion of an etonogestrel releasing implant at medical abortion-a randomized controlled equivalence trial. Hum Reprod 2016;11:2484–90.

Medicines Complete. Stockley's Drug Interactions [https://about.medicinescomplete.com/publication/stockleys-drug-interactions/].

Pohjoranta E, Suhonen S, Gissler M, Ikonen P, Mentula M, Heikinheimo O. Early provision of intrauterine contraception as part of abortion care – 5-year results of a randomised controlled trial. Hum Reprod 2020;35:796–804.

Schmidt-Hansen M, Hawkins JE, Lord J, Williams K, Lohr PA, Hasler E, et al. Long-acting reversible contraception immediately after medical abortion: systematic review with meta-analyses. Hum Reprod Update 2020:26:141–60.

Sexwise [https://www.sexwise.org.uk/].

United States Agency for International Development (USAID), Rutstein S. DHS Working Papers. Further evidence of the effects of preceding birth intervals on neonatal, infant, and under-five-years mortality and nutritional status in developing countries: Evidence from the Demographic and Health Surveys. Calverton, MD: USAID; 2008 [https://dhsprogram.com/pubs/pdf/WP41/WP41.pdf].

University of Liverpool. HIV Drug Interactions. Interaction Checker [https://www.hiv-druginteractions.org/].

Appendix I: Overview of contraceptive methods infographic

All methods are different and the most important thing for individuals is to find the best fit for them and their needs.



Implant

- Typical effectiveness: 99+%
- Releases a hormone
- Inserted into upper arm
- Lasts 3-5 years



LNG-IUD

- Typical effectiveness: 99+%
- Releases a hormone
- Inserted into uterus (womb)
- Also known as hormonal coil
- Lasts 3-6 years



Cu-IUD

- Typical effectiveness: 99+%
- Non-hormonal
- Inserted into uterus (womb)
- · Also known as copper coil
- Lasts 5-10 years



Sterilisation

- Typical effectiveness: 99+%
- Non-hormonal
- Permanent surgical procedure

Less than I in a 100 people will get pregnant in the first year of use





Injection

- Typical effectiveness: 94%
- Contains a hormone
- Given into buttock, thigh, abdomen or ipper arm
- Lasts 2-3 months



Pills

- Typical effectiveness: 91%
- Contains one or two hormones
- Take daily



Patch

- Typical effectiveness: 91%
- Releases two hormones
- Placed on upper arm, abdomen or thigh
- Each patch lasts I week



Ring

- Typical effectiveness: 91%
- Releases two hormones
- · Placed in vagina
- Each ring lasts 3 weeks

6 - 9 in 100 people will get pregnant in first year of use





Diaphragm

- Typical effectiveness: 88%
- Non-hormonal
- Placed in vagina before sex
- Used with spermicide



External (male) condom

- Typical effectiveness: 83%
- Non-hormonal
- Placed on penis before sex
- Protects agains STIs



Internal (female) condom

- Typical effectiveness: 79%
- Non-hormonal
- Placed in vagina before sex
- Protects agains STIs



Fertility awareness

- Typical effectiveness: 78%
- Non-hormonal
- Daily monitoring of App/fertility indicators

12 - 25 in 100 people will get pregnant in first year of use



Making Abortion Safe

RCOG's global initiative to advocate for women's health



Website: www.rcog.org.uk/global-network

Contact: cfwgh@rcog.org.uk