Contraception - IUS/IUD

Last revised in May 2019 Next planned review by May 2021

Changes

Back to top

May 2019 — minor update. Depression has been added as an adverse effect of an IUS [ABPI, 2019a (/contraception-iusiud#!references)].

March 2019 — minor update. Kyleena has been added as a type of LNG-IUS available in the UK, [ABPI, 2018 (/contraception-iusiud#!references)].

January 2019 — minor update. Levosert 20 micrograms/24 hours IDS is now licenced for up to 5 years use [ABPI, 2019b (/contraception-iusiud#!references)].

February 2017 — minor update. Recommendations on when to start a copper intrauterine device (Cu-IUD) or a levonorgestrel intrauterine system (LNG-IUS) after pregnancy, miscarriage, or termination of pregnancy have been updated in line with the Faculty of Sexual and Reproductive Healthcare (FSRH) guideline *Contraception after pregnancy* [FSRH, 2017 (/contraception-iusiud#!references)].

August to October 2016 — reviewed. A literature search was conducted in June 2016 to identify evidence-based guidelines, UK policy, systematic reviews, and key randomized controlled trials published since the last revision of the topic. Minor structural changes have been made.

Previous changes

Back to top

October 2015 — minor update. The sections on advantages, disadvantages, and risks have been updated to include additional information on uterine perforation in the Medicines and Healthcare products Regulatory Agency (MHRA) drug safety update *Intrauterine contraception: uterine perforation.*

August 2013 — minor update. Text added to clarify that when used for protection from endometrial hyperplasia during oestrogen replacement therapy, the levonorgestrel intrauterine system (LNG-IUS) should be retained for no longer than 5 years after insertion (the licence states 4 years), regardless of the age of the woman at insertion.

June 2013 — minor update. The 2013 Quality and Outcomes Framework (QOF) options for local implementation have been added to this topic.

March 2013 — minor update. The telephone number for NHS Direct has been updated.

January 2013 — minor update. Change to the text to reflect updated advice from the Faculty of Sexual and Reproductive Healthcare (FSRH) regarding the interaction between Esmya® and hormonal contraceptives.

February to June 2012 — reviewed. A literature search was conducted in December 2011 to identify evidence-based guidelines, UK policy, systematic reviews, and key randomised controlled trials (RCTs) published since the last revision of the topic. No changes to clinical recommendations have been made. However, recommendations have been rewritten for clarity, and superseded references and manufacturers' Summary of Product Characteristics have been updated accordingly.

January 2012 — minor update. Typographical errors corrected.

March 2011 — topic structure revised to ensure consistency across CKS topics — no changes to clinical recommendations have been made.

February 2010 — updated to include the revised FSRH *UK Medical eligibility criteria for contraceptive use.*

March 2009 — minor update. The QOF indicators for sexual health have been updated.

September 2008 — minor correction. Typographical and table heading corrections to UK medical eligibility criteria tables on copper intrauterine devices (CU-IUDs) and LNG-IUDs.

May 2008 — update to text to reflect new FSRH guidance *Intrauterine contraception* 2007.

April to September 2007 — converted from CKS guidance to CKS topic structure. The evidence-base has been reviewed in detail, and recommendations are more clearly justified and transparently linked to the supporting evidence.

July 2006 — minor update. Information regarding orlistat and reduced efficacy of oral contraceptives included in drug interactions.

January 2006 — minor update. Gynol II Jelly®, Microval® tablets and Duragel® have been discontinued and the prescriptions have been removed. Black triangle status removed from Cerazette®.

October 2005 — updated to include the new recommendations on missed pills from the Faculty of Family Planning and Reproductive Healthcare Clinical Effectiveness Unit, published in April 2005.

April 2005 — minor update. Neogest® tablets have been discontinued and the prescriptions have been removed.

February 2005 — updated to include prescribing advice from the Committee on Safety of Medicines (CSM) on the effect of depot medroxyprogesterone acetate contraception on bones.

September 2004 — updated to include the World Health Organization (WHO) Medical Eligibility Criteria relating to contraception for 2004 and recent licence changes to Cerazette®. Delfen® Contraceptive Foam is being discontinued at the end of October 2004 and the prescriptions have been removed.

January 2004 — reviewed. Validated in March 2004 and issued in June 2004.

January 2001 — rewritten. Validated in March 2001 and issued in June 2001. Guidance on emergency contraception is no longer included but can be found as a separate CKS topic.

December 1997 — written.

Update

Back to top

New evidence

Back to top

Evidence-based guidelines

- Akintomide, H. (2019) *Improving information on intrauterine contraception: providing advice in primary care.* British Journal of General Practice. www.bjgp.org (https://bjgp.org/) [Free Full-text (https://bjgp.org/content/69/679/98)]
- NICE (2019) *CG30 Long-acting reversible contraception.* National Institute for Health and Care Excellence. www.nice.org.uk (https://www.nice.org.uk/) [Free Full-text (https://www.nice.org.uk/guidance/cg30)]
- FSRH (2019) *FSRH Clinical Guideline: Intrauterine Contraception (April 2015, amended September 2019).* The Faculty of Sexual & Reproductive Healthcare of the Royal College of Obstetricians & Gynaecologists. www.fsrh.org.uk (https://www.fsrh.org/home/) [Free Full-text (https://www.fsrh.org/standards-and-guidance/documents/ceuguidanceintrauterinecontraception/)]

HTAs (Health Technology Assessments)

No new HTAs since 1 October 2016.

Economic Appraisals

No new economic appraisals relevant to England since 1 October 2016.

Systematic reviews and meta-analyses

- JAMA (2018) Long-acting reversible contraception - highly efficacious, safe, and underutilized. JAMA Network. www.jamanetwork.com (https://jamanetwork.com/) [Free Full-text (https://jamanetwork.com/journals/jama/fullarticle/2687700)]

Primary evidence

No new randomized controlled trials published in the major journals since 1 October 2016.

New policies

Back to top

No new national policies or guidelines since 1 October 2016.

New safety alerts

Back to top

No new safety alerts since 1 October 2016.

Changes in product availability

Back to top

- New product: Kyleena (levonorgestrel) 19.5 mg intrauterine delivery system. See http://www.medicines.org.uk/emc/medicine/33849 (http://www.medicines.org.uk/emc/medicine/33849).
- SyreniRing contains same drugs as NuvaRing and is inserted at start of menstrual cycle and left in for 3 weeks, followed by a ring-free week. It may be inserted and removed by the woman herself at home. See more here (https://www.mims.co.uk/new-contraceptive-vaginal-ring-launched/contraception/article/1578225).

Goals

Back to top

To support primary healthcare professionals to:

- Provide information and advice on the efficacy, advantages, disadvantages, and risks associated with intrauterine methods of contraception.
- Manage adverse effects of intrauterine methods of contraception.

Outcome measures

Back to top

No outcome measures were found during the review of this topic.

Audit criteria

Back to top

No audit criteria were found during the review of this topic.

QOF indicators

Back to top

Table 1. Indicators related to contraception in the Quality and Outcomes Framework (QOF) of the General Medical Services (GMS) contract.

Indicator	Points	Achievement thresholds
The contractor establishes and maintains a register of women aged 54 years or under who have been prescribed any method of contraception at least once in the last year, or other clinically appropriate interval e.g. last 5 years for an IUS	4	
The percentage of women, on the register, prescribed emergency hormonal contraception one or more times in the preceding 12 months by the contractor who have received information from the contractor about long acting reversible methods of contraception at the time of or within 1 month of the prescription	3	50-90%

Data from: [BMA and NHS Employers, 2016 (/contraception-iusiud#!references)]

QIPP - options for local implementation

Back to top

No QIPP criteria were found during the review of this topic.

NICE quality standards

Back to top

- Women asking for contraception from contraceptive services are given information about, and offered a choice of, all methods including long-acting reversible contraception.
- Women asking for emergency contraception are told that an intrauterine device is more effective than an oral method.
- Women who request an abortion discuss contraception with a healthcare practitioner and are offered a choice of all methods when they are assessed for abortion and before discharge.
- Women who give birth are given information about, and offered a choice of, all contraceptive methods by their midwife within 7 days of delivery.

What is intrauterine contraception?

Back to top

- Intrauterine contraceptives (IUCs) are long-acting reversible contraceptives (LARCs) which have a licensed duration of use of 3–10 years.
- The two types of IUC currently available in the UK:
  - Levonorgestrel intrauterine system (LNG-IUS).
  - Copper intrauterine devices (Cu-IUD).

[FSRH, 2015a (/contraception-iusiud#!references)]

Where can women get intrauterine contraception?

Back to top

- Contraception is widely available in the UK from a number of sources, and is provided free of charge by the NHS for women and men of all ages.
- Intrauterine contraception (levonorgestrel intrauterine system [LNG-IUS] and copper intrauterine device [Cu-IUD]) is available from:
  - General practices — if staff have appropriate training in intrauterine contraception (IUC) insertion techniques.
  - Contraception and sexual health clinics.
  - Young person's clinics — if staff have appropriate training in intrauterine contraception (IUC) insertion techniques.
  - Brook Advisory Centres (http://authoringtool-jsclient.clarity.co.uk/www.brook.org.uk) — for people 25 years of age and younger.

Scenario: Levonorgestrel intrauterine system

Back to top

Starting a levonorgestrel intrauterine system

Back to top

How should I assess a woman considering using a levonorgestrel intrauterine system (LNG-IUS)?

Back to top

- For information on assessing a woman considering using a levonorgestrel intrauterine system, see the section on Levonorgestrel intrauterine system (/contraception-assessment#!scenarioRecommendation:27) in the CKS topic on Contraception - assessment (/contraception-assessment).

What types of levonorgestrel intrauterine system (LNG-IUS) are available?

Back to top

- There are four types of levonorgestrel intrauterine system (LNG-IUS) currently available in the UK:
  - Kyleena contains 19.5 mg of levonorgestrel and is licensed for up to 5 years use for contraception.
  - Mirena® contains 52 mg of levonorgestrel and is licensed for up to 5 years use for contraception and idiopathic menorrhagia, and 4 years use for protection from endometrial hyperplasia during oestrogen replacement therapy.
  - Levosert® contains 52 mg of levonorgestrel and is licensed for up to 5 years use for contraception and heavy menstrual bleeding.
  - Jaydess® contains 13.5 mg of levonorgestrel and is licensed for up to 3 years use for contraception.
- The LNG-IUS is a small polyethylene T-shaped frame with a levonorgestrel reservoir around the vertical stem.
- After insertion into the uterine cavity, the LNG-IUS releases levonorgestrel (a progestogen) into the uterus.
  - The rate of release depends on the type of device and how long it has been in situ.
- Note: CKS recommends that clinicians prescribe the LNG-IUS by brand, as products have different indications, durations of use, and require different insertion techniques.

Mechanism of action

Back to top

- The contraceptive effects of the levonorgestrel intrauterine system (LNG-IUS) are mainly due to its progestogenic effect on the endometrium, which prevents implantation of the fertilized ovum. In addition, changes in cervical mucus inhibit penetration of sperm into the uterus.
- More than 75% of women will continue to ovulate while using this method.
  - The incidence of anovulation is lower with the 13.5 mg LNG-IUS than with the 52 mg LNG-IUS.

When should a levonorgestrel intrauterine system (LNG-IUS) be started?

Back to top

Healthcare professionals offering intrauterine contraception (IUC) should hold the appropriate letter of competence in intrauterine techniques from the Faculty of Sexual and Reproductive Healthcare (FSRH), or an equivalent.

- **If the woman is using the levonorgestrel intrauterine system (LNG-IUS) for the first time:**
  - Insert the LNG-IUS on day 1 to 7 of the menstrual cycle.
    - No additional contraception is required.

- If the LNG-IUS is inserted at any other time in the menstrual cycle, and it is reasonably certain that the women is not pregnant:
  - Advise the woman to avoid sexual intercourse or use a barrier method of contraception (such as condoms) for 7 days after insertion of the LNG-IUS (off-label use).

- **If an existing LNG-IUS is being replaced with a new LNG-IUS:**
  - Replace the existing LNG-IUS with the new LNG-IUS at any time in the menstrual cycle.
    - No additional contraception is required after insertion if the new LNG-IUS is inserted immediately after removing the existing LNG-IUS.
    - However, advise the woman to avoid sexual intercourse or use a barrier contraception (such as condoms) for the 7 days before the replacement, in case the LNG-IUS cannot be inserted.
- **If a copper intrauterine device (Cu-IUD) is being replaced with an LNG-IUS:**
  - Replace the Cu-IUD with a LNG-IUS at any time in the menstrual cycle.
    - Advise the woman to avoid sexual intercourse or use a barrier method of contraception (such as condoms) for 7 days after insertion of the LNG-IUS.
    - If sexual intercourse has occurred in the previous 7 days, advise the woman that the Cu-IUD should be left in place and insertion of the LNG-IUS should be delayed for 7 days and to use a barrier method of contraception (such as condoms) during that time.
- **If the woman is starting the LNG-IUS after oral emergency contraception:**
  - The LNG-IUS should not be inserted until pregnancy can be excluded with a pregnancy test performed no sooner than 3 weeks after the last episode of unprotected sexual intercourse (UPSI).
- **If the woman is switching from another method of contraception:**
  - Insert the LNG-IUS at any time in the menstrual cycle provided that the other method of contraception has been used consistently and correctly, and it is reasonably certain that the woman is not pregnant.
  - There is no need to wait for the next menstrual period or withdrawal bleed.
  - Advise the woman to use a barrier method of contraception (such as condoms) for 7 days after insertion unless the current contraceptive method is still effective, for example:
    - 14 weeks or less since the last progestogen-only injection (10 weeks or less for norethisterone enantate). For more information, see the section on Timing of repeat injections (/contraception-progestogen-only-methods#!scenarioRecommendation:20) in the CKS topic on Contraception - progestogen-only methods (/contraception-progestogen-only-methods).
    - Within 3 years of insertion of a progestogen-only implant.
    - Week 2 or 3 of the combined hormonal contraception cycle, or day 1 of the hormone-free interval.

Postpartum, termination of pregnancy, or miscarriage Back to top

- **If the woman is postpartum (including post-Caesarean section and breastfeeding):**
  - Insert the levonorgestrel intrauterine system (LNG-IUS) within 48 hours postpartum.
    - No additional contraception is required.
  - If the LNG-IUS is not inserted within 48 hours, delay insertion until after 4 weeks postpartum (off–label use), if it is reasonably certain that the woman is not pregnant.
    - Advise the woman to avoid sexual intercourse or use a barrier method of contraception (such as condoms) for 7 days after insertion of the LNG-IUS, unless it is inserted within the first 7 days of the menstrual cycle, or if she meets the criteria for lactational amenorrhea (LAM) method of contraception. For more information see the section on lactational amenorrhoea (/contraception-natural-family-planning#!scenario:1) in the CKS topic on Contraception - natural family ning (/contraception-natural-family-planning).

- **If the woman has had a miscarriage or termination of pregnancy (less than 24 weeks gestation):**
  - Following surgical termination — ideally insert the LNG-IUS at the end of the procedure.
    - No additional contraception is required.
  - Following medical termination — insert the LNG-IUD within 5 days after the second (and final) drug has been taken for medical termination.
    - No additional contraception is required.
  - If the LNG-IUS is inserted on or after day 5 post-termination, advise the woman to avoid sexual intercourse or use a barrier method of contraception (such as condoms) for the next 7 days.

Excluding pregnancy Back to top

- Health professionals can be 'reasonably certain' that a woman is not currently pregnant if any one or more of the following criteria are met and there are no symptoms or signs of pregnancy:
  - She has not had intercourse since last normal menses.
  - She has been correctly and consistently using a reliable method of contraception.
  - She is within the first 7 days of the onset of a normal menstrual period.
  - She is not breastfeeding and less than 4 weeks from giving birth.
  - She is fully or nearly fully breastfeeding, amenorrhoeic, and less than 6 months postpartum.
  - She is within the first 7 days post-termination or miscarriage.
  - A pregnancy test is performed no sooner than 3 weeks since the last episode of unprotected sexual intercourse (UPSI) and is negative.

Basis for recommendation Back to top

Types of IUS

- This information is based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)] a Medicines and Healthcare products Regulatory Agency (MHRA) drug safety update *Levonorgestrel-releasing intrauterine systems: prescribe by brand name* [MHRA, 2016 (/contraception-iusiud#!references)] and the manufacturers' Summaries of Product Characteristics [ABPI, 2015 (/contraception-iusiud#!references); ABPI, 2016a (/contraception-iusiud#!references); ABPI, 2016b (/contraception-iusiud#!references); ABPI, 2019b (/contraception-iusiud#!references)].

Mechanism of action

- This information is based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].

When to start

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guidelines *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)], *Contraception after pregnancy* [FSRH, 2017 (/contraception-iusiud#!references)], and the manufacturers' Summar[illegible] of Product

Characteristics [ABPI, 2015 (/contraception-iusiud#!references); ABPI, 2016a (/contraception-iusiud#!references); ABPI, 2016b (/contraception-iusiud#!references)].

What information and advice should I give a woman considering starting a levonorgestrel intrauterine system (LNG-IUS)?

Back to top

- **Discuss:**
  - The mechanism of action (/contraception-iusiud#!scenarioClarification:2) of the levonorgestrel intrauterine system (LNG-IUS).
  - The contraceptive efficacy (/contraception-iusiud#!scenarioRecommendation:4) of the LNG-IUS.
  - The advantages and disadvantages (/contraception-iusiud#!scenarioRecommendation:2) of the LNG-IUS.
  - The risks and adverse effects (/contraception-iusiud#!scenarioRecommendation:3):
    - Insertion of a LNG-IUS may be painful and cause discomfort for a few hours and light bleeding for a few days.
    - Women should be informed of the symptoms of perforation, including severe pelvic pain after insertion (worse than period cramps), pain which continues for more than a few weeks after insertion, sudden changes in periods (such as heavier bleeding than normal) pain during sex, and not being able to feel the threads.
  - How to check for the LNG-IUS and its threads, the importance of doing this regularly (for example after every menstrual period), and what to do if she is unable to feel the threads (/contraception-iusiud#!scenarioClarification:7).
- **Advise the woman:**
  - To seek medical advice if:
    - Menstrual abnormalities (/contraception-iusiud#!scenarioRecommendation:3) (such as unscheduled bleeding) persist beyond the initial 6 months of use.
    - She experiences possible features of pelvic inflammatory disease — pain or tenderness in the lower abdomen, fever, or abnormal or odorous vaginal discharge, especially within the first 3–4 weeks after insertion of the LNG-IUS. For more information, see the CKS topic on Pelvic inflammatory disease (/pelvic-inflammatory-disease).
  - That the LNG-IUS needs to be changed every 5 years (although it can be left in for longer in certain circumstances. For more information, see the section on Duration of use (/contraception-iusiud#!scenarioRecommendation:5).
  - That the LNG-IUS can be removed at any time if she wishes to become pregnant and there is no delay in return to fertility.
- Also provide written information on the LNG-IUS.
  - The Family Planning Association provides a useful leaflet (http://www.fpa.org.uk/sites/default/files/ius-your-guide.pdf) with information for users of the LNG-IUS.

[FSRH, 2015a (/contraception-iusiud#!references); NICE, 2014 (/contraception-iusiud#!references)]

How should I manage a woman who becomes pregnant whilst using a levonorgestrel intrauterine system (LNG-IUS)?

Back to top

- If a woman is found to be pregnant whilst using the levonorgestrel intrauterine system (LNG- seek immediate advice from a gynaecologist.

How should I manage a woman who cannot feel the threads of her levonorgestrel intrauterine system (LNG-IUS)?

Back to top

- Exclude pregnancy.
- Perform a vaginal examination — if threads are not visible on speculum examination and uterine placement of the LNG-IUS cannot be confirmed clinically, refer the woman for an ultrasound scan to locate it.
- Advise the woman to us a barrier method of contraception (such as condoms) or avoid unprotected sexual intercourse (UPSI) until it is confirmed whether or not the levonorgestrel intrauterine system (LNG-IUS) is correctly in place.
- Consider the need for emergency contraception if sexual intercourse occurred in the preceding 7 days. See the CKS topic on Contraception - emergency (/contraception-emergency) for more information.
- If it is confirmed the LNG-IUS is correctly located it can be left in situ.
  - If removal is required, a thread retriever or Spencer Wells forceps can be used if the appropriate training and experience is available in primary care.
- If ultrasonography cannot locate the device, and pregnancy has been excluded, arrange for an abdominal and pelvic X-ray.
  - If the device is extrauterine, or if partial perforation or embedment into the uterine wall is suspected, refer for surgical retrieval.
  - If the device is not located, this confirms expulsion.
    - Offer reinsertion of a new LNG-IUS or an alternative method of contraception.

When can the levonorgestrel intrauterine system (LNG-IUS) be safely removed or replaced?

Back to top

- If the woman wishes to become pregnant:
  - Remove the levonorgestrel intrauterine system (LNG-IUS) at any time in the menstrual cycle.
- If the woman does not wish to become pregnant:
  - Remove the LNG-IUS at any time during the menstrual cycle, but advise her to avoid unprotected sexual intercourse (UPSI) or use a barrier method of contraception (such as condoms) for the 7 days preceding removal.
  - Provide advice on switching to another method of contraception. See the CKS topics on Contraception - combined hormonal methods (/contraception-combined-hormonal-methods), Contraception - progestogen-only methods (/contraception-progestogen-only-methods), Contraception - sterilization (/contraception-sterilization), Contraception - barrier methods and spermicides (/contraception-barrier-methods-and-spermicides), and Contraception - natural family planning (/contraception-natural-family-planning) for more information.

How should I manage pelvic inflammatory disease in a woman using a levonorgestrel intrauterine system (LNG-IUS)?

Back to top

- If pelvic inflammatory disease (PID) is diagnosed in a woman using the levonorgestrel intrauterine system (LNG-IUS):
  - There is no need for routine removal of the LNG-IUS.

        - Test for the causative organism and start appropriate antibiotic treatment. For more information, see the CKS topic on Pelvic inflammatory disease (/pelvic-inflammatory-disease).
    - Consider removing the LNG-IUS if the woman wishes, or if symptoms have not resolved within 72 hours.
        - If the device is removed and the woman has had sexual intercourse within the last 7 days, consider offering emergency hormonal contraception. For more information see the CKS topic on Contraception - emergency (/contraception-emergency).
    - Follow up women 72 hours after treatment and 2–4 weeks after treatment to check for clinical improvement. For more information, see the CKS topic on Pelvic inflammatory disease (/pelvic-inflammatory-disease).

How should I manage a woman who has actinomyces-like organisms on a cervical smear and is using a levonorgestrel intrauterine system (LNG-IUS)?

Back to top

- There is no need to remove the levonorgestrel intrauterine system (LNG-IUS) in asymptomatic women with actinomyces-like organisms (ALOs).
    - Insertion or reinsertion can also be carried out.
- If the woman has ALOs and pelvic pain:
    - Consider removing the LNG-IUS.
    - Assess her for signs and symptoms of pelvic inflammatory disease. For more information, see the CKS topic on Pelvic inflammatory disease (/pelvic-inflammatory-disease).

Basis for recommendation

Back to top

Pregnancy

- This recommendation is based on good clinical practice.

Unable to feel the threads

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].
    - Threads may not be visible in the vagina as a result of expulsion, perforation or pregnancy, but the absence of threads is often due to retraction of the threads into the cervical canal or uterus.

Removal or replacement

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].
    - The FSRH advice to use condoms for the 7 days preceding removal is a precaution in the event that the device cannot be re-inserted.

Pelvic inflammatory disease

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].

Actinomyces-like organisms on a cervical smear

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].

What are the advantages and disadvantages of a levonorgestrel intrauterine system (LNG-IUS)?

Back to top

Advantages

- Very safe and effective (over 99%).
- Long-term contraception, only needs replaced every 3 to 5 years.
- Sex need not be interrupted to use contraception.
- Periods usually become lighter and shorter, and sometimes less painful. They may stop completely after the first year of use.
  - The levonorgestrel intrauterine system (LNG-IUS) can be useful for women with heavy, painful periods. For more information, see the CKS topic on Menorrhagia (/menorrhagia).
- Normal fertility returns as soon as the device is removed.
- The LNG-IUS can be used:
  - In women of any age, whether or not they have previously been pregnant.
  - From 4 weeks postpartum (off-label use).
  - Immediately after surgical or medical termination of pregnancy.
  - Whilst breastfeeding (although there is an increased risk of uterine perforation if it is inserted during lactation).
  - Through the menopause.
  - When combined oral contraceptives (COCs) are contraindicated (such as migraine or venous thromboembolism).
- May reduce pain associated with primary dysmenorrhoea, endometriosis or adenomyosis. For more information, see the CKS topics on Dysmenorrhoea (/dysmenorrhoea) and Endometriosis (/endometriosis).

Disadvantages

- An internal pelvic examination is needed to check that the LNG-IUS is suitable, and to insert the device.
  - There may be pain or discomfort for a few hours after insertion; this can be treated with analgesics such as paracetamol or ibuprofen.
- A trained healthcare provider must remove the device.
- It does not protect against sexually transmitted infections (STIs), including HIV.
- The LNG-IUS may be expelled without the woman knowing (although this is uncommon, less than 1 in 20 women in 5 years).
- Adverse effects (/contraception-iusiud#!scenarioRecommendation:3) (such as acne, headaches and unscheduled bleeding) may be experienced during the first 3–6 month of using the LNG-IUS.
  - Up to 60% of women stop using the LNG-IUS within 5 years. The most common reasons for discontinuation are unacceptable vaginal bleeding and pain. A less common reason is horm[illegible] (non-bleeding) problems.

Basis for recommendation

Back to top

This information is based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].

What are the possible risks and adverse effects of a levonorgestrel intrauterine system (LNG-IUS)?

Back to top

- **Pain on insertion** — this may cause discomfort for a few hours, but can be relieved with analgesics.
- **Perforation of the wall of the uterus** — this is rare (occurs in less than 1 in 1000 women) and is dependent on the skills of the clinician.
  - The most important risk factors for uterine perforation are insertion:
    - In breastfeeding women, where the risk of perforation is six times higher.
    - Within 36 weeks of giving birth.
  - A partial perforation may have occurred even if the threads can still be seen. This should be considered if there is severe pain following insertion.
- **Expulsion** — the risk of expulsion is around 1 in 20 women in 5 years, and is more likely in the first year, but particularly within the first 3 months of insertion.
- **Pelvic inflammatory disease (PID)** — there is a low risk of PID (1.6 per 1000 women years), which is strongly related to the insertion procedure and background risk of sexually transmitted infections (STIs).
- **Ectopic pregnancy** — pregnancy with the device in place is rare (about 1 in 1000 in 5 years), but when it does occur, the risk of it being ectopic is about 1 in 20.
- **Ovarian cysts** — some women develop functional ovarian cysts (1–10%), however, these do not usually need to be treated as they tend to be asymptomatic and resolve spontaneously.
- **Acne, breast tenderness, headache** — these usually settle with time.
- **Unscheduled bleeding** — this is common in the first 3–6 months following insertion, but improves with time. At 1 year, infrequent bleeding is normal, and some women will experience amenorrhoea.
- **Hypersensitivity** — including rash, urticaria and angioedema have been reported.
- **Depression** – this can be a serious undesirable effect of treatment and is a well-known risk factor for suicidal behaviour and suicide. Women should be advised to see their GP if they develop mood changes and/or depressive symptoms.
- **There is no good evidence that the levonorgestrel intrauterine system (LNG-IUS) significantly increases the risk of:**
  - Reduced libido.
  - Weight gain.
  - Breast cancer.
  - Venous thromboembolism.
  - Myocardial infarction.

[ABPI, 2018 (/contraception-iusiud#!references); ABPI, 2019a (/contraception-iusiud#!references)]

How should I manage unscheduled bleeding in a woman using the levonorgestrel-releasing intrauterine system (IUS)?

Back to top

- Irregular, light, or heavy bleeding is common in the first 6 months of using the levonorgestrel intrauterine system (LNG-IUS).
  - Some women will have infrequent bleeding or be amenorrhoeic after 1 year of use.
- **Exclude and/or manage** situations which could result in unscheduled bleeding, such as:
  - Sexually transmitted infections (STIs) — as a minimum, test for *Chlamydia trachomatis*. The risk of STIs is increased if the woman is under 25 years, has a new sexual partner, or has had more than one sexual partner in the last year. For more information, see the CKS topic on Chlamydia - uncomplicated genital (/chlamydia-uncomplicated-genital).
  - Pregnancy — perform a pregnancy test.
  - Misplaced device — if this is suspected, arrange for ultrasonography to locate the device.
  - Gynaecological conditions such as cervical and endometrial cancer — if cancer is suspected, refer the woman using a suspected cancer pathway referral (for an appointment within 2 weeks). For more information, see the CKS topic on Gynaecological cancers - recognition and referral (/gynaecological-cancers-recognition-and-referral).
- **Consider performing a speculum and pelvic examination:**
  - For persistent bleeding beyond the first 3–6 months of use.
  - For new symptoms or a change in bleeding after at least 3 months of use.
  - If the woman has not participated in the NHS Cervical Screening Programme regularly. For more information, see the CKS topic on Cervical cancer and HPV (/cervical-cancer-and-hpv).
  - If requested by the woman.
  - If there are other symptoms such as pelvic pain, dyspareunia, or post-coital bleeding.
- **Consider performing a transvaginal ultrasound scan and/or hysteroscopy:**
  - If structural abnormalities (such as endometrial polyps) are suspected.
- If no other underlying cause of irregular bleeding is suspected, and speculum and pelvic examination is normal, the bleeding can be assumed to be caused by the LNG-IUS. Providing the woman has no other symptoms:
  - Reassure the woman that irregular bleeding is normal, and is not due to the hormone 'running out'.
  - Consider managing heavy unscheduled bleeding by treating with a combined oral contraceptive (30-35 micrograms of ethinylestradiol with levonorgestrel or norethisterone) either cyclically or continuously for up to 3 months (off-label use).
- Refer to gynaecology if the cause of the bleeding cannot be determined or treated in primary care.

Basis for recommendation

Back to top

These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guidelines *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)], *Problematic bleeding with hormonal contraception* [FSRH, 2015b (/contraception-iusiud#!references)], the National Institute for Health and Care Excellence (NICE) guideline *Suspected cancer: recognition and referral* [NICE, 2015 (/contraception-iusiud#!references)] and a Medicines and Healthcare products Regulatory Agency (MHRA) drug safety update *Intrauterine contraception: uterine perforation* [MHRA, 2015 (/contraception-iusiud#!references)].

How effective is the levonorgestrel intrauterine system (LNG-IUS) at preventing pregnancy?

Back to top

- For comparison of the efficacy of the levonorgestrel intrauterine system (LNG-IUS) with other methods, see the section on Comparative effectiveness of contraceptive methods (/contraception-assessment#!backgroundSub) in the CKS topic on Contraception - assessment (/contraception-assessment).
- When used perfectly (consistently and correctly), 0.2% of women will conceive within the first year of use due to method failure.
- When used typically, 0.2% of women will conceive within the first year of use due to method failure.

Basis for recommendation Back to top

This information is based on expert opinion in the medical textbook *Contraceptive technology* [Hatcher, 2011 (/contraception-iusiud#!references)].

What follow up should I consider for a woman using a levonorgestrel intrauterine system (LNG-IUS)? Back to top

- Consider arranging follow up after the first menses, or 3–6 weeks after insertion to exclude infection, perforation, or expulsion, however it is not essential.
- Advise the woman to return any time if she:
  - Has symptoms of pelvic pain, abnormal bleeding, infection, perforation, or expulsion.
  - Is unable to feel the threads of her levonorgestrel intrauterine system (LNG-IUS).
  - Thinks that she might be pregnant.
  - Wants to change the method of contraception, or her LNG-IUS is due to be changed (after 5 years).

How long should the levonorgestrel intrauterine system (IUS) be used for? Back to top

- The levonorgestrel intrauterine system (LNG-IUS) can be left in place for up to 3 or 5 years depending on the type of LNG-IUS used.
  - Kyleena contains 19.5 mg of levonorgestrel and is licensed for up to 5 years use for contraception.
  - Mirena® contains 52 mg of levonorgestrel and is licensed for up to 5 years use for contraception and idiopathic menorrhagia, and 4 years use for protection from endometrial hyperplasia during oestrogen replacement therapy.
  - Levosert® contains 52 mg of levonorgestrel and is licensed for up to 5 years use for contraception and heavy menstrual bleeding.
  - Jaydess® contains 13.5 mg of levonorgestrel and is licensed for up to 3 years use for contraception.
- The LNG-IUS can be used in women who are 50 years of age or over. However, if a woman is approaching the menopause, and is:
  - **Amenorrhoeic** — consider one of the following options:
    - Check serum follicle stimulating hormone (FSH) levels on two occasions, with an interval of 6 weeks between tests. If both FSH levels are more than 30 IU/L, remove the LNG-IUS after a further year.
    - Remove the LNG-IUS at the age of 55 years when natural loss of fertility can be assumed for most women.
  - ***Not* amenorrhoeic** — continue using the LNG-IUS over 55 years of age until she has been amenorrhoeic for 1 year even if this is beyond the recommened duration (off-label use).
    - Consider investigating any abnormal bleeding or changes in bleeding pattern.

- Women who have the LNG-IUS fitted solely for the purpose of contraception and/or heavy menstrual bleeding age 45 years or over can:
  - If amenorrhoeic, retain the device until the menopause (verified by testing FSH levels), even if this is beyond the recommended duration (off–label use) after which the device should be removed.
  - If not amenorrhoeic, use the LNG-IUS for 7 years (instead of the licensed 5 years) if their bleeding pattern is acceptable (off-label use).

Basis for recommendation Back to top

These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guidelines *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)], *Summary of product characteristics for Kyleena* [ABPI, 2018 (/contraception-iusiud#!references)], and *Contraception for women aged over 40 years* [FSRH, 2010 (/contraception-iusiud#!references)].

What are the key drug interactions for the levonorgestrel intrauterine system (LNG-IUS)?

Back to top

- Ulipristal acetate — the manufacturers of Esmya® (ulipristal acetate 5 mg), which is indicated for the treatment of severe symptoms of uterine fibroids, advise avoiding concomitant use of a progestogen intrauterine system.

Basis for recommendation Back to top

This recommendation is based on the manufacturer's Summary of Product Characteristics [ABPI, 2016c (/contraception-iusiud#!references)].

Scenario: Copper intrauterine device

Back to top

Starting a copper intrauterine device

Back to top

How should I assess a woman considering starting a copper intrauterine device (Cu-IUD)? Back to top

- For information on assessing a woman considering starting a copper intrauterine device (Cu-IUD), see the section on copper intrauterine device (/contraception-assessment#!scenarioRecommendation:27) in the CKS topic on Contraception - assessment (/contraception-assessment).

What types of copper intrauterine device (Cu-IUD) are available? Back to top

- The most effective copper intrauterine devices (Cu-IUDs) contain at least 380 mm^2 of copper and have copper bands on the transverse arms. Available Cu-IUDs include:

- **Framed IUDs with 380mm^2 copper (stem and arms)**, for example:
  - TT380® Slimline — duration of use: 10 years
  - Copper T380A — duration of use: 10 years
  - Mini TT380® Slimline — duration of use: 5 years
  - T–Safe® 380A QL — duration of use: 10 years
  - FlexiT® 380 — duration of use: 5 years
- **Framed IUDs with 380mm^2 copper (stem only)**, for example:
  - UT 380 Short® — duration of use: 10 years
  - UT 380 Standard® — duration of use: 10 years
  - Neo-Safe® T380 — duration of use: 5 years
  - Nova-T® 380 — duration of use: 5 years
  - Novaplus T 380® Ag — duration of use: 5 years
  - Novaplus T 380® Cu — duration of use: 5 years
- **Framed IUDs with less than 380mm^2 copper,** for example:
  - FlexiT® 300
  - Load® 375
  - Multiload® Cu 375
  - Multi–Safe® 375
  - Ancora® 375Cu
- **Frameless IUDs,** for example:
  - GyneFix® (contains 300mm^2 copper)

What is the mechanism of action?

Back to top

- The primary mode of action of copper intrauterine devices (Cu-IUDs) is via the toxic effects of copper on the ovum and sperm, preventing fertilization.
- In addition, alterations in the copper content of cervical mucus may inhibit penetration by sperm, and inflammatory reactions within the endometrium may prevent implantation, should the ovum be fertilized. Consequently, the Cu-IUD can work immediately after insertion.

When should a copper intrauterine device (Cu-IUD) be started?

Back to top

Healthcare professionals offering intrauterine contraception (IUC) should hold the appropriate letter of competence in intrauterine techniques from the Faculty of Sexual and Reproductive Healthcare (FSRH), or an equivalent.

- **If the woman is using the copper intrauterine device (Cu-IUD) for the first time:**
  - Insert the Cu-IUD at any time in the menstrual cycle if it is reasonably certain that the women is not pregnant.
    - A Cu-IUD is effective immediately so no additional contraception is required.
  - If unprotected sexual intercourse (UPSI) occurred before insertion and there is a risk of pregnancy, a Cu-IUD can safely be inserted up to 5 days after the first episode of UPSI or within 5 days of the earliest expected time of ovulation.
- **If an existing Cu-IUD is being replaced with a new Cu-IUD:**

- Replace the existing Cu-IUD with the new Cu-IUD at any time in the cycle.
  - No additional contraception is required if the new Cu-IUD is inserted immediately after removing the existing Cu-IUD.
  - Ideally, advise the woman to abstain from sexual intercourse or use a barrier method of contraception (such as condoms) or for 7 days prior to the replacement in case the Cu-IUD cannot be inserted.
- **If a levonorgestrel intrauterine system (LNG-IUS) is being replaced with a Cu-IUD:**
  - Replace the LNG-IUS with a Cu-IUD at any time in the menstrual cycle if it is reasonably certain that the woman is not pregnant.
  - Ideally, advise the woman to abstain from sexual intercourse or use a barrier method of contraception (such as condoms) for 7 days before replacement in case the Cu-IUD cannot be inserted.
- **If the woman is starting a Cu-IUD after oral emergency contraception:**
  - Insert the Cu-IUD within the first 5 days (120 hours) following unprotected sexual intercourse (UPSI) or within 5 days of the earliest expected time of ovulation.
    - No additional contraception is required.
  - If the Cu-IUD is not inserted within these timeframes, it should not be inserted until pregnancy can be excluded with a pregnancy test performed no sooner than 3 weeks after the last episode of UPSI.
- **If the woman is switching from another method of contraception:**
  - Insert the Cu-IUD at any time in the menstrual cycle provided that the other method of contraception has been used consistently and correctly, and it is reasonably certain that the woman is not pregnant.
    - There is no need to wait for the next menstrual period or withdrawal bleed.
    - No additional contraception is required.

Postpartum, termination of pregnancy, or miscarriage Back to top

- **If the woman is postpartum (including post-Caesarean section and breastfeeding):**
  - Insert the copper intrauterine device (Cu-IUD) within 48 hours postpartum.
    - No additional contraception is required.
  - If the Cu-IUD is not inserted within 48 hours, delay insertion until 4 weeks postpartum, if it is reasonably certain that the woman is not pregnant or at risk of pregnancy (off-label use).
    - No additional contraception is required.
- **If the woman has had a miscarriage or termination of pregnancy:**
  - Following surgical termination — insert the Cu-IUD at the end of the procedure.
    - No additional contraception is required.
  - Following medical termination — insert the Cu-IUD any time after the second (and final) drug has been taken for medical termination.
    - No additional contraception is required.

Excluding pregnancy Back to top

- Health professionals can be ‘reasonably certain’ that a woman is not currently pregnant if any one or more of the following criteria are met and there are no symptoms or signs of pregnancy:
  - She has not had intercourse since last normal menses.
  - She has been correctly and consistently using a reliable method of contraception.

- She is within the first 7 days of the onset of a normal menstrual period.
- She is not breastfeeding and less than 4 weeks from giving birth.
- She is fully or nearly fully breastfeeding, amenorrhoeic, and less than 6 months' postpartum.
- She is within the first 7 days post-termination or miscarriage.
- A pregnancy test is performed no sooner than 3 weeks since the last episode of unprotected sexual intercourse (UPSI) and is negative.

Basis for recommendation Back to top

Types of IUD

- This information is based on the Faculty of Sexual and Reproductive Healthcare (FSRH) guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)] and the National Institute for Health and Care Excellence (NICE) guideline *Long-acting reversible contraception* [NICE, 2014 (/contraception-iusiud#!references)].

Mechanism of action

- This information is based on the Faculty of Sexual and Reproductive Healthcare (FSRH) guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].

When to start

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) guidelines *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)], and *Contraception after pregnancy* [FSRH, 2017 (/contraception-iusiud#!references)].

What information and advice should I give a woman considering starting a copper intrauterine device (Cu-IUD)?

Back to top

- **Discuss:**
  - The mechanism of action (/contraception-iusiud#!scenarioClarification:15) of the copper intrauterine device (Cu-IUD).
  - The contraceptive efficacy (/contraception-iusiud#!scenarioRecommendation:11) of the Cu-IUD.
  - The advantages and disadvantages (/contraception-iusiud#!scenarioRecommendation:9) of the Cu-IUD.
  - The risks and adverse effects (/contraception-iusiud#!scenarioRecommendation:10) of the Cu-IUD.
    - Insertion of a Cu-IUD may be painful and cause discomfort for a few hours and light bleeding for a few days.
    - Women should be informed of the symptoms of perforation, including severe pelvic pain after insertion (worse than period cramps), pain or heavy bleeding after insertion which continues for more than a few weeks, sudden changes in periods, pain during sex, and not being able to feel the threads.
  - How to check for the Cu-IUD and its threads, the importance of doing this regularly (for example after every menstrual period), and what to do if she is unable to feel the threads (/contraception-iusiud#!scenarioClarification:20).

- **Advise the woman:**
  - To seek medical advice if:
    - Menstrual abnormalities (/contraception-iusiud#!scenarioRecommendation:10) persist beyond the initial 6 months of use.
    - She experiences possible features of pelvic inflammatory disease (such as pain or tenderness in the lower abdomen, fever, abnormal or odorous vaginal discharge) especially within the first 3–4 weeks after insertion of the Cu-IUD. For more information, see the CKS topic on Pelvic inflammatory disease (/pelvic-inflammatory-disease).
  - That the Cu-IUD needs to be changed every 5–10 years (depending on which IUD is used).
  - That the device can be removed at any time if she wishes to become pregnant and there is no delay in return to fertility.
- Also provide written information on the Cu-IUD.
  - The Family Planning Association provides a useful leaflet (http://www.fpa.org.uk/sites/default/files/intrauterine-device-iud-your-guide.pdf) with information for users of the Cu-IUD.

How should I manage a woman who becomes pregnant whilst using a copper intrauterine device (Cu-IUD)? Back to top

- If a woman is found to be pregnant whilst using the copper intrauterine device (Cu-IUD), seek immediate advice from a gynaecologist.

How should I manage a woman who cannot feel the threads of her copper intrauterine device (Cu-IUD)? Back to top

- Exclude pregnancy.
- Perform a vaginal examination — if threads are not visible on speculum examination and uterine placement of the Cu-IUD cannot be confirmed clinically, refer the woman for an ultrasound scan to locate it.
- Advise the woman to us a barrier method of contraception (such as condoms) or avoid unprotected sexual intercourse (UPSI) until it is confirmed whether or not the copper intrauterine device (Cu-IUD) is correctly in place.
- Consider the need for emergency contraception if sexual intercourse occurred in the preceding 7 days. See the CKS topic on Contraception - emergency (/contraception-emergency) for more information.
- If it is confirmed that the Cu-IUD is correctly located, it can be left in situ.
  - If removal is required, a thread retriever or Spencer Wells forceps can be used if the appropriate training and experience is available in primary care.
- If ultrasonography cannot locate the device and pregnancy has been excluded, arrange for an abdominal and pelvic X-ray.
  - If the device is extrauterine, or if partial perforation or embedment into the uterine wall is suspected, refer for surgical retrieval.
  - If the device is not located, this confirms expulsion.
    - Offer reinsertion of a new Cu-IUD or an alternative method of contraception.

When can the copper intrauterine device (Cu-IUD) be safely removed or replaced?

Back to top

- If the woman wishes to become pregnant:
  - Remove the copper intrauterine device (Cu-IUD) at any time in the menstrual cycle.
- If the woman does not wish to become pregnant:
  - Remove the Cu-IUD on days 1 to 3 of the menstrual cycle and start the new method of contraception,
    - No additional contraception is required preceding removal.
    - Additional contraception may be required when switching to an alternative method. See the CKS topics on Contraception - combined hormonal methods (/contraception-combined-hormonal-methods), Contraception - progestogen-only methods (/contraception-progestogen-only-methods), Contraception - sterilization (/contraception-sterilization), Contraception - barrier methods and spermicides (/contraception-barrier-methods-and-spermicides), and Contraception - natural family planning (/contraception-natural-family-planning) for more information.
  - If the Cu-IUD is removed at any other time at any time, advise her to avoid unprotected sexual intercourse (UPSI) or use a barrier method of contraception (such as condoms) for the 7 days preceding removal.
  - Provide advice on switching to another method of contraception. See the CKS topics on Contraception - combined hormonal methods (/contraception-combined-hormonal-methods), Contraception - progestogen-only methods (/contraception-progestogen-only-methods), Contraception - sterilization (/contraception-sterilization), Contraception - barrier methods and spermicides (/contraception-barrier-methods-and-spermicides), and Contraception - natural family planning (/contraception-natural-family-planning) for more information.

How should I manage pelvic inflammatory disease in a woman using a copper intrauterine device (Cu-IUD)?

Back to top

- If pelvic inflammatory disease (PID) is diagnosed in a woman using the copper intrauterine device (Cu-IUD):
  - There is no need for routine removal of the Cu-IUD.
    - Test for the causative organism and start appropriate antibiotic treatment. For more information, see the CKS topic on Pelvic inflammatory disease (/pelvic-inflammatory-disease).
  - Consider removing the Cu-IUD if the woman wishes, or if symptoms have not resolved within 72 hours.
    - If the device is removed and the woman has had sexual intercourse within the last 7 days, consider offering emergency hormonal contraception. For more information see the CKS topic on Contraception - emergency (/contraception-emergency).
  - Follow up women 72 hours after treatment and 2–4 weeks after treatment if required. For more information, see the CKS topic on Pelvic inflammatory disease (/pelvic-inflammatory-disease).

How should I manage a woman who has actinomyces-like organisms on a cervical smear and is using a copper intrauterine device (Cu-IUD)?

Back to top

- There is no need to remove the copper intrauterine device (Cu-IUD) in asymptomatic women with actinomyces-like organisms (ALOs).
  - Insertion or reinsertion can also be carried out.
- If the woman has ALOs and pelvic pain:
  - Consider removing the Cu-IUD.
  - Assess her for signs and symptoms of pelvic inflammatory disease. For more information, see the CKS topic on Pelvic inflammatory disease (/pelvic-inflammatory-disease).

Basis for recommendation Back to top

Information and advice

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)], and the National Institute for Health and Care Excellence (NICE) guideline *Long-acting reversible contraception* [NICE, 2014 (/contraception-iusiud#!references)].

Pregnancy

- This recommendation is based is based on good clinical practice.

Unable to feel the threads

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].
  - Threads may not be visible in the vagina as a result of expulsion, perforation or pregnancy, but absence of the threads is often due to retraction of the threads into the cervical canal or uterus.

Removal or replacement

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].
  - The FSRH advice to use condoms for the 7 days preceding removal is a precaution in the event that the device cannot be re-inserted.

Pelvic inflammatory disease

- These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].

What are the advantages and disadvantages of a copper intrauterine device (Cu-IUD)?

Back to top

Advantages

- Very safe and effective.
- Effective immediately after insertion and can be used for emergency contraception.
- Long-term contraception, only needs to be replaced every 5–10 years.
- Sex need not be interrupted.
- There are no hormonal side effects.
- Immediately reversible — normal fertility returns as soon as it is removed.
- Can be used with breastfeeding (although there is an increased risk of uterine perforation if it is inserted during lactation).
- Can be inserted from 4 weeks postpartum (off-label use).
- Can be used immediately following surgical or medical termination of pregnancy.
- Can be used by women of any age, and can be continued through the menopause.
- There are no drug interactions.
- May be associated with a reduced risk of endometrial and cervical cancer.

Disadvantages

- An internal pelvic examination, prior to insertion of the copper intrauterine device (Cu-IUD) is needed to check that it is suitable.
  - There may be pain or discomfort for a few hours after insertion; this can be treated with an analgesic such as paracetamol or ibuprofen.
- Some bleeding or spotting may occur immediately after the Cu-IUD is inserted. This usually resolves in a day or two.
- Some women experience severe cramps and pain beyond the first 3–5 days after insertion.
- The woman cannot discontinue use on her own. A trained healthcare provider must remove the device.
- The Cu-IUD does not protect against sexually transmitted infections (STIs), including HIV. However, the risk of HIV is not increased.
- Adverse effects (/contraception-iusiud#!scenarioRecommendation:10) such as unscheduled bleeding may be experienced in the first 3–6 months of using the Cu-IUD.

Basis for recommendation

Back to top

This information is based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].

What are the possible risks and adverse effects of a copper intrauterine device (Cu-UD)?

Back to top

- **Pain on insertion** — this may cause discomfort for a few hours, but can be relieved with analgesics.
- **Perforation of the wall of the uterus** — this is rare (occurs in less than 1 in 1000 women) and is dependent on the skills of the clinician.
  - The most important risk factors for uterine perforation are insertion:
    - In breastfeeding women during lactation and insertion.
    - Within the 36 weeks after giving birth.

- A partial perforation may have occurred even if the threads can still be seen. This should be considered if there is severe pain following insertion.

- **Expulsion** — the risk of expulsion is around 1 in 20 women in 5 years, and is more likely in the first year, but particularly within the first 3 months of insertion.
- **Pelvic inflammatory disease** (PID) — there is a low risk of PID (1.6 per 1000 women years), which is strongly related to the insertion procedure and background risk of sexually transmitted infections (STIs).
- **Ectopic pregnancy** — pregnancy with the Cu-IUD in place is rare (about 6 in 1000 women during the first year of perfect use), but when it does occur, the risk of the pregnancy being ectopic is about 1 in 20.
- **Unscheduled bleeding** — menstrual changes are common in the first 3 to 6 months but are likely to lessen after this time.

How should I manage unscheduled bleeding in a woman using a copper intrauterine device (Cu-IUD)?

Back to top

- **Spotting and light bleeding**
  - Advise the woman that spotting or light bleeding is common during the first 3–6 months of copper intrauterine device (Cu-IUD) use, that it is not harmful, and that it usually decreases with time.
    - Consider prescribing a nonsteroidal anti-inflammatory drug (NSAID) (for example mefenamic acid). For more information, see the CKS topic on Menorrhagia (/menorrhagia).
- **Heavy and/or prolonged menstruation**
  - Longer and heavier menstrual periods occur in most women, often with bleeding or spotting between periods, and more cramps or pain during periods.
    - Up to 50% of women stop using the Cu-IUD within 5 years, most commonly because of unacceptable vaginal bleeding and pain.
  - Consider prescribing an NSAID (for example mefenamic acid) or an antifibrinolytic (for example tranexamic acid). For more information, see the CKS topic on Menorrhagia (/menorrhagia).
  - If heavy bleeding remains unacceptable or if there is evidence of anaemia, consider changing to another method of contraception, such as the levonorgestrel intrauterine system (LNG-IUS).
  - **Exclude and/or manage** situations which could result in unscheduled bleeding, such as:
    - Sexually transmitted infections (STIs) — as a minimum, test for *Chlamydia trachomatis*. The risk of STIs is increased if the woman is under 25 years, has a new sexual partner, or has had more than one sexual partner in the last year. For more information, see the CKS topic on Chlamydia - uncomplicated genital (/chlamydia-uncomplicated-genital).
    - Pregnancy — perform a pregnancy test.
    - Misplaced device — if this is suspected, arrange for ultrasonography to locate the device.
    - Gynaecological conditions such as cervical cancer and endometrial — if this is suspected, refer the woman using a suspected cancer pathway referral (for an appointment within 2 weeks). For more information, see the CKS topic on Gynaecological cancers - recognition and referral (/gynaecological-cancers-recognition-and-referral).
  - **Consider performing a speculum and pelvic examination:**
    - For persistent bleeding beyond the first 3–6 months of use.
    - For new symptoms or a change in bleeding after at least 3 months of use.
    - If the woman has not participated in the NHS Cervical Screening Programme regularly. For more information, see the CKS topics on Cervical cancer and HPV (/cervical-cancer-and-hpv) and Cervical screening (/cervical-screening).
    - If requested by the woman.
    - If there are other symptoms such as pelvic pain, dyspareunia, or post-coital bleeding.

- **Consider performing a transvaginal ultrasound scan and/or hysteroscopy:**
  - If structural abnormalities (such as endometrial polyps) are suspected.
- If no other underlying cause of irregular bleeding is suspected, and speculum and pelvic examination is normal, the bleeding can be assumed to be caused by the Cu-IUD.
- Refer to gynaecology if the cause of the bleeding cannot be determined or treated in primary care.

Basis for recommendation Back to top

These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guidelines *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)], *Problematic bleeding with hormonal contraception* [FSRH, 2015b (/contraception-iusiud#!references)], the National Institute for Health and Care Excellence (NICE) guideline *Suspected cancer: recognition and referral* [NICE, 2015 (/contraception-iusiud#!references)] and a Medicines and Healthcare products Regulatory Agency (MHRA) drug safety update *Intrauterine contraception: uterine perforation* [MHRA, 2015 (/contraception-iusiud#!references)].

- The recommendation to exclude or manage situations which can lead to unscheduled bleeding and to perform a speculum and pelvic examination in women with unscheduled bleeding is extrapolated from FSRH advice on managing problematic bleeding in women using hormonal contraception [FSRH, 2015b (/contraception-iusiud#!references)].

How effective is the copper intrauterine device (Cu-IUD) at preventing pregnancy? Back to top

- For comparison of the efficacy of the copper intrauterine device (Cu-IUD) with other methods of contraception, see the section oncomparative efficacy in the CKS topic on Contraception - assessment (/contraception-assessment).
- When used perfectly (consistently and correctly) 0.6% of women will conceive within the first year of use due to method failure.
- When used typically, 0.8% of women will conceive within the first year of use due to method failure or user failure.

Basis for recommendation Back to top

This information is based on expert opinion in the medical textbook *Contraceptive technology* [Hatcher, 2011 (/contraception-iusiud#!references)].

What follow up should I consider for a woman using a copper intrauterine device (Cu-IUD)? Back to top

- Consider arranging follow up after the first menses, or 3–6 weeks after insertion to exclude infection, perforation, or expulsion, however it is not essential.
- Advise the woman to return any time if she:

- Has symptoms of pelvic pain, abnormal bleeding, infection, perforation, or expulsion.
- Is unable to feel the threads of her copper intrauterine device (Cu-IUD).
- Thinks that she might be pregnant.
- Wants to change the method of contraception, or her Cu-IUD is due to be changed (after 5 years).

How long should the copper intrauterine device (Cu-IUD) be used for? Back to top

- The copper intrauterine device (Cu-IUD) can be left in place for 5–10 years, depending on which device is used. See the manufacturer's Summary of Product Characteristics for individual devices for more information.
- **For women approaching the menopause:**
  - Women who are aged 40 years or older at the time of Cu-IUD insertion can retain the device until 1 year after the last menstrual period if this occurs when she is over 50 years of age, or until 2 years after the last menstrual period if this occurs when she is younger than 50 years of age, after which the device should be removed.

Basis for recommendation Back to top

These recommendations are based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guidelines *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)] and *Contraception for women aged over 40 years* [FSRH, 2010 (/contraception-iusiud#!references)].

Search strategy

Back to top

Scope of search

A literature search was conducted for guidelines, systematic reviews and randomized controlled trials on primary care management of contraception - IUS/IUD.

Search dates

December 2011 - July 2016

Key search terms

Various combinations of searches were carried out. The terms listed below are the core search terms that were used for Medline.

- exp contraception/

Sources of guidelines

- National Institute for Health and Care Excellence (NICE) (https://www.nice.org.uk/)

- Scottish Intercollegiate Guidelines Network (SIGN) (https://www.sign.ac.uk/)
- Royal College of Physicians (https://www.rcplondon.ac.uk/)
- Royal College of General Practitioners (https://www.rcgp.org.uk/)
- Royal College of Nursing (https://www.rcn.org.uk/)
- NICE Evidence (https://www.evidence.nhs.uk/)
- World Health Organization (https://www.who.int/)
- Guidelines International Network (https://www.g-i-n.net/)
- TRIP database (http://www.tripdatabase.com/)
- Agency for Healthcare Research and Quality (https://www.ahrq.gov/)
- Institute for Clinical Systems Improvement (https://www.icsi.org/)
- National Health and Medical Research Council (Australia) (https://www.nhmrc.gov.au/research-policy)
- Royal Australian College of General Practitioners (https://www.racgp.org.au/clinical-resources/clinical-guidelines)
- British Columbia Medical Association (https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/bc-guidelines)
- Canadian Medical Association (https://www.cma.ca/)
- Alberta Medical Association (http://www.topalbertadoctors.org/cpgs/)
- Michigan Quality Improvement Consortium (http://mqic.org/guidelines.htm)
- Singapore Ministry of Health (https://www.moh.gov.sg/resources-statistics)
- National Resource for Infection Control (https://www.nric.org.uk/)
- Patient UK Guideline links (https://patient.info/patientplus)
- RefHELP NHS Lothian Referral Guidelines (https://apps.nhslothian.scot/refhelp)
- Medline (with guideline filter)
- Driver and Vehicle Licensing Agency (https://www.gov.uk/guidance/assessing-fitness-to-drive-a-guide-for-medical-professionals)
- NHS Health at Work (http://www.nhshealthatwork.co.uk/oh-guidelines.asp) (occupational health practice)

Sources of systematic reviews and meta-analyses

- The Cochrane Library (https://www.cochranelibrary.com/):
  - Systematic reviews
  - Protocols
  - Database of Abstracts of Reviews of Effects
- Medline (with systematic review filter)
- EMBASE(with systematic review filter)

Sources of health technology assessments and economic appraisals

- NIHR Health Technology Assessment programme (https://www.nihr.ac.uk/funding-and-support/funding-for-research-studies/funding-programmes/health-technology-assessment/)
- The Cochrane Library (https://www.cochranelibrary.com/):
  - NHS Economic Evaluations
  - Health Technology Assessments
- Canadian Agency for Drugs and Technologies in Health (https://www.cadth.ca/)
- International Network of Agencies for Health Technology Assessment (http://www.inahta.org

Sources of randomized controlled trials

- The Cochrane Library (https://www.cochranelibrary.com/):
  - Central Register of Controlled Trials
- Medline (with randomized controlled trial filter)
- EMBASE (with randomized controlled trial filter)

Sources of evidence based reviews and evidence summaries

- Bandolier (http://www.bandolier.org.uk/)
- Drug and Therapeutics Bulletin (https://dtb.bmj.com/)
- TRIP database (http://www.tripdatabase.com/)
- Central Services Agency COMPASS Therapeutic Notes (http://www.medicinesni.com/index.asp)

Sources of national policy

- Department of Health (https://www.gov.uk/government/organisations/department-of-health-and-social-care)
- Health Management Information Consortium (HMIC)

Patient experiences

- Healthtalk (http://www.healthtalk.org/)
- BMJ - Patient Journeys (https://www.bmj.com/specialties/patient-journeys)
- Patient.co.uk - Patient Topics (https://patient.info/health)

Sources of medicines information

The following sources are used by CKS pharmacists and are not necessarily searched by CKS information specialists for all topics. Some of these resources are not freely available and require subscriptions to access content.

- British National Formulary (https://bnf.nice.org.uk/) (BNF)
- electronic Medicines Compendium (https://www.medicines.org.uk/emc) (eMC)
- European Medicines Agency (https://www.ema.europa.eu/en) (EMEA)
- LactMed (https://toxnet.nlm.nih.gov/newtoxnet/lactmed.htm)
- Medicines and Healthcare products Regulatory Agency (https://www.gov.uk/government/organisations/medicines-and-healthcare-products-regulatory-agency) (MHRA)
- REPROTOX (http://www.reprotox.org/)
- Scottish Medicines Consortium (https://www.scottishmedicines.org.uk/home)
- Stockley's Drug Interactions (https://about.medicinescomplete.com/publication/stockleys-drug-interactions/)
- TERIS (http://depts.washington.edu/terisdb/terisweb/index.html)
- TOXBASE (https://www.toxbase.org/)
- Micromedex (https://www.micromedexsolutions.com/home/dispatch)
- UK Medicines Information (https://www.ukmi.nhs.uk/)

Stakeholder engagement

Back to top

Our policy

The external review process is an essential part of CKS topic development. Consultation with a wide range of stakeholders provides quality assurance of the topic in terms of:

- Clinical accuracy.
- Consistency with other providers of clinical knowledge for primary care.
- Accuracy of implementation of national guidance (in particular NICE guidelines).
- Usability.

Principles of the consultation process

- The process is inclusive and any individual may participate.
- To participate, an individual must declare whether they have any competing interests or not. If they do not declare whether or not they have competing interests, their comments will not be considered.
- Comments received after the deadline will be considered, but they may not be acted upon before the clinical topic is issued onto the website.
- Comments are accepted in any format that is convenient to the reviewer, although an electronic format is encouraged.
- External reviewers are not paid for commenting on the draft topics.
- Discussion with an individual or an organization about the CKS response to their comments is only undertaken in exceptional circumstances (at the discretion of the Clinical Editor or Editorial Steering Group).
- All reviewers are thanked and offered a letter acknowledging their contribution for the purposes of appraisal/revalidation.
- All reviewers are invited to be acknowledged on the website.All reviewers are given the opportunity to feedback about the external review process, enabling improvements to be made where appropriate.

Stakeholders

- Key stakeholders identified by the CKS team are invited to comment on draft CKS topics. Individuals and organizations can also register an interest to feedback on a specific topic, or topics in a particular clinical area, through the Getting involved (http://cks.clarity.co.uk/get-involved/) section of the Clarity Informatics (https://clarity.co.uk/) website.
- Stakeholders identified from the following groups are invited to review draft topics:
  - Experts in the topic area.
  - Professional organizations and societies(for example, Royal Colleges).
  - Patient organizations, Clarity has established close links with groups such as Age UK and the Alzheimer's Society specifically for their input into new topic development, review of current topic content and advice on relevant areas of expert knowledge.
  - Guideline development groups where the topic is an implementation of a guideline.
  - The British National Formulary team.
  - The editorial team that develop MeReC Publications.

- Reviewers are provided with clear instructions about what to review, what comments are particularly helpful, how to submit comments, and declaring interests.

Patient engagement

Clarity Informatics has enlisted the support and involvement of patients and lay persons at all stages in the process of creating the content which include:

- Topic selection
- Scoping of topic
- Selection of clinical scenarios
- First draft internal review
- Second draft internal review
- External review
- Final draft and pre-publication

Our lay and patient involvement includes membership on the editorial steering group, contacting expert patient groups, organizations and individuals.

Back to top

Evidence exclusion criteria

Our policy

Scoping a literature search, and reviewing the evidence for CKS is a methodical and systematic process that is carried out by the lead clinical author for each topic. Relevant evidence is gathered in order that the clinical author can make fully informed decisions and recommendations. It is important to note that some evidence may be excluded for a variety of reasons. These reasons may be applied across all CKS topics or may be specific to a given topic.

Studies identified during literature searches are reviewed to identify the most appropriate information to author a CKS topic, ensuring any recommendations are based on the best evidence. We use the principles of the GRADE and PICOT approaches to assess the quality of published research. We use the principles of AGREE II to assess the quality of published guidelines.

Standard exclusions for scoping literature:

- Animal studies
- Original research is not written in English

Possible exclusions for reviewed literature:

- Sample size too small or study underpowered
- Bias evident or promotional literature
- Population not relevant
- Intervention/treatment not relevant
- Outcomes not relevant

- Outcomes have no clear evidence of clinical effectiveness
- Setting not relevant
- Not relevant to UK
- Incorrect study type
- Review article
- Duplicate reference

Organizational, behavioural and financial barriers

Back to top

Our policy

The CKS literature searches take into consideration the following concepts, which are discussed at the initial scoping of the topic.

- Feasibility
  - Studies are selected depending on whether the intervention under investigation is available in the NHS and can be practically and safely undertaken in primary care.
- Organizational and Financial Impact Analysis
- Studies are selected and evaluated on whether the intervention under investigations may have an impact on local clinical service provision or national impact on cost for the NHS. The principles of clinical budget impact analysis are adhered to, evaluated and recorded by the author. The following factors are considered when making this assessment and analysis.
  - Eligible population
  - Current interventions
  - Likely uptake of new intervention or recommendation
  - Cost of the current or new intervention mix
  - Impact on other costs
  - Condition-related costs
  - In-direct costs and service impacts
  - Time dependencies
- Cost-effectiveness or cost-benefit analysis studies are identified where available.

We also evaluate and include evidence from NICE accredited sources which provide economic evaluations of recommendations, such as NICE guidelines. When a recommended action may not be possible because of resource constraints, this is explicitly indicated to healthcare professionals by the wording of the CKS recommendation.

Declarations of interest

Back to top

Our policy

Clarity Informatics requests that all those involved in the writing and reviewing of topics, and those involved in the external review process to declare any competing interests. Signed copies are securely held by Clarity Informatics and are available on request with the permission of the individual. A copy of the declaration of interest form which participants are asked to complete annually is also available on request. A br[illegible]utline of the declarations of interest policy is described here and full details of the policy is available on th[illegible]

Informatics website (https://cks.clarity.co.uk/). Declarations of interests of the authors are not routinely published, however competing interests of all those involved in the topic update or development are listed below. Competing interests include:

- Personal financial interests
- Personal family interest
- Personal non-financial interest
- Non-personal financial gain or benefit

Although particular attention is given to interests that could result in financial gains or losses for the individual, competing interests may also arise from academic competition or for political, personal, religious, and reputational reasons.An individual is not obliged to seek out knowledge of work done for, or on behalf of, the healthcare industry within the departments for which they are responsible if they would not normally expect to be informed.

Who should declare competing interests?

Any individual (or organization) involved in developing, reviewing, or commenting on clinical content, particularly the recommendations should declare competing interests. This includes the authoring team members, expert advisers, external reviewers of draft topics, individuals providing feedback on published topics, and Editorial Steering Group members. Declarations of interest are completed annually for authoring team and editorial steering group members, and are completed at the start of the topic update and development process for external stakeholders.

Competing interests declared for this topic:

None.

Back to top

Contraception - IUS/IUD: Summary

- Intrauterine contraceptives (IUCs) are long-acting reversible contraceptives (LARCs) which have a licensed duration of use of 3–10 years, depending on the device chosen.
- There are two types of IUC currently available in the UK:
  - The levonorgestrel intrauterine system (LNG-IUS) — a small polyethylene T-shaped frame with a levonorgestrel reservoir around the vertical stem. The levonorgestrel is released into the uterine cavity.
  - The copper intrauterine device (Cu-IUD) — this is a non-hormonal T-shaped device. The most effective types contain at least 380 mm^2 of copper and have copper bands on the transverse arms.
- IUCs should only be inserted by trained and accredited healthcare professionals.
- If a woman is considering using an IUC (IUD or IUS):
  - An assessment should be carried out to identify any relevant medical conditions or medication that could affect her choice of IUC.
  - Advice on IUCs should be given, including the advantages and disadvantages, possible risks and benefits, efficacy, what to do if she is unable to feel the threads, and how to manage adverse effects.
  - Pregnancy should be excluded before the LNG-IUS or Cu-IUD is inserted. The use of a barrier method (such as condoms) should be advised until pregnancy can be excluded.
- If considering an LNG-IUS, a woman should be advised that:

    - It needs to be changed every 3 to 5 years depending on the type of device (although it can be left in longer in some circumstances).
    - It can be removed at any time if she wishes to become pregnant, and there is no delay in return to fertility.
    - When inserted correctly, 0.2% of women will conceive within the first year of use.
- The contraceptive effect of a LNG-IUS is mainly due to its progestogenic effect on the endometrium, which prevents implantation of the fertilized ovum.
    - Changes in cervical mucus also inhibit penetration of sperm into the uterus.
- If considering a Cu-IUD, a woman should be advised that:
    - It needs to be changed every 5 to 10 years, depending on which Cu-IUD is used.
    - It can be removed at any time if she wishes to become pregnant and there is no delay in return to fertility.
    - When inserted correctly, 0.8% of women will conceive within the first year of use.
- The primary mode of action of the Cu-IUD is via the toxic effects of copper on the ovum and sperm, preventing fertilization.
    - The copper also has an effect on cervical mucus which may inhibit sperm penetration, and inflammatory reactions within the endometrium may prevent implantation.
- Risks and adverse effects of IUCs include:
    - Unscheduled bleeding.
    - Perforation of the uterine wall at the time of insertion or later.
    - Ectopic pregnancy.
- The Family Planning Association provides useful leaflets on intrauterine contraception.

Back to top

Have I got the right topic?

From age 13 years to 60 years (Female).

This CKS topic is largely based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)].

This CKS topic covers the use of the levonorgestrel intrauterine system (LNG-IUS) and the copper intrauterine device (Cu-IUD), including their advantages and disadvantages, efficacy, when to start using them and their possible risks and adverse effects.

This CKS topic does not cover how to fit the LNG-IUS or Cu-IUD, as professional training is required for each of these methods. It also does not cover the management of women requesting emergency contraception, or the factors affecting the choice of contraceptive methods, such as comorbidities, concurrent medication, age, ethical and legal issues, safe sex advice, and assessment for sexually transmitted infections.

There are separate CKS topics on Amenorrhoea (/amenorrhoea), Contraception - assessment (/contraception-assessment), Contraception - barrier methods and spermicides (/contraception-barrier-methods-and-spermicides), Contraception - combined hormonal methods (/contraception-combined-hormonal-methods), Contraception - emergency (/contraception-emergency), Contraception - natural family planning (/contraception-natural-family-planning), Contraception - progestogen-only methods (/contraception-progestogen-only-methods), Contraception - sterilization (/contraception-sterilization), and Menorrhagia (/menorrhagia).

The target audience for this CKS topic is healthcare professionals working within the NHS in the UK, and providing first contact or primary healthcare.

How up-to-date is this topic?

Back to top

- Changes
- Update

Goals and outcome measures

Back to top

- Goals
- Outcome measures
- Audit criteria
- QOF indicators
- QIPP - options for local implementation
- NICE quality standards

Background information

Back to top

- Definition
- Access

Management

Back to top

- **Scenario: Levonorgestrel intrauterine system (/contraception-iusiud#!scenario):** covers when to start using the IUS; management of common problems (such as lost threads and unscheduled bleeding; management of uncommon problems (such as pregnancy whilst using the device and pelvic inflammatory disease); the advantages, disadvantages, risks, and efficacy of the LNG-IUS; and the subsequent monitoring and follow-up required.
- **Scenario: Copper intrauterine device (/contraception-iusiud#!scenario:1):** covers when to start using the IUD; management of common problems (such as lost threads and unscheduled bleeding); management of uncommon problems (such as pregnancy whilst using the device and pelvic inflammatory disease); the advantages, disadvantages, risks, and efficacy of the Cu-IUD; and the subsequent monitoring and follow-up required.

Supporting evidence

Back to top

This CKS topic is largely based on the Faculty of Sexual and Reproductive Healthcare (FSRH) clinical guideline, *Intrauterine contraception* [FSRH, 2015a (/contraception-iusiud#!references)]. The rationale for individual recommendations is outlined in the relevant basis for recommendation sections of the topic.

How this topic was developed

Back to top

This section briefly describes the processes used in developing and updating this topic. Further details on the full process can be found in the About Us (http://cks.nice.org.uk/development) section and on the Clarity Informatics (https://clarity.co.uk/) website.

References

Back to top

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