The Royal Australian and New Zealand College of Obstetricians and Gynaecologists

Excellence in Women's Health

Emergency contraception

This statement has been developed and reviewed by the Women's Health Committee and approved by the RANZCOG Board and Council.

A list of Women's Health Committee Members can be found in Appendix A.

Disclosure statements have been received from all members of this committee.

Disclaimer This information is intended to provide general advice to practitioners. This information should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient. This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The document has been prepared having regard to general circumstances.

First endorsed by RANZCOG: 1995
Current: November 2019
Review due: Novemvber 2022

Objective: To provide advice on emergency contraception.

Target audience: Health professionals providing gynaecological care.

Values: The evidence was reviewed by the Women's Health Committee (RANZCOG), and applied to local factors relating to Australia and New Zealand.

Background: This statement was first developed by Women's Health Committee in 1995 and most recently reviewed in November 2019.

1. Plain language summary

Emergency contraception (EC) can be used by a woman after unprotected sexual intercourse to prevent pregnancy. There are a number of safe and effective options for emergency contraception available in Australia and New Zealand including use of a tablet or pill (sometimes called the morning after pill or emergency contraceptive pill) or insertion of an intrauterine device (IUD). Prompt and easy access to emergency contraception that preserves confidentiality, privacy and dignity is crucial for women. Other important aspects of emergency contraception care include assessment of ongoing contraception needs and risk for sexually transmitted infections follow-up to ensure the pregnancy has been prevented.

2. Summary of recommendations

Recommendation 1	Grade
Emergency contraception options include oral methods available from pharmacies and the copper intrauterine device. The most effective method is the copper IUD which also provides ongoing contraception.	Consensus-based recommendation
Recommendation 2	**Grade**
Women presenting for EC should be given advice about the effectiveness of the EC methods, information about ongoing contraception and, where relevant be offered testing for sexually transmitted infections.	Consensus-based recommendation

3. Types of emergency contraception

Three methods of emergency contraception are available in Australia: two oral methods and the copper IUD. The two oral methods are the levonorgestrel (LNG) and ulipristal acetate (UPA) tablets which are both available without a prescription over the counter from pharmacies as dedicated products. The oral methods of EC work by preventing or delaying ovulation.[1,2] (ie before the luteinising hormone [LH] surge) and are not effective once ovulation has occurred.[1,3] The emergency copper IUD is the most effective of the three methods and works through inhibition of fertilisation and prevention of implantation.

Table 1. Comparison of efficacy of emergency contraceptive methods available in Australia[2,5]

Emergency contraceptive method	Pregnancy rate if method taken within 120 hours
LNG	2.2%
UPA	1.4%

Copper IUD	<1%

4. Emergency contraception pills

There are two methods of oral emergency contraception:

- Ulipristal acetate 30mg, a selective progesterone receptor modulator, is the most effective of the oral ECPs with data from a meta-analysis demonstrating greater efficacy compared to levonorgestrel especially if taken within the first 24 hours after UPSI.
- Ulipristal is effective up to 5 days (120 hours) after UPSI. Levonorgestrel is licensed for use up to 3 days (72 hours) after UPSI but may have some efficacy up to 96 hours (4 days).

The side effect profile is similar for both medications: [4 5]

- Liver enzyme inducing drugs reduce the efficacy of both UPA and LNG. The FSRH recommends that women on these medications should be advised that the Copper IUD is the only method of EC not affected. If this is not possible, or is declined, expert opinion recommends doubling of the dose of LNG (3mg). [6]
- Women who have a BMI in the obese range should be informed that it is possible that the effectiveness of oral EC (particularly LNG-EC) could be reduced. Use of ulipristal acetate (less significant reduction in efficacy compared to levonorgestrel) or a copper intrauterine device is a more effective EC option in these women.[7]
- There is some evidence that the sooner emergency contraception pills are taken after sexual intercourse, the more likely they are to be effective.[4,1]

- The effectiveness of UPA can be reduced by concurrent or subsequent use within five days of progestogen-containing contraception or drugs. Therefore, hormonal contraception should not start until five days after UPA administration.

5. Copper releasing IUDs

Copper IUDs are highly effective as emergency contraception with a less than 1% failure rate[8] and may be indicated if more than 72 hours have elapsed since unprotected sexual intercourse (UPSI) and/or the client is considering using an IUD for long-term contraception.[1] Copper IUDs provide ongoing contraception for up to 10 years if left in situ.[10]

- Copper IUDs can be inserted for EC within 5 days of unprotected intercourse, or if the date of ovulation can be estimated, up to 5 days after ovulation, in women for whom they are suitable.
- Screening for STIs is indicated in women considered at higher risk of STIs (<25 years of age, recent change in sexual partner or more than one partner in last 12 months) but should not prevent use of an IUD for EC.[9]

There is no evidence to support the use of the Mirena® levonorgestrel-releasing Intrauterine Contraceptive Device as emergency contraception and it is not approved for this indication.

6. Other options

- The antiprogestogen Mifepristone, previously known as RU486, is a very effective emergency contraceptive agent that in mid-range doses (25-50mg) is more effective and better tolerated than the levonorgestrel EC. It can be used up to 120 hours after unprotected sex but may delay the onset of the next menses.[9] It is not available in Australia or New Zealand for this indication.
- Ulipristal acetate is currently not available in New Zealand.[5]

7. Indications

RANZCOG considers that prompt and easy access to emergency contraception is crucial and that the provision of emergency contraception should be accompanied by:

- Advice on dosage and administration of the EC in a setting that preserves the patient's confidentiality, privacy and dignity.
- The provision of advice and information about ongoing contraception, as required.
- The provision of information about, and access to, testing for sexually transmitted infections, as required.
- Arrangements for medical review to exclude ongoing pregnancy if the period is delayed following EC use.
- The provision of advice about what a woman should do if the emergency contraceptive method is not successful and pregnancy occurs.

If the above requirements are met, emergency contraception can be promptly and safely supplied by suitably trained health professionals including pharmacists, as supported by the Faculty of Sexual and Reproductive Health Care Clinical Effectiveness Unit (FSRH). [6]

8. References

1. Croxatto HB, Brache V, Pavez M, et al. Pituitary-ovarian function following the standard levonorgestrel emergency contraceptive dose or a single 0.75-mg dose given on the days preceding ovulation. *Contraception* 2004;70(6):442-50. doi: 10.1016/j.contraception.2004.05.007
2. Gemzell-Danielsson K, Berger C, Lalitkumar PG. Mechanisms of action of oral emergency contraception. *Gynecological Endocrinology* 2014;30(10):685-87. doi: 10.3109/09513590.2014.950648
3. von Hertzen H, Piaggio G, Ding J, et al. Low dose mifepristone and two regimens of levonorgestrel for emergency contraception: a WHO multicentre randomised trial. *Lancet (London, England)* 2002;360(9348):1803-10. doi: 10.1016/s0140-6736(02)11767-3 [published Online First: 2002/12/14]
4. Cheng L, Che Y, AM. G. Interventions for emergency contraception. *Cochrane Database of Systematic Reviews* 2012;8
5. Glasier AF, Cameron ST, Fine PM, et al. Ulipristal acetate versus levonorgestrel for emergency contraception: a randomised non-inferiority trial and meta-analysis. *Lancet (London, England)* 2010;375(9714):555-62. doi: 10.1016/s0140-6736(10)60101-8 [published Online First: 2010/02/02]
6. Faculty of Sexual & Reproductive Healthcare Clinical Guidance. Emergency contraception, March 2017 (Updated December 2017).
7. Glasier A, Cameron ST, Blithe D, et al. Can we identify women at risk of pregnancy despite using emergency contraception? Data from randomized trials of ulipristal acetate and levonorgestrel. *Contraception* 2011;84(4):363-7. doi: 10.1016/j.contraception.2011.02.009
8. Cleland K, Zhu H, Goldstuck N, et al. The efficacy of intrauterine devices for emergency contraception: a systematic review of 35 years of experience. *Hum Reprod* 2012;27(7):1994-2000. doi: 10.1093/humrep/des140 [published Online First: 2012/05/10]
9. Cheng L, Gulmezoglu AM, Piaggio G, et al. Interventions for emergency contraception. *The Cochrane database of systematic reviews* 2008(2):CD001324. doi: 10.1002/14651858.CD001324.pub3
10. Harper CC, Speidel JJ, Drey EA, Trussell J, Blum M, Darney PD. Copper intrauterine device for emergency contraception: Clinical practice among contraceptive providers. Obstet Gynecol 2012;119(2 Pt 1):220–26.

9. Other suggested reading

Faculty of Sexual and Reproductive Healthcare. UK Medical Eligibility Criteria for Contraceptive Use. UKMEC 2016 Available at: https://www.fsrh.org/standards-and-guidance/documents/ukmec-2016/

10. Patient information

A range of RANZCOG Patient Information Pamphlets can be ordered via:
https://www.ranzcog.edu.au/Womens-Health/Patient-Information-Guides/Patient-Information-Pamphlets

Appendices

Appendix A Women's Health Committee Membership

Name	Position on Committee
Professor Yee Leung	Chair and Board Member
Dr Gillian Gibson	Deputy Chair, Gynaecology
Dr Scott White	Deputy Chair, Obstetrics and Subspecialties Representative
Associate Professor Ian Pettigrew	Member and EAC Representative
Dr Kristy Milward	Member and Councillor
Dr Will Milford	Member and Councillor
Dr Frank O'Keeffe	Member and Councillor
Professor Steve Robson	Member
Professor Sue Walker	Member
Dr Roy Watson	Member and Councillor
Dr Susan Fleming	Member and Councillor
Dr Sue Belgrave	Member and Councillor
Dr Marilyn Clarke	ATSI Representative
Associate Professor Kirsten Black	Member
Dr Thangeswaran Rudra	Member
Dr Nisha Khot	Member and SIMG Representative
Dr Judith Gardiner	Diplomate Representative
Dr Angela Brown	Midwifery Representative, Australia
Ms Adrienne Priday	Midwifery Representative, New Zealand
Ms Ann Jorgensen	Community Representative
Dr Rebecca Mackenzie-Proctor	Trainee Representative
Dr Leigh Duncan	Maori Representative
Prof Caroline De Costa	Co-opted member (ANZJOG member)
Dr Christine Sammartino	Observer

Appendix B Overview of the development and review process for this statement

i. Steps in developing and updating this statement

This statement was originally developed in 1995 and was most recently reviewed in November 2019. The Women's Health Committee carried out the following steps in reviewing this statement:

- Declarations of interest were sought from all members prior to reviewing this statement.
- Structured clinical questions were developed and agreed upon.
- An updated literature search to answer the clinical questions was undertaken.
- At the November 2019 face-to-face committee meeting, the existing consensus-based recommendations were reviewed and updated (where appropriate) based on the available body of evidence and clinical expertise. Recommendations were graded as set out below in Appendix B part iii)

ii. Declaration of interest process and management

Declaring interests is essential in order to prevent any potential conflict between the private interests of members, and their duties as part of the Women's Health Committee.

A declaration of interest form specific to guidelines and statements was developed by RANZCOG and approved by the RANZCOG Board in September 2012. The Women's Health Committee members were required to declare their relevant interests in writing on this form prior to participating in the review of this statement.

Members were required to update their information as soon as they become aware of any changes to their interests and there was also a standing agenda item at each meeting where declarations of interest were called for and recorded as part of the meeting minutes.

There were no significant real or perceived conflicts of interest that required management during the process of updating this statement.

iii. Grading of recommendations

Each recommendation in this College statement is given an overall grade as per the table below, based on the National Health and Medical Research Council (NHMRC) Levels of Evidence and Grades of Recommendations for Developers of Guidelines. Where no robust evidence was available but there was sufficient consensus within the Women's Health Committee, consensus-based recommendations were developed or existing ones updated and are identifiable as such. Consensus-based recommendations were agreed to by the entire committee. Good Practice Notes are highlighted throughout and provide practical guidance to facilitate implementation. These were also developed through consensus of the entire committee.

Recommendation category		Description
Evidence-based	A	Body of evidence can be trusted to guide practice
	B	Body of evidence can be trusted to guide practice in most situations
	C	Body of evidence provides some support for recommendation(s) but care should be taken in its application
	D	The body of evidence is weak and the recommendation must be applied with caution
Consensus-based		Recommendation based on clinical opinion and expertise as insufficient evidence available
Good Practice Note		Practical advice and information based on clinical opinion and expertise

Appendix C Full Disclaimer

This information is intended to provide general advice to practitioners, and should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient.

This information has been prepared having regard to general circumstances. It is the responsibility of each practitioner to have regard to the particular circumstances of each case. Clinical management should be responsive to the needs of the individual patient and the particular circumstances of each case.

This information has been prepared having regard to the information available at the time of its preparation, and each practitioner should have regard to relevant information, research or material which may have been published or become available subsequently.

Whilst the College endeavours to ensure that information is accurate and current at the time of preparation, it takes no responsibility for matters arising from changed circumstances or information or material that may have become subsequently available.