EMERGENCY CONTRACEPTION IN AUSTRALIA

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WHAT IS IT?

Emergency contraception (EC) is one of the range of contraceptive choices available in Australia. The three methods in Australia are Levonorgestrel (LNG) and Ulipristal Acetate (UPA) emergency contraceptive pills (ECPs) which are oral medications, and the Copper Intrauterine Device (Cu-IUD).

WHEN IS IT USED?

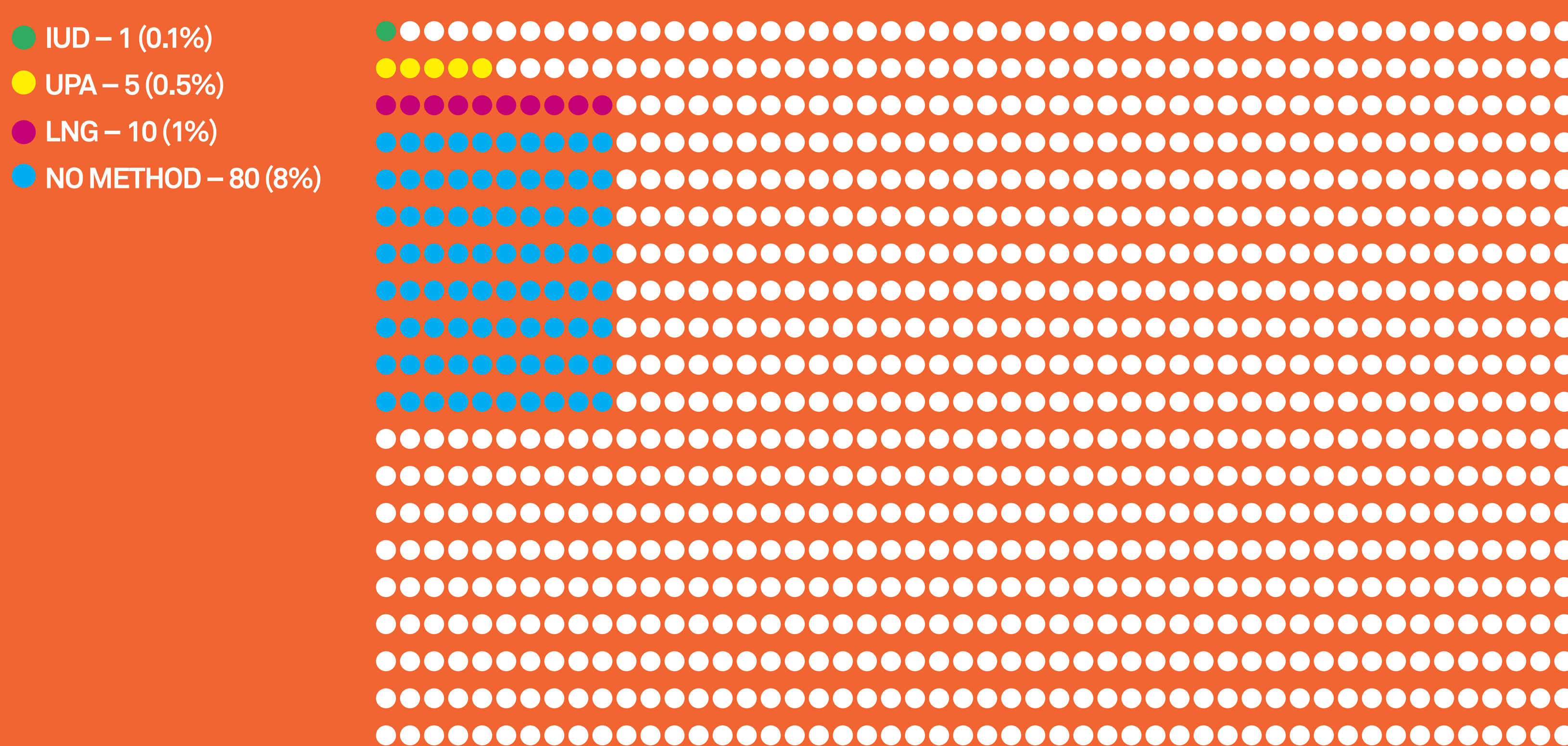
After unprotected sexual intercourse (UPSI) from:

- sexual assault
- non-use of contraception
- contraceptive failure
  - > condom breakage or slippage
  - > diaphragm dislodgement
  - > missed or late doses of hormonal contraceptives
  - > for Cu-IUD or LNG Intrauterine System (IUS), removal without immediate replacement, partial or complete expulsion, threads missing or location unknown

SUMMARY OF EACH OF THE METHODS OF EC IN AUSTRALIA

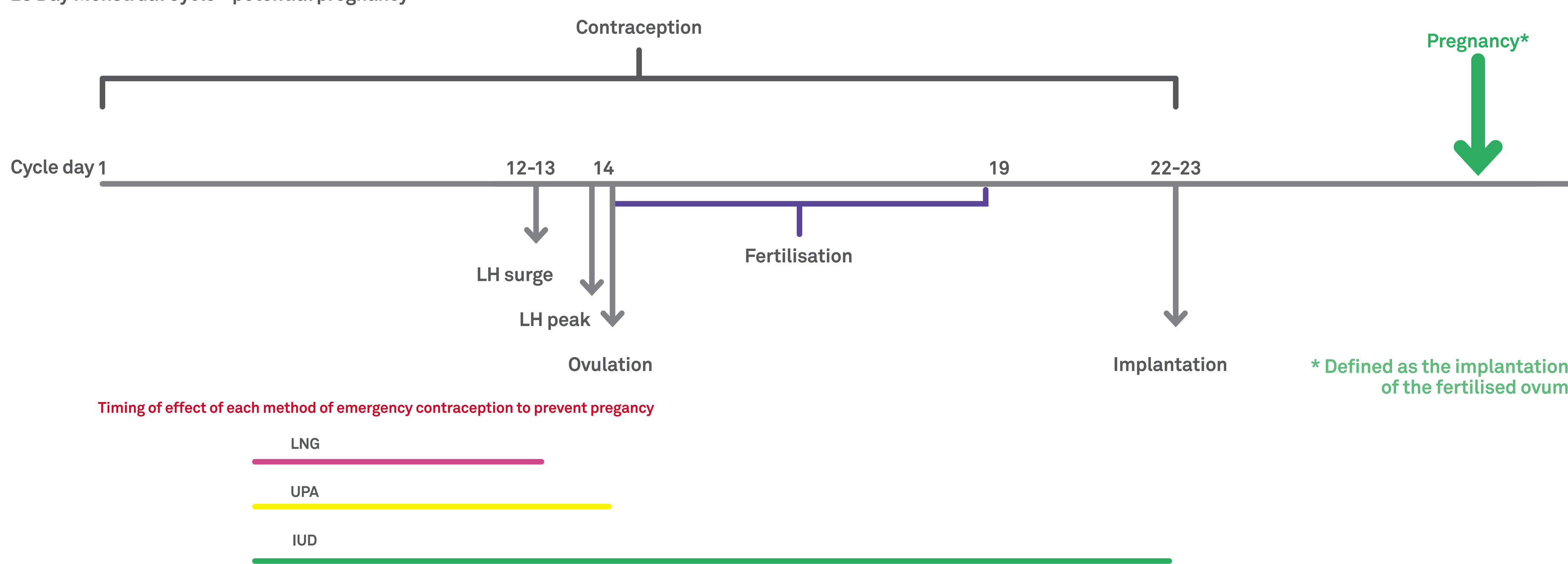
	Levonorgestrel EC (oral)	Ulipristal Acetate EC (oral)	Copper Intrauterine Device
Brand names	Levonelle-1®, NorLevo-1®, Postinor-1® and other brands	ellaOne®	Cu T380® Multiload 375®
Dose	1.5 mg Repeat dose if vomiting occurs within 2 hours of ingestion.[1]	30 mg Repeat dose if vomiting occurs within 3 hours of ingestion.[2]	Continuous release of copper ions.[3]
Action	Inhibits or prevents ovulation (before the LH surge).[4]	An antiprogestin that postpones, inhibits or delays ovulation: 100% if given before the LH surge; 79% if given between the LH surge and LH peak; 8% if given after the LH peak.[5]	Works before or after ovulation (not known if it inhibits sperm production when used as EC). Inhibits implantation of a fertilised ovum.[3]
Timing	Taken as soon as possible; within 96 hrs of UPSI (although the Product Information states 72 hrs). In the absence of another choice of EC it can be taken up to 120 hours after UPSI.[6]	Taken as soon as possible; within 120 hrs of UPSI.[6]	Inserted within 120 hrs of UPSI (or no more than 5 days after ovulation) to make sure that it is not inserted into a pregnant uterus.[3]
Risk of pregnancy	Within 24 hrs 2.3% Within 72 hrs 2.2% Within 120 hrs 2.2% [4,7]	Within 24 hrs 0.9% Within 72 hrs 1.4% Within 120 hrs 1.3%[4,7]	0.1% A systematic review of 42 studies found 6 pregnancies per 6,834 post-coital insertions of Cu-IUDs.[1,8]
Use in breast feeding	Safe[1]	Breast milk should be expressed and discarded for 7 days after UPA.[2]	Safe[9]
Contraindications	None	None	Use of a Cu-IUD for EC carries the same contraindications as routine Cu-IUD insertion:[9] pregnancy, current PID, puerperal sepsis, unexplained vaginal bleeding, before 4 weeks postpartum, endometrial or ovarian cancer, uterine fibroids with distortion of the cavity, anatomical distortion of the uterine cavity, severe thrombocytopenia. NOTE: *risk of sexually transmitted infections (STIs), previous ectopic pregnancy, age and nulliparity are* ***not*** *contraindications to use.*
Precautions	Drugs that induce CYP3A4 have the potential to decrease the contraceptive efficacy of LNG. A recent recommendation is to increase the dose of LNG to 3 mg when women are taking these medications.[10] Concomitant use of LNG and UPA is not recommended.[2]	Concomitant use of CYP3A4 inducers may decrease efficacy, so UPA is not recommended and the Cu-IUD is the best alternative.[2] Concomitant use of LNG and UPA is not recommended.[2]	Needs to be inserted by a trained IUD inserter.
Side effects	Headaches, fatigue, dizziness; delay of menses, dysmenorrhoea; nausea and vomiting; breast tenderness; abdominal or back pain.[7,13]	Headaches, fatigue, dizziness; delay of menses, dysmenorrhoea; nausea and vomiting; breast tenderness; abdominal or back pain.[7,13]	Dysmenorrhoea, heavier periods; pelvic infection at the time of the IUD insertion; migration of the IUD (rare); expulsion; pregnancy (rare).[9]
Cost	$30 – but may be cheaper at Family Planning or Sexual Health Clinics.	$45 – but may be cheaper at Family Planning or Sexual Health Clinics.	$120 – but may be cheaper at Family Planning or Sexual Health Clinics.
Availability	In pharmacies as a Schedule 3 (pharmacist only medication). Also available at Family Planning / Sexual Health Clinics, some EDs.	Schedule 4** – requires a doctor's prescription.	Inserted by a trained IUD inserter (Doctor or RN) at a sexual and reproductive health clinic, GP service or hospital.
Repeated use	No limit to repeated use in the same cycle. If UPSI occurs within 24 hrs of LNG EC, no need to repeat dose.[6]	Not known, but emerging evidence suggests that UPA can be repeated within the same cycle.[2,6]	Not applicable.
Specific issues related to the method	This is the cheapest method of EC, but is ineffective after the LH surge.	This method is more efficacious than LNG EC, but at present requires a doctor's prescription (S4). **UPA will be rescheduled to Schedule 3 in early 2017. Hormonal contraception should not be used within 5 days of UPA and a barrier method used until the next period.	Although this is the most effective method of EC, in Australia there are currently uptake and provision issues. The IUD is a method that provides ongoing contraception for 10 years.

PREGNANCIES PER 1000 WOMEN AFTER UNPROTECTED SEX [11,12]



THE MENSTRUAL CYCLE, POSSIBLE FERTILISATION AND TIMING OF EMERGENCY CONTRACEPTION

28 Day Menstrual Cycle – potential pregnancy



CONTRACEPTION AFTER ECPs

For women who	Offer this ECP	For ongoing contraception	Use backup method for
Need ECPs because of missed (active) oral contraceptive pills	LNG	Continue pill pack or start a new pack if it was in the last week of pills (inactive pills)	7 days
Want to commence OCs, patch, ring	UPA	Wait for 5 days after taking UPA to commence new method[13]	14 days[13]

New method desired	Offer this ECP	For ongoing contraception	Use backup method for
LNG IUS, injectable, implant	UPA	Schedule follow up appointment 5 days after UPSI; provide method if reasonably certain the woman is not pregnant (particularly important for LNG IUS due to potential risk to an existing pregnancy)[18]	14 days[18]

MYTHS ABOUT EMERGENCY CONTRACEPTION

ECPs can only be taken the 'morning after'

The ECP is commonly known as the 'morning after pill' both by the community and by health professionals. As can be seen in the table above, this is certainly not the case. Although the efficacy is higher the earlier ECPs are taken, they can be used up to 120 hours after UPSI. It is important for health professionals to use the correct terminology 'emergency contraceptive pill' and explain this to clients.

EC is an abortifacient

EC is not an abortifacient and cannot interrupt an implanted embryo. This an important point to discuss with women who may be concerned about this aspect of EC as it is a commonly held misconception. This misunderstanding may result in women not choosing to use emergency contraception when they might otherwise have done so.

Use of EC leads to repeated use of EC and non-use of contraception

Advance provision studies indicate that women do not always use ECPs when they are provided ahead of time and indicate that women have poor understanding of fertility, contraception and pregnancy risk, often underestimating their risk for pregnancy.[13,16] It is important that women are educated about the potential fertile time in their menstrual cycle, so that they can use EC after UPSI if they want to prevent pregnancy.

PRACTICE POINTS

- ECPs are not as effective as ongoing methods, so provision of EC can be a useful opportunity to discuss the commencement of a more reliable ongoing method of contraception or reviewing the current method if it is no longer suitable. The benefits of Long-Acting Reversible Contraception (LARC) methods over shorter-acting methods should be explained.
- The client must be treated non-judgmentally and encouraged to return for follow up.
- The action and efficacy must be discussed. It is important that the client understands that no EC method is 100% effective, and she must return for a pregnancy test if her next period is more than 7 days late.
- BMI and EC – there has been varying evidence about the efficacy of LNG EC for women with increased body weight and BMI. However, a recent analysis of four WHO studies showed an overall pregnancy rate of <3% for LNG ECs over all BMI and weight categories with an observed decrease in effect for obese women compared to women with normal BMI. The analysis concluded that access to LNG EC should be promoted to all women if options are limited (that is, if UPA or the IUD are not available).[14]
- Consideration may be given to pregnancy testing prior to EC administration if a woman has been at risk earlier in the cycle. A pregnancy test cannot reliably exclude pregnancy if there has been an episode of UPSI less than 3 weeks previously.[15]
- All EC methods do not provide protection against STIs and this should be discussed with clients.
- Women presenting for EC should be offered the opportunity to undergo testing for STIs, including HIV. They should be informed that a recently acquired STI may not be detected, and retesting after the appropriate window period may be needed. STI testing should be offered to all women irrespective of age, relationship or ethnicity.[15]
- Women should be advised that oral EC methods do not provide contraceptive cover for subsequent UPSI in that cycle and they will need to use a backup method (see *Contraception after ECPs* chart) or abstain from sexual intercourse in the rest of that cycle to avoid further risk of pregnancy.[15]

OTHER OPTIONS FOR EC NOT CURRENTLY MARKETED IN AUSTRALIA OR WHICH ARE UNDERGOING INVESTIGATION

Mifepristone is available in doses of 10–25 mg as a safe and effective method of oral EC in a small number of countries, but is not currently available for use as EC in Australia. The COX-2 inhibitor meloxicam (15 mg) added to 1.5 mg levonorgestrel, has been shown to block follicular rupture even after the ovulatory process has been stimulated by the gonadotropin surge. Administration of meloxicam alone (15 or 30 mg for 5 days) has been shown to be effective in disrupting ovulation in a pilot study. Neither of these regimens are currently marketed anywhere as EC products.[6]

TAKE HOME MESSAGES

- EC is not routinely discussed with women before the need arises, so although there is a general awareness about EC, specific information which would facilitate timely access is not always known[17] and should be discussed as part of all consultations about reversible methods of contraception.
- Cost can be a barrier, so clinics offering low-cost or free EC are useful for women with low or no income.
- Although at a population level EC is not used often enough and the incidence of UPSI is high,[13] EC works for individual women if they use it.
- The Cu-IUD is the most effective method of EC but in many cases IUD insertion for EC is not practical in Australia at present.
- For ECPs (UPA and LNG), the earlier they are taken the better – the days just prior to ovulation are the most critical for oral EC.
- All forms of EC do not protect against STIs.
- Women should be educated about and provided with easy and affordable access to EC to have a last chance to prevent pregnancy.

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