



The role of emergency contraception

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Emergency contraception is an underused therapeutic option for women in the event of unprotected sexual intercourse. Available postcoital contraceptives include emergency contraceptive pills (ECPs) both with and without estrogen, and copper-bearing intrauterine devices. Each method has its individual efficacy, safety, and side effect profile. Most patients will experience prevention of pregnancy, providing they follow the treatment regimen carefully. There are concerns that women who use ECPs may become lax with their regular birth control methods; however, reported evidence indicates that making ECPs more readily available would ultimately reduce the incidence of unintended pregnancies. In addition, it is typically conscientious contraceptive users who are most likely to seek emergency treatment. Patient education is paramount in the reduction of unintended pregnancies and there are numerous medical resources available to women to assist them in this endeavor. Finally, ECPs are associated with financial and psychologic advantages that benefit both the individual patient and society at large.

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Half of all pregnancies in the United States are unintended; there were 3.0 million in 1994 alone, the last year for which data are available.¹ Emergency contraception, which prevents pregnancy after unprotected sexual intercourse, has the potential to reduce significantly the incidence of unintended pregnancy and the consequent need for abortion.² Emergency contraception is especially important for outreach to the 3.1 million women at risk of pregnancy but not using a regular method³

by providing a bridge to use of an ongoing contraceptive method. Although emergency contraceptives do not protect against sexually transmitted infection, they do offer reassurance to the 7.9 million women who rely on condoms for protection against pregnancy³ in case of condom slippage or breakage. Emergency contraceptives available in the United States include combined oral contraceptive tablets, levonorgestrel-only contraceptive tablets, and the copper-T intrauterine device (IUD).⁴⁻⁶

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Combined emergency contraceptive pills

Combined emergency contraceptive pills (ECPs) are ordinary birth control pills containing the hormones estrogen and progestin. Although this therapy is commonly known as the morning-after pill, the term is

Table I Twenty-one OCs that can be used for emergency contraception in the United States*

Brand	Distributor	Pills per dose [†]	Ethinyl estradiol per dose (µg)	Levonorgestrel per dose (mg) [‡]
Plan-B	Barr	1 white pill	0	0.75
Preven	Gynetics	2 blue pills	100	0.50
Ovral	Wyeth-Ayerst	2 white pills	100	0.50
Ogestrel	Watson	2 white pills	100	0.50
Alesse	Wyeth-Ayerst	5 pink pills	100	0.50
Levlite	Berlex	5 pink pills	100	0.50
Aviane	Barr	5 orange pills	100	0.50
Lessina	Barr	5 pink pills	100	0.50
Nordette	Wyeth-Ayerst	4 light-orange pills	120	0.60
Levlen	Berlex	4 light-orange pills	120	0.60
Levora	Watson	4 white pills	120	0.60
Portia	Barr	4 pink pills	120	0.60
Seasonale	Barr	4 pink pills	120	0.60
Lo/Ovral	Wyeth-Ayerst	4 white pills	120	0.60
Low-Ogestrel	Watson	4 white pills	120	0.60
Cryselle	Barr	4 white pills	120	0.60
Triphasil	Wyeth-Ayerst	4 yellow pills	120	0.50
Tri-Levlen	Berlex	4 yellow pills	120	0.50
Trivora	Watson	4 pink pills	120	0.50
Enpresse	Barr	4 orange pills	120	0.50
Ovrette	Wyeth-Ayerst	20 yellow pills	0	0.75

* Plan-B and Preven are the only dedicated products specifically marketed for emergency contraception. Ovral, Ogestrel, Alesse, Levlite, Aviane, Lessina, Nordette, Levlen, Levora, Portia, Seasonale, Lo/Ovral, Low-Ogestrel, Cryselle, Triphasil, Tri-Levlen, Trivora, and Enpresse have been declared safe and effective for use as ECPs by the US Food and Drug Administration.²⁶ Outside the United States, more than 20 emergency contraceptive products are specifically packaged, labeled, and marketed. For example, Gedeon Richter and HRA Pharma are marketing in many countries the levonorgestrel-only products Postionor-2 and Norlevo, respectively, each consisting of a 2-pill strip with each pill containing 0.75 mg levonorgestrel. Norlevo became available OTC without a prescription in Norway in October 2000 and in Sweden in late 2001.

[†] The treatment schedule is 1 dose within 120 hours after unprotected intercourse, and another dose 12 hours later. However, recent research has found that both doses of Plan B or Ovrette can be taken at the same time.

[‡] The progestin in Ovral, Ogestrel, Lo/Ovral, Low-Ogestrel, Cryselle, and Ovrette is norgestrel, which contains 2 isomers, only 1 of which (levonorgestrel) is bioactive; the amount of norgestrel in each tablet is twice the amount of levonorgestrel.

misleading; ECPs may be initiated sooner than the morning after—immediately after unprotected intercourse—or later—for at least 72 hours after unprotected intercourse. The hormones that have been studied exclusively in clinical trials of ECPs are the estrogen ethinyl estradiol and the progestin levonorgestrel or norgestrel (which contains 2 isomers, only 1 of which—levonorgestrel—is bioactive). These are found in 18 brands of combined oral contraceptives available in the United States as well as in 1 specially packaged ECP product (Table I).⁷ This combination of active ingredients used in this way is also sometimes called the Yuzpe method, after the Canadian physician who first described the regimen. Newer research has investigated the safety and efficacy of formulations containing ethinyl estradiol and the progestin norethindrone; results indicate efficacy, but probably less than the Yuzpe or levonorgestrel-only regimens (described later).⁸

Effectiveness

The use of combined ECPs reduces the risk of pregnancy by about 75%.⁹⁻¹¹ This statement does not mean

that 25% of women using ECPs will become pregnant. Rather, if 100 women had unprotected intercourse once during the second or third week of their cycle, about 8 would become pregnant; after treatment with ECPs, only 2 would become pregnant, a 75% reduction. The current treatment schedule is 1 dose within 72 hours after unprotected intercourse, and a second dose 12 hours after the first dose. A large study by the World Health Organization (WHO) found that effectiveness declined significantly with increasing delay between unprotected intercourse and the initiation of treatment.^{12,13} This finding suggests that ECPs should be taken as soon after unprotected intercourse as is practical. When taking the second dose 12 hours later would be difficult, however, the timing of the second dose might be altered; for example, a woman who took her first dose at 3 PM immediately after discovery of a burst condom might delay taking the second dose until 7 AM. The goal should be to make the therapy as user-friendly as possible.¹⁴ New research does indicate, however, that the second dose appears to increase efficacy of the therapy and so should not be skipped entirely.⁸

It is biologically implausible that efficacy would abruptly plummet to zero after 72 hours.¹⁵ Moreover, new research directly investigating the effectiveness beyond 72 hours suggests that combined ECPs are just as effective when taken 73 to 120 hours after unprotected intercourse as when taken in the first 72 hours.^{16,17} Therefore, clinical protocols that deny treatment beyond 72 hours seem excessively restrictive, particularly if the alternative of emergency insertion of a copper IUD is not immediately available or appropriate.

Side effects

About 50% of women who take combined ECPs experience nausea and 20% vomit.^{9,12} If vomiting occurs within 2 hours after taking a dose, some clinicians recommend repeating that dose. The results of one study suggest that ECPs containing levonorgestrel have an incidence of side effects substantially lower than do ECPs containing norgestrel¹⁸ (see last column in [Table I](#) for information on progestins in ECPs). The nonprescription anti-nausea medicine meclizine has been demonstrated to reduce the risk of nausea by 27% and vomiting by 64% when two 25-mg tablets are taken 1 hour before combined ECPs, but the risk of drowsiness was doubled (to about 30%).¹⁹ Anti-nausea medicines are not routinely offered in the United States. Many providers recommend instead that women reduce the risk of nausea by taking ECPs with food, although research suggests that doing so is ineffective.¹⁹

Safety

Almost all women can safely use combined ECPs. According to the WHO, the only absolute contraindication to use of combined ECPs is confirmed pregnancy, simply because ECPs will not work if a woman is pregnant.²⁰ Treatment may also not be appropriate for those who have an active migraine with marked neurologic symptoms or crescendo migraine.²¹ Given the very short duration of exposure and low total hormone content, however, combined ECP treatment can be considered safe for women who would ordinarily be cautioned against use of combined oral contraceptives for ongoing contraception. Although no changes in clotting factors have been detected after combined ECP treatment,²² progestin-only ECPs or insertion of a copper IUD may be preferable to use of combined ECPs for a woman who has a history of stroke or blood clots in the lungs or legs and wants emergency contraception. All 3 of these conditions (pregnancy, migraine, or history of thromboembolism) are identified through medical history screening, so women requesting combined ECPs can be evaluated via telephone, without need for an office visit, pelvic examination, or laboratory tests. Planned Parenthood Federation of America now allows affiliates to prescribe ECPs via telephone.

There have been no conclusive studies of births to women who were already pregnant when they took combined ECPs or after failure of combined ECPs. However, 2 observations provide reassurance for any concern about birth defects.⁵ First, in the event of treatment failure, ECPs are taken long before organogenesis starts so they should not have a teratogenic effect. Second, studies that have examined births to women who inadvertently continued to take combined oral contraceptives (including high-dose formulations) without knowing they were pregnant have found no increased risk of birth defects.²³⁻²⁵ The FDA removed warnings about adverse effects of combined oral contraceptives on the fetus from the package insert several years ago.²⁶

Mechanisms of action

Several clinical studies have shown that combined ECPs can inhibit or delay ovulation.²⁷⁻³⁰ This is an important mechanism of action and may explain ECP effectiveness when used during the first half of the menstrual cycle, before ovulation has occurred. Some studies have shown histologic or biochemical alterations in the endometrium after treatment with the regimen, leading to the conclusion that combined ECPs may act by impairing endometrial receptivity to implantation of a fertilized egg.^{28,31-33} However, other studies have found no such effects on the endometrium.^{27,34,35} Additional possible mechanisms include interference with corpus luteum function, thickening of the cervical mucus resulting in trapping of sperm, alterations in the tubal transport of sperm, egg, or embryo, and direct inhibition of fertilization.^{5,36,37} No clinical data exist regarding the last 3 of these possibilities. Nevertheless, statistical evidence on the effectiveness of combined ECPs suggests that there must be a mechanism of action other than delaying or preventing ovulation.³⁸ ECPs do not interrupt an established pregnancy, defined by the National Institutes of Health/FDA³⁹ and the American College of Obstetricians and Gynecologists (ACOG)⁴⁰ as beginning with implantation. To make an informed choice, women must know that combined ECPs—like all regular hormonal contraceptives such as the birth control pill, the patch Evra, the vaginal ring NuvaRing, the injectable Lunelle, and the injectable Depo-Provera (Pharmacia Corporation, Peapack, NJ),⁴¹ and even breastfeeding⁴²—may prevent pregnancy by delaying or inhibiting ovulation, inhibiting fertilization, or inhibiting implantation of a fertilized egg.

Progestin-only ECPs

Progestin-only ECPs contain no estrogen. Only the progestin levonorgestrel has been studied for freestanding use as an emergency contraceptive. The treatment schedule is one 0.75 mg dose within 72 hours after unprotected intercourse, and a second 0.75 mg dose 12

hours after the first dose. The only practical progestin-only product available in the United States is Plan-B (Barr Pharmaceuticals Woodcliff Lake, NJ), approved by the FDA as an ECP in July 1999 (Table I). One tablet is required for each dose. Aside from Plan-B, the only progestin-only formulation available in the United States is the birth control minipill Ovrette (which contains 0.075 mg norgestrel) (Wyeth Pharmaceutical, Collegeville, Pa). Twenty Ovrette tablets are needed for each dose. The levonorgestrel regimen appears to be as or more effective than the Yuzpe regimen, and definitely has a significantly lower incidence of nausea and vomiting¹²; according to a randomized controlled trial conducted by WHO, progestin-only ECPs reduce the risk of pregnancy by 88% and are associated with an incidence of nausea 50% lower and an incidence of vomiting 70% lower than that for combined ECPs. Like combined ECPs, progestin-only ECPs are more effective the sooner after unprotected intercourse treatment is initiated.^{12,13,43} The most recent trials found that treatment is effective when initiated up to 5 days after unprotected intercourse⁴³ and that a single dose of 1.5 mg is as effective as two 0.75 mg doses 12 hours apart.^{43,44} Early treatment may inhibit or delay ovulation or interfere with sperm migration and function at all levels of the genital tract.^{37,45-48}

Copper-bearing IUDs

Copper-bearing IUDs can be inserted up to the time of implantation—5 to 7 days after ovulation—to prevent pregnancy. Thus, if a woman had unprotected intercourse 3 days before ovulation occurred in that cycle, the IUD could prevent pregnancy if inserted up to 10 days after intercourse. Because of the difficulty in determining the day of ovulation, however, many protocols allow insertion up to only 5 days after unprotected intercourse. Emergency insertion of a copper-bearing IUD is significantly more effective than use of ECPs, reducing the risk of pregnancy after unprotected intercourse by more than 99%.⁴⁹ Such a degree of effectiveness implies that emergency insertion of a copper-bearing IUD must be able to prevent pregnancy after fertilization. A copper-bearing IUD can also be left in place to provide effective ongoing contraception for up to 10 years. But IUDs are not ideal for all women. Women at risk of sexually transmitted infections (STIs) may not be good candidates for IUDs; insertion of the IUD in these women can lead to pelvic infection, which can cause infertility if untreated. Women not exposed to STIs have little risk of pelvic infection after IUD insertion.⁵⁰

Barriers to more widespread use of emergency contraception

The lack of a product specifically packaged, labeled, and marketed as an emergency contraceptive was a major

obstacle to more widespread use of emergency contraception in the United States until the fall of 1998, when Preven (Gynetics Inc, Somerville, NJ) was approved. More recently, a second specially packaged emergency contraception, Plan-B (Barr Pharmaceuticals) was approved a year later. Although availability of these products has helped, the 2 pharmaceutical companies originally distributing them were very small and were not able to promote the products on the same scale as most contraceptives. For this reason, and because the dedicated products can cost more, off-label use of regular ongoing oral contraceptive brands remains popular.

Although the FDA has not specifically approved regular combined or progestin-only birth control pills or copper-bearing IUDs for emergency contraception, providing these products for this indication off-label is completely legal. Once a medication or device has been tested and approved for one use, it is a legal and medically accepted practice to prescribe it for other appropriate uses.⁵¹ For example, many women take birth control pills not to prevent pregnancy, but to regulate their menstrual periods, to decrease menstrual cramping, or to prevent the recurrence of ovarian cysts, and these uses are perfectly legal. The FDA's reproductive health drugs advisory committee reviewed research concerning ECP treatment in 1996 and concluded that existing data were sufficient to document the safety and efficacy of this regimen, and the agency then took the unusual action of publishing in the *Federal Register* a notice declaring ECPs to be safe and effective:

“The Food and Drug Administration (FDA) is announcing that the Commissioner of Food and Drugs (the Commissioner) has concluded that certain combined oral contraceptives containing ethinyl estradiol and norgestrel or levonorgestrel are safe and effective for use as postcoital emergency contraception.... The Commissioner bases this conclusion on FDA's review of the published literature concerning this use, FDA's knowledge of the safety of combined oral contraceptives as currently labeled, and on the unanimous conclusion that these regimens are safe and effective made by the agency's Advisory Committee for Reproductive Health Drugs at its June 18, 1996 meeting.”²⁶

Even though some doctors have been prescribing emergency contraceptives since the 1970s, no company already marketing oral contraceptives or IUDs for ongoing contraception has applied to the FDA to market these products for emergency use. Although considerable international research attests to the safety and efficacy of emergency contraceptives, manufacturers cannot also promote these products for postcoital use until they seek and gain formal FDA approval for this specific purpose. Without commercial marketing or advertising, it is not surprising that physicians prescribe emergency contraceptives infrequently and rarely provide information about emergency contraception to women

during routine visits. As a consequence, very few women know that emergency contraception is available, effective, and safe.⁵² A college campus survey found that while nearly all students were aware of ECPs and knew they were available at the college health center—because of an effective publicity campaign—few knew that combined ECPs were ordinary oral contraceptives, and many could not distinguish ECPs from mifepristone, a medication taken to induce abortion after pregnancy has been confirmed.⁵³

One objection to making ECPs more widely available is the concern that women who know they can use ECPs may become less diligent with their ongoing contraceptive method. However, if used as an ongoing method, ECP therapy would be far less effective than most other contraceptive methods: if the typical woman used combined ECPs for a year; her risk of pregnancy would exceed 35% and if she used progestin-only ECPs, she would still have a 20% chance of pregnancy. Therefore, continued use would not be a rational choice. Moreover, 1 in 2 women experiences nausea and 1 in 5 women vomits after taking combined ECPs. If anti-nausea medicines are used with combined ECPs or if progestin-only ECPs are used, the incidence of nausea and vomiting would be reduced significantly, but not eliminated.¹⁹ This risk is likely to dissuade such users from having unprotected intercourse often. Reported evidence demonstrates that making ECPs more widely available does not increase risk taking but instead reduces the incidence of unintended pregnancy⁵⁴ and that women who are the most diligent about ongoing contraceptive use are those most likely to seek emergency treatment.⁵⁵ For example, a recent study considering the effect of advance ECP provision on regular methods of birth control, women aged 16 to 24 receiving emergency contraception supplies in advance were 3 times as likely to use ECPs when needed but did not report higher frequencies of unprotected sex.⁵⁶ Another study demonstrated that educating teens about ECPs does not increase their sexual activity levels or use of emergency contraception but increases their knowledge about proper administration of the drugs.⁵⁷ And finally, even if ECP availability did adversely affect regular contraceptive use, women are entitled to know about all contraceptive options.

To help educate women and men about emergency contraception, the Association of Reproductive Health Professionals in Washington and the Office of Population Research at Princeton University sponsor the toll-free Emergency Contraception Hotline (1-888-NOT-2-LATE) and the Emergency Contraception Web site (<http://not-2-late.com>). Since it was launched on February 14, 1996, the Hotline has received more than 450,000 calls. More detailed information is available on the Emergency Contraception Web site, which has received approximately 2,100,000 hits since it was launched in October 1994. Both the Hotline and the Web site are

completely confidential, available 24 hours a day in English and Spanish, and offer names and telephone numbers of providers of emergency contraception located near the caller's area. Public service announcements for print, radio, television, and outdoor venues advertising the Hotline ran in several cities in 1997 and 1998. These were the first advertisements about contraception to be shown on broadcast television.⁵⁸

Ideas for improving access to emergency contraception

Several service delivery innovations involving emergency contraception would help to reduce the number of unintended pregnancies. Perhaps the greatest impact would result from making ECPs available over-the-counter (OTC) without prescription. There are no medical reasons why ECPs should remain prescription-only products in the United States.^{59,60} The ACOG recently recommended that emergency contraceptive pills be available OTC in the United States,⁶¹ and the Center for Reproductive Law and Policy has filed a petition with the FDA signed by more than seventy organizations supporting the method's OTC availability.^{62,63} ECPs are available OTC in Norway (2000) and Sweden (2001). In December, 2003, an FDA advisory committee voted 23 to 4 to support a switch for plan B from Rx to OTC.

A second-best alternative is enabling women to obtain ECPs directly from a pharmacy without having to see a physician, as is possible in Alaska, California, Hawaii, New Mexico, Washington State,⁶⁴⁻⁶⁶ Albania, Belgium, Benin, Cameroon, some provinces in Canada,⁶⁷ Congo, Denmark, Estonia, Finland, France, Gabon, Guinea, Guinea-Bissau, India, Israel, Ivory Coast, Latvia, Madagascar, Mali, Mauritania, Mauritius, Namibia, New Zealand, Nigeria, Portugal, Senegal, South Africa, Sri Lanka, Switzerland, Tunisia, Uganda, and the United Kingdom.⁶⁸

A third-best alternative is screening by telephone or Web site, after which a prescription is called to the woman's pharmacy of choice; several Planned Parenthoods offer this service (see Appendix).

Another important step is changing provider practices so that women seen by primary and reproductive health care clinicians would be routinely informed about emergency contraception before the need arises; currently only 25% of gynecologists and 14% of general practice physicians routinely counsel women in advance about emergency contraception.⁶⁸ The recent clinical practice bulletin issued by the ACOG⁶⁹ should help clinicians achieve this goal. Additional resources include a monograph of legal issues for health care providers of ECPs produced by the Center for Reproductive Law and Policy⁷⁰ and a provider packet developed by the Program for Appropriate Technology in Health⁷¹

and endorsed by many medical organizations (including the American Medical Association, the ACOG, and Planned Parenthood Federation of America). Information could be provided to women (and men!) in a culturally sensitive manner⁷² during counseling or by posters, brochures, audio or videocassettes, or wallet cards. Access would be enhanced if clinicians advertised emergency contraception services and if ECPs were prescribed by telephone without the need for an office visit. A more proactive step would be to prescribe or dispense ECPs to women in advance so the therapy would be immediately accessible if the need arises.

Availability would also be enhanced if one of the large pharmaceutical companies active in marketing other contraceptives to the medical community gained FDA approval for and then actively promoted emergency contraceptives.

Cost-effectiveness

Emergency contraception is nearly always cost-effective. Use of combined or progestin-only ECPs reduces expenditures on medical care by preventing unintended pregnancies, which are very costly. Insertion of a copper-T IUD is not cost saving in the United States when used solely as an emergency contraceptive. Unlike the other 2 alternatives, however, insertion of a copper-bearing IUD can provide continuous contraceptive protection for up to 10 years thereafter, producing savings if used as an ongoing method of contraception for as little as 4 months after emergency insertion.⁷³ Hormonal emergency contraceptives are cost-effective regardless of whether they are provided when the emergency arises or provided beforehand as a routine preventive measure.^{7,74,75}

Not only would making emergency contraception more widely available save medical care dollars, but also additional social cost savings would result. These include not only the monetary costs of unwanted pregnancies and births but also the considerable psychologic costs of unintended pregnancy. Moreover, the average medical care cost of unintended births is likely to be greater than the average cost of all births.⁷⁶

Comment

One of every 2 women aged 15 to 44 in the United States has experienced at least 1 unintended pregnancy.¹ Unintended pregnancy is a major public health problem that affects not only the individuals directly involved but also society.⁷⁶ Emergency contraception, whether combined estrogen-progestin, progestin-alone, or copper-bearing IUDs, are effective, safe, simple, and readily feasible in the United States. Making emergency contraceptives

more widely available in the United States is 1 of the most important steps that can be taken to reduce the incidence of unintended pregnancy and the consequent need for abortion.^{2,7,77} It was estimated that as many as 51,000 abortions were averted by use of ECPs in 2000 in the United States.⁷⁸

Appendix

Kaiser Family Foundation Survey⁵²

- Obstetricians/gynecologists (2001)
 - Only 25% routinely discuss emergency contraception with patients
 - 80% prescribed ECPs last year (61% of whom did so only 5 or fewer times)
- Family practice physicians (2001)
 - Only 14% routinely discuss emergency contraception with patients
 - 36% prescribed ECPs last year (83% of whom did so only 5 or fewer times)
- Women ages 18 to 44 (2003)
 - Only 6% have ever used ECPs
 - 68% know there is something a woman can do in the next few days after unprotected sex to prevent pregnancy

Action steps for providers

- Ensure that all office staff (especially those answering the telephone) know that you provide emergency contraceptives
- Routinely discuss emergency contraception with clients
- Do not require a pelvic exam before prescribing ECPs
- Prescribe ECPs by telephone to clients
- Provide ECPs in advance to clients or give prescriptions in advance that can be filled when needed
- Discuss antinausea medicines with clients
- Extend 72-hour window when prescribing ECPs
- Join the directory of providers listed on the Emergency Contraception Web site and the Emergency Contraception Hotline
- Advertise the availability of emergency contraception in your office/clinic

Emergency contraception resources

- Emergency Contraception Web site: <http://not-2-late.com>
- Emergency Contraception Hotline: 1-888-NOT-2-LATE

- ARHP EC Train-the-Trainer PowerPoint slide set: <http://www.arhp.org/ec/>
- Emergency Contraceptive Pills: Common Legal Questions about Prescribing, Dispensing, Repackaging, and Advertising. New York: The Center for Reproductive Law and Policy; 1999. To order, call 212-514-5534.
- Emergency Contraception: Resources for Providers. Seattle (WA): Program for Appropriate Technology in Health; 1997. To order, call 1-800-669-0156.
- Emergency Contraception: Client Materials for Diverse Audiences. Seattle (WA): Program for Appropriate Technology in Health; 1998. To order, call 1-206-285-3500 or e-mail info@path.org.
- Emergency Oral Contraception. ACOG Practice Bulletin. Number 25. Washington (DC): The College; 2001. To order, call 508-750-8400.
- Emergency Contraception: Is the Secret Getting Out? Menlo Park (CA): The Henry J. Kaiser Family Foundation; 1997. To order, call 1-800-656-4533 (ask for no. 1352).

Planned Parenthood state hotlines and Web sites

- Georgia: 1-877-ECPills
- Maryland: 1-877-99-GO-4-EC
- Connecticut: 1-800-230-PLAN
- North Carolina: 1-866-942-7762
- Illinois: 1-866-222-EC4U
- Georgia: www.econnection.org/
- Illinois: www.plannedparenthoodchicago.com/
- Indiana: www.ppin.org/ecaccess/ecinfo.html
- Oregon: www.ppcw.org/store/suite/emergencycontraception.asp

Reducing the risk of nausea

- OTC: 2 meclizine hydrochloride (Dramamine II, Bonine) 25-mg tablets 1 hour before the first ECP dose
- OTC: 1 to 2 diphenhydramine hydrochloride (Benadryl) 25-mg tablets 1 hour before each ECP dose; repeat as needed every 4 to 6 hours
- OTC: 1 to 2 dimenhydrinate (Dramamine) 50-mg tablets or 4 to 8 teaspoons dramamine liquid 30 minutes to 1 hour before each ECP dose; repeat as needed every 4 to 6 hours
- OTC: 1 cyclizine hydrochloride (Marezine) 50-mg tablet 30 minutes before each ECP dose; repeat as needed every 4 to 6 hours
- Prescription: 2 meclizine hydrochloride (Antivert) 25-mg tablets 1 hour before the first ECP dose
- Prescription: 1 trimethobenzamide hydrochloride (Tigan) 250-mg tablet or 200-mg suppository 1 hour before each ECP dose; repeat as needed every 6 to 8 hours

- Prescription: 1 promethazine hydrochloride (Phenergan) 25-mg tablet or suppository 30 minutes to 1 hour before each ECP dose; repeat as needed every 8 to 12 hours

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