



Emergency Contraception: Safe for Repeat Use?

With the recent change in prescription status for Plan B® emergency contraception pills (EC or ECPs), questions have arisen regarding the safety of repeat use of this product. Studies and expert opinions indicate that while frequent use of EC is safe, it remains best used as a back-up method.

According to all available data, there is no medical danger associated with repeat use of EC.

The FDA's Safety Review of Plan B confirms that no cases of overdose or addiction to the drug have been reported and points to several studies over the past several decades to affirm the safety of repeat use.¹

These studies looked at the possibility of using levonorgestrel, the synthetic progestin that serves as the active ingredient in Plan B, as a regular postcoital contraceptive. More than 8,800 women took average monthly doses of 3.2 – 6 mg of levonorgestrel (2 – 4 times the amount in one dose—two pills—of Plan B) for an average of 6-8 months without reports of serious adverse effects.²

One trial, conducted from 1973 to 1987 in South America and Eastern Europe, involved women taking as many as 20 tablets (containing .75 mg levonorgestrel each) in a single menstrual cycle, as well as women who took up to 3 tablets in 24 hours, with repeat dosing allowed. In this study, only one adverse event was reported—an ectopic pregnancy.³ However, because Plan B reduces the risk of pregnancy in general, it also reduces the overall risk of ectopic pregnancy.⁴

In another study, 298 women took 1 mg of postcoital levonorgestrel as their regular method of contraception. The average length of participation in the study was 8.6 months, and the total monthly exposure to levonorgestrel ranged from 4 – 20 mgs. There were no reported serious adverse events.⁵ Women in this study also reported some less serious side effects; most common were menstrual irregularity (76%) and headaches (18%).

Additionally, because Plan B is a progestin-only drug regimen, women who take it do not have to worry about any complications caused by estrogen. Daily progestin-only minipills are associated with fewer serious complications than daily combined oral contraceptives.⁶

Major medical organizations agree that repeat use of EC is safe. The World Health Organization (WHO) says that the “repeated use [of EC] poses no known health risks,⁷” and according to the American College of Obstetricians and Gynecologists (ACOG), “emergency contraception may be used even if the woman has used it before, even within the same menstrual cycle.”⁸ Additionally, the Association of Reproductive Health Providers (ARHP) states that “there is no contraindication to repeated ECP use, and women should not be denied repeat access to ECPs if needed.”⁹

So why use it only as a back-up method?

While repeat use of Plan B is safe, EC should not be used as a primary contraceptive method, as it is less effective than many other contraceptives, including daily oral contraceptives and other hormonal contraceptives.¹⁰

For example, if a woman used Plan B as her primary contraceptive method for a year, her chances of getting pregnant that year would be about 20%.¹¹

A typical user of daily oral contraceptives has only an 8% likelihood of pregnancy, and a typical condom user has a 15% likelihood of pregnancy. (These estimates assume that the methods were not always used correctly or consistently; a pill was forgotten or a condom wasn't used. Perfect use of either method significantly reduces the pregnancy risk, to 2% for condoms and less than 1% for oral contraceptives.)¹²

Additionally, while generally mild and temporary, the use of EC is associated with more side effects than many other methods, the likelihood of which is increased with frequent use. As described above, 76% of women in one postcoital levonorgestrel study reported menstrual irregularity after taking Plan B—this can be disconcerting for women, perhaps particularly disconcerting if attempting to avoid pregnancy.

While not intended as a primary contraceptive method, repeat emergency use of Plan B is not only safe, but should be encouraged.

Researchers for a 2004 study calculated that a typical user of EC as a back-up method for condoms might need EC 3 to 11 times a year (basing their assumptions on 83 acts of intercourse annually, and condom slippage and breakage rates ranging from 3.8% to 13.3%).¹³

However, actual use studies have shown that even when women have easy access to EC, they do not always take it after unprotected sex, and as a result we may see little difference in unintended pregnancy rates or abortion rates, even with Plan B available over the counter.

The bottom line? Repeat use of EC is medically safe—safer than pregnancy, in fact, particularly when pregnancy is unintended and women do not have access to safe abortion services.¹⁴

At the same time, other contraceptive methods are more reliable, and may help women avoid side effects, such as menstrual irregularity. As such, we must continue to increase education about contraception in general and specifically EC—when to take it, and where to get it. As the authors of the 2004 study suggest, “Our concern should not be whether ECPs are used repeatedly, but that they are not used every time they are needed.”

References

¹ United States Food and Drug Administration (FDA), *Medical Officer's Safety Review of Supplemental NDA for Plan B (Levonorgestrel)*, completed March 17, 2004.

http://www.fda.gov/cder/foi/nda/2006/021045s011_Plan_B_MedR.pdf (pg. 133-177)

² *Ibid.* pg 8 (pg 140 in link)

³ *Ibid.* pg 23 (pg 155 in link)

⁴ *Ibid.* pg. 8 (pg 140 in link)

⁵ *Ibid.* pg. 23 (pg 155 in link)

⁶ Hatcher, Robert A., Trussell, James, Stewart, Felicia, Nelson, Anita L, Cates, Willard, Guest, Felicia, and Kowal, Deborah, *Contraceptive Technology*, 18th rev. edition, published 2004, pg. 487.

⁷ World Health Organization (WHO), *Fact Sheet No. 244: Emergency contraception*, revised October 2005. <http://www.who.int/mediacentre/factsheets/fs244/en/>

⁸ American College of Obstetricians and Gynecologists (ACOG), *ACOG Practice Bulletin Number 69: Emergency Contraception*, revised December 2005.

⁹ Association of Reproductive Health Providers (ARHP), *Emergency Contraception—Information for Providers of Family Planning Services*, accessed August 2006.

<http://www.arhp.org/healthcareproviders/resources/ecresources/ecprotocol.cfm>

¹⁰ WHO

¹¹ The Emergency Contraception Website, *Answers to Frequently Asked Questions About... Effectiveness*, accessed August 2006. <http://ec.princeton.edu/questions/eceffect.html>

¹² Hatcher, Robert A., et al., pg. 226.

¹³ Katrina Abuabara, Davida Becker, Charlotte Ellertson, Kelly Blanchard, Raffaella Schiavon, and Sandra G. Garcia, *As often as needed: appropriate use of emergency contraceptive pills*, published April 2004, *Contraception*; Volume 69, Issue 4, pgs. 339-342.

¹⁴ Trussell, James, Raymond, Elizabeth, *Emergency Contraception: A Cost-Effective Approach to preventing Unintended Pregnancy*, published September 2006, pg. 4. <http://ec.princeton.edu/questions/ec-review.pdf>