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State of Alaska Epidemiology **Bulletin**

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Bulletin No. 20
December 29, 1999

Emergency Contraception - A Second Chance for Preventing Unintended Pregnancy

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Unintended pregnancy, (pregnancy that is unwanted or mistimed), occurs commonly in the United States. In Alaska, 41% of live births (over 7,000 babies) during 1996 and 1997 resulted from an unintended pregnancy.[1] In the United States as a whole, over 3 million unintended pregnancies occurred during 1994 to women from all segments of society, of which 47% ended in abortion, 40% in birth, and 13% in miscarriage.[2] These data suggest a significant failure of precoital contraception such as hormonal modulation, diaphragms, condoms, intrauterine devices, and abstinence.

Compared to women who have intended pregnancies, women who have unintended pregnancies have a greater risk of depression, physical abuse, divorce or separation, and failing to achieve educational, financial, and career goals. Children born of an unintended pregnancy have a greater risk of low birth weight, dying in the first year of life, and experiencing neglect or abuse.[3]

Emergency contraceptives are methods of preventing pregnancy after unprotected sexual intercourse. Use of emergency contraception within 72 hours after unprotected intercourse can reduce the risk of pregnancy by 75 percent or more. Emergency contraception can be used any time unprotected sexual intercourse occurs, e.g., after unplanned or forced sexual intercourse and after intercourse when a condom breaks or slips off or when a diaphragm slips out of place.

The widespread use of emergency contraception in the United States could prevent over 800,000 surgical abortions and 1.7 million unintended pregnancies each year.[4] However, significant barriers to implementation exist. Sexually active men and women may not have heard of emergency contraception or they may not have access to a provider in time to obtain a prescription. Others mistakenly equate emergency contraception with medicines that can induce abortion after pregnancy has occurred. Health care providers may be unaware of recent advances in emergency contraception.

The US Food and Drug Administration (FDA) has approved two types of emergency contraceptive pills (ECPs) [Table 1]. The first consists of ordinary oral contraceptive pills containing estrogen and progestin (combined ECPs). One brand in this category called "Preven" is specifically packaged and labeled for emergency use. In the absence of ECP use, 8% of women will become pregnant following unprotected sex during the second or third week of their cycle; use of a combined ECP reduces this to 2.0%, for a 75% prevention effectiveness. The second ECP type contains only progestin and is marketed under the brand name Plan B. Plan B is more effective than combined ECPs with a prevention effectiveness of 89%. Although ECPs are relatively effective, they are less effective than ongoing contraceptive methods and should not be used as the only protection against pregnancy.

The most common side effects of ECPs include nausea (50%) and vomiting (20%) both of which are lower with Plan B than combined ECPs. Less frequent side effects include abdominal discomfort, fatigue, headache, dizziness, breast tenderness, and menstrual changes. No evidence exists that ECP use poses a risk to the fetus if pregnancy has already occurred. Emergency contraception will not terminate an established pregnancy and does not protect against HIV and other sexually transmitted infections.[5] ECP use poses less risk than routine combined oral contraception use and thus absolute contraindications are few. ECP use is contraindicated for women who are pregnant or have an allergy to any components of the pill and may be contraindicated for women who are at risk of stroke, heart disease, blood clots, or other cardiovascular problems or who have liver tumors.[6]

Women who have a supply of ECPs at home may have a lower rate of unintended pregnancies than women who obtain ECPs by visiting a health provider.[4] Washington State now allows women to receive ECPs from over 100 participating pharmacies without a doctor's prescription. In the first ten months, 7,211 ECP prescriptions were provided to women directly by a pharmacist. The program estimates that this may have prevented as many as 541 unintended pregnancies. Women receiving the service are satisfied with the quality of care they have received and value the accessibility. Pharmacists made over 500 referrals to providers in the first ten months of the project primarily for ongoing contraception. Many women who receive ECPs directly from a pharmacist do not have a health care provider. By referring these women, the pharmacist can link them with ongoing health care services.[7]

Efforts to reduce unintended pregnancies and their public health and social burdens require community support and collaboration. Health care providers can assist through educating and advising women and men of reproductive age on (a) the current science of contraception; (b) the availability of emergency contraception; and (c) the national emergency contraception hotline **1-888-NOT-2-LATE** and the web site **http://opr.princeton.edu/ec/** which provide information about emergency contraception and a national directory of clinicians who prescribe ECPs. Health care providers should consider prescribing sexually active women a supply of ECPs that can be kept at home for use if needed.

Table 1. Emergency contraceptive pills and recommended doses.[8] A complete course consists of two doses. The first dose should be taken as soon as possible and within 72 hours after unprotected sex. The second dose is taken 12 hours later.

Name	Number of pills per dose
Alesse	5 pink pills
Levlen	4 light-orange pills

Levlite	5 pink pills
Levora	4 white pills
Lo/Ovral	4 white pills
Nordette	4 light-orange pills
Ovral	2 white pills
Plan B	1 white pill
Preven	2 blue pills
Tri-Levlen	4 yellow pills
Triphasil	4 yellow pills
Trivora	4 pink pills