ADMINISTRATION OF HORMONAL CONTRACEPTIVE DRUGS

A Quick Reference Guide for Clinicians

Association of Reproductive Health Professionals

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Using This Guide

Despite the fact that contraceptives with high efficacy rates have been available for several decades, the rate of unintended pregnancy in the United States remains high—about 49%.[1] Annually, more than one million unintended pregnancies are related to oral contraceptive use, misuse, or discontinuation.[2] Women need to know about their range of contraceptive choices. It is important for providers to present all the available options. Many women who take oral contraceptives have difficulty remembering them and would welcome easier, more convenient alternatives.[3]

This *Quick Reference Guide for Clinicians* is designed to help health care providers quickly counsel women about the hormonal contraceptive systems currently available. Because all hormonal contraceptives provide high perfect-use efficacy, this guide will highlight principal differences among the systems to enable providers to support women in choosing the best system for their individual needs and preferences.

This guide devotes a separate section to each of the following five methods of administering hormonal drugs: injectable contraception, the intrauterine system, oral contraceptives, the transdermal patch, and the vaginal ring. Each section covers the background and development of the method, the hormonal contents, products currently available in the United States, the pharmacokinetics, side effect profile, effect of body weight on efficacy, and the ease of application or use. Rather than list side effects common to most forms of hormonal contraception—acne, mood changes, bloating, breast tenderness, nausea, and possible irregular bleeding—the guide highlights only those unique to a particular method. Each section ends with a list of principal advantages and disadvantages of the system and principal counseling messages.

The last section of this *Quick Reference Guide for Clinicians* includes a chart that compares features of the five hormonal administration methods, making counseling more efficient. Remember that hormonal systems containing estrogen are not appropriate for women with contraindications to estrogen, including breast or uterine cancer, smoking if over age 35, undiagnosed abnormal genital bleeding, or thromboembolic disorders.

The following abbreviations are used throughout this document:

DMPA – depot medroxyprogesterone acetate

ECPs – emergency contraceptive pills

EE – ethinyl estradiol

FDA – Food and Drug Administration

IUS – intrauterine system

LNG – levonorgestrel

MPA – medroxyprogesterone acetate

NGMN – norelgestromin

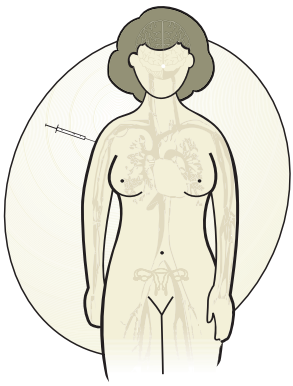
OCs – oral contraceptives

PID – pelvic inflammatory disease

The final section addresses emergency contraceptive pills, an important option about which to inform women.

Health care providers have a clear responsibility to counsel their patients on the contraceptive options, but their time is limited. The Association of Reproductive Health Professionals (ARHP) hopes this *Quick Reference Guide* will facilitate an effective, comprehensive discussion with patients and foster individualization of contraceptive choice.

Injectable



Background/development. Injectable contraception containing progestin was introduced to the United States in 1993. A lower-dose formulation of injectable progestin with the potential for self-administration is under review by the Food and Drug Administration (FDA). Injectable contraception containing both estradiol and progestin was developed more than two decades ago and has been used by millions of women worldwide, but it is not currently available in the United States.

Hormonal contents. Medroxyprogesterone acetate (MPA).

Currently available products:

Depo-Provera®(DMPA; contraceptive dose is 150 mg intramuscularly every three months)

Pharmacokinetics of system. After injection, the blood levels of DMPA increase for approximately three weeks to reach a peak plasma concentration of 1–7 ng/ml. The half-life of DMPA is about 50 days. Use of injection avoids first-pass metabolism. Globins that increase clotting are not measurably increased with this product.

System-specific side effects. Side effects specific to this drug administration include weight gain and menstrual cycle changes. Virtually all women experience alterations in the menstrual cycle, including irregular bleeding, spotting, or rarely, heavy bleeding. After about six months, fewer women experience excessive or frequent bleeding, and more women experience amenorrhea. By one year, up to 70% of women have amenorrhea.[4]

Effect of body weight on efficacy. No data are available. No dosage adjustment is necessary based on body weight. Weight gain occurs in

about 50% of women on DMPA, particularly those who are sedentary or overweight.[5]

Ease of use. Administered by injection every three months, thus requires patient to travel to the office quarterly.

Principal advantages:

- Discreet.
- Efficacy equivalent to sterilization.
- Reduces blood loss, protecting against anemia.
- Amenorrhea occurs in many women by one year of use; some women consider this to be an advantage.
- The lack of estrogen in DMPA makes it appropriate for smokers over age 35 or other women with contraindications to estrogen.

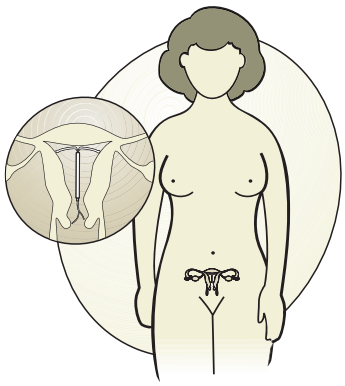
Principal disadvantages:

- Initial bleeding profile.
- Weight gain may occur in some women, particularly those who are sedentary or overweight when beginning use of DMPA.[5]
- Need for quarterly injection.
- Reversible 60 to 90 days after the next injection was due, longer than with other hormonal methods. Not a good method for women planning a pregnancy within two years.

Principal counseling messages:

- Depo-Provera can be used in women for whom estrogen products are contraindicated.
- Bleeding profile improves over time. Amenorrhea may be an advantage or disadvantage, depending on the individual woman.

Intrauterine System



Background/development. More than two million women worldwide have used the hormonal intrauterine system (IUS), which the FDA approved for use in the United States in 2000. Women physicians are more likely than other women to use intrauterine contraception.[6]

Hormonal contents.
Levonorgestrel (LNG).

Currently available products:

- Mirena™ (20 mcg of LNG released per day)

Pharmacokinetics of system. The IUS provides a steady plasma level of hormone with a lower concentration than that seen with hormonal implants or oral contraceptives (about one-fifth the dose of the lowest levonorgestrel OC). There are no concentration peaks and troughs. This system avoids first-pass metabolism.

System-specific side effects. Bleeding patterns are unpredictable, with frequent light bleeding for the first three months after insertion. By three to six months, most women experience dramatically reduced bleeding. About 20% of women will have amenorrhea after 12 months.[7]

Effect of body weight on efficacy. No data are available. Because most of the contraceptive effect is due to the intrauterine hormone release rather than serum drug level, there is no biologically plausible reason to believe that increased body weight would affect efficacy.

Ease of use. Must be inserted and removed by a skilled provider. Can be used for up to five years.

Principal advantages:

- Discreet.
- Easy to use once placed by the provider.
- Rapidly reversible.
- Long-term method that is equivalent in efficacy to sterilization.
- Dramatically reduces menstrual blood loss, protecting against anemia.
- The lack of estrogen makes IUS appropriate for smokers over age 35 or other women with contraindications to estrogen.
- Delivers low levels of hormones.

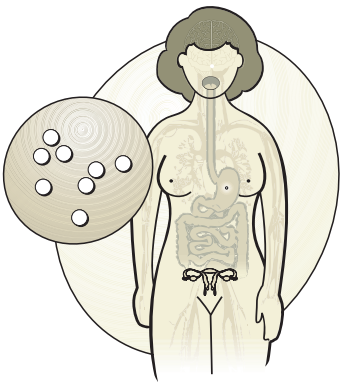
Principal disadvantages:

- Expulsions occur with up to 5% of intrauterine systems inserted.
- Does not completely suppress functional ovarian cysts, which can lead to persistent follicles in some women.
- Requires procedure for insertion and provider visit for removal.

Principal counseling messages:

- Excellent choice for women seeking long-term reversible method, including women considering tubal ligation.
- Product labeling recommends the hormonal IUS for women who have had at least one child, have no history of pelvic inflammatory disease (PID) or ectopic pregnancy, and are in a stable, mutually monogamous relationship. However, there is no evidence that the hormonal IUS increases the rate of infections, PID, or ectopic pregnancies. Clinicians should use their discretion about appropriate use for women for whom this method might be advantageous.
- Infections related to intrauterine devices are confined to first month of use, when bacteria may have been introduced into the uterus during insertion. The risk of bacterial introduction can be reduced with appropriate screening during the patient history and use of aseptic technique.

Oral Contraceptives



Background/development. Oral contraceptives (OCs) were introduced in the United States in the early 1960s. Early OCs contained high levels of hormones. In the past 40 years, OCs have changed significantly, with reductions in both the estrogen and progestin components, the development of multiphasic formulations, and the availability of progestin-only OCs. This guide focuses on low-dose combination OCs and progestin-only OCs.

Hormonal contents. Low-dose combination—ethinyl estradiol (EE; by definition, low-dose OCs contain less than 50 µg of EE) and one of eight progestins. **Progestin-only**—progestin.

Currently available products:

Low-dose combination:

- Many low-dose combination products are available (see chart).
- Seasonale—a low-dose combination OC containing levonorgestrel and 0.03 mg of EE, is FDA approved for extended use; a woman takes Seasonale for 84 consecutive days (12 weeks), then takes an inert pill for seven days, during which time she experiences vaginal bleeding.[8]

Progestin-only:

- Micronor ™ (35 mg of norethindrone)
- NOR-Q D ™ (35 mg of norethindrone)
- Ovrette ™ (0.075 mg of norgestrel)

Pharmacokinetics of system. There is a daily peak and trough in drug concentration with OCs. Orally administered drugs undergo first-pass metabolism in the liver; thus the total dose administered

needs to be greater than that for other hormonal drug administration methods to ensure therapeutic drug levels in the bloodstream.

Because combination and progestin-only OCs differ significantly in side effect profile, effect of body weight on efficacy, and principal advantages and disadvantages, these characteristics are compared separately in Table 1.

Ease of use. Requires a prescription. Requires remembering to take pill daily. A study using a pill pack with a memory chip found that by the third cycle of use, more than 50% of OC users missed three or more pills per month.[3] Consistent and correct use tends to decline rather than improve over time.[3]

Principal counseling messages:

- Consider introducing "Quick Start" as an alternate means of having women begin OCs in the office, regardless of the time in the cycle. For Quick Start, the clinician rules out pregnancy by taking a thorough sexual history and using an in-office early pregnancy test if necessary. Once pregnancy is ruled out, the patient begins the first pill of the cycle at that office visit, then continues as she would have if she had started on the first day of her menses. Provide emergency contraceptive pills if indicated, insist on barrier back-up method for at least one week, and instruct patient to conduct a home pregnancy test two weeks after using Quick Start to begin OCs.[9]
- Extended use, or taking more than 21 active pills in a row to avoid menses, has been approved by the FDA for one oral contraceptive: Seasonale. Although not specifically approved by the FDA, other oral contraceptives, as well as the vaginal ring and the transdermal patch, could be used for extended periods of time. Extended use of the patch and the ring is under study.
- OC efficacy is not reduced by antibiotics generally used for acne or common infections but can be reduced by griseofulvin and antibiotics used to treat tuberculosis.

TABLE 1	Combination OCs	Progestin-only OCs
System-specific side effects	Risk of thromboembolic events Nausea	Expected irregular vaginal bleeding that does not improve over time
Effect of body weight on efficacy	Effect of increased body weight on efficacy is under study in a large multicenter trial Weight gain not associated with use	Slightly lower efficacy than combination pills regardless of body weight Weight gain not associated with use
Principal advantages	Many women prefer pills over other methods Discreet Rapidly reversible Good cycle control by three months Reduces menstrual pain Reduces blood loss, decreasing risk of anemia Provides non-contraceptive benefits not yet documented for other methods*	No associated nausea Many women prefer pills over other methods Discreet Rapidly reversible Can be used in women who have contraindications to estrogen use
Principal disadvantages	Adherence Side effect profile, for some women	Adherence Side effect profile, for some women

**Such as lower risk of ovarian and endometrial cancer*

Low-Dose Oral Contraceptives Currently Available in the United States

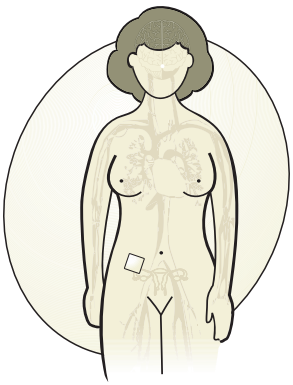
PRODUCT NAME	MANUFACTURER	ESTROGEN	µg (DAYS)	PROGESTIN	µg (DAYS)
MONOPHASIC PREPARATIONS					
20 µg estrogen Gonane progestin					
Alesse	Wyeth-Ayerst	EE	20	Levonorgestrel	0.1
Aviane	Barr (generic)	EE	20	Levonorgestrel	0.1
Levlite	Berlex	EE	20	Levonorgestrel	0.1
Estrane progestin					
Loestrin 1/20	Pfizer	EE	20	Norethindrone Acetate	1
Loestrin Fe 1/20	Pfizer	EE	20	Norethindrone Acetate	1
Microgestin Fe 1/20	Watson (generic)	EE	20	Norethindrone Acetate	1
30-35 µg estrogen Spirolactone progestin					
Yasmin	Berlex	EE	30	Drospirenone	3
Gonane progestin					
Desogen	Organon	EE	30	Desogestrel	0.15
Levlen	Berlex	EE	30	Levonorgestrel	0.15
Levora	Watson (generic)	EE	30	Levonorgestrel	0.15
Lo/Ovral	Wyeth-Ayerst	EE	30	Norgestrel	0.3
Low-Ogestrel	Watson (generic)	EE	30	Norgestrel	0.3

Low-Ogestrel	Watson (generic)	EE	30	Norgestrel	0.3
Microgestin Fe 1.5/30	Watson (generic)	EE	30	Norethindrone Acetate	0.15
Nordette	Monarch	EE	30	Levonorgestrel	0.15
Ortho-Cept	Ortho-McNeil	EE	30	Desogestrel	0.15
Estrane progestin					
Brevicon	Watson	EE	35	Norethindrone	0.5
Demulen 1/35	Searle	EE	35	Ethynodiol Diacetate	1
Loestrin 1.5/30	Pfizer	EE	30	Norethindrone Acetate	1.5
Loestrin Fe 1.5/30	Pfizer	EE	30	Norethindrone Acetate	1.5
Modicon	Ortho-McNeil	EE	35	Norethindrone	0.5
Necon 0.5/35	Watson (generic)	EE	35	Norethindrone	0.5
Necon 1/35	Watson (generic)	EE	35	Norethindrone	1
Nelova 0.5/35E	BMS* (generic)	EE	35	Norethindrone	0.5
Nelova 1/35E	BMS* (generic)	EE	35	Norethindrone	1
Norinyl 1 + 35	Watson	EE	35	Norethindrone	1
Ortho-Cyclen	Ortho-McNeil	EE	35	Norgestimate	0.25
Ortho-Novum 1/35	Ortho-McNeil	EE	35	Norethindrone	1
Ovcon-35	BMS*	EE	35	Norethindrone	0.4
Zovia 1/35E	Watson (generic)	EE	35	Ethynodiol Diacetate	1

PRODUCT NAME	MANUFACTURER	ESTROGEN	µg (DAYS)	PROGESTIN	µg (DAYS)
MULTIPHASIC PREPARATIONS					
20 µg estrogen Gonane progestin					
Mircette	Organon	EE	20 (21)	Desogestrel	0.15 (21)
		EE	0 (2)		
		EE	10 (5)		
25 µg estrogen Gonane progestin					
Cyclessa	Organon	EE	25 (21)	Desogestrel	0.10 (7)
30-35 µg estrogen Gonane progestin					0.125 (7)
					0.15 (7)
Ortho Tri-Cyclen	Ortho-McNeil	EE	35 (21)	Norgestimate	0.18 (7)
				Norgestimate	0.215 (7)
				Norgestimate	0.25 (7)
Tri-Levlen	Berlex	EE	30 (6)	Levonorgestrel	0.05 (6)
		EE	40 (5)	Levonorgestrel	0.075 (5)
		EE	30 (10)	Levonorgestrel	0.125(10)
Triphasil	Wyeth-Ayerst	EE	30 (6)	Levonorgestrel	0.05 (6)
		EE	40 (5)	Levonorgestrel	0.075 (5)
		EE	30 (10)	Levonorgestrel	0.125 (10)
Trivora	Watson (generic)	EE	30 (6)	Levonorgestrel	0.05 (6)
		EE	40 (5)	Levonorgestrel	0.075 (5)

Trivora	Watson (generic)	EE	30 (6)	Levonorgestrel	0.05 (6)
		EE	40 (5)	Levonorgestrel	0.075 (5)
		EE	30 (10)	Levonorgestrel	0.125 (10)
Estrane progestin					
Estrostep	Pfizer	EE	20 (5)	Norethindrone Acetate	1
		EE	30 (7)		
		EE	35 (9)		
Estrostep Fe	Pfizer	EE	20 (5)	Norethindrone Acetate	1
		EE	30 (7)		
		EE	35 (9)		
Jenest	Organon	EE	35 (21)	Norethindrone	0.50 (7)
				Norethindrone	1.00(14)
Necon 10/11	Watson (generic)	EE	35 (21)	Norethindrone	0.50(10)
				Norethindrone	1.00 (11)
Nelova 10/11	BMS* (generic)	EE	35 (21)	Norethindrone	0.50 10)
				Norethindrone	1.00 (11)
Ortho-Novum 10/11	Ortho-McNeil	EE	35 (21)	Norethindrone	0.5 (10)
				Norethindrone	1.00 (11)
Ortho-Novum 7/7/7	Ortho-McNeil		35 (21)	Norethindrone	0.50 (7)
				Norethindrone	0.75 (7)
				Norethindrone	1.00 (7)
Tri-Norinyl	Watson		35 (21)	Norethindrone	0.50 (7)
				Norethindrone	1.00 (9)
				Norethindrone	0.50 (5)

Transdermal Patch



Background/development. Only one contraceptive transdermal patch is available in the United States. ORTHO EVRA™ is a beige-colored patch that is applied once a week to the abdomen, buttock, upper outer arm, or upper torso. The patch should not be placed on the breast.

Hormonal contents. Norelgestromin (NGMN) and ethinyl estradiol.

Currently available products:

ORTHO EVRA (6 mg of NGMN and 0.75 mg of EE)

Pharmacokinetics of system. The patch releases 150 mcg of NGMN and 20 mcg of EE to the bloodstream per 24 hours. After patch application, both NGMN and EE rapidly appear in the serum, reach a plateau by about 48 hours, and are maintained in an approximately steady-state level of 0.6 to 0.8 ng/ml NGMN and 40 to 50 pg/ml EE during recommended usage. A weekly peak and trough in drug concentration is seen with patch use. All four recommended application sites provide therapeutically equivalent absorption.[10] The transdermal route avoids first-pass metabolism. The drug is mixed with the adhesive; therefore, patches that do not stick must be replaced to maintain therapeutic drug levels.

System-specific side effects. In a study of 1,417 women, breast discomfort within the first two months of use occurred more commonly among patch users than OC users.[11] Application site reactions, including redness, pain, and discomfort, occurred in 20% of women who received the patch.[11] Most skin reactions were mild; less than 3% of patients withdrew from the study because of application site reactions.

Effect of body weight on efficacy. A pooled analysis of three clinical studies found that women who weighed more than 90 kg (198

pounds) had a higher likelihood of contraceptive failure than women weighing 90 kg or less.[12] There is no evidence to suggest that the use of the patch contributes to weight gain.

Ease of application and use. Requires a prescription. Providers are encouraged to write an extra prescription for patients in case of skin irritation or detachment. Patients must change the patch once per week for three weeks, then leave the patch off for one week. Patients can wear the patch during exercise, showers, bathing, and swimming. Young women may be able to use the patch more consistently than oral contraceptives, because the patch requires less thought on a daily basis.[13]

Principal advantages:

- Patient controlled, with simple weekly application.
- Rapidly reversible.
- Excellent cycle control by three months of use.
- Easy to start and stop.
- Potential for improved adherence.

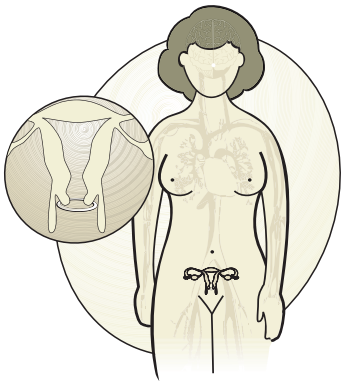
Principal disadvantages:

- Concern about visibility of patch for some women (may be considered an advantage to some).
- Need to use non-hormonal backup contraception for one week after starting the patch.
- Possible skin reactions or detachment.

Principal counseling messages:

- Patients must change patch weekly.
- More women experience breast discomfort in the first few months with the patch than with oral contraceptives.
- Need for non-hormonal backup contraception for first week of use.
- Extra protection for two days with second and third patch.

Vaginal Ring



Background/development. Vaginal rings releasing progestin alone or in combination with estrogen have been studied over the last three decades.[14] NuvaRing, the only contraceptive vaginal ring available in the US, was approved by the FDA in 2001.

Hormonal contents. Progestin (etonogestrel) and estrogen.

Currently available products:

- NuvaRing (delivers 0.120 mg of etonogestrel and 0.015 mg of EE daily)

Pharmacokinetics of system. In use, the vaginal ring provides steady hormone levels; a monthly peak and trough occurs because of the three-weeks-on, one-week-off dosing regimen. Serum levels of etonogestrel rise to a maximum of 1716 pg/ml approximately eight days after insertion of the vaginal ring. Serum levels of EE rise to a maximum of 34.7 pg/ml approximately 60 hours after insertion, and then a steady-state level of 17 pg/ml is maintained. The vaginal ring provides a smoother, more constant concentration of EE than the patch or oral contraceptives. Vaginal administration avoids first-pass metabolism.

System-specific side effects. Device-related events (foreign body sensation, coital problems, device expulsion) and vaginal leukorrhea were uncommon; less than 3% of women discontinued use because of such events. Irregular bleeding also was uncommon.[15] Vaginal health appears improved, as measured by Nugent score (gram stain).

Effect of body weight on efficacy. No data are available. There is no evidence to suggest that the vaginal ring contributes to weight gain.

Ease of application and use. Requires a prescription. Inserted by the woman and used for three weeks, then removed for a one-week break and discarded, after which a new ring is inserted.

Principal advantages:

- Discreet.
- Does not require special fitting; there is no "wrong way" to insert the ring.
- Excellent cycle control from the first month of use for most women.
- Simple to insert and patient controlled.
- Extra protection built in; if a woman forgets to remove the vaginal ring after 21 days, serum hormone levels will remain in the contraceptive range for up to one week.
- Rapidly reversible.
- Off-label use of ring by calendar has been recommended by some providers: the woman inserts the ring on the first day of the month and removes it on the 25th day of the month.[16]
- Potential for improved adherence.

Principal disadvantages:

- Patient must remember to remove ring after three weeks, then insert another after a one-week break.
- May increase normal vaginal secretions.
- Vaginal rings are a new and unfamiliar technology.

Principal counseling messages:

- Offering a trial ring in the office may reassure women who are skeptical about comfort and ease of use.
- Most women wear the ring during intercourse. It is rarely uncomfortable, it rarely interferes with intercourse, and few partners object.[17] If there is a problem with intercourse, the ring can be removed for up to three hours without loss of efficacy.

Table 2: Comparing the Administration of Hormonal Contraceptive Drugs

Drug Administration	Injectable	Intrauterine
Dosing Frequency	Quarterly	Every five years
Frequency of Concentration Peak/ Trough	Quarterly	None
Type of Progestin	Medroxyprogesterone acetate	Levonorgestrel
Principal Advantages		
Patient controlled	N	N
Discreet	Y	Y
Efficacy like sterilization	Y	Y
Ease of use	N	Y
Good cycle control	N	N
Rapidly reversible	N	Y
Reduced menstrual blood loss	Y	Y
Can be used in women with contraindications to estrogen	Y	Y
Non-contraceptive health benefits	N	N
Principal Disadvantages		
Need to remember	Quarterly	N
Weight gain	Y	N
Initial bleeding profile	Y	N
Requires provider insertion	N	Y
Visibility	N	N

References: See page 23

Oral Contraceptives	Transdermal	Vaginal
Daily	Weekly	Monthly
Daily	Weekly	Monthly
Levonorgestrel, Norethindrone acetate, Desogestrel, Norgestrel, Norgestimate, Drospirenone, Norethindrone, Ethynodiol diacetate	Norelgestromin (which is metabolized to norgestrel)	Etonogestrel (which is metabolized to desogestrel)
Y	Y	Y
Y	N	Y
N	N	N
N	Moderate	Moderate
Y from third month (only for combination OCs)	Y from third month	Y from first month
Y	Y	Y
Y	N	N
Y (only for progestin-only pills)	N	N
Y	N	N
Daily	Weekly	Monthly
N	N	N
N	N	N
N	N	N
N	Y	N

Emergency Contraceptive Pills

"Emergency contraception" refers to treatment regimens that prevent pregnancy after intercourse. Emergency contraceptive pills (ECPs) are oral contraceptives used for this purpose. There are two ECP regimens: progestin-only and combined estrogen/progestin.

The progestin-only regimen reduces the risk of pregnancy by 89%. It is most effective when the first dose is taken within 72 hours of unprotected intercourse, followed by another dose in 12 hours. It is more effective and better tolerated than the combined estrogen/progestin regimen.[18] The only progestin-only ECP available in the United States is Plan B.™

The combined estrogen/progestin regimen reduces the risk of pregnancy by 75% and should also be initiated within 72 hours of unprotected intercourse, followed by another dose in 12 hours. Side effects experienced by many women include nausea, vomiting, and fatigue.[19] The only combination ECP available in the United States is Preven.

Certain daily OCs also can be used for ECP, when prescribed in higher than normal doses.

ARHP encourages health care providers to offer their patients advance prescriptions for ECPs during routine check-ups or over the phone.

The reproductive health advisory committee and the non-prescription drugs advisory committee of the Food and Drug Administration made a joint recommendation to the FDA commissioner in December 2003 that ECPs be made available over the counter. The FDA is expected to make a final decision about this matter in early 2004. Please visit ARHP's web sites at www.arhp.org or www.not-2-late.com for updates about this decision.

Emergency Contraception in United States

Dedicated Products / Progestin Only

Take 2 pills within 120 hours after unprotected sex:

Plan B

Dedicated Products / Progestin-Estrogen Combined

Take 2 pills within 120 hours after unprotected sex and take 2 more pills 12 hours later:

Preven

Oral Contraceptives used for EC / Progestin Only

Take 40 pills within 120 hours after unprotected sex:

Ovrette

Oral Contraceptives used for EC / Progestin-Estrogen Combined

Note: **in 28-day packs, only the first 21 pills can be used**

Take 2 pills within 120 hours after unprotected sex and take 2 more pills 12 hours later:

Ogestrel

Ovral

Take 4 pills within 120 hours after unprotected sex and take 4 more pills 12 hours later:

Cryselle

Levlen

Levora

Lo/Ovral

Take 5 pills within 120 hours after unprotected sex and take 5 more pills 12 hours later:

Alesse

Aviane

Lessina

Levlite

Low-Ogestrel

Nordette

Portia

Seasonale

For more information on ECPs, call ARHP's Emergency Contraception Hotline (1-888-NOT-2-LATE) or visit the Emergency Contraception Website (www.not-2-late.com).

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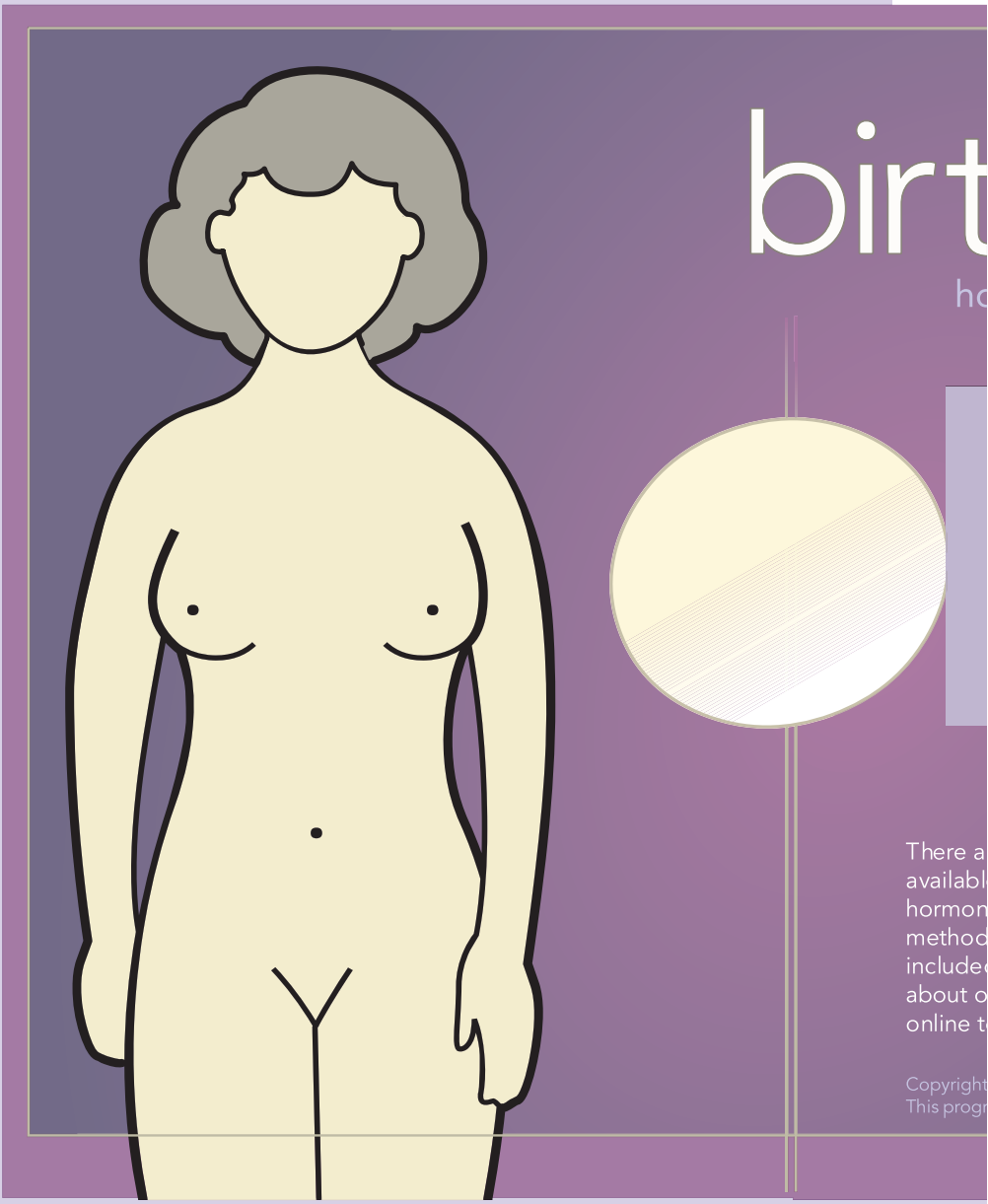

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