

Preventing Gaps When Switching Contraceptives

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Unintended pregnancy can occur when women stop one birth control method before starting another. To prevent gaps in contraception, physicians should ask women regularly about adverse effects, cost, difficulty remembering the next dose, and other issues that affect adherence. Women who want to change contraceptive methods need accurate advice about how to do so. Some contraception transitions require an overlap between the old method and the new method. To switch safely from one contraceptive to another without overlap, women may go directly from the old method to the new method, abstaining from sexual intercourse or using a barrier method, such as condoms or spermicide, for the first seven days. (*Am Fam Physician*. 2011;83(5):567-570. Copyright © 2011 American Academy of Family Physicians.)

► **Patient information:**
A handout on how to switch birth control methods, written by the authors of this article, is provided on page 575.



This clinical content conforms to AAFP criteria for evidence-based continuing medical education (EB CME). See CME Quiz on page 537.

The United States has one of the highest rates of unintended pregnancy in the developed world.¹ Healthy People 2010 aimed for all women at risk of unintended pregnancy to use birth control.² Despite this target, rates of contraceptive use declined between 1995 and 2005, with the greatest decrease seen among nonwhite, low-income groups.¹ A survey of U.S. physicians identified several barriers to successful family planning.³ Physicians cited inadequate contraception counseling as a considerable obstacle.

Unintended pregnancy can occur during a gap in contraception (i.e., the interval between stopping one method of birth control and starting another). A recent survey of American women found that most gaps in contraception are related to method dissatisfaction or transitions in housing, jobs, or relationships.⁴ When women experience adverse effects, or when they cannot afford to renew their prescription, they may stop using their contraceptive without starting a new one. This occurs more often among women who have difficulty reaching their physician,⁴ underscoring the importance of physician availability to address problems with and questions about contraceptives. Understanding the correlation between personal

transitions and contraceptive gaps can help physicians anticipate the risk of contraceptive failure.

To help prevent gaps in contraception, physicians should ask women about adverse effects, cost, difficulty remembering to take the next dose, and other issues affecting adherence. Women who experience spotting or breast tenderness during the first few weeks of a new contraceptive method should be reassured that these adverse effects will likely resolve within two to three months.⁵ However, women who find early adverse effects intolerable often benefit from switching to a new product.

Women need accurate and detailed advice about how to switch contraceptives without raising their risk of pregnancy. When advising women how to switch from one contraceptive method to another, physicians should instruct them to avoid any gap between methods. In many cases, overlapping methods by a few days may help maximize effectiveness (*see table in patient education handout on page 576*). In each of the following scenarios, women may choose to add a barrier method, such as condoms or spermicide, for the first few days of the new method rather than overlapping with the previous method. Because estrogen-

SORT: KEY RECOMMENDATIONS FOR PRACTICE

<i>Clinical recommendation</i>	<i>Evidence rating</i>	<i>References</i>
Women should switch directly from one contraceptive pill to another to eliminate a gap in contraception.	C	7
The return to fertility after removing an intrauterine device may be immediate; therefore, an overlap period of seven days is recommended with most contraceptive methods.	C	17
The copper intrauterine device should be inserted within five days of discontinuing a previous contraceptive method.	C	19

A = consistent, good-quality patient-oriented evidence; B = inconsistent or limited-quality patient-oriented evidence; C = consensus, disease-oriented evidence, usual practice, expert opinion, or case series. For information about the SORT evidence rating system, go to <http://www.aafp.org/afpsort.xml>.

containing contraceptives require only a brief overlap, the overall risk of thromboembolism from hormonal exposure remains lower than the risk from pregnancy.⁶

Switching from One Pill to Another Pill

Women do not need to wait for a withdrawal bleed before starting a new oral contraceptive. Outdated “Sunday start” instructions can create confusion, especially for women whose withdrawal bleeding does not happen exactly when expected. To eliminate gaps in contraception, physicians should instruct women to switch directly from one pill to another, making sure they do not go a day without a pill.⁷

Women may complete their current pack and start a new pack the next day, or they can stop before the pack ends and take the first pill of the new pack the following day. This applies to combined hormonal contraceptive pills and progestin-only pills.

Switching from a Pill to a Patch or Ring

Hormone levels reach a plateau approximately 48 hours after a woman applies her first patch (Ortho Evra).⁸ When women switch from a pill to a patch, a two-day overlap avoids a decline in hormone levels and maintains full contraceptive effectiveness. Therefore, women should start the patch the day before they take the last pill.⁹

Hormones in the vaginal ring (Nuvaring) are more rapidly absorbed than those in the

patch.¹⁰ Women switching from a pill to the ring should start the ring the day after they take the last pill. There is no need to complete an entire pack of pills before switching to the patch or ring.

Switching from a Patch or Ring

The contraceptive patch provides nine days of pregnancy prevention,^{11,12} and the vaginal ring provides 35 days of pregnancy prevention.¹³ After the patch or ring is removed, the half-life is 17 to 26 hours.^{8,13} Women switching from a patch or ring to a pill should take the first pill the day before they are scheduled to remove the patch or ring, creating a one-day overlap. This means that the first pill should be taken no more than eight days after applying the last patch or no more than 34 days after inserting the last ring. Women switching from a patch to a ring may insert the ring and remove the patch on the same day, whereas those switching from a ring to a patch should apply the patch two days before removing the ring. It is not necessary to complete the full schedule of the patch or ring before switching to a pill.

Switching to a Progestin IUD, Implant, or Injection

Although the levonorgestrel-containing intrauterine device¹⁴ (IUD; Mirena) and the progestin injection¹⁵ (Depo-Provera) take several weeks to produce peak hormone concentrations, these methods reach full efficacy

When switching contraceptives, overlapping methods may help maximize effectiveness.

seven days after initiation.⁵ These methods prevent pregnancy by thickening the cervical mucus; they do not depend entirely on ovulatory inhibition. When switching to the progestin IUD or injection, women should continue using the pill, patch, or ring for seven days or use barrier contraception during this interval.

Etonogestrel, the hormone in the single-rod implantable device (Implanon), is absorbed immediately after insertion, and peak serum levels occur within four days.¹⁶ Women who switch to the implant should continue using the pill, patch, or ring (or barrier method) for four days after insertion of the implant. It is not necessary to complete the full schedule of the pill, ring, or patch before switching to the progestin IUD, implant, or injection.

Return to fertility after IUD removal may be immediate.¹⁷ Women who switch from a copper IUD (Paragard) to a progestin IUD should use barrier contraception during the first week. When women switch to a progestin implant from a copper IUD, they should start the new method four days before removing the copper IUD. When switching to an injection from a copper IUD, the injection should be administered seven days before the IUD is removed. However, if women choose to save an office visit by having the copper IUD removed the same day that the implant is inserted or the injection is administered, they should use a barrier method for the first four days with the implant or the first seven days after the injection.

Switching from a Progestin IUD, Implant, or Injection to a Pill, Patch, or Ring

The return to fertility after removing an IUD or implant is immediate¹⁷; therefore, women switching to a contraceptive pill, patch, or ring should start the new method one week before removal of the IUD or implant. Because progestin injections may be given up to four weeks late (i.e., 16 weeks after the previous injection) without requiring additional contraception,¹⁸ women switching from the injection to the pill, patch, or ring may do so up to 15 weeks after their last injection.

An implant or IUD may be inserted up to 15 weeks after the last injection.

Switching to or from a Copper IUD

The copper IUD becomes effective immediately after insertion.¹⁹ It prevents pregnancy via spermicidal mechanisms up to five days after unprotected sexual intercourse.²⁰ Copper IUD insertion should occur no more than five days after cessation of the previous method (or up to 16 weeks after the previous injection).¹⁹

Women who switch from a copper to a progestin IUD (or vice versa) may do so immediately after the first IUD is removed; however, barrier contraception is required for one week when switching from copper to progestin. Switching from a copper IUD to a pill, patch, or ring requires a seven-day overlap with the new method before the IUD is removed, or a seven-day interval using a barrier method. Switching from a copper IUD to an implant requires a four-day overlap, or a four-day interval using a barrier method.

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