Contraception Resources from the CDC: 2016 U.S. Selected Practice Recommendations for Contraceptive Use

Division of Reproductive Health
Centers for Disease Control and Prevention
Disclaimer

- The findings and conclusions in this report are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Objectives

- Describe the U.S. Selected Practice Recommendations for Contraceptive Use, 2016 (U.S. SPR)
- Identify intended use and target audience
- Explain how to use the U.S. SPR
- Discuss the guidance in specific situations, based on clinical scenarios
U.S. Selected Practice Recommendations for Contraceptive Use, 2016

- Recommendations for contraceptive management questions
- Target audience: health care providers
- Purpose: to assist health care providers when they counsel patients on contraceptive use and to serve as a source of clinical guidance
- Content: Guidance for common contraceptive management topics such as:
  - How to be reasonably certain that a woman is not pregnant
  - When to start contraception
  - Medically indicated exams and tests
  - Follow-up and management of problems
Methods for 2016 U.S. SPR

- Adapted from WHO guidelines
- On-going monitoring of published evidence
- Expert meeting in August 2014 to discuss scope
- Expert meeting in August 2015 to review evidence and discuss specific recommendations
  - CDC staff and outside authors conducted independent systematic reviews to inform recommendations
  - These systematic reviews have been e-published
  - CDC determined final recommendations
Why is evidence-based guidance for contraceptive use needed?

- To base family planning practices on the best available evidence
- To address misconceptions regarding who can safely use contraception
- To remove unnecessary medical barriers
- To improve access and quality of care in family planning
US SPR

US SELECTED PRACTICE RECOMMENDATIONS FOR CONTRACEPTIVE USE, 2016
Contraceptive Methods in US SPR

- Intrauterine devices
- Progestin-only contraceptives
- Combined hormonal contraceptives
- Emergency contraception
- Fertility Awareness-Based Methods
- Female and Male Sterilization
EFFECTIVENESS OF FAMILY PLANNING METHODS

*The percentages indicate the number out of every 100 women who experienced an unintended pregnancy within the first year of typical use of each contraceptive method.

**MOST EFFECTIVE**
Less than 1 pregnancy per 100 women in a year

- **Implant:** 0.05%
- **Intrauterine Device (IUD):**
  - LNG: 0.2%
  - Copper T: 0.8%

**PERMANENT STERILIZATION**
- **Female (Abdominal, Laparoscopic, and Hysteroscopic):** 0.5%
- **Male (Vasectomy):** 0.15%

**REVERSIBLE**
6-12 pregnancies per 100 women in a year

- **Injectable:** 6%
- **Pill:** 9%
- **Patch:** 9%
- **Ring:** 9%
- **Diaphragm:** 12%

**MOST EFFECTIVE**
18 or more pregnancies per 100 women in a year

- **Male Condom:** 18%
- **Female Condom:** 21%
- **Withdrawal:** 22%
- **Sponge:**
  - Nulliparous Women: 12%
  - Parous Women: 24%

- **Condoms should always be used to reduce the risk of sexually transmitted infections.**

**Fertility Awareness-Based Methods**

- **Spermicide:** 28%

Other Methods of Contraception:
1. Lactational Amenorrhea Method (LAM): is a highly effective, temporary method of contraception and relies on the high levels of hormones from breastfeeding to prevent pregnancy.
2. Emergency Contraception: emergency contraceptive pills or a copper IUD offer unprotected intercourse substantially reduces risk of pregnancy.

Major Updates to 2016 U.S. SPR

- **New recommendation**
  - Using medications to ease IUD insertion

- **Update of existing recommendation**
  - When to start regular contraception after ulipristal acetate
CLINICAL SCENARIOS
Clinical scenario 1: When to start a contraceptive method

- 24 y.o. woman comes to office desiring contraception and wants to start pills

  - Q: When can she start?
When to start a contraceptive method

- **Barriers to starting**
  - Filling a prescription
  - Starting during menses
  - Coming back for a second (or more) visit

- **Starting when woman requests contraception (“Quick start”)**
  - May reduce time woman is at risk for pregnancy
  - May reduce barriers to starting
Evidence for Risk of Pregnancy

Two types of risk:

- **Risk of already being pregnant**
  - Risk that woman already pregnant with “Quick start” of CHCs low

- **Risk of becoming pregnant**
  - Risk of pregnancy with “Quick start” of CHCs low
Other findings

- Starting CHCs on different days of the cycle does not affect bleeding or other side effects

- “Quick start” may increase continuation of combined oral contraceptives (COCs) and patch in the short term; this difference disappears over time

- No increased risk for adverse outcomes (congenital anomalies, neonatal death, infant death) among infants exposed in utero to COCs

Brahmi, Contraception, 2013.
## When to Start Using Specific Contraceptive Methods

<table>
<thead>
<tr>
<th>Contraceptive method</th>
<th>When to start (if the provider is reasonably certain that the woman is not pregnant)</th>
<th>Additional contraception (i.e., back up) needed</th>
<th>Examinations or tests needed before initiation¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper-containing IUD</td>
<td>Anytime</td>
<td>Not needed</td>
<td>Bimanual examination and cervical inspection²</td>
</tr>
<tr>
<td>Levonorgestrel-releasing IUD</td>
<td>Anytime</td>
<td>If &gt;7 days after menses started, use back-up method or abstain for 7 days.</td>
<td>Bimanual examination and cervical inspection²</td>
</tr>
<tr>
<td>Implant</td>
<td>Anytime</td>
<td>If &gt;5 days after menses started, use back-up method or abstain for 7 days.</td>
<td>None</td>
</tr>
<tr>
<td>Injectable</td>
<td>Anytime</td>
<td>If &gt;7 days after menses started, use back-up method or abstain for 7 days.</td>
<td>None</td>
</tr>
<tr>
<td>Combined hormonal contraceptive</td>
<td>Anytime</td>
<td>If &gt;5 days after menses started, use back-up method or abstain for 7 days.</td>
<td>Blood pressure measurement</td>
</tr>
<tr>
<td>Progestin-only pill</td>
<td>Anytime</td>
<td>If &gt;5 days after menses started, use back-up method or abstain for 2 days.</td>
<td>None</td>
</tr>
</tbody>
</table>
Clinical scenario 1: When to start a contraceptive method?

- 24 y.o. female comes to office desiring contraception and wants to start pills
  - Q: When can she start?
  - A:
    - Anytime, if reasonably certain she is not pregnant.
    - If it has been more than 5 days since menstrual bleeding started, she will need to abstain from sex or use additional contraceptive protection for the next 7 days.
Clinical scenario 2: How to be reasonably certain that a woman is not pregnant

- 24 y.o. female comes to office desiring contraception and wants to start pills
  - Q: How can you be reasonably certain she is not pregnant?
Evidence: Pregnancy test limitations

- Pregnancy detection rates can vary based on sensitivity of test and timing with respect to missed menses
- Pregnancy test not able to detect pregnancy resulting from recent intercourse
- Pregnancy test may remain positive several weeks after pregnancy ends

How to Be Reasonably Certain That a Woman is Not Pregnant

A health-care provider can be reasonably certain that a woman is not pregnant if she has no symptoms or signs of pregnancy and meets any one of the following criteria:
  • is ≤7 days after the start of normal menses
  • has not had sexual intercourse since the start of last normal menses
  • has been correctly and consistently using a reliable method of contraception
  • is ≤7 days after spontaneous or induced abortion
  • is within 4 weeks postpartum
  • is fully or nearly fully breastfeeding (exclusively breastfeeding or the vast majority [≥85%] of feeds are breastfeeding), amenorrheic, and <6 months postpartum
Clinical scenario 2: How to be reasonably certain that a woman is not pregnant

- 24 y.o. female comes to office desiring contraception and wants to start pills
  - Q: How can you be reasonably certain she is not pregnant?
  - A: If she has no signs or symptoms of pregnancy and fulfills one of the SPR criteria, a provider can be reasonably certain that the woman is not pregnant.
Clinical scenario 3: Exams and tests

- 24 y.o. female comes to office desiring contraception and wants to start pills

  Q: Do you need to do any exams or tests before she starts?
Unnecessary tests may create barriers to starting contraception

- Women (adolescents) may not be comfortable with pelvic exam
- Coming back for a second (or more) visit to receive test results

Recommendations address exams and tests needed prior to initiation

- Class A = essential and mandatory
- Class B = contributes substantially to safe and effective use, but implementation may be considered within the public health and/or service context
- Class C = does not contribute substantially to safe and effective use of the contraceptive method
# US SPR

**Exams and tests prior to initiation**

<table>
<thead>
<tr>
<th>Examination or test</th>
<th>LNG and Cu-IUD</th>
<th>Implant</th>
<th>Injectable</th>
<th>CHC</th>
<th>POP</th>
<th>Condom</th>
<th>Diaphragm or cervical cap</th>
<th>Spermicide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood pressure</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>A*</td>
<td>C</td>
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<td>Weight (BMI)</td>
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<td>Clinical breast examination</td>
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<tr>
<td>Bimanual examination and cervical inspection</td>
<td>A</td>
<td>C</td>
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</tbody>
</table>

**Laboratory test**

<table>
<thead>
<tr>
<th>Laboratory test</th>
<th>LNG and Cu-IUD</th>
<th>Implant</th>
<th>Injectable</th>
<th>CHC</th>
<th>POP</th>
<th>Condom</th>
<th>Diaphragm or cervical cap</th>
<th>Spermicide</th>
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<tbody>
<tr>
<td>Glucose</td>
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<td>Liver enzymes</td>
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<tr>
<td>Hemoglobin</td>
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<tr>
<td>Thrombogenic mutations</td>
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<td>C</td>
<td>C</td>
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<tr>
<td>Cervical cytology (Papanicolaou smear)</td>
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<tr>
<td>STD screening with laboratory tests</td>
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<tr>
<td>HIV screening with laboratory tests</td>
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</table>
Evidence: BP measurement

- 6 case-control studies
  - Women who did not have blood pressure check prior to COC initiation had higher odds of acute myocardial infarction and ischemic stroke than women who had blood pressure check
  - No increased risk for hemorrhagic stroke based on whether or not blood pressure measured

- No evidence identified on other hormonal methods

Tepper, Contraception, 2012.
Pelvic Exam before Initiating CHCs

- Is not necessary before starting CHCs
- No conditions for which CHCs would be unsafe would be detected by pelvic exam

**Evidence:**
- Two case-control studies
- Delayed versus immediate pelvic exam before contraception
- No difference in risk factors for cervical neoplasia, incidence of STDs, incidence of abnormal Papanicolaou smears, or incidence of abnormal wet mounts.

Tepper Contraception 2013
Clinical scenario 3: Exams and tests

- 24 y.o. female comes to office desiring contraception and wants to start pills
  - Q: Do you need to do any exams or tests before she starts?
  - A: Blood pressure measurement essential
Clinical scenario 4: Emergency Contraception

- 38 y.o. obese female had unprotected intercourse 4 days ago and is worried about pregnancy.

  **Q:** What are her emergency contraception options?
Four options for EC available in the US

- **Intrauterine device**
  - Copper intrauterine device (Cu-IUD)

- **Emergency contraceptive pills (ECPs)**
  - Ulipristal acetate (UPA) available in a single dose (30 mg)
  - Levonorgestrel (LNG) in a single or split dose
  - Estrogen/progestin in 2 doses
**SPR Recommendation on Effectiveness**

- Large systematic review of 42 studies showed that the pregnancy rate among emergency IUD users is 0.09%.

- UPA and LNG ECPs have similar effectiveness when taken within 3 days after unprotected intercourse.
  - UPA has been shown to be more effective than the LNG formulation between 3 and 5 days after unprotected intercourse.

- UPA may be more effective than LNG for women who are obese.

- The combined estrogen/progestin regimen is less effective than UPA or LNG and is associated with more frequent side effects.

Clinical scenario 4: Emergency Contraception

- 38 y.o. obese female had unprotected intercourse 4 days ago and is worried about pregnancy.
  - **Q**: What are her emergency contraception options?
  - **A**:
    - Copper IUD
    - Ulipristal acetate
    - Levonorgestrel ECPs
    - Combination estrogen/progestin pills
Clinical scenario 5: Initiation of regular contraception after emergency contraception pills

- 38 y.o. obese female had unprotected intercourse 4 days ago and is worried about pregnancy. She has chosen to take UPA.

- **Q:** When can she start regular contraception after ECPs?
Evidence

- Data limited to pharmacodynamics data and expert opinion.

- One pharmacodynamics study raised concern for decreased effectiveness of UPA if hormonal contraception was started the next day.

Cameron et al, Human Reproduction, 2015
Brache et al, Human Reproduction, 2015
Salcedo et al, Contraception, 2013
US SPR Recommendation: When to initiate regular contraception after ECPs

- **Levonorgestrel or combined ECPs:**
  - Any regular contraceptive method can be started immediately
  - Abstain from intercourse or use backup for 7 days

- **UPA ECPs:**
  - Resume or start hormonal contraception no sooner than five days after UPA
  - Non-hormonal contraception can be started immediately
  - Abstain from intercourse or use backup for 7 days after starting contraception

- Advise the woman to have a pregnancy test, if she does not have a withdrawal bleed within 3 weeks.
Clinical scenario 5: Initiation of regular contraception after emergency contraception pills

- 38 y.o. obese female had unprotected intercourse 4 days ago and is worried about pregnancy. She has chosen to take UPA.
  - **Q:** When can she start regular contraception after UPA?
  - **A:** She can resume hormonal contraception five days after taking UPA. She will need to abstain or use backup for 7 days after resuming contraception, or until next menses, whichever comes first.
Clinical scenario 4: Medications to ease IUD insertion

- A 19 year old nulliparous woman desires a levonorgestrel IUD.
  - **Q:** Should any medications be administered before IUD insertion?
Evidence

- **Misoprostol is not recommended for routine use before IUD insertion.**
  - A total of 10 randomized trials suggest that misoprostol does not improve ease of insertion, reduce the need for adjunctive insertion measures or improve insertion success
  - Misoprostol might increase patient pain and side effects
- **Paracervical block with lidocaine might reduce pain during IUD insertion.**
- **Limited evidence on NSAIDs and nitric oxide generally suggests no positive effect**

Lopez et al. Cochrane Database Sys Rev 2015
Zapata et al. Contraception 2016
Clinical scenario 4: Medications to ease IUD insertion

- A 19 year old nulliparous woman desires a levonorgestrel IUD.
  - Q: Should any medications be administered before attempting insertion?
  - A: No adjunctive medications are needed
Take Home Messages, U.S. SPR

- U.S. SPR can help providers decrease medical barriers to initiating and using contraception
- Most women can start most methods anytime
- Few, if any, exams or tests are needed
- Routine follow-up generally not required
- Regular contraception should be started after emergency contraception
- Recommendations for anticipatory counseling for potential bleeding problems and proper management are provided
Safe use of contraceptive methods by women and men with certain characteristics or medical conditions

Target audience: health care providers

Purpose: to assist health care providers when they counsel patients about contraceptive use and to serve as a source of clinical guidance

Content: more than 1800 recommendations for over 60 conditions
Accessing the MEC and SPR in everyday practice
2016 U.S. MEC and SPR App

- MEC by Condition
- MEC by Method
- SPR

Select Method (MEC)
- Intrauterine Contraception
- Progestin-only Contraceptives
- Combined Hormonal Contraceptives
- Barrier Methods
- Fertility Awareness-based Methods
- Lactational Amenorrhea Method
- Coitus Interruptus

SPR
- How To Be Reasonably Certain That A Woman Is Not Pregnant
- Cu-IUD
- LNG-IUD
- Implants
- Injectables
- Combined Hormonal Contraceptives
- Progestin Only Pills
Using the U.S. SPR App

Late or Missed Doses and Side Effects from Combined Hormonal Contraceptive Use

For the following recommendations, a dose is considered late when <24 hours have elapsed since the dose should have been taken. A dose is considered missed if ≥24 hours have elapsed since the dose should have been taken. For example, if a COC pill was supposed to have been taken on Monday at 9:00 a.m. and is taken at 11:00 a.m., the pill is late; however, by Tuesday morning at 11:00 a.m., Monday’s 9:00 a.m. pill has been missed and Tuesday’s 9:00 a.m. pill is late. For COCs, the recommendations only apply to late or missed hormonally active pills and not to placebo pills. Recommendations are provided for late or missed pills (Figure 2), the patch (Figure 3), and the ring (Figure 4).
Summary tables and charts

- MEC summary table in English, Spanish
- SPR quick reference charts
  - When to start contraceptive methods and routine follow up
  - What to do for late, missed or delayed combined hormonal contraception
  - Management of IUD when PID is found
  - Management of women with bleeding irregularities while using contraception
Online access

CDC Contraceptive Guidance for Health Care Providers

U.S. Medical Eligibility Criteria for Contraceptive Use, 2016 (US MEC)

The 2016 U.S. Medical Eligibility Criteria for Contraceptive Use (U.S. MEC) comprises recommendations for the use of specific contraceptive methods by women and men who have certain characteristics or medical conditions. The recommendations in this report are intended to assist health care providers when they counsel women, men, and couples about contraceptive method choice.

U.S. Selected Practice Recommendations for Contraceptive Use, 2016 (US SPR)

The 2016 U.S. Selected Practice Recommendations for Contraceptive Use (U.S. SPR) addresses a select group of common, yet sometimes controversial or complex, issues regarding initiation and use of specific contraceptive methods. The recommendations in this report are intended to serve as a source of clinical guidance for health care providers and provide evidence-based guidance to reduce medical barriers to contraception access and use.

Quality Family Planning

Providing Quality Family Planning Services (QFP) recommends how to provide family planning services so that individuals can achieve their desired number and spacing of children, increase the chances that a baby will be born healthy, and improve their health even if they choose to not have children.

http://wwwdev.cdc.gov/reproductivehealth/contraception/contraception_guidance.htm
Other Tools and Aids

- MEC Wheel
- Continuing Education Activities
- Speaker-ready slides
- Contraceptive Effectiveness Charts
- Online alerts to receive updates
- eBook for SPR
- Residency training and certification
Resources

- CDC evidence-based family planning guidance documents:
  http://www.cdc.gov/reproductivehealth/contraception/contraception_guidance.htm

- Sign up to receive alerts!