CDC’s contraceptive guidelines

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Reproductive Health ECHO
Disclosures

- Rameet Singh, MD
  - Twistle by Health Catalyst: Consultant, Executive Role

- Jamie Krashin, MD
  - None
Objectives

- Describe the U.S. Medical Eligibility Criteria for Contraceptive Use, 2016 (U.S. MEC) and the U.S. Selected Practice Recommendations for Contraceptive Use, 2016 (U.S. SPR)
- Identify the benefits of evidence-based contraceptive guidance
- Understand how to access and use the U.S. MEC and U.S. SPR in your clinical practice
Audience response:
U.S. Medical Eligibility Criteria

- Have you used the U.S. MEC in your clinical practice?
  - A. Yes
  - B. No
Audience response:
U.S. Selected Practice Recommendations

- Have you used the U.S. SPR in your clinical practice?
  - A. Yes
  - B. No
CDC’s guidelines focus on safety & management.

Target audience: Healthcare providers
CDC's guidelines focus on safety & management.

**US MEC**

**SAFETY**

>1800 recommendations

60 conditions

**US SPR**

**MANAGEMENT**

- Initiation:
  - Being reasonably certain a woman isn’t pregnant
  - When to start
  - Indicated exams & tests
- Follow-up
- Problem management
Methods for U.S. MEC and SPR

- Adapted from WHO guidelines
- Ongoing monitoring of published evidence

CDC, expert & stakeholder meeting: **scoping**

CDC & outside authors: **systematic reviews**

CDC, expert & stakeholder meeting: **evidence review**

CDC determines 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
Contraceptive Methods in US MEC

- Intrauterine devices
- Progestin-only contraceptives
- Combined hormonal contraceptives
- Emergency contraceptive pills
- Barrier contraceptive methods
- Fertility Awareness-Based Methods
- Lactational Amenorrhea Method
- Coitus Interruptus
- 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.*

<table>
<thead>
<tr>
<th>Method</th>
<th>Most Effective</th>
<th>Reversible</th>
<th>Least Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implant</td>
<td>0.05%</td>
<td></td>
<td>18%</td>
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<tr>
<td>Intrauterine Device (IUD)</td>
<td>0.2% LNG</td>
<td>0.8% Copper T</td>
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<tr>
<td>Permanent Sterilization</td>
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<td></td>
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<tr>
<td>Female (Abdominal, Laparoscopic, and Hysteroscopic)</td>
<td>0.5%</td>
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<tr>
<td>Male (Vasectomy)</td>
<td>0.15%</td>
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</tr>
</tbody>
</table>

- **Once in place, little or nothing to do or remember.**
- **After procedure, little or nothing to do or remember. Use another method for first 3 months (Hysteroscopic, Vasectomy).**
- **Get repeat injections on time.**
- **Take a pill each day.**
- **Keep in place, change on time.**
- **Use correctly every time you have sex.**

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

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

**Fertility Awareness-Based Methods**

- ** Withdrawal:** 22%
- **Sponge:**
  - 12% Nulliparous Women
  - 24% Parous Women

**Spermicide**

- **January:**
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>6</th>
<th>7</th>
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<th>10</th>
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</tbody>
</table>

**Other Methods of Contraception:**

- **Lactational Amenorrhea Method (LAM):** A highly effective, temporary method of contraception, and
- **Emergency Contraception:** Emergency contraceptive pills or a copper IUD offer unprotected intercourse substantially reduces risk of pregnancy.

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No restriction for the use of the contraceptive method for a woman with that condition</td>
</tr>
<tr>
<td>2</td>
<td>Advantages of using the method generally outweigh the theoretical or proven risks</td>
</tr>
<tr>
<td>3</td>
<td>Theoretical or proven risks of the method usually outweigh the advantages – not usually recommended unless more appropriate methods are not available or acceptable</td>
</tr>
<tr>
<td>4</td>
<td>Unacceptable health risk if the contraceptive method is used by a woman with that condition</td>
</tr>
</tbody>
</table>
### Example: Smoking and Contraceptive Use

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cu-IUD</th>
<th>LNG-IUD</th>
<th>Implants</th>
<th>DMPA</th>
<th>POPs</th>
<th>CHCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoking</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>a. Age &lt;35</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>1</td>
</tr>
<tr>
<td>b. Age ≥35</td>
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<tr>
<td>i. &lt;15 cigarettes/day</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>II. ≥15 cigarettes/day</td>
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<td>1</td>
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<td>1</td>
</tr>
</tbody>
</table>

Cu-IUD: Copper IUD; LNG-IUD: Levonorgestrel IUD; DMPA: Depo-Medroxyprogesterone Acetate; POPs: Progestin-only pills; CHCs: Combined hormonal contraceptives including pills, patch, and ring.
<table>
<thead>
<tr>
<th>Conditions Associated with Increased Risk for Adverse Health Events as a Result of Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breast cancer</strong></td>
</tr>
<tr>
<td>Consolided valvular heart disease</td>
</tr>
<tr>
<td>Cystic fibrosis</td>
</tr>
<tr>
<td>Diabetes with nephropathy, retinopathy or other vascular disease</td>
</tr>
<tr>
<td>Endometrial or ovarian cancer</td>
</tr>
<tr>
<td>Epilepsy</td>
</tr>
<tr>
<td>Solid organ transplantation within the past 2 years</td>
</tr>
<tr>
<td>History of bariatric surgery within the past 2 years</td>
</tr>
<tr>
<td>Systemic lupus erythematosus</td>
</tr>
<tr>
<td>HIV: not clinically well or not receiving anti-retroviral therapy</td>
</tr>
<tr>
<td>Ischemic heart disease</td>
</tr>
</tbody>
</table>

Consider long-acting, highly-effective contraception for these patients.
2016 Updates to U.S. MEC: New Recommendations

- **4 new conditions**
  - Cystic fibrosis
  - Multiple sclerosis
  - Women using selective serotonin reuptake inhibitors (SSRIs)
  - Women using St. John’s wort

- **1 new emergency contraception method**
  - Ulipristal acetate (UPA)

- Revised emergency contraception section
2016 Updates to U.S. MEC: Changes to Existing Recommendations

- **Hormonal methods (Implants, DMPA, POP, CHCs)**
  - Superficial venous disease
  - Use of antiretroviral therapy
  - Multiple risk factors for atherosclerotic disease

- **Intrauterine methods (Cu-IUD, LNG-IUD)**
  - Factors related to sexually transmitted diseases
  - Human immunodeficiency virus

- **Hormonal and intrauterine methods**
  - Migraine headaches
  - Gestational trophoblastic disease
  - Postpartum period
CLINICAL SCENARIO
A 30 year old female has a history of migraine headaches with light sensitivity. She does not experience any visual warning signs for a coming headache. She is interested in starting contraception. What method(s) are safe for her to consider?

A. Combined hormonal methods (pill, patch, ring)
B. Depot medroxyprogesterone acetate
C. Intrauterine devices
D. All of the above
# Headaches

<table>
<thead>
<tr>
<th>Condition</th>
<th>Cu-IUD</th>
<th>LNG IUD</th>
<th>Implants</th>
<th>DMPA</th>
<th>POP</th>
<th>CHCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-migraine</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1*</td>
</tr>
<tr>
<td>Migraine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Without aura (including menstrual migraine)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>With aura</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
A 30 year old female has a history of migraine headaches with light sensitivity. She does not experience any visual warning signs for a coming headache. She is interested in starting contraception. What method(s) are safe for her to consider?

Answer:
A. Combined hormonal methods (pill, patch, ring)
B. Depot medroxyprogesterone acetate
C. Intrauterine devices
D. All of the above

All of the above, so long as she does not have other risk factors for stroke. (If so, progestin-only methods and IUDs are safe or generally safe to use.)
Take Home Messages, U.S. MEC

- U.S. MEC can help providers decrease barriers to choosing contraceptive methods

- Most women can safely use most contraceptive methods

- Certain conditions are associated with increased risk for adverse health events as a result of pregnancy
  - Affected women may especially benefit from highly effective contraception for pregnancy planning

- Women, men, and couples should be informed of the full range of methods to decide what will be best for them
Remember the SPR

US SPR

MANAGEMENT

- Initiation:
  - Being reasonably certain a woman isn't pregnant
  - When to start
  - Indicated exams & tests
- Follow-up
- Problem management
- Self-administration of DMPA-SC

Helpful provider tools!
CLINICAL SCENARIO
A 24 y.o. new patient comes to your office desiring contraception and wants to start pills. What exams or tests are needed before providing her prescription?

A. Pap smear
B. Clinical breast exam
C. Blood pressure
D. All of the above
Exams and tests prior to initiation

- 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
<table>
<thead>
<tr>
<th>Examination or test</th>
<th>Contraceptive method and class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LNG and Cu-IUD</td>
</tr>
<tr>
<td>Blood pressure</td>
<td>C</td>
</tr>
<tr>
<td>Weight (BMI)</td>
<td>—+</td>
</tr>
<tr>
<td>Clinical breast examination</td>
<td>C</td>
</tr>
<tr>
<td>Bimanual examination and cervical inspection</td>
<td>A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laboratory test</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Glucose</td>
<td>C</td>
</tr>
<tr>
<td>Lipids</td>
<td>C</td>
</tr>
<tr>
<td>Liver enzymes</td>
<td>C</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>C</td>
</tr>
<tr>
<td>Thrombogenic mutations</td>
<td>C</td>
</tr>
<tr>
<td>Cervical cytology (Papanicolaou smear)</td>
<td>C</td>
</tr>
<tr>
<td>STD screening with laboratory tests</td>
<td>—§</td>
</tr>
<tr>
<td>HIV screening with laboratory tests</td>
<td>C</td>
</tr>
</tbody>
</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
Pelvic Exam before Initiating CHCs

- **Is not necessary before starting CHCs**
- **No concerning conditions will be detected by pelvic**

**Evidence:**
- Two case-control studies
- Delayed versus immediate pelvic exam before contraception

Tepper Contraception 2013
A 24 y.o. new patient comes to your office desiring contraception and wants to start pills. What exams or tests are needed before providing her prescription?

A. Pap smear
B. Clinical breast exam
C. Blood pressure
D. All of the above
Accessing the MEC and SPR in everyday practice
2016 U.S. MEC and SPR App

MEC by Condition
MEC by Method
SPR

About this App
Full Guidelines
Provider Tools

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. MEC App

Endometriosis
Epilepsy
Gallbladder disease
Gestational trophoblastic disease

Headaches
  a. Nonmigraine (mild or severe)
  b. Migraine
    i. Without aura (this category of migraine includes menstrual migraine)
    ii. With aura

High risk for HIV
HIV infection (Cu-IUD, LNG-IUD)
HIV infection (Implant, DMPA, POP, CHC)
History of bariatric surgery

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Headaches
b. Migraine
  i. Without aura (this category of migraine includes menstrual migraine)

<table>
<thead>
<tr>
<th>Method</th>
<th>Category</th>
<th>Clarification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cu-IUD</td>
<td>1</td>
<td></td>
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<tr>
<td>LNG-IUD</td>
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<tr>
<td>Implants</td>
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<tr>
<td>DMPA</td>
<td>1</td>
<td></td>
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<tr>
<td>POP</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHCs</td>
<td>2'</td>
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</tr>
</tbody>
</table>

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Classification depends on accurate diagnosis of those severe headaches that are migraines and those headaches that are not, as well as diagnosis of ever experiencing aura. Aura is a specific focal neurologic symptom. For more information about headache classification, see The International Classification of Headache Disorders, 2nd edition (http://ihns-classification.org/en). Any new headaches or marked changes in headaches should be evaluated.

Classification is for women without any other risk factors for stroke (e.g., age, hypertension, and smoking).
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
  - Initiation & follow up
  - What to do for late, missed or delayed combined hormonal contraception
  - IUD management when PID is diagnosed
  - Bleeding irregularities while using contraception
Online Access

Reproductive Health

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
New updates coming in 2024!

Sign up to receive alerts at:

https://www.cdc.gov/reproductivehealth/contraception/contraception_guidance.htm