The Doctor Is In

- Brent N Davidson MD
- Vice Chair Women’s Health Henry Ford Health System
- Medical Director Family Planning MDCH
<table>
<thead>
<tr>
<th></th>
<th>No restriction for the use of the contraceptive method for a woman with that condition</th>
</tr>
</thead>
<tbody>
<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>
**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>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implant</td>
<td>0.05%</td>
</tr>
<tr>
<td>Intrauterine Device (IUD)</td>
<td>0.2% (LNG) 0.8% (Copper T)</td>
</tr>
<tr>
<td><strong>Permanent Sterilization</strong></td>
<td></td>
</tr>
<tr>
<td>Female (Abdominal, Laparoscopic, and Hysteroscopically)</td>
<td>0.5%</td>
</tr>
<tr>
<td>Male (Vasectomy)</td>
<td>0.15%</td>
</tr>
<tr>
<td>Injectable</td>
<td>6%</td>
</tr>
<tr>
<td>Pill</td>
<td>9%</td>
</tr>
<tr>
<td>Patch</td>
<td>9%</td>
</tr>
<tr>
<td>Ring</td>
<td>9%</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>12%</td>
</tr>
<tr>
<td>Male Condom</td>
<td>18%</td>
</tr>
<tr>
<td>Female Condom</td>
<td>21%</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>22%</td>
</tr>
<tr>
<td>Sponge</td>
<td>12% (Nulliparous Women) 24% (Para Women)</td>
</tr>
<tr>
<td><strong>Fertility Awareness-Based Methods</strong></td>
<td></td>
</tr>
<tr>
<td>Spermicide</td>
<td>28%</td>
</tr>
</tbody>
</table>

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

**Other Methods of Contraception:**

1. Lactational Amenorrhea Method (LAM): is a highly effective, temporary method of contraception.

2. Emergency Contraception: Emergency contraceptive pills or a copper IUD after unprotected intercourse substantially reduce the risk of pregnancy.

<table>
<thead>
<tr>
<th>Conditions Associated with Increased Risk for Adverse Health Events as a Result of Pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast cancer</td>
</tr>
<tr>
<td>Cystic fibrosis</td>
</tr>
<tr>
<td>Diabetes</td>
</tr>
<tr>
<td>Endocrine dysregulation</td>
</tr>
<tr>
<td>Epilepsy</td>
</tr>
<tr>
<td>Hypertension &gt; 140 mm Hg</td>
</tr>
<tr>
<td>History of smoking</td>
</tr>
<tr>
<td>HIV: not clinically well or not receiving anti-retroviral therapy</td>
</tr>
<tr>
<td>Ischemic heart disease</td>
</tr>
<tr>
<td>Gestational trophoblastic disease</td>
</tr>
</tbody>
</table>

Consider long-acting, highly-effective contraception for these patients.
How to increase LARC use in Adolescents

- 15-19 highest unintended preg rate of any group
- 52.6% 3 yr continuation rate vs 21.2% of non-larc counterparts
- No increased adverse outcomes: pregnancy, perforation, infection, heavy bleeding
- Possible increased risk of expulsion in age<25
- Applies to Kyleena, Liletta, Mirena, Paragard, Skyla
- Access, Cost, Timing of insertion
Access to LARC Among Us Publicly Funded Health Centers

- 64% (2013-14) had providers trained in all 3 LARC (hormonal IUD, copper IUD, implant)
- 21% did not offer any LARC onsite or relied on referrals
- 52% IUD (any type) and implant onsite
- Highest % at Planned Parenthood and Title-X sites
- Health Departments and rural clinics - lowest %
Not Seeking yet trying LARC

- 916 women 18-29 seeking pills or injectables
- 43% agreed to randomization LARC v SARC
- Continuation rates at 24 months: 64.3% LARC vs 25.5% SARC randomization and 40% SARC preference
- 24 month unintended pregnancy rates: 9.9% preference SARC vs 3.6% LARC
- Opportunity to encourage voluntary informed decisions
Cost of Unintended Pregnancy in Sweden—a possibility to lower cost by increasing LARC usage

- 73,989 unintended pregnancies yearly cost 158 Euros
- 5% increased LARC usage
- 3,500 fewer unintended pregnancies
- Savings 7.7 Euros
- 2.4% of unintended pregnancy costs
Routine Availability of PostPartum LARC

- Nurses role in intra and postpartum education
- Montefiore Medical Center
- Surveys re recommendations 1 yr apart
- Positive recommendation iud/implant increased fro 2% to 32%
- Attitude recommendation remained negative for DMPA
Cost-effectiveness of emergency contraceptive options over 1 year

- Ulipristal acetate
- Oral levonorgestrel
- Copper intrauterine device
- Oral levonorgestrel plus same day levonorgestrel iud
- Over 1 yr the most cost effective was the copper iud
- Summation of cost of the therapy plus accounts for the failure rates
How Does Oral Contraceptive Use Affect One’s Risk of ovarian, endometrial, breast, and colon cancer

- Overall net decrease in developing cancer
- Significant decrease in both breast and ovarian, benefit increases with longer duration
- Ovarian reduction persists regardless of smoking status, BMI, alcohol use, physical activity level
- Endometrial-largest reduction in current smokers and those w/BMI > 30kg/m2
- Trend toward slight increase risk of breast cancer
- Danish Cohort Study rr 1.2, differences in study design, populations
Oral Contraceptives and Cancer Risk

- **Net decrease of developing any cancer for OC users**
- **Weigh cancer risk vs risks of unintended pregnancy**
- **Maternal Mortality 26.4 deaths/100,000 women**
- **Highest published estimates of HC-attributable breast cancer=13 cases/100,000 women, 2 incremental cases of breast cancer/100,000 women 35 years or younger**
- **Economic burden unintended pregnancy-21 billion dollars/year**
- **42% of unintended pregnancies end in abortion**
Obesity and Contraceptive Use among Women 20-44, 2011-2015 National Survey

- Obese women higher rates of sterilization OR 1.96
- Obese women higher incidence of IUD use, OR 1.64
- Obese women lower incidence of hormonal contraception OR 0.78

Possible explanations: unequal access to alternatives, awareness of increased risk of unintended birth, directive counseling from health care providers, or informed choice
Emerging Role of Obesity in Short-Acting Hormonal Contraceptive Effectiveness

- 2014 37% of US reproductive age women obese (BMI > 30 kg/m²)
- 2001 Ortho-Evra 1st to include comment on obesity (198lb)
- “Creeping Pearl” Phenomenon
- 2007 Advisory Committee Reproductive Health Drugs advised - real world populations for studies
- Natazia, Bayer 2015 excluded BMI > 30kg/m²)
Morbid Obesity: Patient Considerations

- Restrictions (?) on BMI >130%, Nexplanon
- Bariatric patients
Timing of Etonogestrel Implant Insertion after D & E

- Primary outcome: use rate at 6 months via telephone follow-up
- Placement rates: 100% immediate vs 42.7% delayed (2-4 weeks)
- 6 month usage rates: 93% immediate vs 63% delayed
- Emphasizes importance of immediate insertion and challenges with LARC immediate placement (preapproval authorization)
Difficult IUD Removal
US MEC

US MEDICAL ELIGIBILITY CRITERIA FOR CONTRACEPTIVE USE, 2016
Bayer Consultant Program

- Consultants-practicing providers available for consultation
- One week at a time
- Direct contact for consultation
- Provided by MDCH for 10 years
IUD Usage

- 2002 2% contracepting women
- 2011-13 10.3%
- 2002 0.5% nulliparous women
- 2011-2013 4.8%
Provider Resistance

- 2/3 considered nulliparous women appropriate
- 30% misconceptions re safety in nulliparous women
- Concerns: risk of PID, safety, difficulty of insertion
- Paragard label change 2005
- Cytotec not recommended to make insertion easier
- Ketorolac: pain of injection = pain of IUD insertion
- ? Lidocaine 4% viscous gel
Perforation Risk

- European Active Surveillance Study on IUD
- 61448 women enrolled (70% levonorgestrel, 30% copper devices)
- 4.5/1000 lactating women
- 0.6% nonlactating
- Time since last delivery
HPV and IUD Usage

- No listing in CDC MEC
- Effect on acquisition and clearance
- Evaluated 676 sexually active young women enrolled in family planning clinics in San Francisco
- No association clearance or acquisition
- Reduction in endometrial cancer
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)
Hyperprolactinemia

- Cabergoline/bromocriptine
- If dopamine agonists have been unsuccessful or the patient cannot tolerate them, transsphenoidal surgery or ovulation induction with clomiphene citrate can be considered (for women wishing to become pregnant). For women not pursuing pregnancy, estrogen and progesterone replacement can be considered; men can consider testosterone therapy.
Difficult removal of subdermal contraceptive implants: a multidisciplinary approach involving a peripheral nerve expert

Elizabeth B. Odom, David L. Eisenberg, Ida K. Fox

Contraception
Volume 96, Issue 2, Pages 89-95 (August 2017)
DOI: 10.1016/j.contraception.2017.05.001
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 family planning
- Women, men, and couples should be informed of the full range of methods to decide what will be best for them
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
Using the U.S. MEC App

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>
</tr>
<tr>
<td>LNG-IUD</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Implants</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>DMPA</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>POP</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CHCs</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

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://ihd-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).
2016 U.S. MEC and SPR App

CDC Contraception 2016

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 Amennorrhea 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
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
Resources


- Sign up to receive alerts!
Uterine Anomaly

Duplicate Cervix
Hysteroscopic resection of septum
Single cavity
LARC Complications
7 Case Challenges

- Pain w/ IUD insertion
- IUD strings not visualized
- Difficult removal
- Copper iud in lower uterine segment
- Pregnancy in an iud user
- Pregnancy in an implant user
- Nonpalpable implant
Ischemic Stroke and Migraine

- Migraine with Aura and CHC-independent assn w/increased risk of ischemic stroke
- ?joint effects
- 2006-2012 25,887 ischemic strokes females 15-49
- 6 fold increase over no risk factor
- Odds ratios: migraine w/aura +chc=2.7
  - Migraine w/out aura +chc=1.8
  - Migraine w/ aura alone=2.2
2016 Updates to U.S. MEC: Changes to Existing Recommendations

- **Hormonal methods (Implants, DMPA, POP, CHCs)**
  - Migraine headaches
  - Superficial venous disease
  - Women using antiretroviral therapy
  - Women with known dyslipidemia

- **Intrauterine devices (Cu-IUD, LNG-IUD)**
  - Gestational trophoblastic disease
  - Postpartum and breastfeeding women
  - Human immunodeficiency virus
  - Factors related to sexually transmitted diseases
Accessing the MEC and SPR in everyday practice