

# Contraceptive Methods for Women with Chronic Medical Conditions

**First Time Motherhood/New Parent Initiative**

**EDGECOMBE - HALIFAX – HERTFORD –  
GATES - NASH – NORTHAMPTON**

# Approach to Best Method

- First: Do no harm
- Second: Try to do good
- Third: If you don't know, ask
- Fourth: Document

# How Do You Choose the Best Method?

- Thorough medical history and plans for future pregnancy
- Assess *medical eligibility* for contraception
- Consider evidence surrounding method/condition interaction
- Efficacy
- Safety/availability of method

# Thorough Medical History

- Very important to perform a thorough medical history when deciding contraception for a woman with a chronic medical condition
- Is this medical condition going to affect a pregnancy?
- Will pregnancy affect this medical condition?

# From the Medical History:

Which method medically “fits”

**AND**

Which method individually “fits” the woman



# Assessing Medical Eligibility

## Resources

- World Health Organization (WHO) *Medical eligibility criteria for contraceptive use 4th ed.* (2009) and can be found at [www.who.int/reproductivehealth](http://www.who.int/reproductivehealth)
- The Medical Eligibility Criteria Wheel can be found at <http://www.who.int/reproductive-health/publications/mec/>
- Managing Contraception Pocket Guide can be ordered from [www.managingcontraception.com](http://www.managingcontraception.com)
- Contraceptive Technology 19<sup>th</sup> ed. Hatcher, R et al. 2007

# WHO Medical Eligibility Criteria – Safety of Use

Category	With Clinical Judgment	With Limited Clinical Judgment
<b>1</b>	Use method in any circumstances	Yes (use the method)
<b>2</b>	Generally use the method	
<b>3</b>	Use of method not usually recommended unless other more appropriate methods are not available	No (do not use the method)
<b>4</b>	Method not to be used	

## Consider Evidence Surrounding Method/Condition Interaction

- What are the non-contraceptive benefits?
- Are there any medication interactions?
- What about other medical conditions that may be present in the woman?
- Many WHO MEC Category 3 methods are based on theoretical concerns

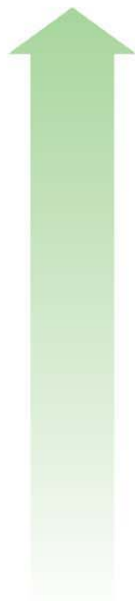


# Efficacy

## Comparing Effectiveness of Family Planning Methods

### More effective

Less than 1 pregnancy per 100 women in 1 year



Implants



IUD



Female sterilization



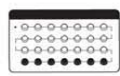
Vasectomy



Injectables



LAM



Pills



Patch



Vaginal ring



Male condoms



Diaphragm



Female condoms



Fertility awareness methods



Withdrawal



Spermicides

### Less effective

About 30 pregnancies per 100 women in 1 year

### How to make your method more effective

**Implants, IUD, female sterilization:** After procedure, little or nothing to do or remember

**Vasectomy:** Use another method for first 3 months

**Injectables:** Get repeat injections on time

**Lactational amenorrhea method, LAM (for 6 months):** Breastfeed often, day and night

**Pills:** Take a pill each day

**Patch, ring:** Keep in place, change on time

**Condoms, diaphragm:** Use correctly every time you have sex

**Fertility awareness methods:** Abstain or use condoms on fertile days. Newest methods (Standard Days Method and TwoDay Method) may be easier to use.

**Withdrawal, spermicides:** Use correctly every time you have sex



#### Sources:

Steiner MJ, Trussell J, Mehta N, Condon S, Subramaniam S, Bourne D. Communicating contraceptive effectiveness: a randomized controlled trial to inform a World Health Organization family planning handbook. *Am J Obstet Gynecol* 2006;195(1):85-91.

World Health Organization/Department of Reproductive Health and Research (WHO/RHR), Johns Hopkins Bloomberg School of Public Health (JHSHPH)/Center for Communication Programs (CCP). *Family Planning: A Global Handbook for Providers*. Baltimore, MD and Geneva: CCP and WHO, 2007.

Trussell J. Choosing a contraceptive: efficacy, safety, and personal considerations. In: Hatcher RA, Trussell J, Stewart F, Nelson AL, Cates W Jr, Guest F, Kowal D, eds. *Contraceptive Technology, Nineteenth Revised Edition*. New York: Ardent Media, Inc., in press.

2007

# Contraceptive “Fit” for the Woman

- Future pregnancy plan; When? How many? Ever again?
- Sexually transmitted infection protection?
- Privacy concerns, partner support
- Cost
- Ability to use consistently and correctly
- Can she do what is necessary?
  - ☐ Remember to take pills, change patch, etc.
  - ☐ Get to pharmacy, clinic (i.e., for Depo injection)
  - ☐ Capable of using method  
(i.e., insertion of NuvaRing)

# Availability of Method

- Long-acting reversible methods (i.e., IUDs, Implanon, etc) are highly effective and have less user error, but initial method cost is higher
- Implanon provider must be trained by manufacturer directly before he/she can be allowed to order/insert Implanon
- Use of Women's Health Service Fund dollars to purchase more long acting methods (health departments)
- Family Planning Waiver covers all long acting reversible contraceptive methods

# Considerations

- Age
- Smoking
- Asthma
- Hypertension
- Diabetes Mellitus
- Obesity
- Sickle Cell Disease
- Cancer
- History of sexually transmitted infection/HIV

# Age



- Age alone has no contraindications based on the WHO Medical Eligibility Criteria in any of the methods
- All methods are a category 1 or 2

# Smoking

## For women under age 35 and smoking

- All methods are category 1 or 2

## For those over age 35 and smoke <15 cigarettes per day

- Oral contraceptives, patch and ring are **not** recommended (category 3)

## For those over age 35 and smoke >15 cigarettes per day

- Oral contraceptives, patch and ring **DO NOT USE** (category 4)
- Other methods are all category 1

# Asthma

- There are no contraindications for any of the birth control methods and asthma
- Have found that extended cycle and continuous use of combined oral contraceptives (COC's) can significantly reduce asthma attacks



# Hypertension

- This medical condition will affect a future pregnancy: increases pre-eclampsia, placental abruption, intrauterine growth restriction, pre-term delivery
- Use of COC's may increase BP in normotensive women (average 8 mm Hg systolic/6mm Hg diastolic)
- The risk of MI and CVA in young women is very low
  - Weigh decision to use combined methods with the adverse outcome of pregnancy
  - Even if the relative risk is increased, the absolute risk remains very low



# Hypertension

## History of hypertension (HTN) where BP CANNOT be evaluated

- Copper IUD (Paragard) is a Category 1
- Mirena IUD, Implanon, Depo injection, Progestin-only pills are a Category 2
- All others are a Category 3

## Adequately controlled HTN where BP CAN be evaluated

- Progestin-only pills, Implanon, Paragard and Mirena IUDs are all Category 1
- Depo injection is a Category 2
- COC's, Patch and Ring are a Category 3

# Contraceptive Fit for HTN

For women without other risks who can be followed closely:

- Use method in the top two tiers of Efficacy Chart that fits her lifestyle (*Implanon, Mirena, Paragard, Depo injection, progestin-only pills*)

For women with complications:

- Use a progestin only (*Implanon, Depo injection, progestin-only pills*) or non-hormonal method (*Paragard*)



# Diabetes Mellitus (DM)

- Risks to future pregnancies.....YES
- Risk of fetal anomaly, loss, macrosomia, intrauterine growth restriction, increased risk of HTN, possible progression of retinopathy and nephropathy during pregnancy, and pregnancy increases insulin resistance
- Risk increases if woman is insulin dependent with damage to arteries, kidneys, eyes or nervous system, or of more than 20 years duration

# Contraceptive Choices for DM

## Gestational Diabetes history

- All methods of birth control are a Category 1

## Non-vascular diabetes (insulin dependent or not)

- Paragard IUD is a Category 1. All other methods are a Category 2

## Vascular disease or >20 years duration

- Paragard IUD is Category 1, Mirena IUD is a Category 2
- Implanon, Depo, progestin-only pills are a Category 2  
All others are Category 3 and 4

# Obesity

- Increased risk for HTN, gestational diabetes, post-term pregnancy, macrosomia, post-partum complications and is an independent risk factor for venous thromboembolism (VTE)
- May have a slightly higher rate of failure with patch and possibly COC's in women over 90 kg. (198 lbs)
- Women who have had bariatric surgery may have trouble with malabsorption

# Obesity

- No Medical Eligibility Criteria contraindications with any methods (Pills, patch, ring and Depo are a Category 2)
- Mirena IUD has **not** been associated with weight gain, **not** affected by weight, and offers endometrial protection
- Implanon appears **not** to be associated with weight gain
- Depo injection **is** associated with a 5.4 lb. weight gain in first year, 16.5 lbs after 5 years.

# Sickle Cell Disease

- Increased risk for maternal morbidity, mortality, and perinatal mortality
- Pregnancy can also increase the risk of sickle cell crisis, infections, and pulmonary complications
- All methods of birth control are Category 1 or 2  
Extended cycle or continuous use COC's and Depo have been shown to decrease the frequency and severity of crises
- Depo injection probably best method if acceptable to client

# Cancer

- Breast cancer in the past 5 years prohibits the use of hormonal contraception (COC's, patch, ring, Depo, Mirena IUD)
- Recommended methods are Paragard, other non-hormonal methods or sterilization
- Family history of breast cancer is NOT a contraindication to hormonal contraception



# Other Cancers

- Endometrial, ovarian, and cervical cancer should not have IUD placements
- Liver tumors (benign or malignant) use of Paragard is the only Category 1 method. All others are Category 2, 3 or 4

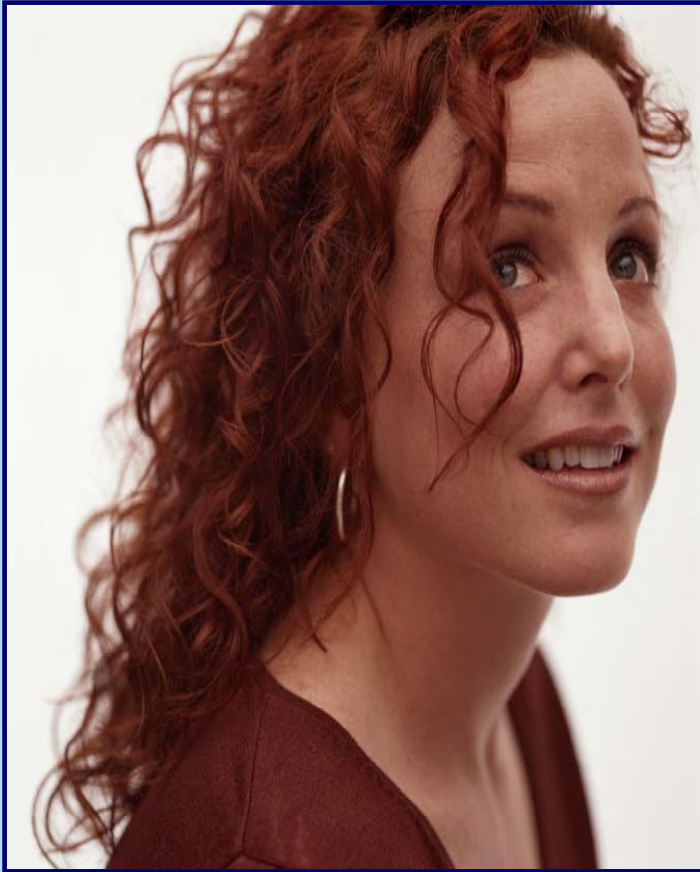
# Sexually Transmitted Infections

- Important to counsel women on the fact that birth control methods (excluding male/female condoms) only prevent pregnancy and not sexually transmitted infections (STIs).
- All methods are a Category 1 for individuals with STIs excluding current vaginitis, cervicitis, chlamydia or gonorrhea for IUD insertion.
- Unless acute infection is visually present, Paragard or Mirena may be inserted, but must test for CT/GC or vaginitis (yeast, BV, Trich) on day of insertion. If STD is identified with testing, treatment with appropriate medication is warranted.

# Sexually Transmitted Infections

STIs have serious health consequences:

- Tubal occlusion leading to infertility and ectopic pregnancy
- Genital cancers
- Enhanced transmission of human immunodeficiency virus (HIV)
- Pregnancy loss and neonatal morbidity caused by infection transmission during pregnancy and childbirth



# Correcting Misunderstandings on STIs and IUDs

- Rarely do IUDs lead to PID
- Do not increase the risk of contracting STIs, including HIV
- Risk of STI acquisition and IUD use have been exaggerated due to flaws in early IUD research
- Both epidemiological and bacteriological evidence indicate that the insertion process, and not the device or its string, increases the risk of STI infection
- Research shows no support for removing IUD as an adjunct to antibiotic therapy for those with STI

# HIV

- Effects of pregnancy
  - In asymptomatic women, no increase in maternal morbidity or mortality
  - Increased risk of preterm birth, fetal growth restriction, and stillbirth
  - Vertical transmission
- All methods are Category 1 or 2 for those with HIV infection
- For women who have AIDS, use of Paragard and Mirena are a Category 3 for insertion but Category 2 if well controlled on ARV therapy
- Dual protection (condom use with birth control method) recommended

# Summary

- Women and their medical conditions with associated risks do not always fit into one category
- Need to weigh risks/benefits of method vs. no method and effect of pregnancy on condition
- However, there are methods available for women with chronic medical conditions

## For More Information

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