

Diabetes and Birth Control: What the Health Care Team Should Know

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Disclosures

- No Financial Disclosures
- Thanks to Tony Ogburn, Eve Espey, ARHP

Objectives

- Identify safe methods of contraception for women with diabetes and other medical conditions.
- Discuss the special benefits of long-acting reversible contraception.
- Recognize contraceptive methods that have the highest efficacy rates.
- Identify strategies to reduce unintended pregnancy in women with diabetes.

Approximately what percent of pregnancies in the US are unintended?

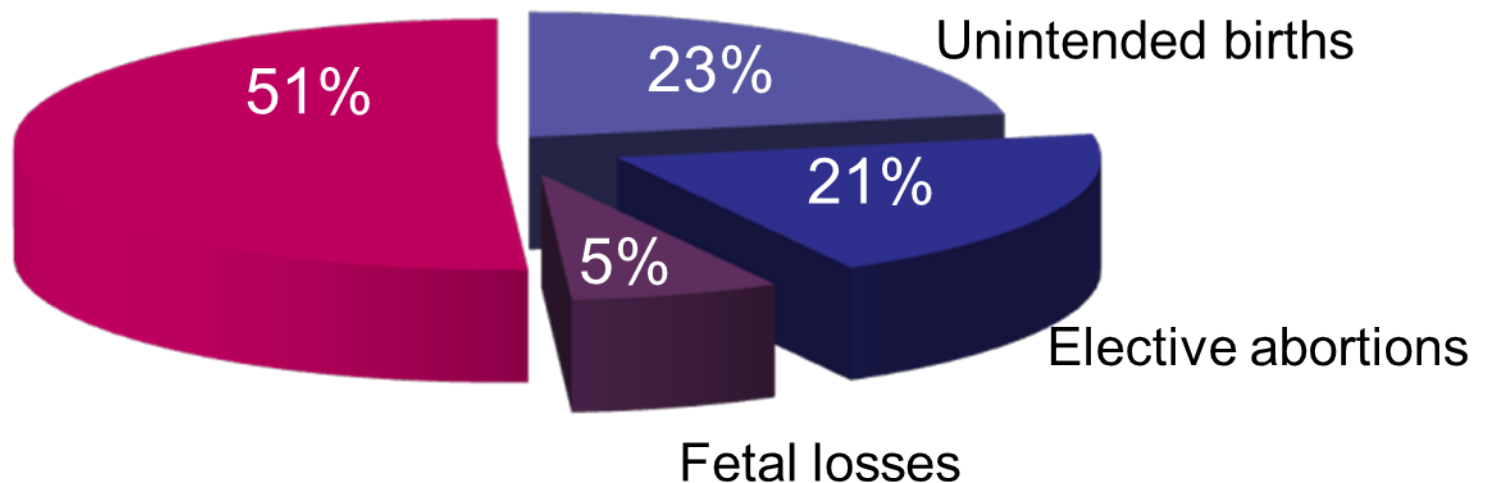
- A. 10
- B. 32
- C. 49
- D. 78
- E. 90

Unintended Pregnancy in the US

1 year: 6.7 million pregnancies

Intended: 51%

Unintended 49%



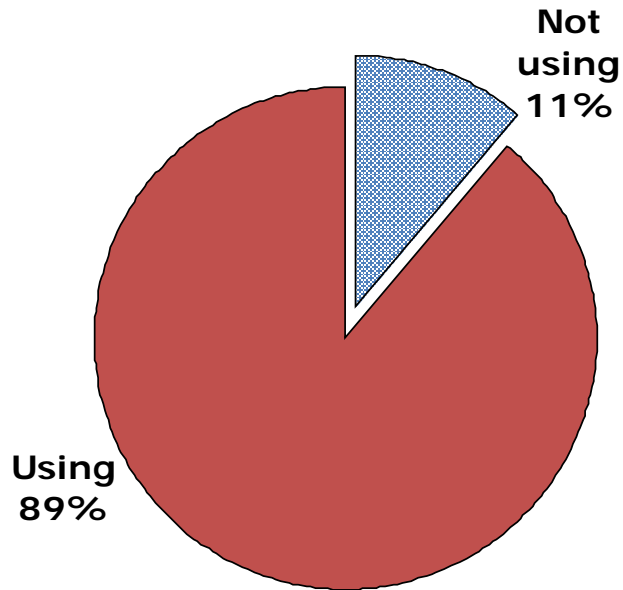
Finer, Zolna. *Contraception*. 2011.

What percentage of women who are sexually active are using a contraceptive method?

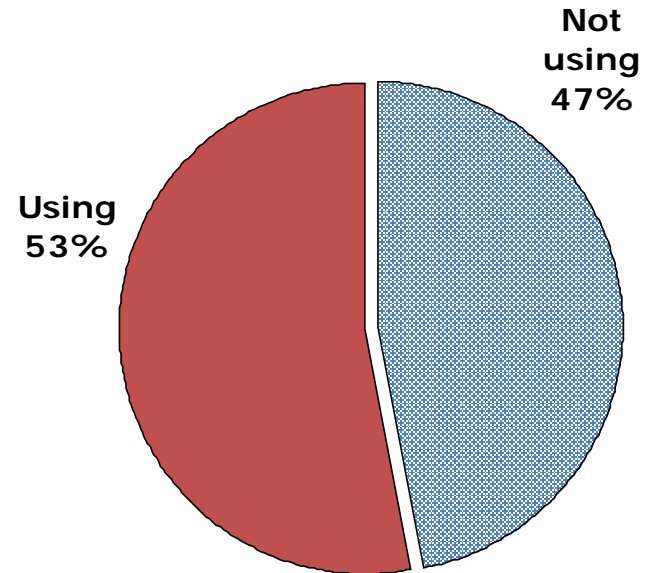
1. 20%
2. 53%
3. 89%

The small proportion of women who do not use contraceptives...account for roughly half of all unintended pregnancies.

Women at risk of unintended pregnancy



Women experiencing unintended pregnancy

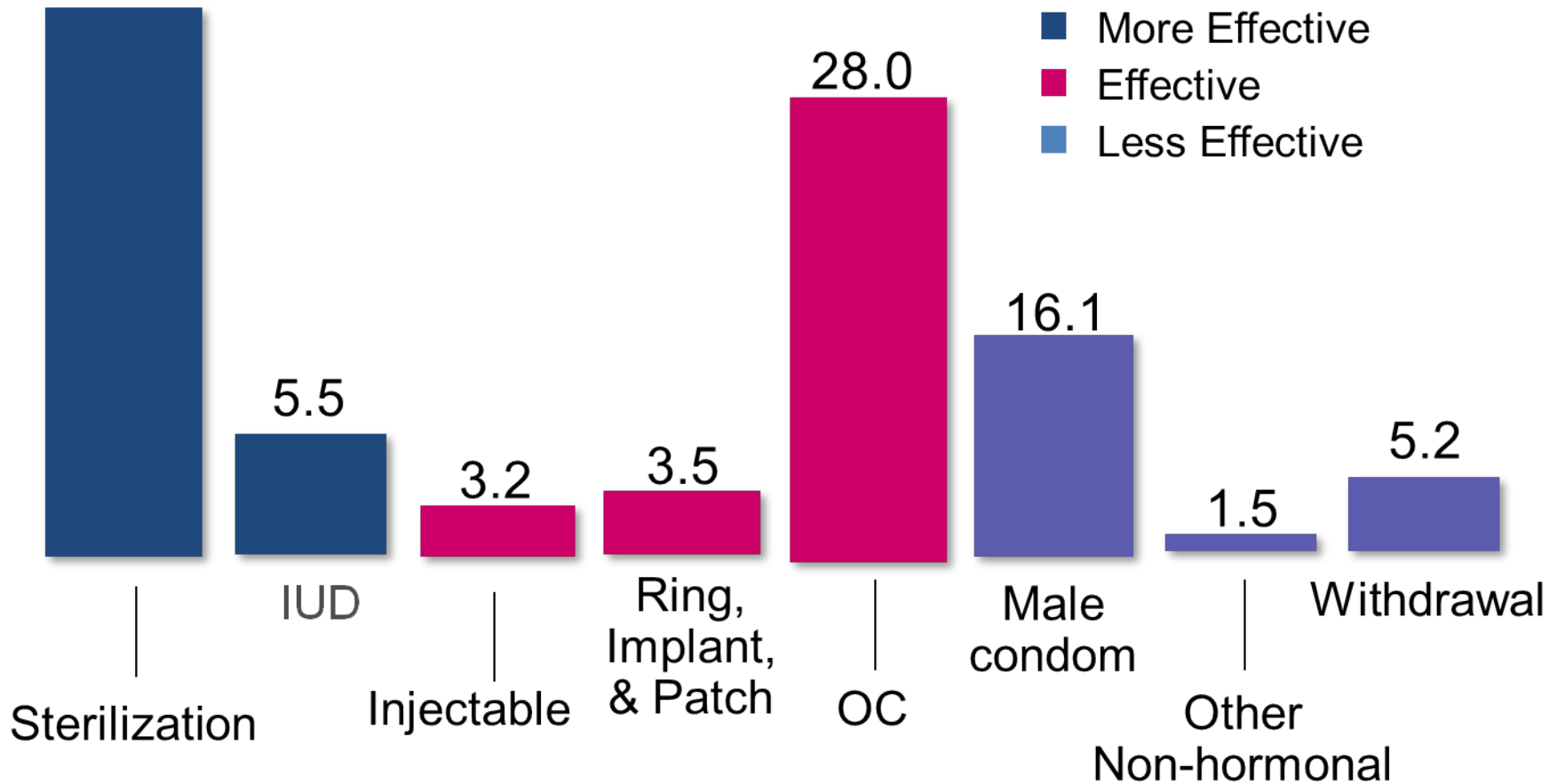


What are the top 3 contraceptive methods used in the US?

1. Pills, withdrawal, condoms
2. Pills, sterilization, condoms
3. Abstinence, condoms, Pills

US Contraceptive Use 2006-2008

% of US women who practice contraception



Mosher WD, et al. *Vital Health Stat.* 2010.; Guttmacher 2012.

With information and access, what do women choose?


- 10,000 women desiring contraception
- Evidenced based contraceptive counseling
- All methods free of charge
- Three year follow-up

“Choice Study”

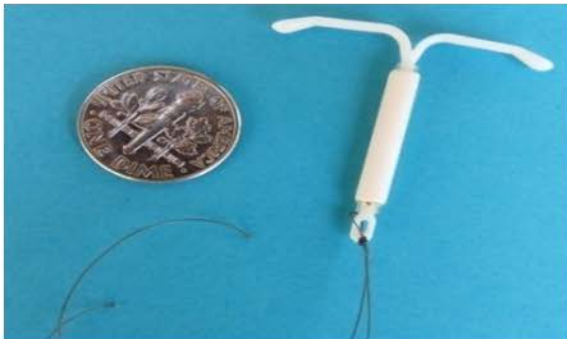


Piepert, Obstetrics and Gynecology,
2012

Baseline Chosen Method

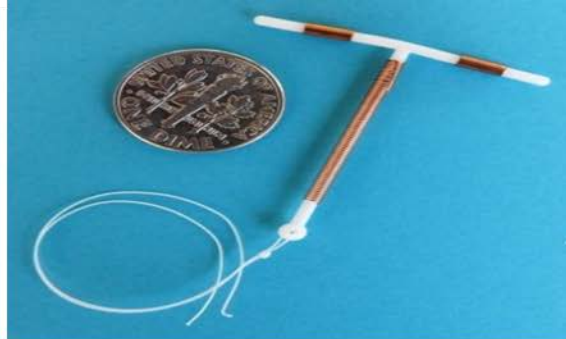
Method	%	 75% LARCs
LNG-IUS	46.0	
Copper IUD	11.9	
Implant	16.9	
DMPA	6.9	
Pills	9.4	
Ring	7.0	
Patch	1.8	
Other	<1.0	

Long-Acting Reversible Contraception (LARC)



LNG-IUS

- 99% effective
- 20 mcg levonorgestrel/day
- Up to 5 years



Copper T IUD

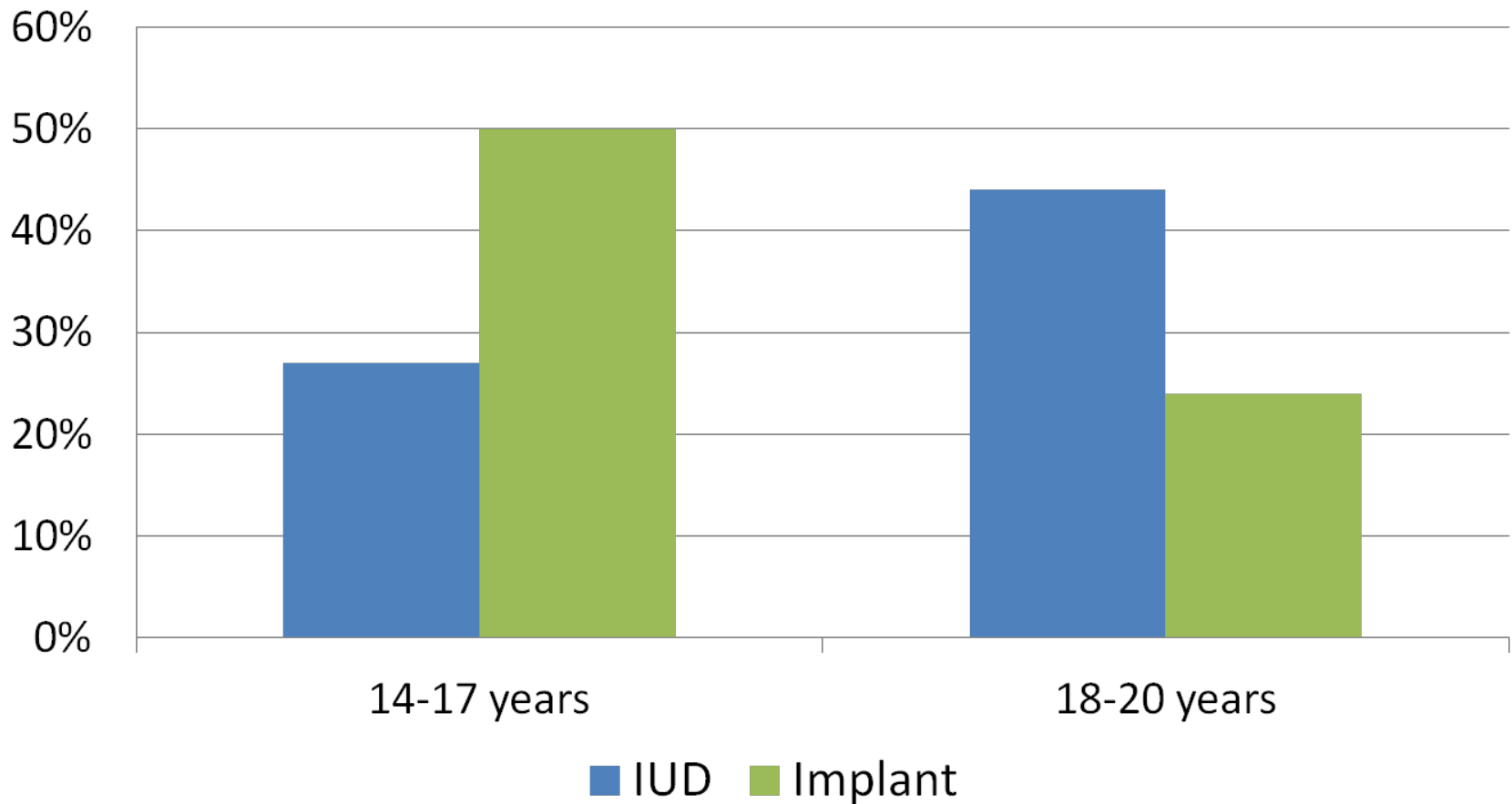
- 99% effective
- Copper ions
- Up to 10 years



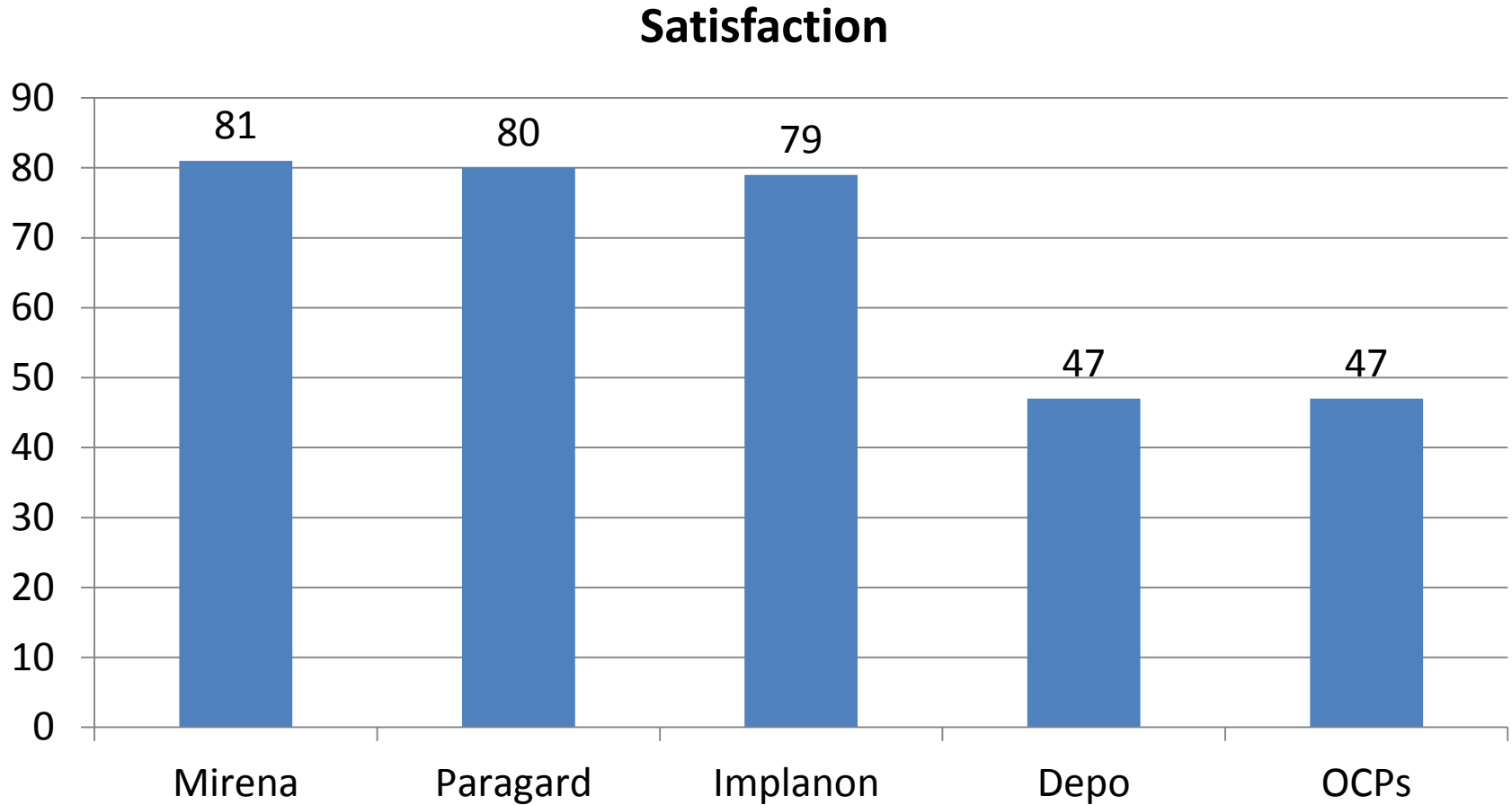
Subdermal Implant

- 99% effective
- 60 mcg etonogestrel/day
- Up to 3 years

Choice of LARC Methods Among Adolescents



Contraceptive Choice Satisfaction (%)

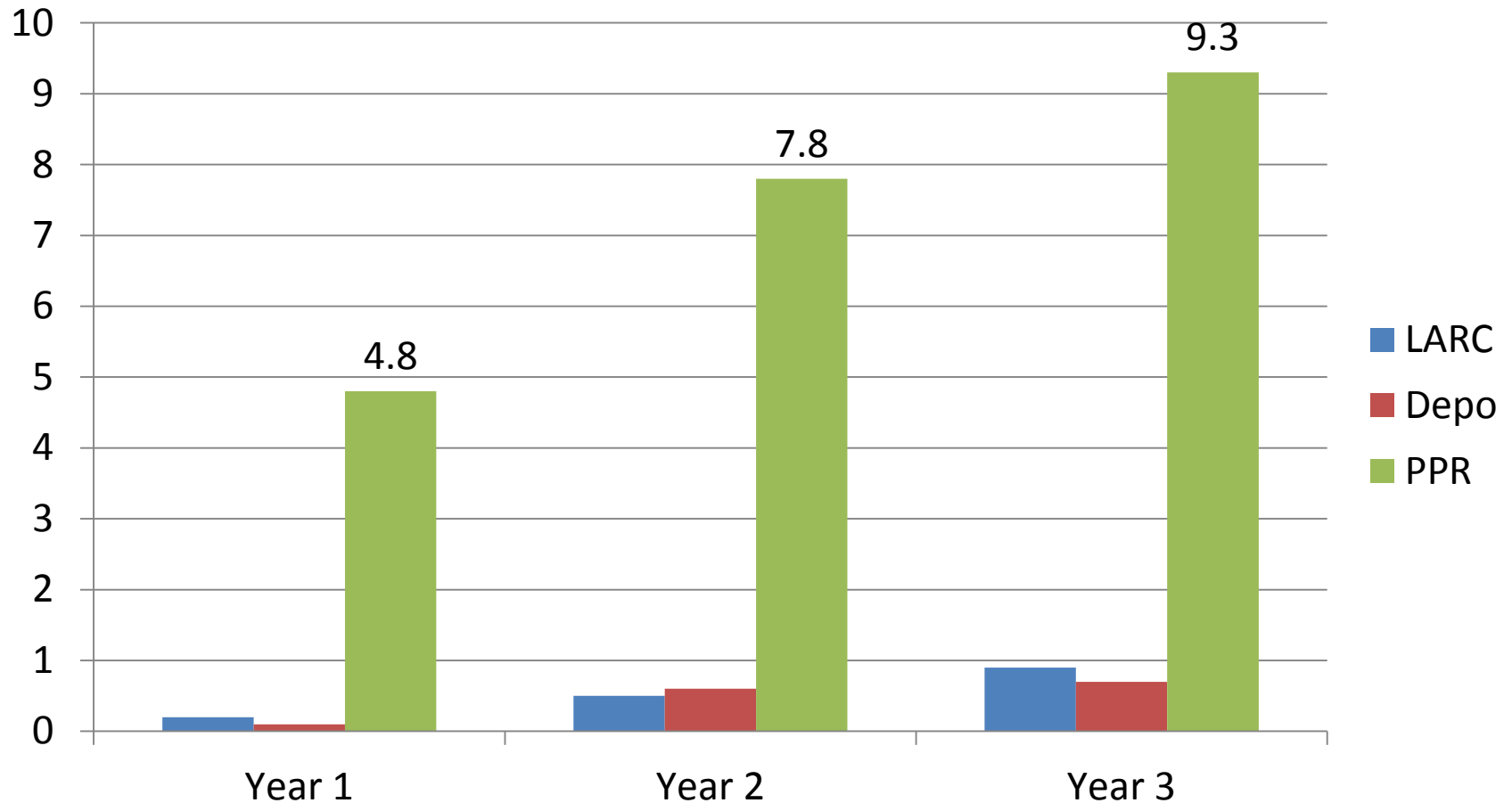


12-Month Continuation Rates

Method	Continuation Rate (%)
LNG-IUS	87.5
Copper IUD	84.1
Implant	83.3
Any LARC	86.2
DMPA	56.2
OCPs	55.0
Ring	54.2
Patch	49.5
Non-LARC	54.7

Pregnancy Prevention

(% pregnancies/year)



Results - CHOICE

- LARCs – IUDs and implant
 - 20 X more effective than OCPs!
 - Have the highest continuation and satisfaction rates
 - > 80% compared to <60% for OCPs and Depo
 - ***Should be the recommended method for most women (ACOG agrees!)***

Results – CHOICE (cont.)

- Clinically and statistically significant reduction:
 - ***Abortion rates***
 - 4.4-7.5 abortions/1,000 in study pop vs. 13.4-17/1,000 in St. Louis region vs. 19.6/1,000 in US
 - ***Teen birth rates***
 - 6.3/1,000 vs. US rate 34.1/1,000
- 1 abortion prevented for every 108 women given free contraceptive

Peipert, OB-GYN, 2012

A 29 y/o G0 with insulin-dependent diabetes and a history of PID desires an IUD. Where do you go to see if that's OK?

- US Preventive Services Taskforce
- ACOG practice bulletins
- Google
- US medical eligibility criteria
- The Farmer's almanac

US Medical Eligibility Criteria: US MEC

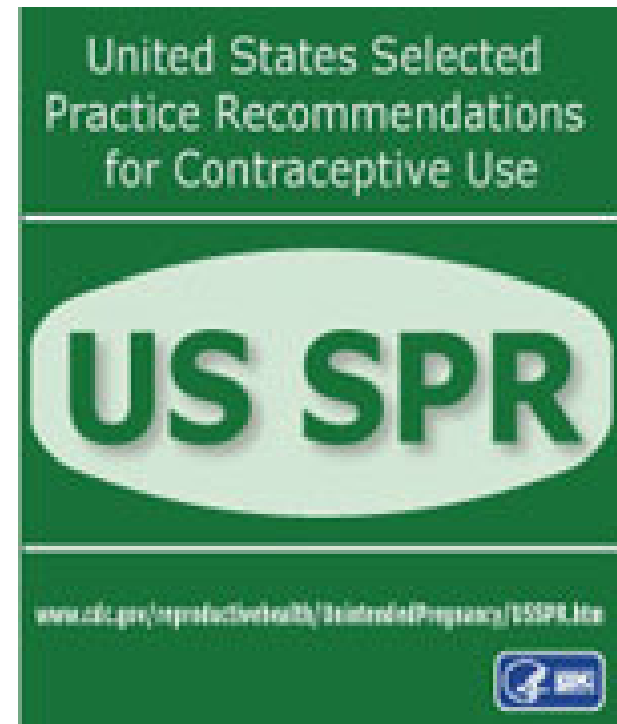
- 2010 CDC national evidence-based guidance on contraceptive practice
- Remove misconceptions
- Increase access and decrease medical barriers
- Improve quality of care



**U.S. Medical Eligibility Criteria for
Contraceptive Use, 2010**
Adapted from the World Health Organization
Medical Eligibility Criteria for Contraceptive Use, 4th edition

US Selected Practice Recommendations for Contraceptive Use, 2013

- *Comprises recommendations that address a select group of common, yet sometimes controversial or complex, issues regarding initiation and use of specific contraceptive methods*
 - How to tell if a woman is reasonably not pregnant
 - IUDs and PID
 - Recommended examinations and test before contraceptive initiation



US Medical Eligibility Criteria: Categories

1	No restriction for the use of the contraceptive method for a woman with that medical condition
2	Advantages of using the method generally outweigh the theoretical or proven risks
3	Theoretical or proven risks of the method usually outweigh the advantages
4	Unacceptable health risk if the contraceptive method is used by a woman with that medical condition

<http://www.cdc.gov/mmwr/pdf/rr/rr5904.pdf>

US MEC Categories



Category 1
Use!



Category 2
Use!



Category 3
Don't use often!



Category 4
Don't use!



Summary Chart of U.S. Medical Eligibility Criteria for Contraceptive Use, 2010



Key:	
1	No restriction (method can be used)
2	Advantages generally outweigh theoretical or proven risks
3	Theoretical or proven risks usually outweigh the advantages
4	Unacceptable health risk (method not to be used)

This summary sheet only contains a subset of the recommendations from the US MEC. For complete guidance, see: www.cdc.gov/reproductivehealth/usmec

Most contraceptive methods do not protect against sexually transmitted infections (STIs). Consistent and correct use of the male latex condom reduces the risk of STIs and HIV.

Condition	Sub condition	Combined pill, patch, ring		Progestin-only pill		Injection		Implant		LNG-IUD		Copper IUD	
		1	2	1	2	1	2	1	2	1	2	1	2
Age	Menarche to <40:1			Menarche to <18:1		Menarche to <18:2		Menarche to <18:1		Menarche to <20:2		Menarche to <20:2	
	>40:2			18-45:1		18-45:1		18-45:1		>20:1		>20:1	
Anatomic abnormalities	a) Distorted uterine cavity									4		4	
	b) Other abnormalities									2		2	
Amenorrhea	a) Thrombophilia	1		1		1		1		1		1	
	b) Sick cell disease	2		1		1		1		1		1	
	c) Iron deficiency anemia (including cysts)	1		1		1		1		1		1	
Benign ovarian tumors		1		1		1		1		1		1	
		1		1		1		1		1		1	
Breast disease	a) Undiagnosed mass	2*		2*		2*		2*		2		1	
	b) Benign breast disease	1		1		1		1		1		1	
	c) Family history of cancer	1		1		1		1		1		1	
	d) Breast cancer												
	i) current	4		4		4		4		4		1	
Breastfeeding	ii) past and no evidence of current disease for 5 years	3		3		3		3		3		1	
Cervical cancer	a) < 1 month postpartum	3*		2*		2*		2*					
	b) 1 month or more postpartum	2*		1*		1*		1*					
Cervical ectropion	Awaiting treatment	2		1		2		2		4		2	
		1		1		1		1		1		1	
Cervical intraepithelial neoplasia (CIN)		2		1		2		2		2		1	
Cervix	a) Mild (compensated)	1		1		1		1		1		1	
	b) Severe (decompensated)	4		3		3		3		3		1	
Deep venous thrombosis (DVT) / Pulmonary embolism (PE)	a) History of DVT/PE, not on anticoagulant therapy												
	i) higher risk for recurrent DVT/PE	4		2		2		2		2		1	
	ii) lower risk for recurrent DVT/PE	3		2		2		2		2		1	
	b) Acute DVT/PE	4		2		2		2		2		2	
	c) DVT/PE and established on anticoagulant therapy for at least 3 months												
	i) higher risk for recurrent DVT/PE	4*		2		2		2		2		2	
	ii) lower risk for recurrent DVT/PE	3*		2		2		2		2		2	
	d) Family history (first-degree relatives)	2		1		1		1		1		1	
	e) Major surgery												
	f) with prolonged immobilization	4		2		2		2		2		1	
	g) without prolonged immobilization	2		1		1		1		1		1	
Depressive disorders		1*		1*		1*		1*		1*		1*	
Diabetes mellitus (DM)	a) History of gestational DM only	1		1		1		1		1		1	

Condition	Sub condition	Combined pill, patch, ring		Progestin-only pill		Injection		Implant		LNG-IUD		Copper IUD	
		1	2	1	2	1	2	1	2	1	2	1	2
DM (cont.)	b) Non-vascular disease												
	(i) non insulin dependent	2		2		2		2		2		1	
	(ii) insulin dependent	2		2		2		2		2		1	
	c) Nephropathy/retinopathy/nephropathy	3-4*		2		3		2		2		1	
	d) Other vascular disease or diabetes of >20 years duration	3-4*		2		3		2		2		1	
Endometrial cancer		1		1		1		1		4		2	
		1		1		1		1		1		1	
Endometrial hyperplasia		1		1		1		1		1		1	
		1		1		1		1		1		1	
Epilepsy	a) drug interactions	1*		1*		1*		1*		1		1	
Gall-bladder disease	a) Symptomatic												
	(i) treated by cholecystectomy	2		2		2		2		2		1	
	(ii) medically treated	3		2		2		2		2		1	
	(iii) current	3		2		2		2		2		1	
	b) Asymptomatic	2		2		2		2		2		1	
Gestational trophoblastic disease	a) Decreasing or undetectable B-hCG levels	1		1		1		1		3		3	
	b) Persistently elevated B-hCG levels or malignant disease	1		1		1		1		4		4	
Headaches	a) Non-migrainous	1*		1*		1*		1*		1*		1*	
	b) Migraine												
	(i) without aura, age <35	2*		1*		2*		2*		2*		2*	
	(ii) without aura, age ≥35	3*		1*		2*		2*		2*		2*	
	(iii) with aura, any age	4*		2*		3*		3*		3*		3*	
History of bariatric surgery	a) Restrictive procedures	1		1		1		1		1		1	
	b) Malabsorptive procedures	COOCe 3		3		1		1		1		1	
History of cholestasis during pregnancy	a) Pregnancy-related	2		1		1		1		1		1	
	b) Past CDC-related	3		2		2		2		2		1	
History of high blood pressure during pregnancy		2		1		1		1		1		1	
History of pelvic surgery		1		1		1		1		1		1	
HIV	High risk or HIV infected	1		1		1		1		2		2	
	AIDS (see drug interactions) †§	1*		1*		1*		1*		3		3	
Hyperlipidemia													
		2/3*		2*		2*		2*		2*		1*	
Hypertension	a) Adequately controlled hypertension	3*		1*		2*		1*		1		1	
	b) Elevated blood pressure levels (properly taken measurements)												
	(i) systolic 140-159 or diastolic 90-99	3		1		2		1		1		1	

US Medical Eligibility Criteria (US-MEC) for contraceptive use

- CDC coordinated, evidence based contraceptive
 - Characteristics
 - Age
 - Parity
 - Postpartum
 - Diseases
 - Diabetes
 - Migraines



Condition	Sub-condition	Combined pill, patch, ring		Progestin- only pill		Injection		Implant		LNG--IUD		Copper- IUD	
		I	C	I	C	I	C	I	C	I	C	I	C
Diabetes mellitus	a) History of gestational DM only	1		1		1		1		1		1	
	b) Non-vascular disease												
	(i) non-insulin dependent	2		2		2		2		2		1	
	(ii) insulin dependent‡	2		2		2		2		2		1	
	c) Nephropathy/ retinopathy/ neuropathy‡	3/4*		2		3		2		2		1	
	d) Other vascular disease or diabetes of >20 years' duration‡	3/4*		2		3		2		2		1	

MEC – Diabetes

Methods with Estrogen

There is an increased risk of **thrombosis** for women with diabetes who have nephropathy, retinopathy, neuropathy, other vascular disease or diabetes of more than 20 year duration.



MEC – Diabetes

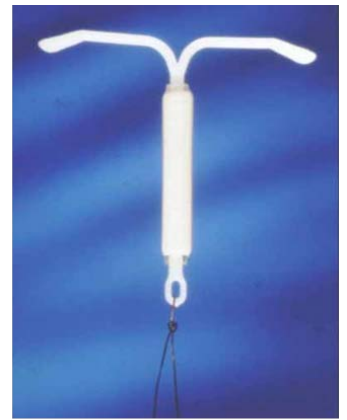
Progestin-Only Methods

“Some concern, particularly with DMPA, that reduced HDL effects may be more prominent among diabetics with micro- and macro-vascular disease. Thus, older diabetic women and those with vascular disease should probably not use Depo because of increases risk profile for atherosclerosis.”





MEC – Diabetes IUDs



IT'S ALL GREEN!!!

Overweight women have excess estrogen which increases their risk for endometrial cancer. The LNG-IUS may lower this risk by providing balancing progesterone.

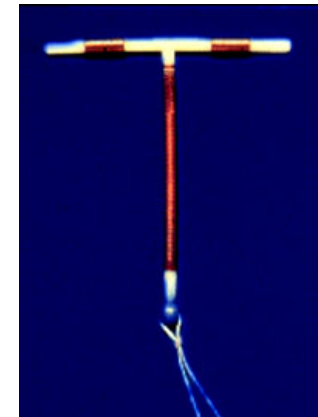
Trudy

16 y/o G0 with four boyfriends in the last year; she's been sexually active with three of them. She desires an LNG IUS because her older sister has one and likes it. She had chlamydia cervicitis diagnosed and treated four months ago. She asks what you recommend:

- A. Pill, patch, ring
- B. IUD with condoms
- C. Depo with condoms
- D. Stop having sex, you're only 16!

IUDs

- LNG IUS (Mirena)
 - 5 years
 - 1% failure rate
- Copper T380A (Paraguard)
 - 10 years
 - 1% failure rate

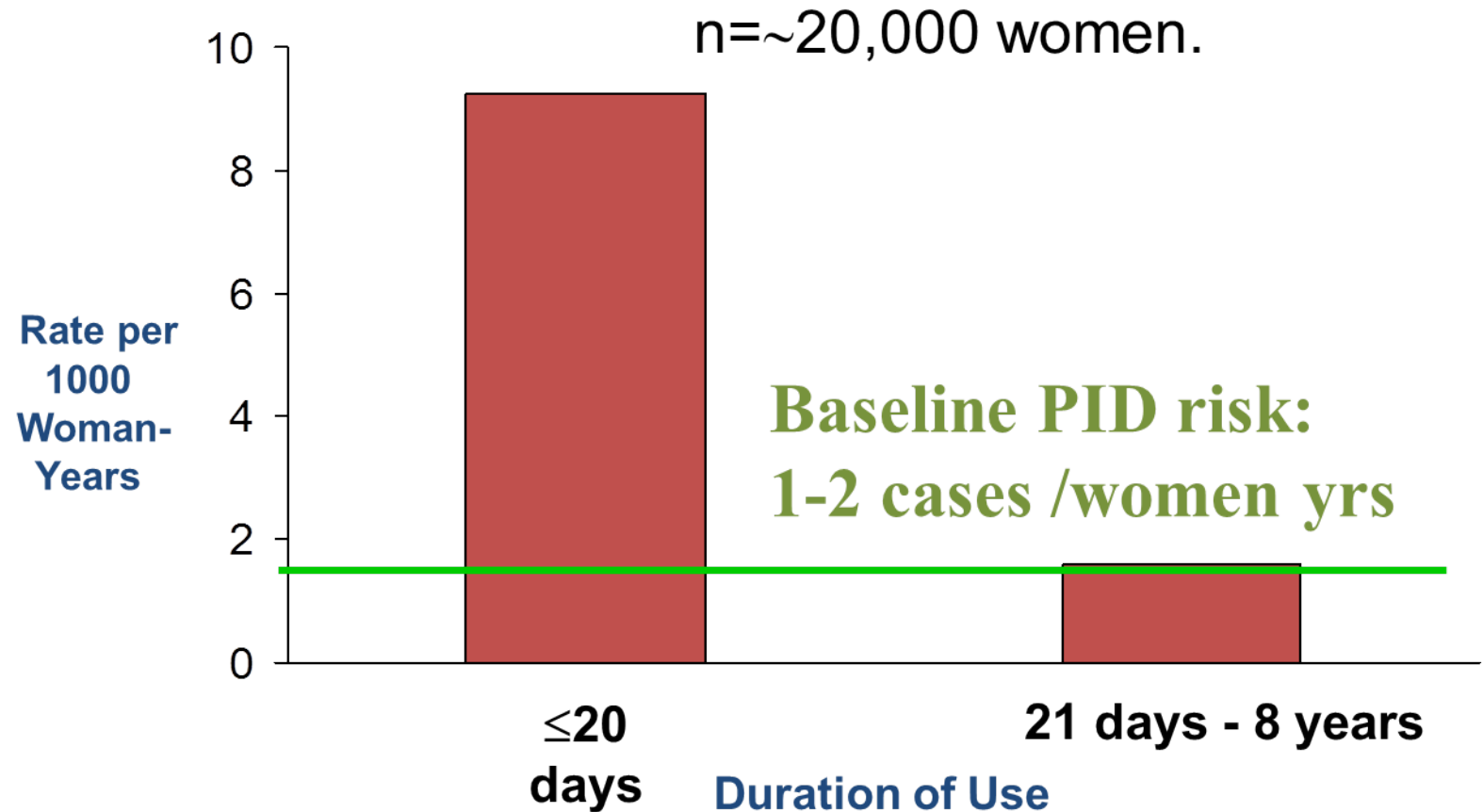


Introducing.... Skyla

It's PINK!!!!

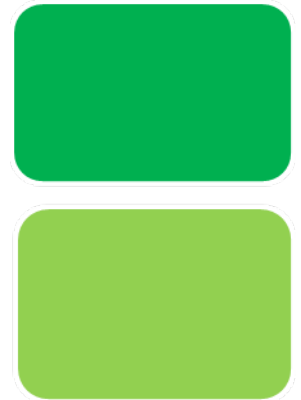


PID by duration of IUD use



Adapted from Farley T, et al. *Lancet*. 1992;339:785-788.

IUDs Do Not Cause PID



- Preexisting STI at time of insertion, not the IUD itself, increases risk
- No reason to restrict use based on sexual behaviors
- STI/PID risk similar with and without the IUD

Svensson L, et al. *JAMA*. 1984.

Sivin I, et al. *Contraception*. 1991.

Farley T, et al. *Lancet*. 1992.

Grimes, DA, *Lancet*, 2000

IUDs not linked to infertility

- Case control study
- > 1500 women with tubal infertility
- No association with past IUD use
- Positive association with antibody to chlamydia

Hubacher, 1995

IUDs and nulliparous women

Category 2

- IUDs safe and effective in nulliparous women
- No increase in infertility
- LNG-IUS appropriate for nulliparous women with menorrhagia and/or dysmenorrhea
- IUD expulsion, bleeding, and pain are slightly more likely among nulliparous women

IUDs and teenagers

Category 2

- Little data
- Higher continuation with LARC than with shorter term methods (84.5% at 1 year)
- ACOG: “First line” method
- Adolescents are twice as likely as women > 30 to become pregnant when using OCs
- Continuation and satisfaction are high

Deans, Contraception, 2002

IUDs and ectopic pregnancy

Category 1

- Prior ectopic traditionally a contraindication
- Mirena package insert
 - “Warning”
- US MEC supports routine use of IUDs in women with a history of ectopic pregnancy

IUD insertion screening

- Evidence supports no routine screening tests
 - CT/GC in high risk or < 26 y/o
 - Pregnancy test if at risk for pregnancy
 - Pap smear only if due and not till age 21
 - Hematocrit only if anemia suspected
- Any screening test can be done on the day of IUD insertion

Grimes, Lancet, 2004

Timing of insertion

- When she presents for contraception
- Within minutes postpartum
- 4-6 weeks postpartum
- Post-abortion
- Removal and reinsertion at same visit

IUD Summary—

First Line Contraception for Almost All Women

- The IUD does not cause PID
- The IUD does not cause infertility
- The IUD does not increase risk for ectopic pregnancy
- IUDs may be used in nulliparous women



Trudy decides on the LNG IUS, but says, by the way, she had unprotected sex two days ago....

- A. Insert the LNG IUS
- B. Give Ella and insert the LNG IUS
- C. Give Plan B and insert the LNG IUS
- D. Give Plan B and have her return for insertion in two weeks after pregnancy test
- E. Give Ella and have her return for insertion in two weeks after pregnancy test

Emergency contraception: Levonorgestrel (OTC)

- Levonorgestrel
 - Plan B One Step
 - (1.5 mg LNG X 1)
 - Plan B (0.75 mg LNG x 2)
 - Next Choice
 - (0.75 mg LNG x 2)
 - No prescription required
 - Available directly from IHS Pharmacies



Emergency Contraception:

Ulipristal acetate (Ella)

- First selective progesterone receptor modulator approved by FDA
- Effective in preventing pregnancy up to five days after unprotected sex
- Compared to LNG EC
 - OR 0.55 (0.32–0.93) if used within 120 hours
 - OR 0.35 (0.11–0.93) if used within 24 hours
- Prescription required

Glasier AF. *Lancet* 2010;375:555-62.



Emergency Contraception and Obesity

- Obese women over 3X less protected by EC
- Compared to health weight women:
 - All EC – 3.6 increase (1.96-6.53; $p < .0001$)
 - Levonorgestrel – 4.4 increase (CI, 2.05-9.44, $p = .0002$)
 - Ulipristal – 2.6 increase (0.89-7.00, NS)
- What to do?
 - Ulipristal
 - Copper IUD

Glasier, Contraception, 2011

Emergency Contraception: IUD

- Most effective
- Works for long-term contraception
- 412 women/adolescents asked about interest in copper IUD for EC:
 - 12% desired same-day insertion
 - 22% wanted more info about IUDs



Schwarz, OB-GYN 2011

Samantha

17 year old who is breastfeeding the baby girl she delivered yesterday. Asking for the contraceptive implant before she goes home from the hospital.

Do you:

- A. Place the Implant?
- B. Tell her she can get the implant at her PP visit?
- C. Recommend birth control pills instead?
- D. Recommend progesterone only pills instead?
- E. Tell her not to have sex?

MEC – Estrogen Containing Methods Immediately Postpartum



< 21 days PP – category 4



21 – 42 days PP – risk
factors - category 3



21 – 42 Days PP – NO risk
factors - category 2

MEC – Postpartum Progestin-Only Methods

- Breastfeeding:
 - < 1 mo Category 2
 - > 1 mo Category 1
- Not Breastfeeding:
 - <21 days Category 1
 - 21 – 42 days Category 1
 - 1

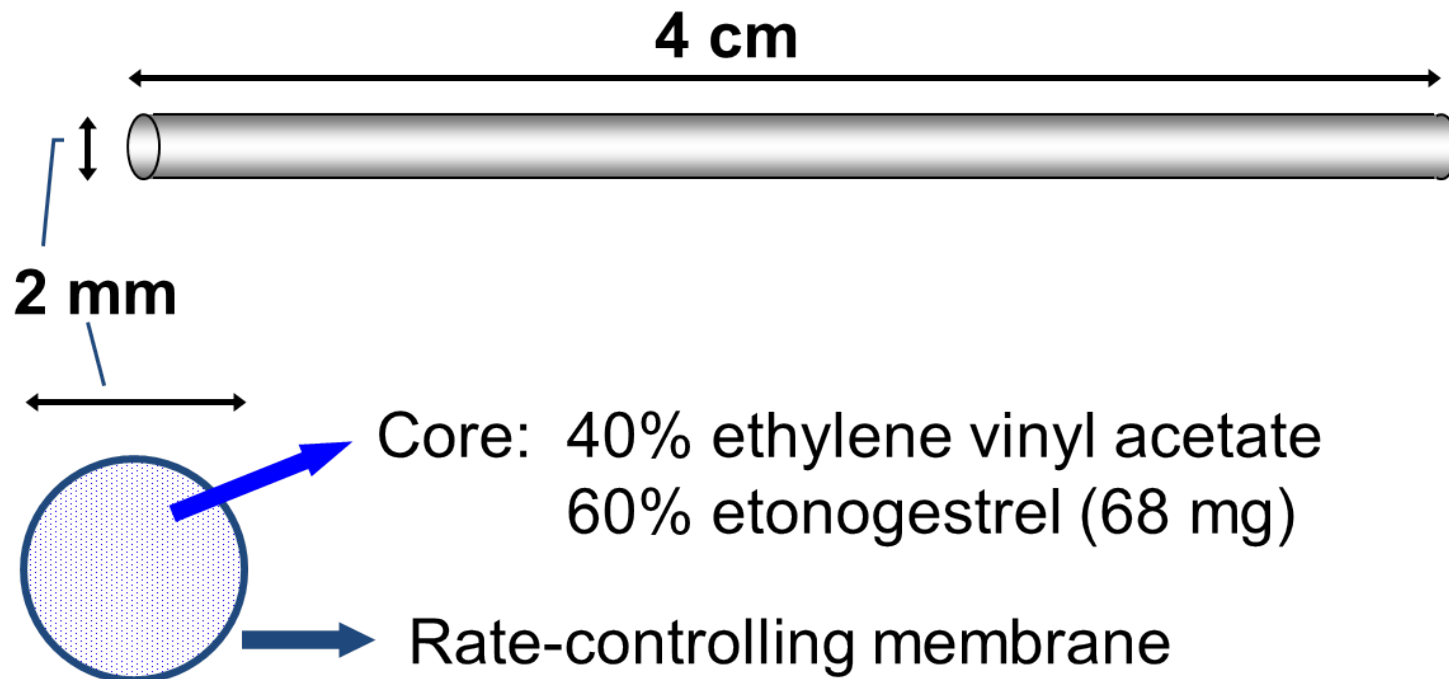


Nexplanon™

- 3 years
- Prevents ovulation
 - No ovulation for 30 months in clinical trials
- Alters cervical mucus
- Highly effective
 - 6 pregnancies in 20,648 women years
- Few contraindications



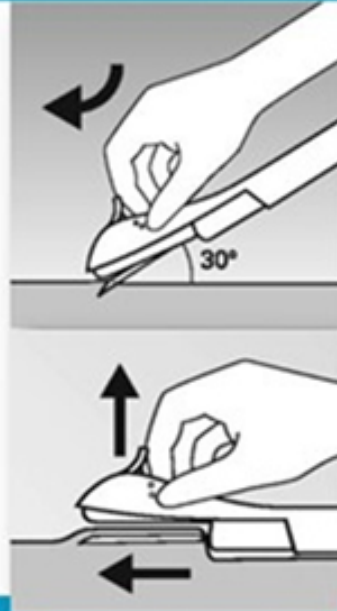
Nexplanon™



Nexplanon

How to Insert Nexplanon®

- ▶ **Stretch the skin around the insertion site with thumb and index finger**
- ▶ Puncture the skin with the tip of the needle angled about 30°
- ▶ During the entire insertion procedure you should be able to see the insertion site and the movement of the needle
- ▶ Lower the applicator to a horizontal position
- ▶ While lifting the skin with the tip of the needle, slide the needle to its full length.
- ▶ You may feel slight resistance but do not exert excessive force
- ▶ If the needle is not inserted to its full length, the implant will not be inserted properly.



Depo-Provera “The Shot”

- Three month injection
- Medroxyprogesterone acetate
- Irregular bleeding
- Weight gain
- A minority of women love this method and desire it long term
- “Quick Start” okay



Depo-Provera - Black Box warning

- May cause loss of bone mineral density. Bone loss is greater with increasing duration of use and may not be completely reversible.”
- Unknown if use of Depo-provera during adolescence or early adulthood will increase the risk of osteoporotic fracture in later life.”

Depo – Black box warning

- “Depo-provera should be used as a long-term birth control method (e.g. longer than two years) only if other birth control methods are inadequate.”
- Concluded the drug “is still safe and effective”



The evidence

- BMD is lower in current users compared to non users
- Rapid recovery of BMD after stopping Depo
- Women using Depo until menopause have slower bone loss than those with natural menopause
- ***No link between Depo and increased menopausal osteoporosis or fracture risk***

Bottom line....

- No limit for duration of use for healthy women, teens
- No need for BMD screening or estrogen add-back therapy
- Encourage all patients to optimize bone health with adequate calcium, exercise, smoking cessation
- End barriers to same day initiation

Mandy

- 17 y/o Go presents for UTI
- “By the way,” sexually active x 3 months
- Negative pregnancy test
- Wants birth control pills (or the patch or the ring)

Needing contraception is an EMERGENCY



Before prescribing pills you would
require her to have...

- A. Pap smear/Pelvic exam
- B. STI screening
- C. A good talking to about abstinence, and
wouldn't prescribe OCPs
- D. None of the above
- E. All of the above

Need a pelvic exam?

- Traditionally, a “bundled service”
- No medical reason
- Screening for STIs and dysplasia important
- WHO: 1994
 - Pelvic exam not mandatory for OC RX
- US OC label: PE can be deferred if “judged appropriate by the physician
- US-SPR “NO”

You prescribe OCs...

When would you instruct her to start pills? Her last menses was two weeks ago and she has not been sexually active since then.

- A. Sunday after next menses
- B. On the first day of her next menses
- C. Today
- D. Never – she should abstain

Traditional start

- Sunday after next menses
- Exposure to unintended pregnancy
- Don't start due to
 - Confusion
 - Waning motivation
 - Pregnancy
 - Changes in relationship



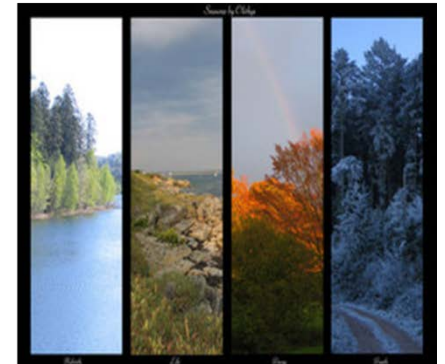
Quick Start

- Start any day of the cycle
- Observe first pill taken in clinic
- 7 days of backup method
- No increase in bleeding or spotting
- OR 2.7 (1.1 – 6.8) of starting 2nd pack after Quick Start



Extended dose regimens

- 84 active pills followed by 7 placebo pills
- Initially more breakthrough bleeding, improves over time



Morgan

- 24 y/o G3 P3 using the patch successfully for two years
- Heard that the patch causes blood clots
- No risk factors
- Thinking about using condoms
- Strong desire not to become pregnant



Contraceptive Patch: Ortho Evra

- Transdermal patch
 - EE and norelgestromin
- Applied weekly for three weeks
- Compliance and satisfaction slightly better than pills
- Less breakthrough bleeding than with pills
- ***FDA black box warning***



Black box: Patch and Drospirinone

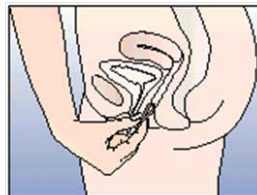
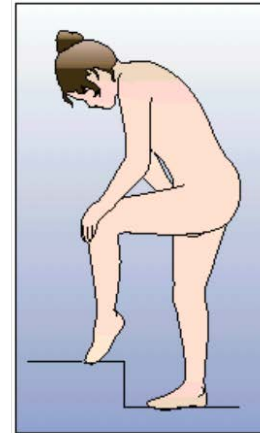
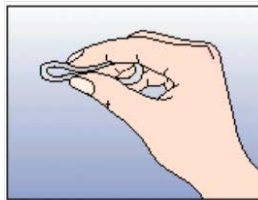
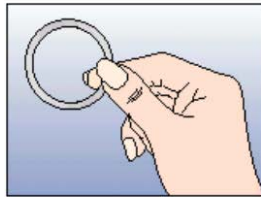
- Multiple studies on risk of VTE with patch and drospirinone-containing OCs
 - Claims data retrospective
 - Industry funded prospective
 - Risks elevated: .9 – 3.3
- Rare outcome
 - An increase of 5-10/10,000 women would be affected, rarely fatal
- Benefits of ALL contraceptive methods outweighs risks

Nuvaring

- Less estrogen exposure than pill or patch
- Advantages
 - Coitus independent
 - Infrequent dosing regimen
- Good cycle control, rare BTB
- 98.8% efficacy in clinical trials



NuvaRing[®] Insertion



There is no wrong way to insert. If it is in the vagina, it is in correctly.

Does the ring fall out?

- Only 1-2% of the time
- If it falls out, put it back in
- It can be out for three hours with no impact on efficacy

Sylvia:

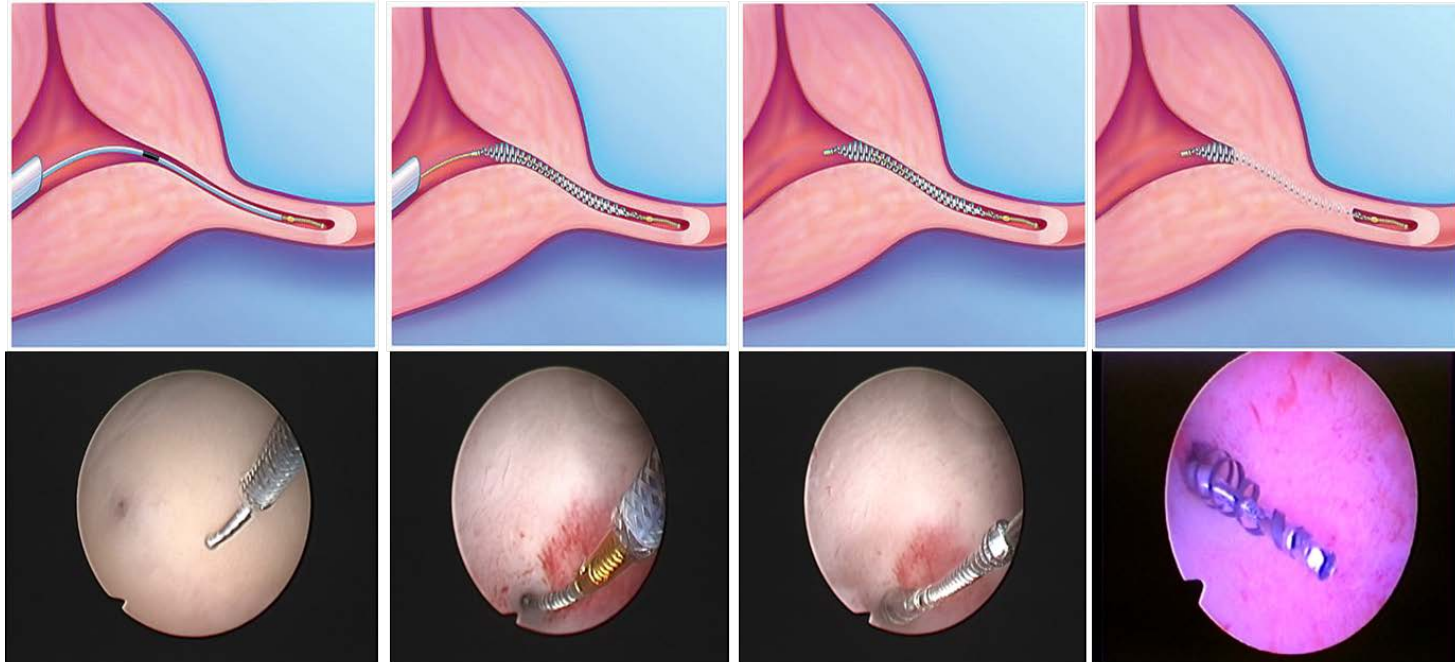
“I want my tubes tied...”

- 38 y/o G4P4 weighs 260 pounds, history of severe asthma, C/S x 4, DVT after last delivery
- Mirena IUD removed after months of constant bleeding

What would you recommend?

- A. Copper IUD
- B. Depo-Provera
- C. Laparoscopic tubal sterilization
- D. Hysteroscopic tubal sterilization
- E. Oral contraceptive pills

Essure System Placement



Prepare endometrium
Hydro-dilation of cervix

Preoperative toradol
12-30 degree hysteroscope

Transcervical Sterilization

Advantages

- Performed in outpatient setting under sedation/local anesthetic
- General anesthesia not necessary
- No incisions
- May be less expensive
- Less pain/shorter recovery

Transcervical Sterilization

Limitations

- Not immediately effective
- HSG required to ensure blockage of tubes
- Long term effects unknown
- Need specialized equipment and training

Melva

- 21 yo G1P0 desires contraception
 - 236 pounds, BMI 38
 - Reports she got pregnant on pills
 - Her mother says that pills don't work as well in overweight women. She heard it on TV.

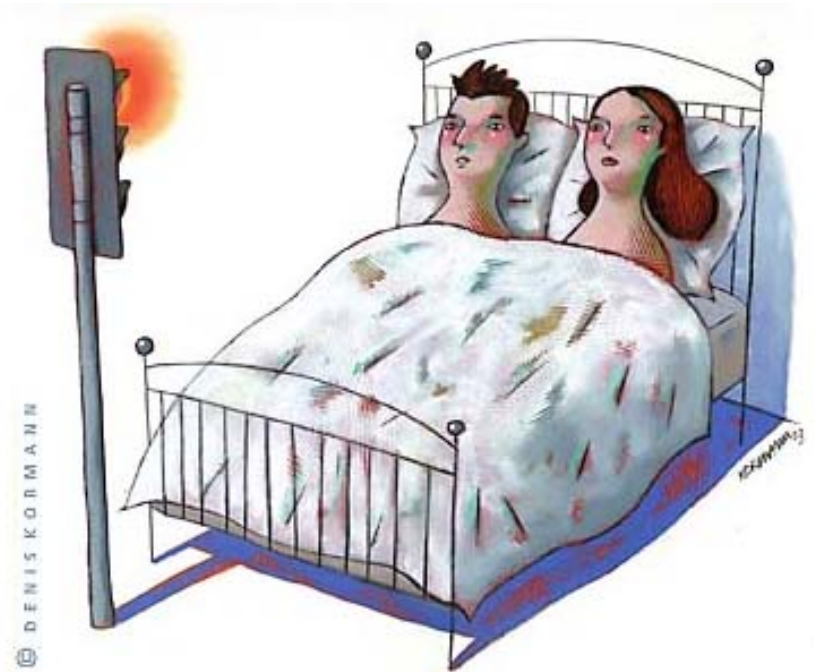


Effect of weight on efficacy of pills, patch, ring

- Patch: Decreased effectiveness
 - Meta-analysis of 3 studies. 5 of 15 on-study pregnancies occurred in women > 198#: no longer “highly effective”
- Pills: Limited data
 - Single retrospective study
 - Increased risk of pregnancy by weight quartile
- Ring: Limited data
 - Single retrospective study
 - No increase in pregnancies among 3259 women over a year

What to tell obese patients?

- Two fold increase in pregnancy with hormonal methods
- Still highly effective *if used*.
 - Use your pill/patch/ring as prescribed!!!
- Much safer than pregnancy
- Consider an IUD!



Implants and weight

- Choice Project
 - 1,168 Implanon users
 - 28% overweight, 35% obese
 - 4,200 IUD users
 - 27% overweight
 - 35% obese
 - Three year follow-up
 - Pregnancy rate the same for both groups - <1%
 - Did not vary by BMI



Xu, Ob/Gyn, 2012

Diabetes Pre-Conception Care

Every visit is a pre-conception visit!

Ask about pregnancy plans.

Eliminate barriers to contraception.

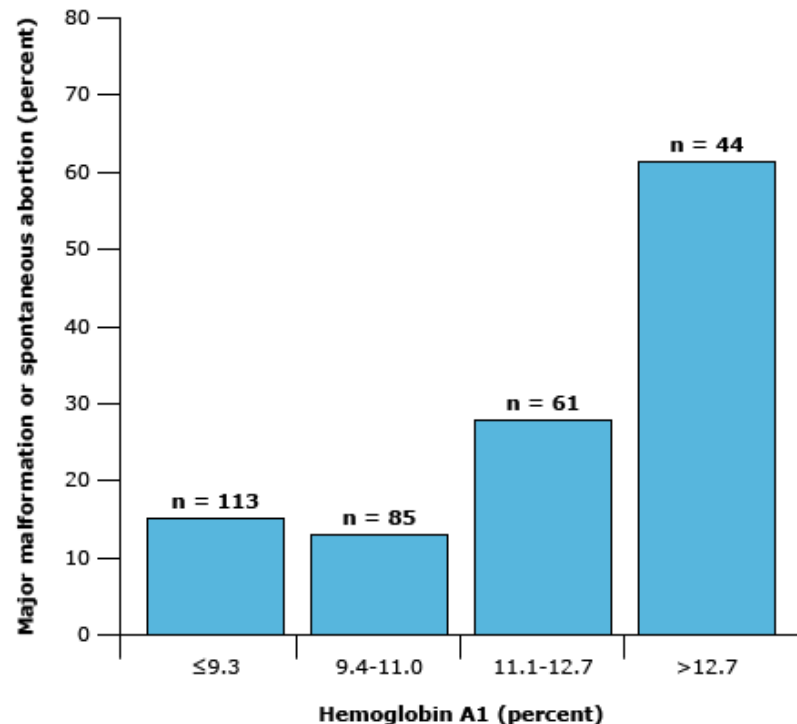
Specifically address increased fertility with **Metformin** use—many women, especially those with PCOS, may return to fertile cycles with Metformin use.

Diabetes Preconception Care:

A1C Matters!

- Folate
- Healthy Weight
- Stop Teratogens

Deleterious effect of poor glycemic control on fetal outcome



Combined incidence of major malformation and spontaneous abortion according to the hemoglobin A1 (HbA1) value during the first trimester of pregnancy in 303 women with type 1 diabetes. The risk rose markedly at HbA1 values above 11 percent (approximately equivalent to an A1C value of 8.5 percent). Other studies have found an increase in risk at A1C values above 9.5 percent.

Data from: Greene MF, Hare JW, Cloherty JP, et al, *Teratology* 1989; 39:225

UpToDate®

The best method...
...is the one that gets used

“Method Match”

- Association of Reproductive Health Professionals (ARHP)
- <http://www.arhp.org/MethodMatch/>








Narrow Results

- ☐ Does not contain hormones
- ☐ Protects against STDs
- ☐ Does not require healthcare provider visit
- ☐ No pre-sex preparation required
- ☐ Quickly reversible
- ☐ May decrease monthly bleeding and cramping
- ☐ Private/not detectable
- ☐ Works after sex
- ☐ Works immediately





[Clear All](#)

SORT BY: **Effectiveness** | Alpha A-Z | Frequency





Extremely Effective

 Abstinence / Outercourse +	 Copper IUD ParaGard +	 Female Sterilization +	 Hormonal IUD Mirena +	 Implant Implanon +
 Lactational Amenorrhea Method (LAM) +	 Vasectomy +			






Very Effective

 Patch Ortho Evra +	 Pill +	 Shot Depo-Provera +	 Vaginal Ring NuvaRing +
--	---	--	---

Effective

 Diaphragm +	 Female Condom +	 Male Condom +	 Withdrawal Pulling Out +
--	--	---	--

Moderately Effective

 Cervical Cap FemCap +	 Emergency Contraception Morning After Pill +	 Fertility Awareness Methods +	 Spermicide +	 Sponges Today Sponge +
---	--	---	---	--

Selected Methods ▾

1

2

3

4

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METHOD EXPLORER /

★ *most effective* ⚗ *party-ready* ✕ *STI prevention* 🔍 *easy to hide* ❤ *do me now*



The image displays a variety of birth control methods arranged on a white background. In the top left, there is a small vial of pills, a single pill, and a condom. Below these are a red pill, a padlock, and a calendar with several dates marked with 'X's. In the center, there is a square patch, a circular ring, a blister pack of pills, and a tube of cream. To the right, there is a large condom, a small cup, and a small brown object. At the bottom right, there is a small brown object, a small brown object, and a small brown object.

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Safe Sex



Closing thoughts.....

- Consider every visit with a reproductive aged woman an opportunity to discuss contraception
- If a woman wants birth control, consider it an emergency!



Resources

- CDC US Medical Eligibility Criteria for Contraception:
<http://www.cdc.gov/reproductivehealth/UnintendedPregnancy/USMEC.htm>
- CDC US Selected Practice Recommendations for Contraceptive Use, 2013:
<http://www.cdc.gov/reproductivehealth/UnintendedPregnancy/usspr.htm>
- WHO evidence-based family planning guidance documents:
http://www.who.int/reproductivehealth/publications/family_planning/en/index.html

Resources (cont.)

- Association of Reproductive Health Professionals (ARHP)
 - www.arhp.org
- <http://www.arhp.org/MethodMatch/>
- <http://bedsider.org/>