

# Long Acting Reversible Contraception: First Line Care for Adolescents

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**PHYSICIANS**<sup>®</sup>  
**FOR REPRODUCTIVE**  
**HEALTH**



Adolescent  
Reproductive &  
Sexual  
Health  
Education  
Program

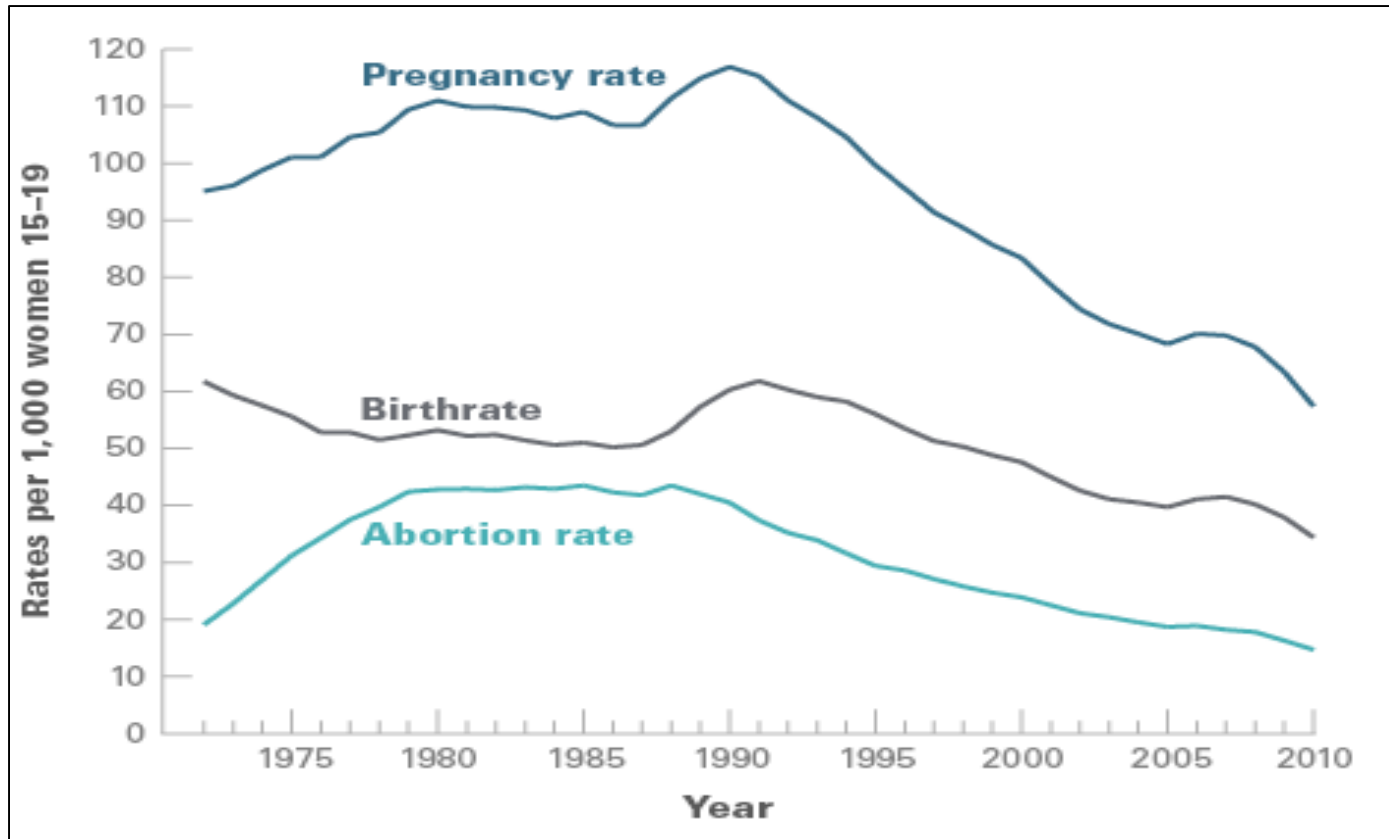
# Disclosures

- ▶ Melissa Kottke is a Nexplanon trainer for Merck

# Objectives

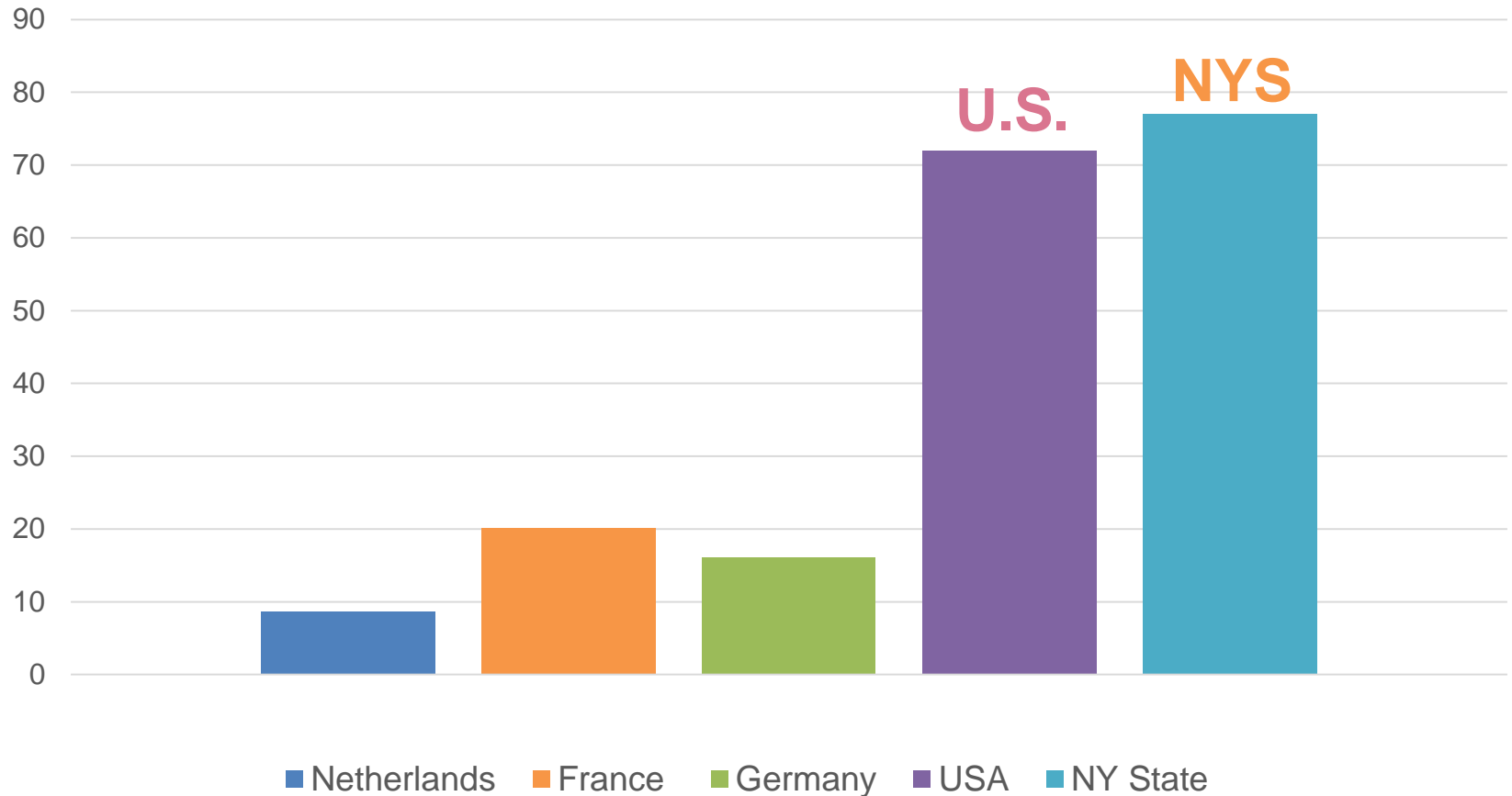
- ▶ Describe the long acting reversible contraception (LARC) methods available to adolescents
- ▶ Provide counseling addressing the advantages and disadvantages of each method
- ▶ Identify barriers that impact LARC use among adolescents
- ▶ Discuss resources for provider training on LARC insertion and refer patients to LARC education and referral sources

# Teen Pregnancy, Birth and Abortion Rates Are Declining (15–19 year olds)



# Teen Pregnancy Rates Remain High

Teen Pregnancy Rates per 1,000 Teens ages 15–19



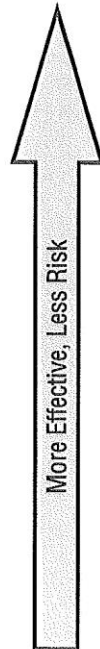
# Current Contraceptive Options

Extremely Effective	Very Effective	Moderately Effective	Effective
Prevents pregnancy >99% of the time	Prevents pregnancy ~91%–99%	Prevents pregnancy ~78%–98%	Prevents pregnancy ~72%–99%
Long Acting Reversible Contraception: <ul style="list-style-type: none"> <li>• Intrauterine Devices (IUDs)</li> <li>• Implants</li> <li>• Sterilization</li> </ul>	<ul style="list-style-type: none"> <li>• Pills</li> <li>• Ring</li> <li>• Patch</li> <li>• Injectable</li> </ul>	<ul style="list-style-type: none"> <li>• Male Condom</li> <li>• Withdrawal</li> <li>• Diaphragm</li> <li>• Female Condom</li> </ul>	<ul style="list-style-type: none"> <li>• Fertility awareness methods</li> <li>• Spermicide</li> </ul>

# World's Best Birth Control

## At Your Health Department

Birth Control Effectiveness<sup>®</sup>  
In 10,000 Women



	PREGNANCIES PER YEAR	LASTS	CONTAINS ESTROGEN?	DAILY PROGESTIN (micrograms)
Nexplanon	5	3 yrs		45
Male Sterilization	15	†		
Mirena IUD	20	5 yrs		20
Female Sterilization	50	†		
Paragard IUD	80	10 yrs		
<hr/>				
Depo Shot	600	3 mos		1,666
Minipill	900	1 day		350
Combination Pills*	900	1 day	YES*	200
Condom	1,800			
Withdrawal	2,200			
No Method	8,500			

\*Estrogen increases risk for stroke, heart attack, and blood clots. When estrogen is combined with other risks like:

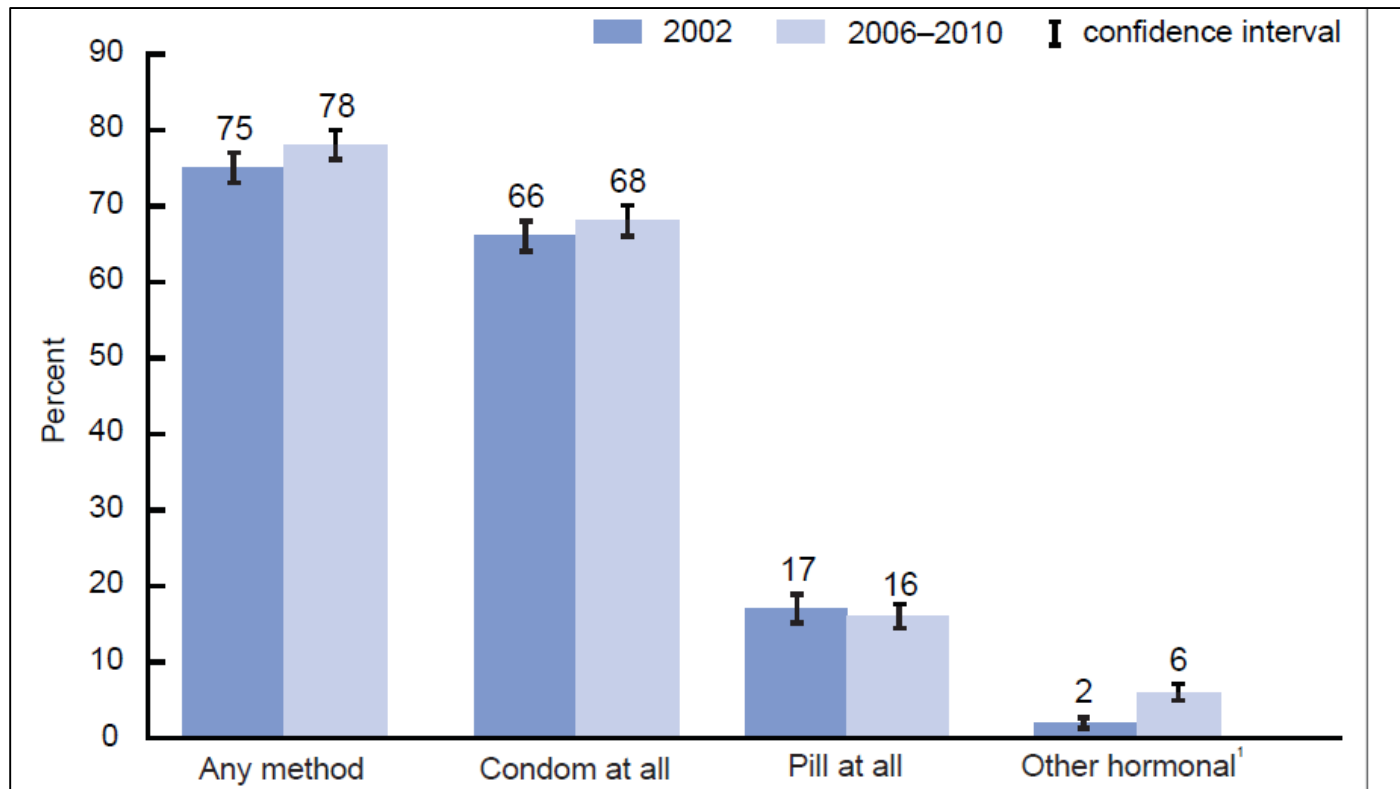
- Migraines with aura (visual or hearing changes)
- Previous blood clots
- Tobacco use
- Obesity
- High blood pressure
- Diabetes
- Migraines without aura
- Age over 40

† It may be desirable or even necessary to use another less risky method of birth control.

† Irreversible

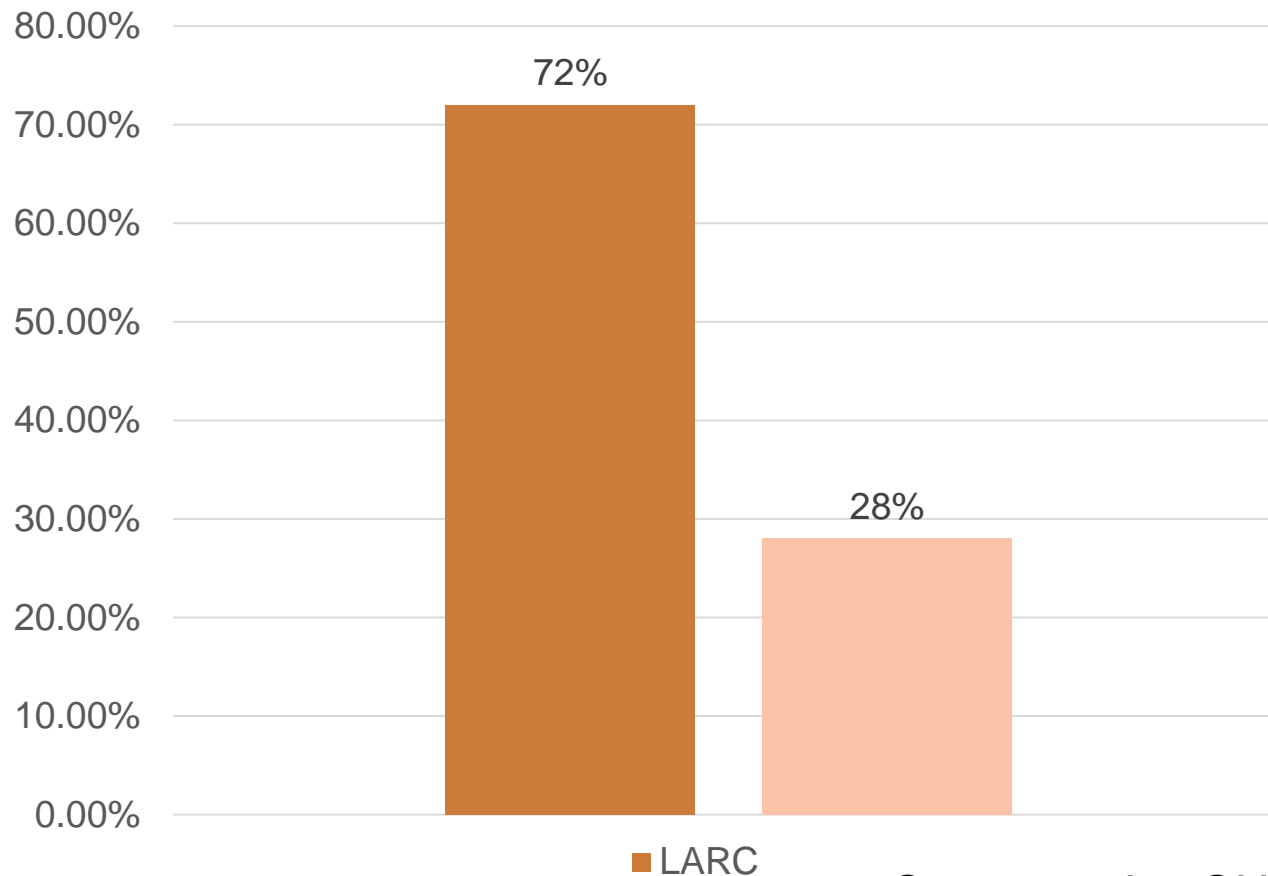
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# What Birth Control are Teens Using?



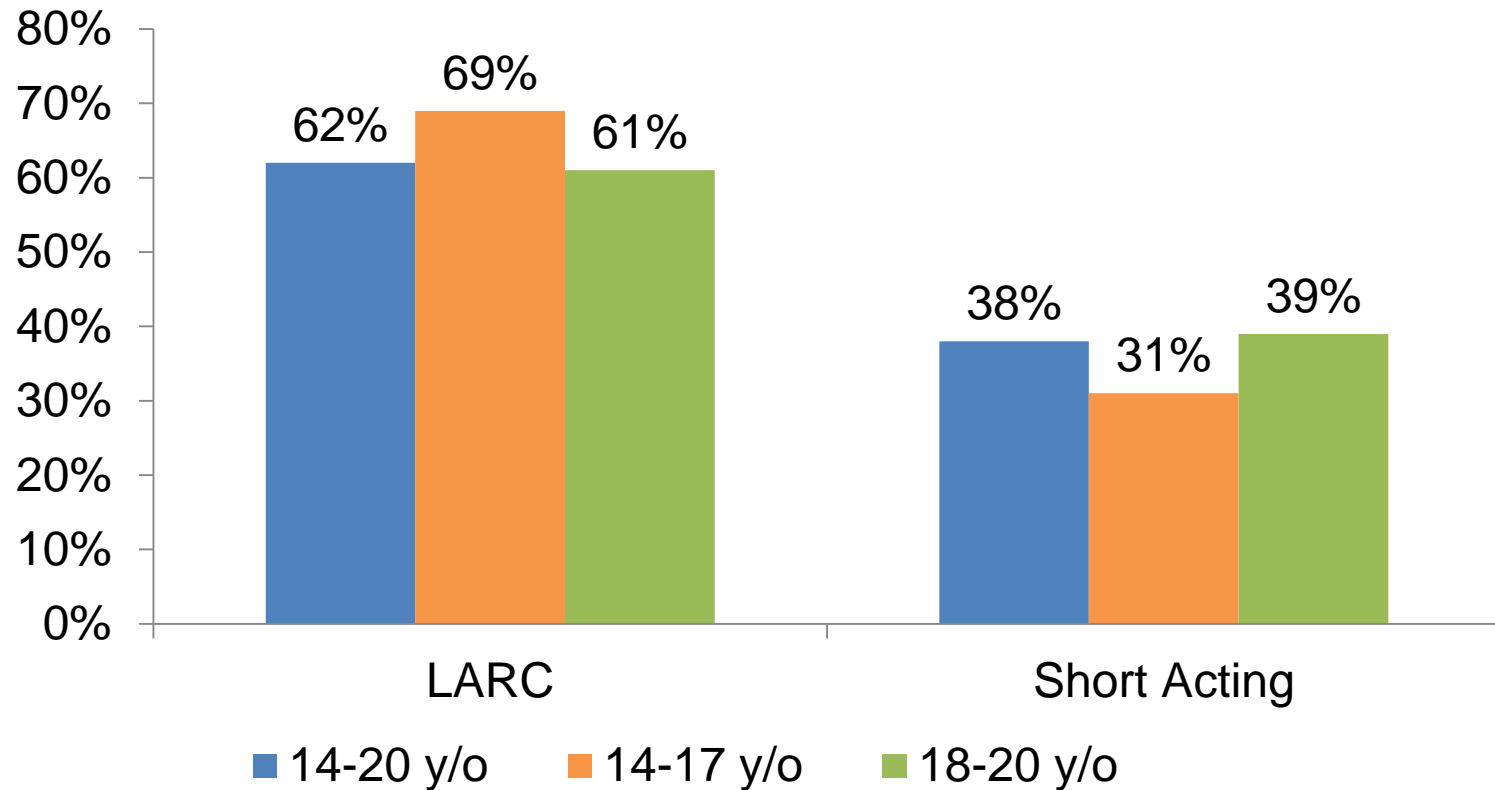


# What Birth Control Would Teens Choose?

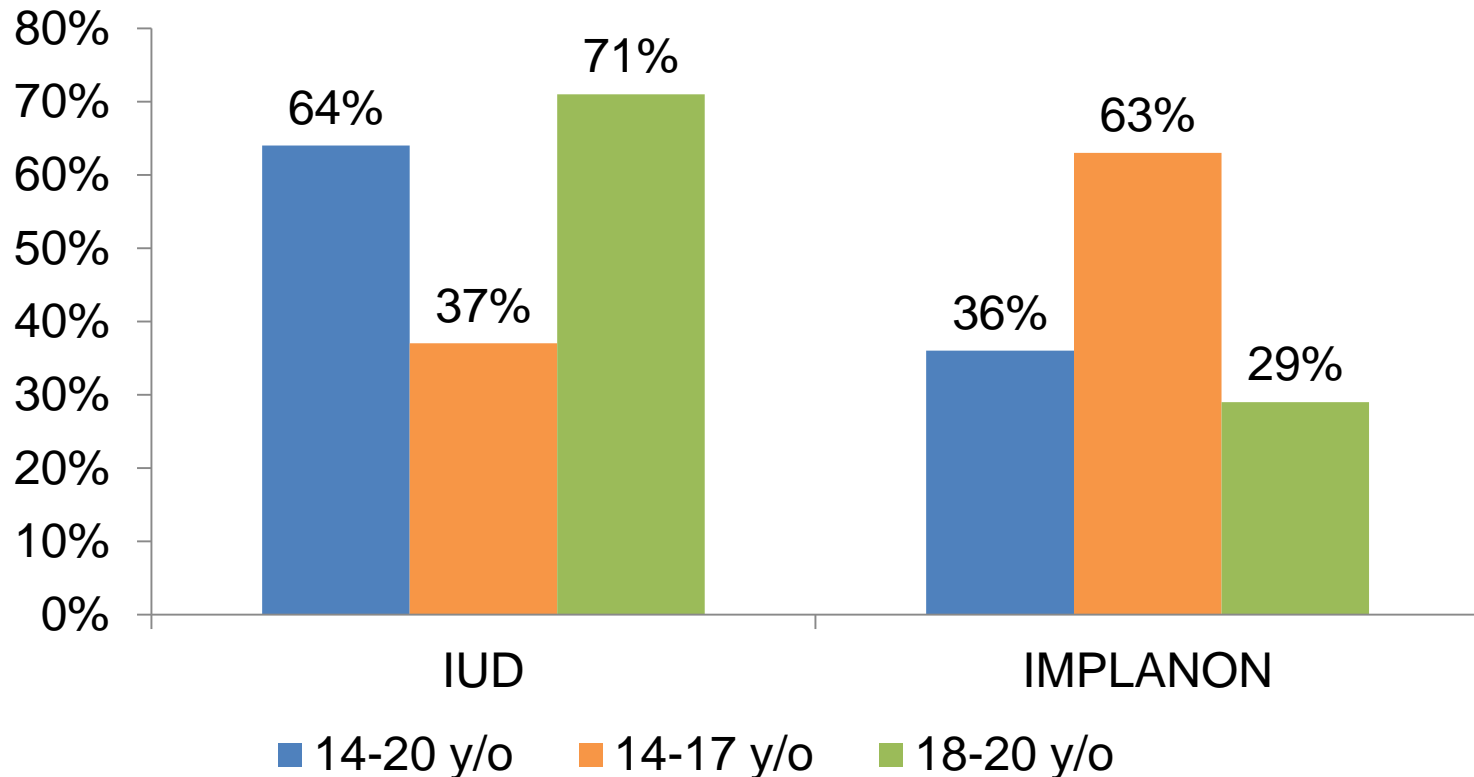


*Contraceptive CHOICE Project findings*

# What Do Teens Choose?



# Of Teens Choosing LARC... What Do Teens Choose?



# Continuation Rates at 1 Year

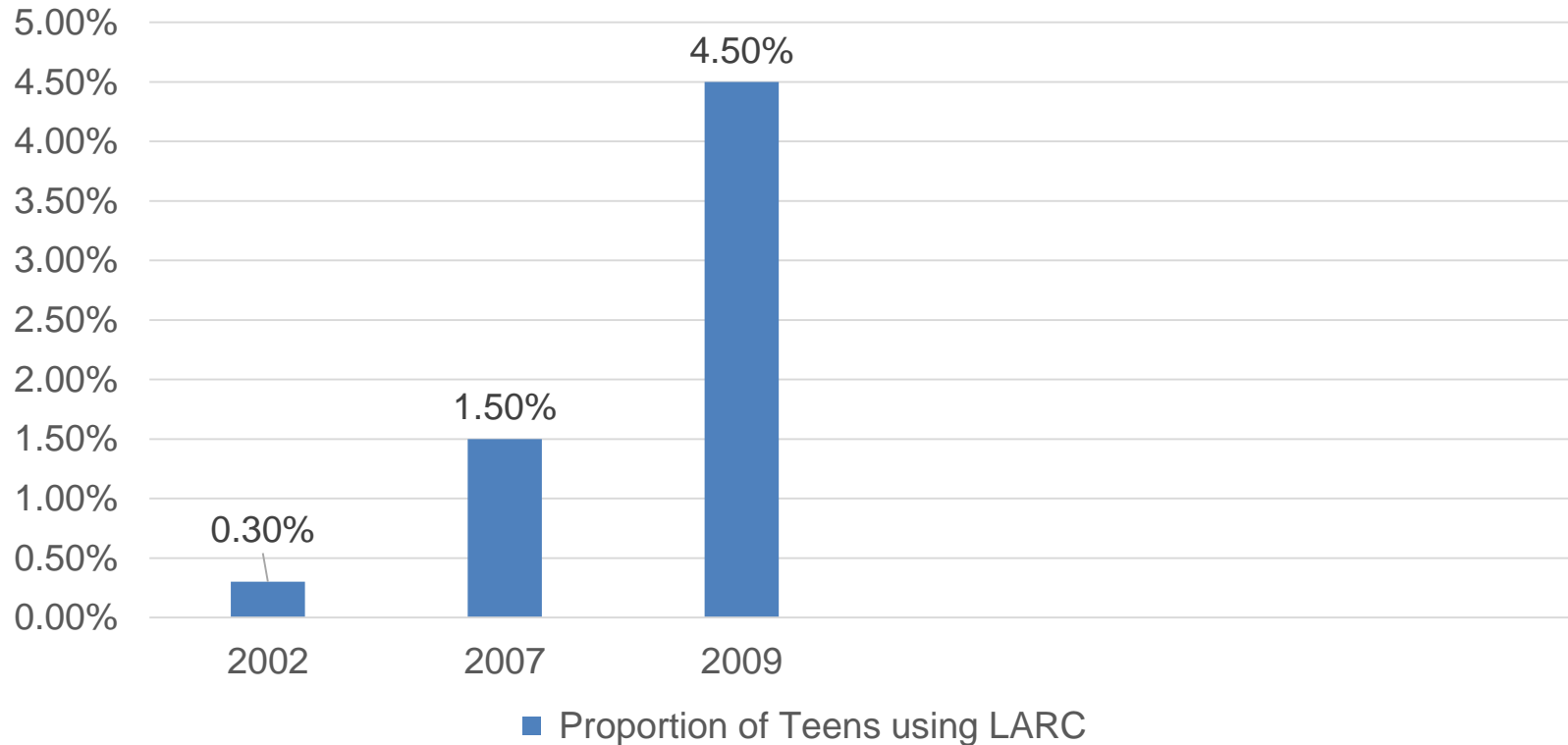
HORMONAL IUD	88%
COPPER IUD	84%
IMPLANT	83%
SHOT	57%
PILLS	55%
RING	54%
PATCH	49%
LONG-ACTING METHODS	86%
NON-LONG-ACTING METHODS	55%

# Are Women Satisfied with their Method?



# LARC Use Increasing for Teens (15–19 years old)

## Proportion of Teens using LARC



# What is LARC?



Long

Acting

Reversible

Contraception

# AAP: LARC and Teens



- ▶ “Given the efficacy, safety, and ease of use, LARC methods should be considered first-line contraceptive choices for adolescents”
- ▶ “Pediatricians should be able to educate patients about LARC methods...”



# ACOG: IUDs and Teens

- ▶ “Intrauterine devices are safe to use among adolescents.”
- ▶ “Intrauterine devices do not increase an adolescent’s risk of infertility.”
- ▶ “Intrauterine devices may be inserted without technical difficulty in most adolescents and nulliparous women.”

**ACOG**  
THE AMERICAN CONGRESS  
OF OBSTETRICIANS  
AND GYNECOLOGISTS

# ACOG: LARC and Teens

- ▶ “With top-tier effectiveness, high rates of satisfaction and continuation, and no need for daily adherence, LARC methods should be first-line recommendations for adolescents.”
- ▶ “Health care providers’ concerns about LARC use by adolescents are a barrier to access.”



# Long Acting Reversible Contraception (LARC) = IUDs and Implants

- ▶ Most effective methods: >99%
- ▶ Safest
  - ▶ No estrogen
  - ▶ Contraindications rare
- ▶ Highest patient satisfaction
  - ▶ (80% LARC vs 50% short acting)
- ▶ Highest continuation rates
  - ▶ (86% LARC vs. 55% short acting)
- ▶ Long-term protection—lasts 3–12 years
- ▶ Rapid return of fertility
- ▶ Most cost effective
- ▶ Least likely to be used by teens

# Levonorgestrel IUD (Mirena®)

## Extremely Effective



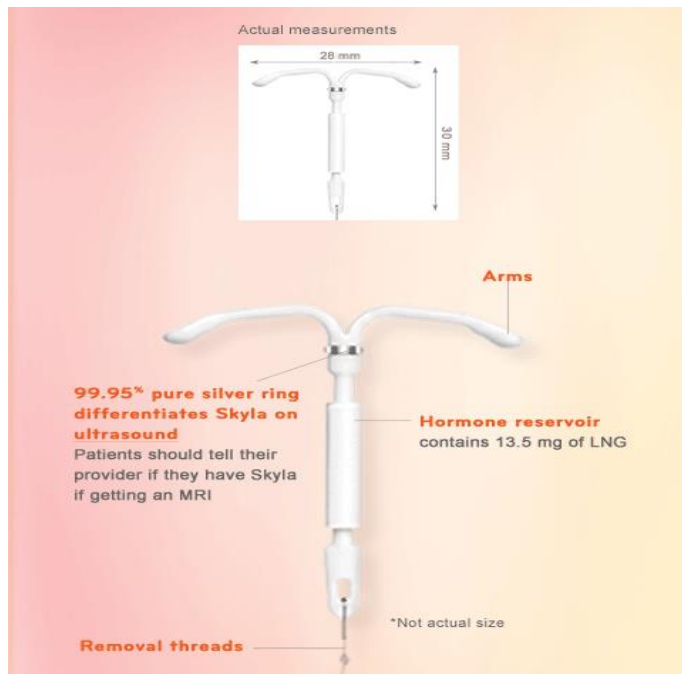
- 20 mcg levonorgestrel/day
- Progestin only method
- 5 years use
- Cost : ~\$300–\$700
- Bleeding pattern:
  - Light spotting initially:
    - 25% at 6 months
    - ~10% at 1 year
  - Amenorrhea in:
    - 44% by 6 months
    - 50% by 12 months



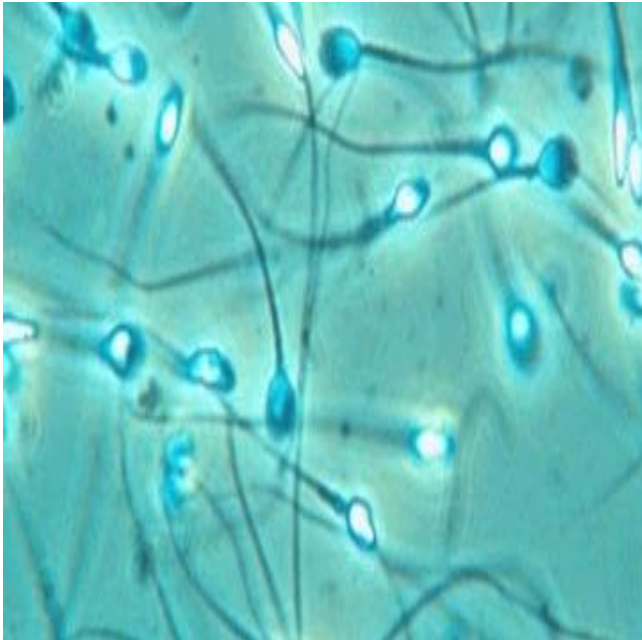
# Levonorgestrel IUD (Skyla®)

## Extremely Effective

- 14 mcg levonorgestrel/day
- Progestin only method
- 3 years use
- Cost : ~\$300–\$650
- Smaller in size than Mirena
  - 1.1 x 1.2 in. (vs. 1.3 x 1.3 in)
  - Inserter tube 0.15 in. (vs. 0.19 in)
- More irregular bleeding than Mirena
  - Only 6% have amenorrhea at 1 yr



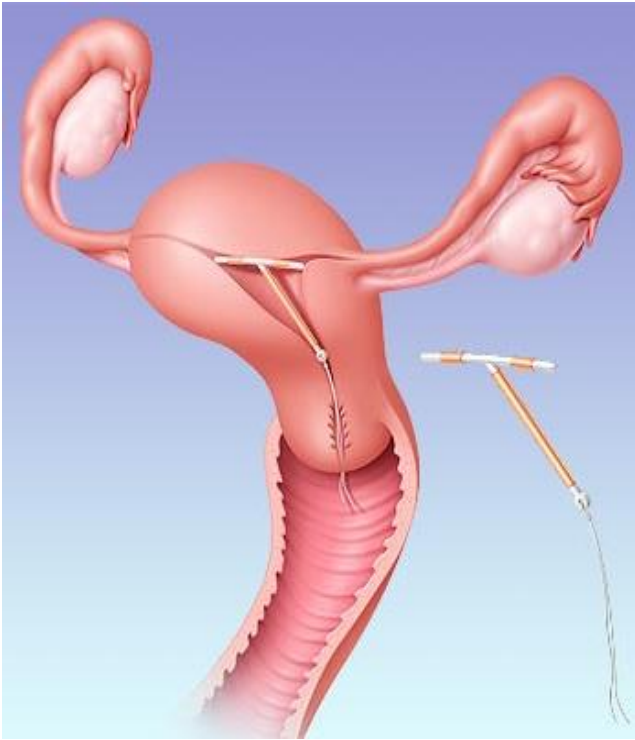
# Mirena/Skyla: Mechanism of Action



- ▶ Fertilization inhibition:
  - ▶ Cervical mucus thickened
  - ▶ Sperm motility and function inhibited
  - ▶ Weak foreign body reaction induced
  - ▶ Ovulation inhibited (in 5%–15% of cycles)

# Copper-T IUD: Paragard®

Extremely  
Effective



- Copper ions
- No hormones
- 12 years of use
- Cost: ~\$150–\$475
- 99% effective as EC
- Bleeding Pattern:
  - Menses regular
  - May be heavier, longer, crampier for first 6 months



# Paragard: Mechanism of Action



## ▶ Spermicidal

- ▶ Copper ions block sperm motility and enzymes needed to fertilize the egg
- ▶ Sterile inflammatory reaction in endometrium kill sperm



# Which IUD Is the Best Choice?

## Copper T IUD (Paragard)

- Want regular periods
- Want no hormones
- No h/o dysmenorrhea
- No h/o menorrhagia

## LNG IUD (Mirena)

- ▶ OK w/irregular bleeding
- ▶ OK w/amenorrhea
- ▶ H/O dysmenorrhea
- ▶ H/O menorrhagia

# IMPLANT: Nexplanon (Implanon)

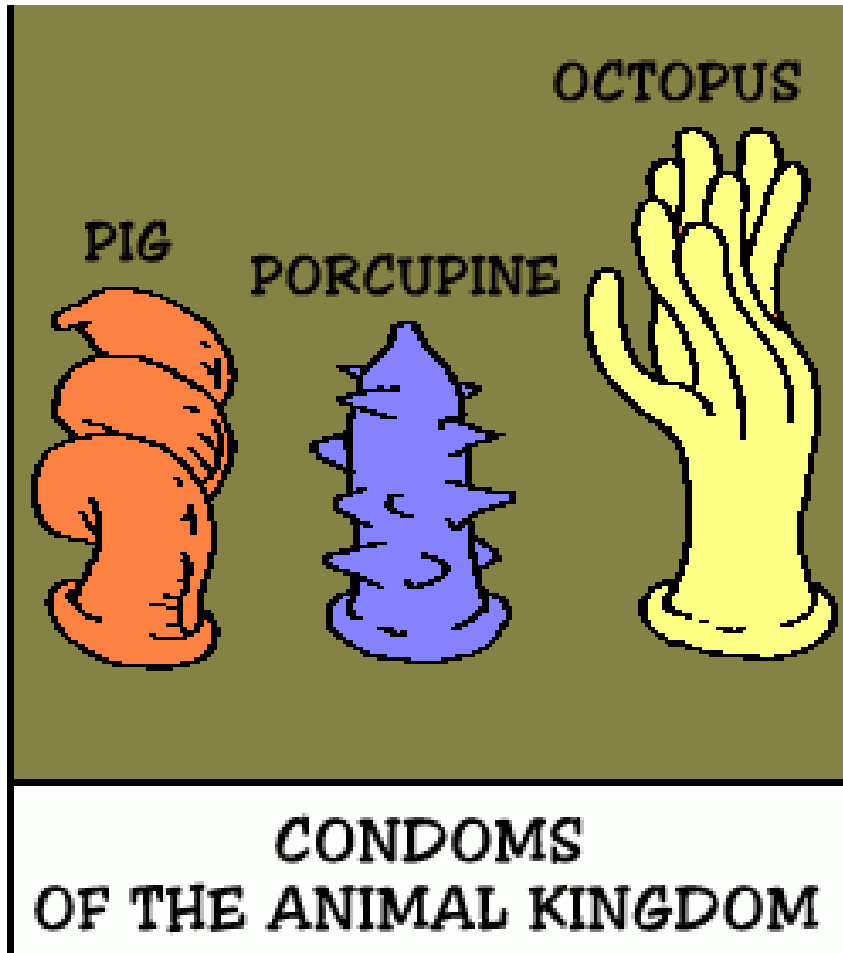
Extremely  
Effective



- ▶ Progesterone only (etonogestrel)
- ▶ Effective for 3 years
- ▶ Cost: ~\$300–\$600
- ▶ Mechanism: Inhibits ovulation
- ▶ Bleeding pattern:
  - ▶ Amenorrhea (22%)
  - ▶ Infrequent (34%)
  - ▶ 11% stop due to frequent bleeding



# Dispelling Myths



- ▶ When providers or patients hold misperceptions about the risks associated with contraception...
- ▶ Teens' choices are unnecessarily limited

# Myths

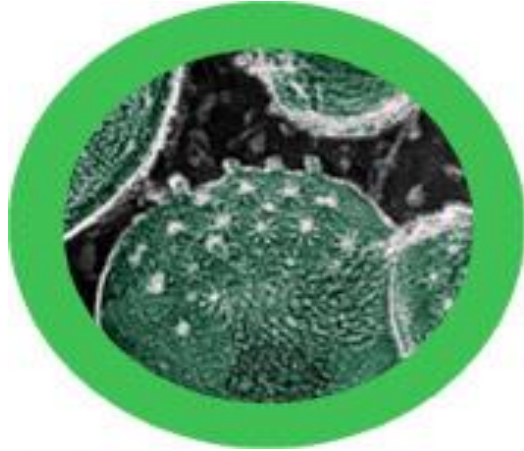
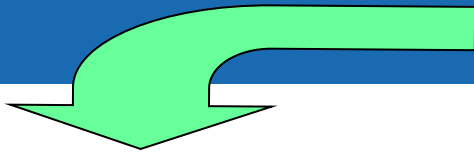
- ▶ IUDs cause PID and infertility
- ▶ IUDs are only for women who had a baby

# IUDs Do NOT Cause PID



- ▶ PID incidence for IUD users similar to that of general population
  - ▶ Risk increased only during first month after insertion, still extremely low (1/1000)
  - ▶ Preexisting STI at time of insertion (not the IUD itself) increases risk
- ⇒ R/O GC/CT in at risk women
- In Asx teens may insert and screen

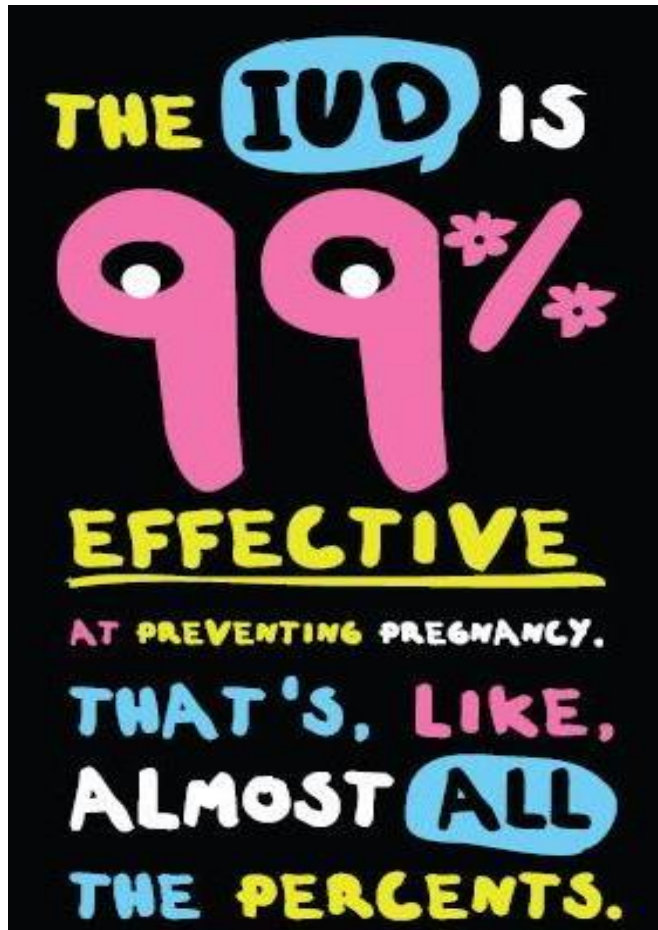
# IUDs Do Not Cause Infertility... Chlamydia Does!



- ▶ 2000 women case-control
- ▶ IUD users NOT more likely to have infertility than gravid controls (OR = 0.9)
- ▶ Women with CT antibodies more likely to be infertile (OR = 2.4)
- ▶ IUD use is not related to infertility
- ▶ Chlamydia is related to infertility
- ▶ Similar results in multiple studies



# Almost ALL TEENS Can Use IUDs



## WHO CAN USE IUDs:

- ▶ Teens? ▶ YES!
- ▶ Never been pregnant? ▶ YES!
- ▶ Multiple partners? ▶ YES!
- ▶ History of STD? ▶ YES!
- ▶ History of PID? ▶ YES!
- ▶ History of ectopic? ▶ YES!

# CDC: LARC and Teens

## CDC USMEC: U.S. Medical Eligibility Criteria

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)



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
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	



# IUDs Have VERY FEW Contraindications

- ▶ Current PID
- ▶ Current untreated mucopurulent cervicitis, gonorrhea, or chlamydia
- ▶ Post abortion/partum infection in past 3 mo.
- ▶ Current or suspected pregnancy
- ▶ Anatomically distorted uterine cavity
- ▶ Wilson's disease (Paragard)
  - ▶ Other: Uncommon issues for teens
    - Known cervical or uterine cancer
    - Known breast cancer (Mirena only)
    - Genital bleeding of unknown etiology

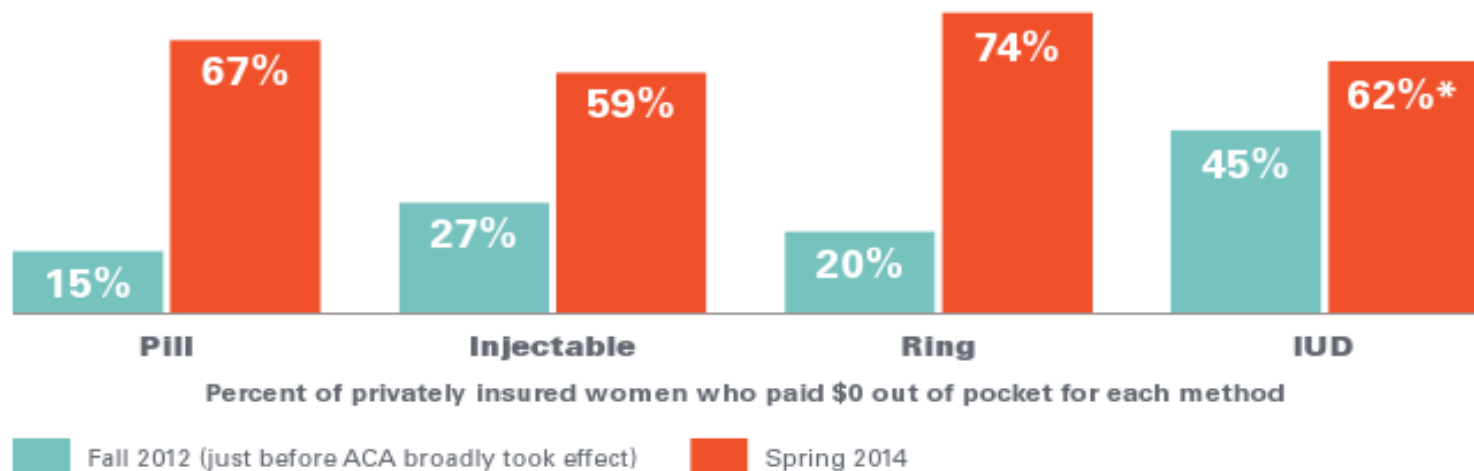
# IMPLANT: Only ONE Contraindication

- ▶ Current breast cancer
- ▶ Important to know about class labeling of implant with CHC by FDA.

# Making Contraception Affordable

## The Affordable Care Act's contraceptive coverage guarantee is working...

Privately insured women are increasingly paying \$0 out of pocket for a range of contraceptive methods.



# Young Pregnant Women Lack Knowledge about IUDs

How safe/effective are IUDs compared to pills, injections, or tubal sterilization?

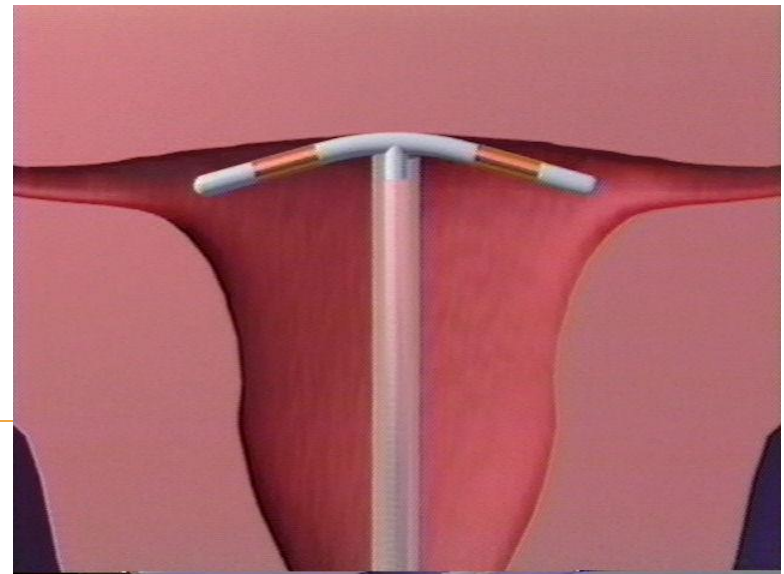
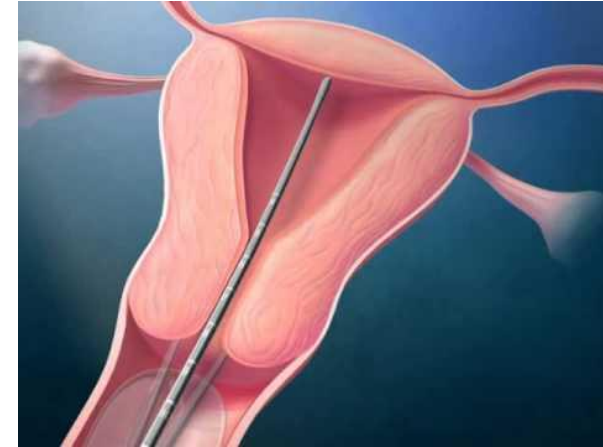
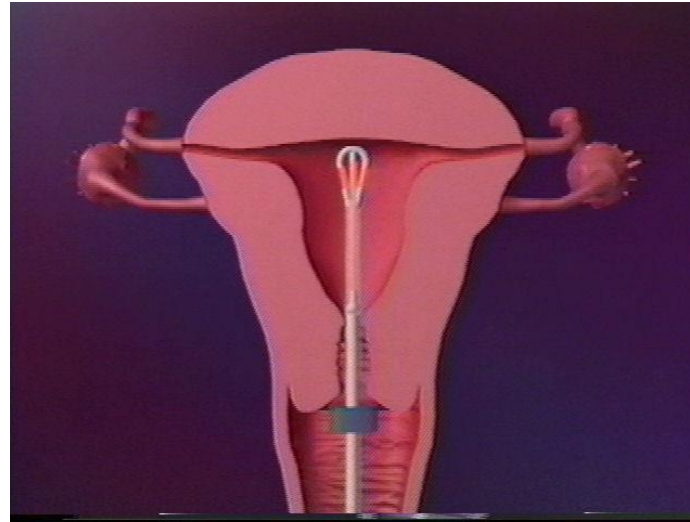
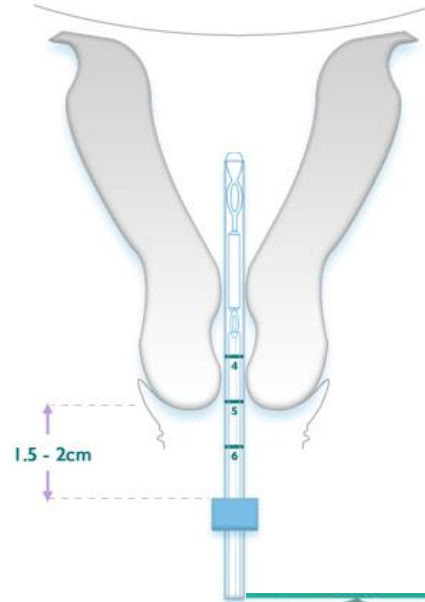
Unsure of safety

71%

Unsure of efficacy

58%

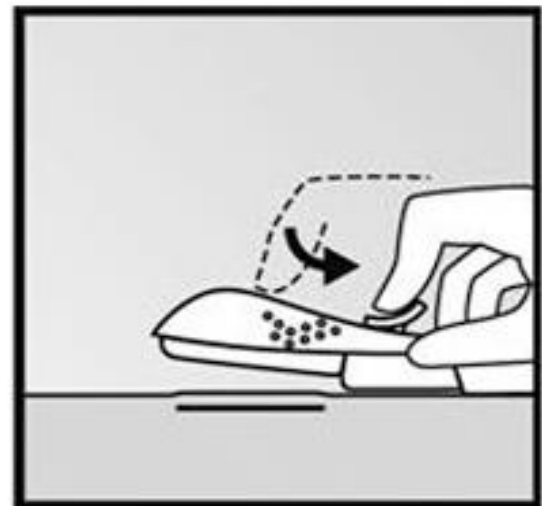
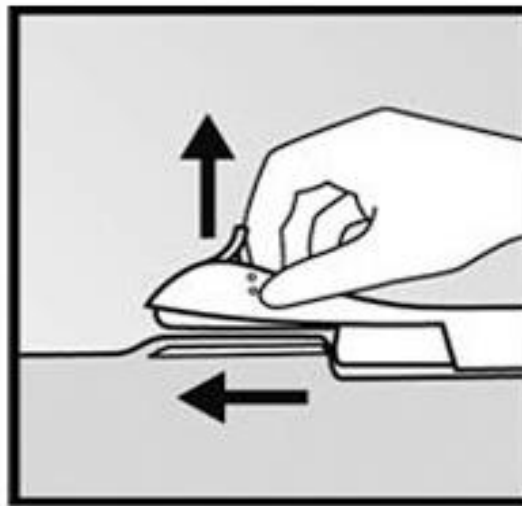
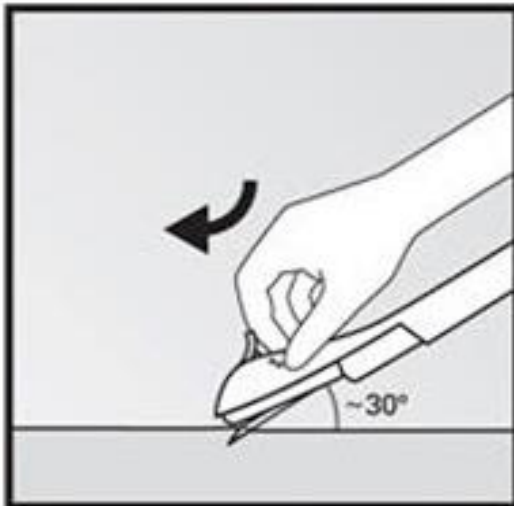
# IUD Insertion: What to Expect?



# Implant Insertion: What to Expect?



© AP



# Training to Insert Implants

- ▶ Training available exclusively through Merck
- ▶ Those trained in Implanon® can be trained online to insert and remove Nexplanon®
- ▶ [www.nexplanon-usa.com/en/hcp/services-and-support/request-training/index.asp](http://www.nexplanon-usa.com/en/hcp/services-and-support/request-training/index.asp)

# Referring Teens for LARC

- ▶ Planned Parenthood
- ▶ Family Planning Clinics
- ▶ Ob/gyn
- ▶ LARC Locator
  - ▶ [larc.arhp.org](http://larc.arhp.org)

The screenshot shows the ARHP LARC Locator website. At the top, there is a navigation bar with the ARHP logo and links for "Provider Locator", "Need Emergency Contraception?", "Tips for Your Appointment Call", and "For Providers". Below this is a dark green header with the text "Provider Locator" and a "Share this page" link. The main content area has a light beige background and contains a paragraph of text: "The implant and intrauterine devices (IUDs) provide amazingly reliable birth control with minimal effort and nothing to remember every day. These methods last for many years and are easily reversible if you decide you are ready to get pregnant. To get an implant or an IUD, you need to visit a health care provider. Enter your location below to find a nearby provider who can help you get one of these easy and effective methods." Below the text are three images: a hand holding a Copper T IUD (ParaGard®), a hand holding a Hormonal IUD (Mirena® & Skyla™), and a hand holding an Implant (NEXPLANON®). At the bottom of the interface, there is a search bar with the placeholder text "Search by zip code or city and state", a dropdown menu set to "Within 10 miles", and a red "Search" button.



# LARC Specific Resources

- ▶ In-service UCSF Bixby Center LARC training:  
[bixbycenter.ucsf.edu/research/cd\\_and\\_fp/larc.html](http://bixbycenter.ucsf.edu/research/cd_and_fp/larc.html)
- ▶ [www.acog.org/About-ACOG/ACOG-Departments/Long-Acting-Reversible-Contraception](http://www.acog.org/About-ACOG/ACOG-Departments/Long-Acting-Reversible-Contraception)
- ▶ [www.love-my-larc.org/live/larc-awareness-week](http://www.love-my-larc.org/live/larc-awareness-week)
- ▶ [www.teensource.org/birth-control/long-acting-reversible-methods](http://www.teensource.org/birth-control/long-acting-reversible-methods)
- ▶ [www.safeandeffective.org/pages](http://www.safeandeffective.org/pages)
- ▶ [bedsider.org/methods/iud#details\\_tab](http://bedsider.org/methods/iud#details_tab)

# Provider Resources

- ▶ [www.prh.org](http://www.prh.org)—Physicians for Reproductive Health
- ▶ [www.aap.org](http://www.aap.org)—The American Academy of Pediatrics
- ▶ [www.acog.org](http://www.acog.org)—The American College of Obstetricians and Gynecologists
- ▶ [www.adolescenthealth.org](http://www.adolescenthealth.org)—The Society for Adolescent Health and Medicine
- ▶ [www.aclu.org/reproductiverights](http://www.aclu.org/reproductiverights)—The Reproductive Freedom Project of the American Civil Liberties Union
- ▶ [www.advocatesforyouth.org](http://www.advocatesforyouth.org)—Advocates for Youth
- ▶ [www.guttmacher.org](http://www.guttmacher.org)—Guttmacher Institute
- ▶ [www.cahl.org](http://www.cahl.org)—Center for Adolescent Health and the Law
- ▶ [janefondacenter.emory.edu](http://janefondacenter.emory.edu)—The Jane Fonda Center of Emory University
- ▶ [www.siecus.org](http://www.siecus.org)—The Sexuality Information and Education Council of the United States
- ▶ [www.arhp.org](http://www.arhp.org)—The Association of Reproductive Health Professionals

Please Complete Your Evaluations Now

