

KEEPING CENTRAL  
TEXAS CHILDREN WELL

# HORMONAL CONTRACEPTION UPDATE

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# REMI NDERS

*“The views expressed by speakers and content of presentations are solely those of the presenters and may not reflect those of the Seton Family of Hospitals.”*

Definitely applies to this talk!

# CAVEATS

- This talk does represent recommendations of major medical organizations
- Hormonal methods may be used for non-contraceptive reasons

# OUTLINE

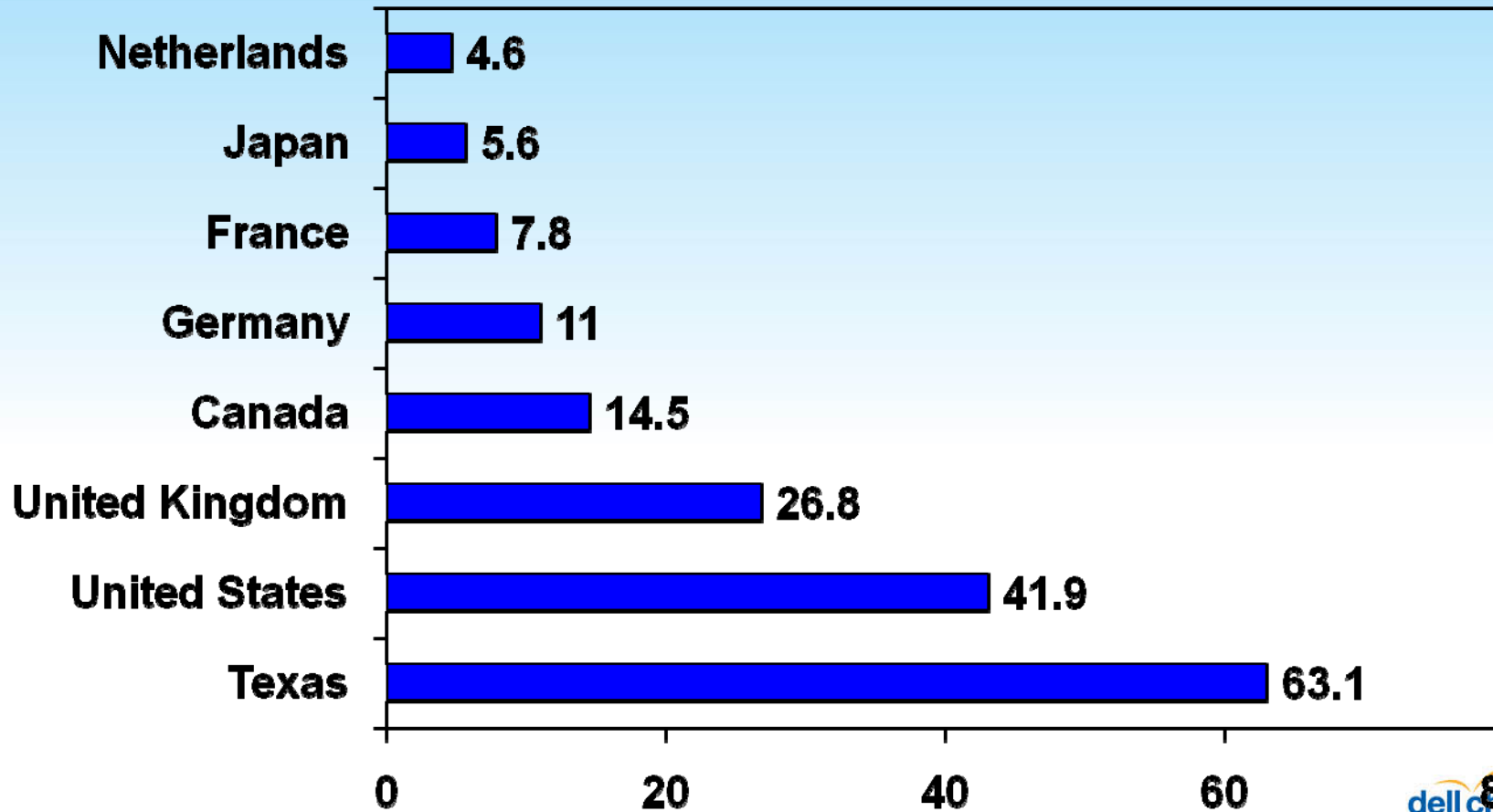
- Teen Pregnancy
- Menses-what's normal?
- Progesterone-only methods
- Combination methods
- Quick start

# IMPORTANT, BUT NOT COVERING

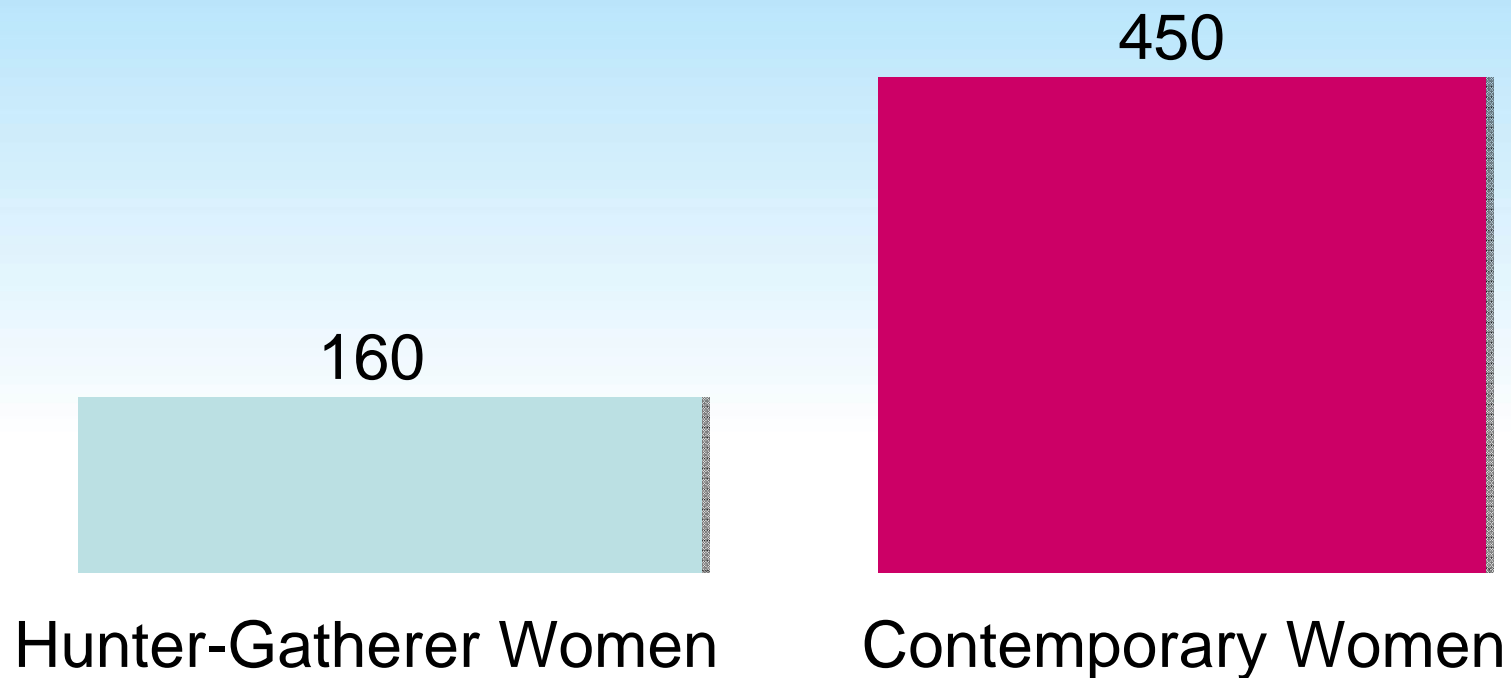
- Other issues around teen pregnancy prevention, i.e. education, family, etc.
- Discussing sexuality, abstaining, condom use (first line contraception!)
- Details on mechanisms of action
- Details on improving compliance
- Emergency contraception

# Teen Birth Rate

(Per 1,000 age 15-19)



# LIFETIME MENSES: WHAT IS "NATURAL"



Eaton, SB. *Q Rev Biol.* 1994.

[www.arhp.org](http://www.arhp.org)

# Reasons for Increased Frequency

	Age (y) at Menarche	Age (y) at First Birth	No. of Live Births	Period of Breastfeeding
Hunter-Gatherer Women	16	19.5	6	~1-2 yrs.
Contemporary Women	12.5	24	2	0-3 mos.

Eaton, SB. *Q Rev Biol.* 1994.

[www.arhp.org](http://www.arhp.org)



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# Candidates for Reduced Menstruation

- Have menstrual-related gyn/med disorders
- Adolescents in general
- Athletes
- Developmentally delayed
- Wants to bleed less frequently

[www.arhp.org](http://www.arhp.org)

...



# Misconceptions About Menstruation

Isn't it natural for me to get a period, even when I'm on the pill?

During my cycle, when am I safe from pregnancy?



Is it safe to take hormones to stop my period?

What is the purpose of monthly bleeding?

ARHP Greenberg Quinlan Rosner Survey 2005.

[www.arhp.org](http://www.arhp.org)



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# PROGESTIN-ONLY METHODS

- Pill
- Shot
- Implant
- IUD

## Absolute

### Contraindications

- Undiagnosed abnormal bleeding
- Known pregnancy
- ?thrombosis
- ?liver disease

# ADVANTAGES

- No estrogen-related complications
- Can use immediately after pregnancy
- *Generally* no or lighter menses
  - Decreased cramps, pain, mood changes, headaches, anemia, SS crisis
- Decreased risk endometrial cancer, ovarian cancer, PID
- Low risk ectopic pregnancy

# DEPOT MEDROXY PROGESTERONE ACETATE

- 150mg IM q 12-13 weeks
- Private, but need office visit
- 0.3-3% failure rate
- Possible weight gain
- Controversy over bone loss
- Possible delayed return fertility
- **IRREGULAR BLEEDING**



# IMPLANON



- Etonogestrel
- 3 year coverage
- Requires minor procedure
- Almost 100% effective
- Quick return fertility

# MINERA

- Intrauterine
- 5 year coverage
- Easily removed if desired
- Private
- 0.1-1% failure



# ESTROGEN-PROGESTERONE METHODS

- Pills
- The Ring
- The Patch

## Contraindications

- Increased risk clotting
- Active liver disease/tumor
- Complex migraines
- Known pregnancy
- Estrogen-dependent cancer
- Uncontrolled DM, HTN
- TG > 250
- Prolonged immobilization
- Consider certain drug interactions

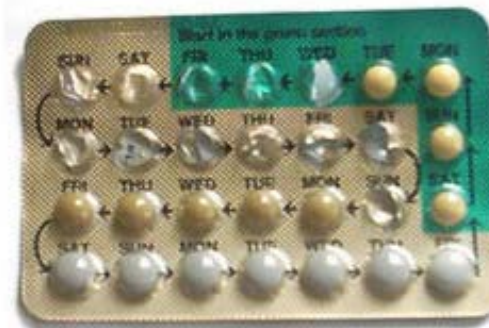
# NON-CONTRACEPTIVE ADVANTAGES

- Decreased ovarian and endometrial cancer
- Decreased benign breast disease
- Decreased acne, hirsutism, and other androgen excess/sensitive states
- Decreased pain/frequency of SS crises
- Possible increased bone mineral density
- Decreased PID
- Decreased anemia, dysmenorrhea
- Better control when or if bleed

# WHICH PILL???



- What's covered
- What you know
- I prefer monophasic, 30-35 mcg ethinyl estradiol to start
- Controversy over progesterones



# Summary: 12-cycle RT, Continuous OCs

No  
observed  
pregnancies

No  
observed  
adverse  
events

No  
observed  
endometrial  
hyperplasia

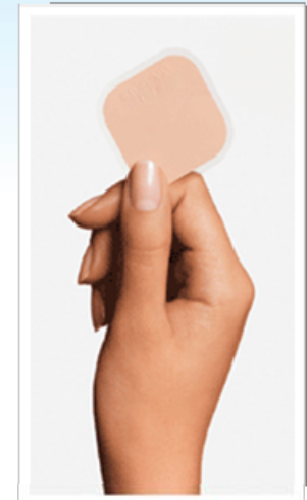
Miller, L. *Obstet Gynecol.* 2003

[www.arhp.org](http://www.arhp.org)

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# THE RING AND PATCH

- Contraceptive vaginal ring (NuvaRing®)
  - Approved for contraceptive use October 2001
- Transdermal contraceptive patch (Ortho Evra®)
  - Approved for contraceptive use November 2001



Bjarnadottir, RI. *Am J Obstet Gynecol.* 2002.  
Zieman, M. *Fertil Steril.* 2002. [www.arhp.org](http://www.arhp.org)

# Extended Use of Patch or Ring vs. OCs

Patch shows higher circulating estrogen levels than the pill

but...

Lower peak concentrations

- Clinical significance unclear
- Studies are being conducted to assess if this represents a greater risk for VTE

Ortho Evra Web site.; van den Heuvel, MW.  
*Contraception*. 2005. Jick, SS. *Contraception*. 2006.



# Concerns: Extended Use of Patch or Ring

- Risk of blood clots higher with pregnancy than with hormonal methods
- More data needed to better define safety of extended use regimens with patch and ring

[www.arhp.org](http://www.arhp.org)



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Patient requests a new birth control method

First day of LMP five or fewer days ago?

Yes

No

Urine pregnancy test negative\*  
Unprotected sex since LMP?

No

Yes

Initiate method today; advise use of backup method during first week

Five or fewer days ago

No

Yes

Consider hormonal EC today†

Advise that negative pregnancy test is not conclusive

Patient wants to start new method?

No

Yes

Provide prescription for chosen method

Initiate method today‡

## Quick Start Initiation of Hormonal Contraception

# SUMMARY

- If no contraindications, contraception safer than pregnancy
- Non-contraceptive advantages
- Consider continuous use
- Have options
  - Personalize
  - Allow switching
  - Be flexible; think about Quick Start
- Pelvic exam not necessary

Thanks to residents who have helped with pieces of past talks on this subject!



# HELPFUL RESOURCES

- *Contraception and Adolescents*, AAP Policy Statement. (2007). *PEDATRICS* Volume 120, Number 5, November 2007
- National Campaign to Prevent Teen and Unplanned Pregnancies [www.thenationalcampaign.org](http://www.thenationalcampaign.org)
- “Choosing When to Menstruate” & other presentations Association of Reproductive Health Professionals [www.arhp.org](http://www.arhp.org)
- Managing Contraception for Your Pocket 2010-2012. [www.managingcontraception.com](http://www.managingcontraception.com)