

# Circumcision and the Foreskin

Presented by  
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Colorado Center

# Outline

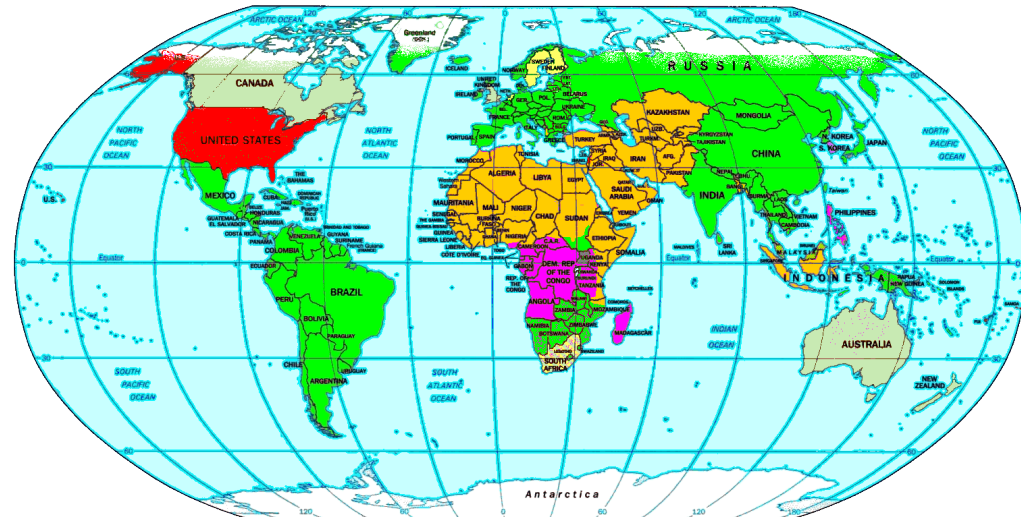
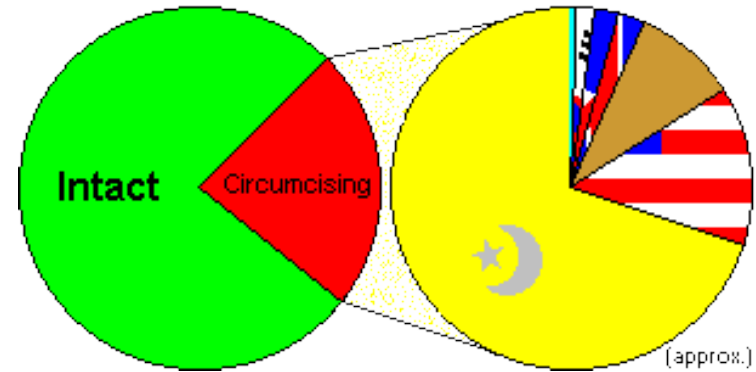
- Global context & history
- Information gap
- Anatomy and functions of the foreskin
- Development and care of the intact penis
- Foreskin problems & conservative treatment
- The procedure: types, pain, complications
- Social & medical issues
- Ethics
- Additional Resources

# Mother-Friendly Childbirth Initiative (MFCI)

- Developed by the Coalition for Improving Maternity Services (CIMS)
  - <http://www.motherfriendly.org/MFCI/>
- Birth Network is based on the MFCI
  - <http://www.birthnetwork.org/about.htm>
- Ten Steps define a mother-friendly hospital, birth center, or home birth service
  - Step #9: *Discourages non-religious circumcision of the newborn*

# Global Perspective

- Worldwide, circumcision is rare (~25%)
  - Europe, South America, & most of Asia never adopted it
- UK, Canada, Australia, New Zealand
  - Abandoned circumcision during 1950s-1970s
- Common:
  - Muslim countries & Israel
  - parts of Africa (along with FGM)
  - Philippines, South Korea



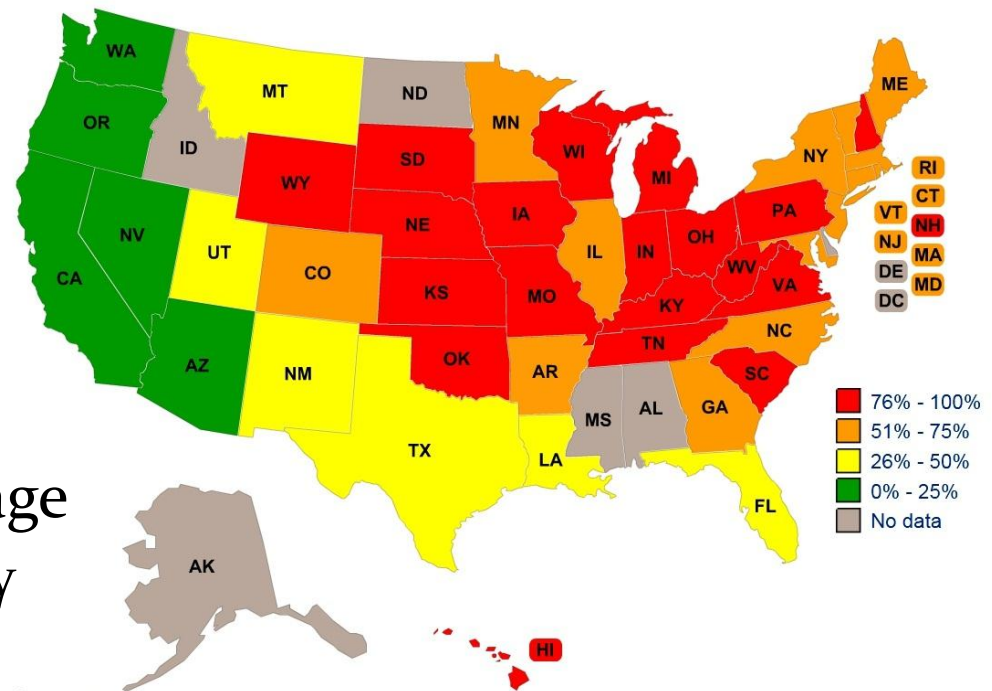
Green portions: circumcision very rare, Red: non-religious circ common, Orange: religious circ common  
[www.circumstitions.com/Maps.html](http://www.circumstitions.com/Maps.html)

# How Circumcision Began in U.S.

- Late 1800's – sexually repressive Victorian era
  - multiple pseudo-medical claims
    - “cured” paralysis, epilepsy, bedwetting, insanity, & many others
  - anti-masturbation hysteria: both boys and girls
- Came to be associated with upper class
  - birth moved into hospital
  - became part of the hospital birth process
- Routine, almost universal in late 1940s/50s
  - pushed by doctors or done without asking parents
  - generally right after delivery, without anesthesia
- Original reasons debunked; new reasons put forth

# Current Trends in U.S.

- Peaked in 1970s – about 90%
- About ~55% nationwide (2009)
- 1971 AAP: no absolute medical indication
- Advent of the Internet
- Immigration
- Medicaid dropping coverage
  - 18 states (36%) do not pay
  - 2011: South Carolina & Colorado dropped coverage



data from 2009/2010, courtesy of [circumstitions.com](http://circumstitions.com)  
image from: [mgmbill.org/statistics.htm](http://mgmbill.org/statistics.htm)

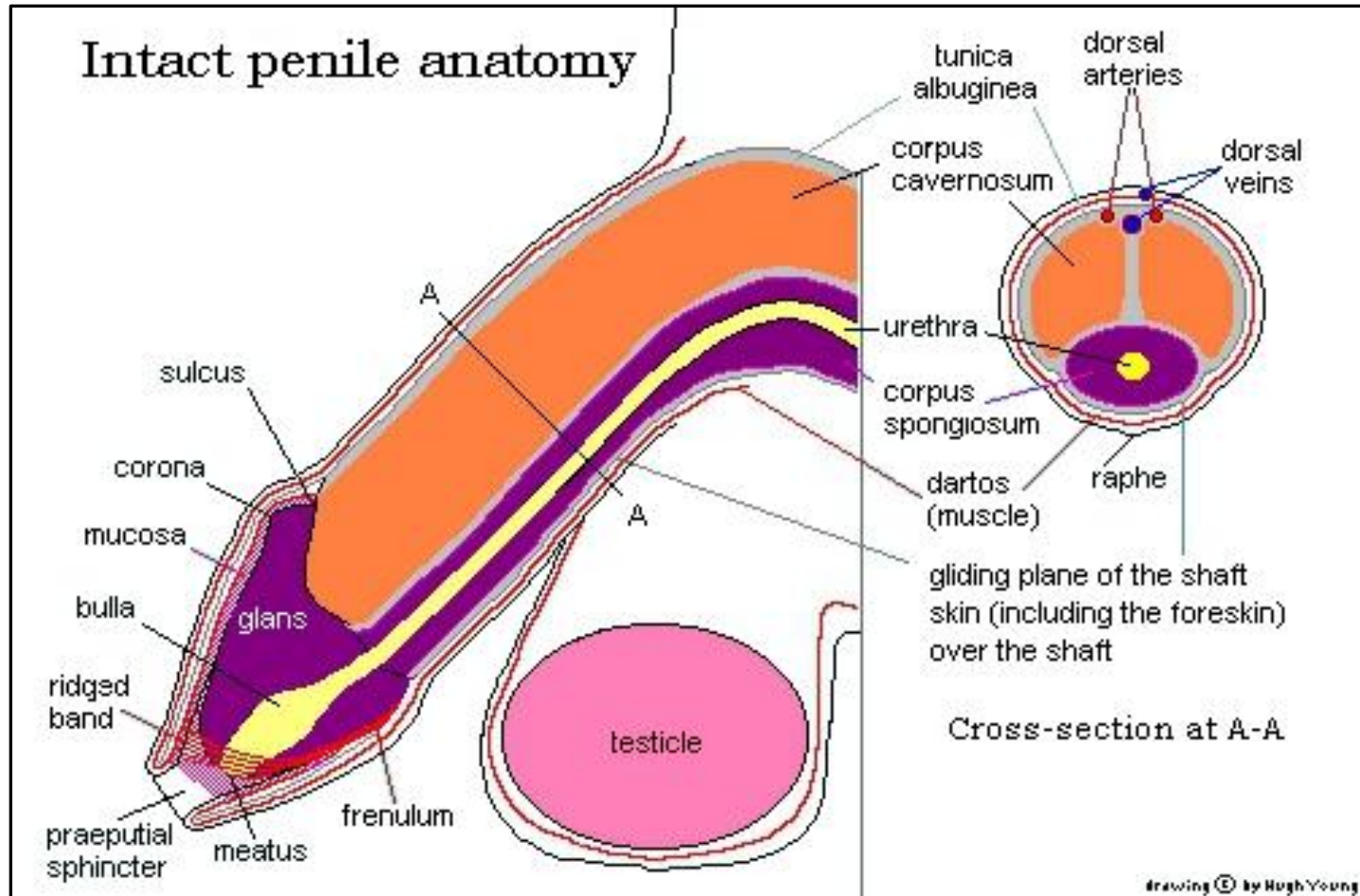
# Information Gap

- Many parents' decisions are preconceived<sup>1</sup>
- Lack of informed consent
  - Details of procedure
  - Risks
  - Alternative of not circumcising
  - Functions of the foreskin
  - Consideration of the child's perspective & choice
- Lack of knowledge among caregivers
- Assumption: foreskin has no value

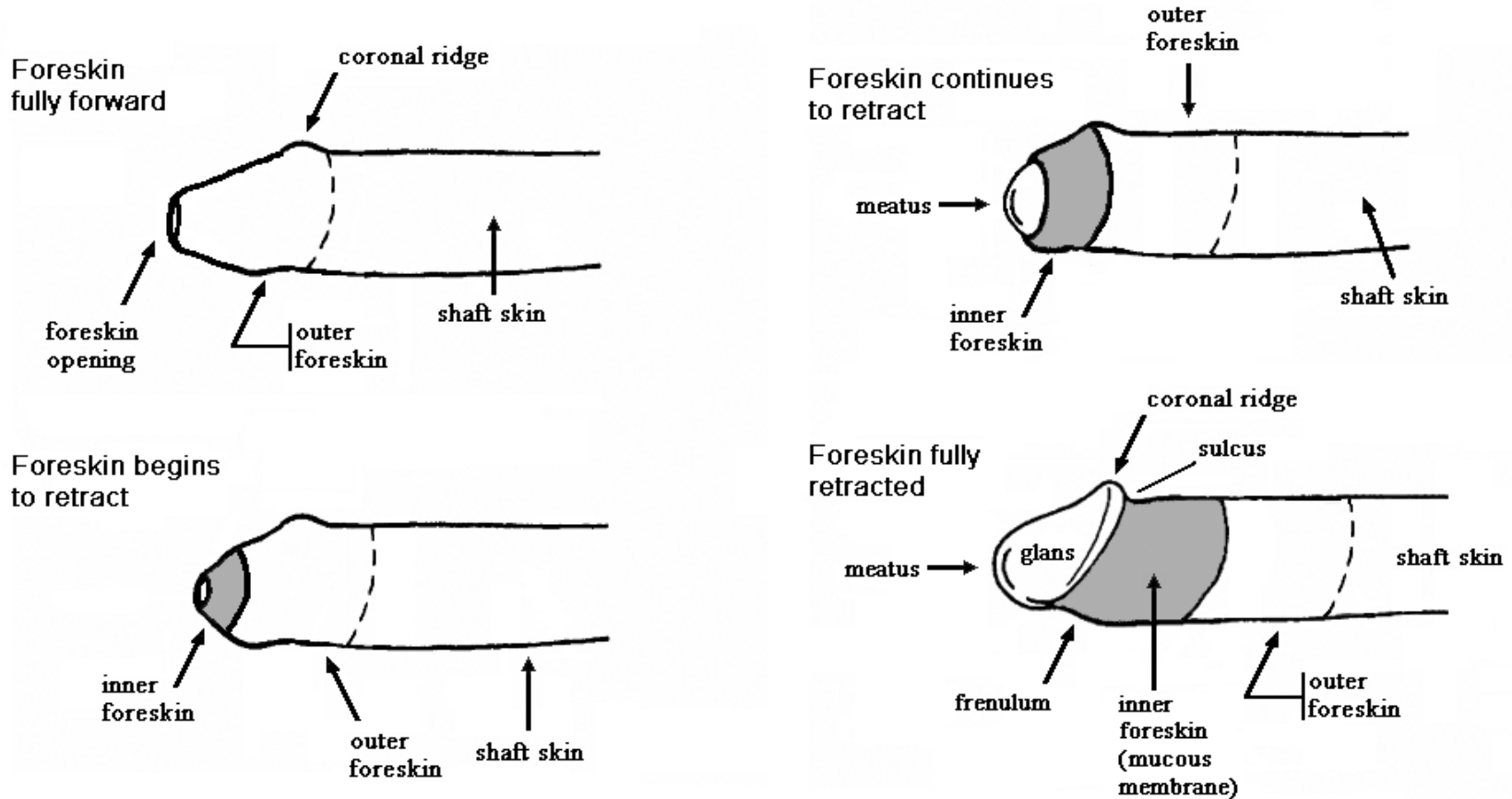


1. "Report 10 of the Council on Scientific Affairs (I-99):Neonatal Circumcision". 1999 AMA Interim Meeting: Summaries and Recommendations of Council on Scientific Affairs Reports. American Medical Association. December 1999. pp. 17. Retrieved 2006-06-13.

# Anatomy



# Anatomy: Foreskin Retraction



\*Never forcibly retract a child's foreskin!

# Foreskin size & mobility of penile skin

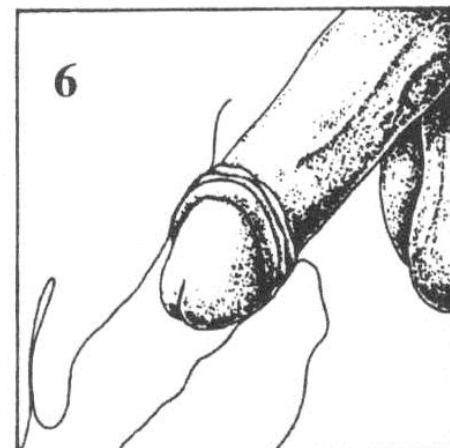
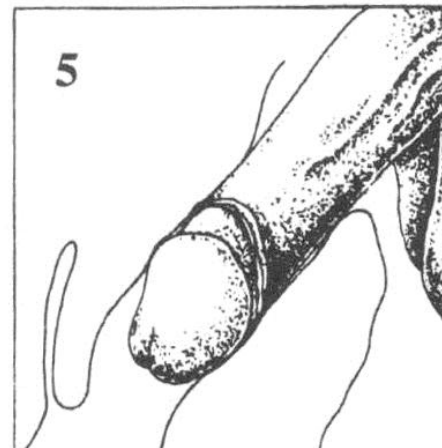
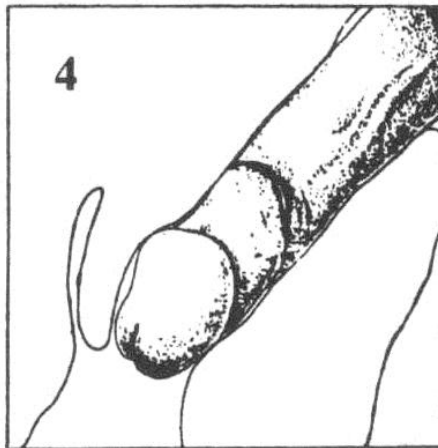
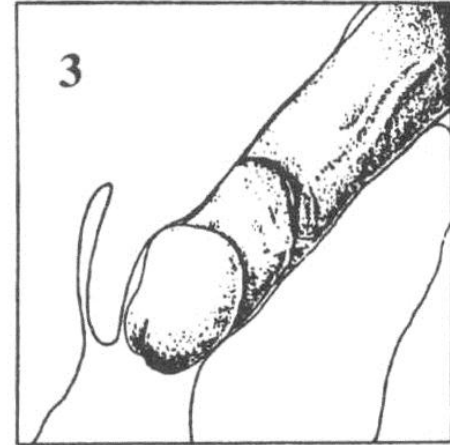
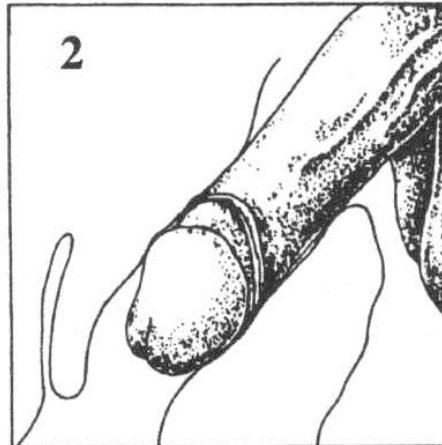
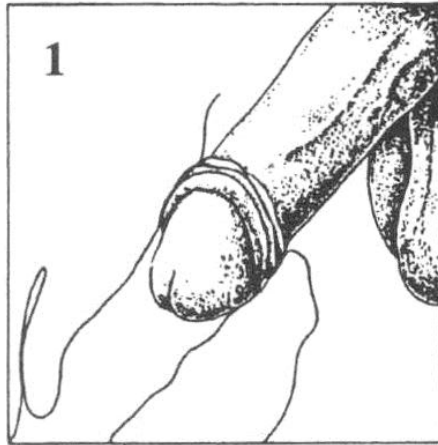


The foreskin can cover almost the entire shaft.

**ABLE TO MOVE!**



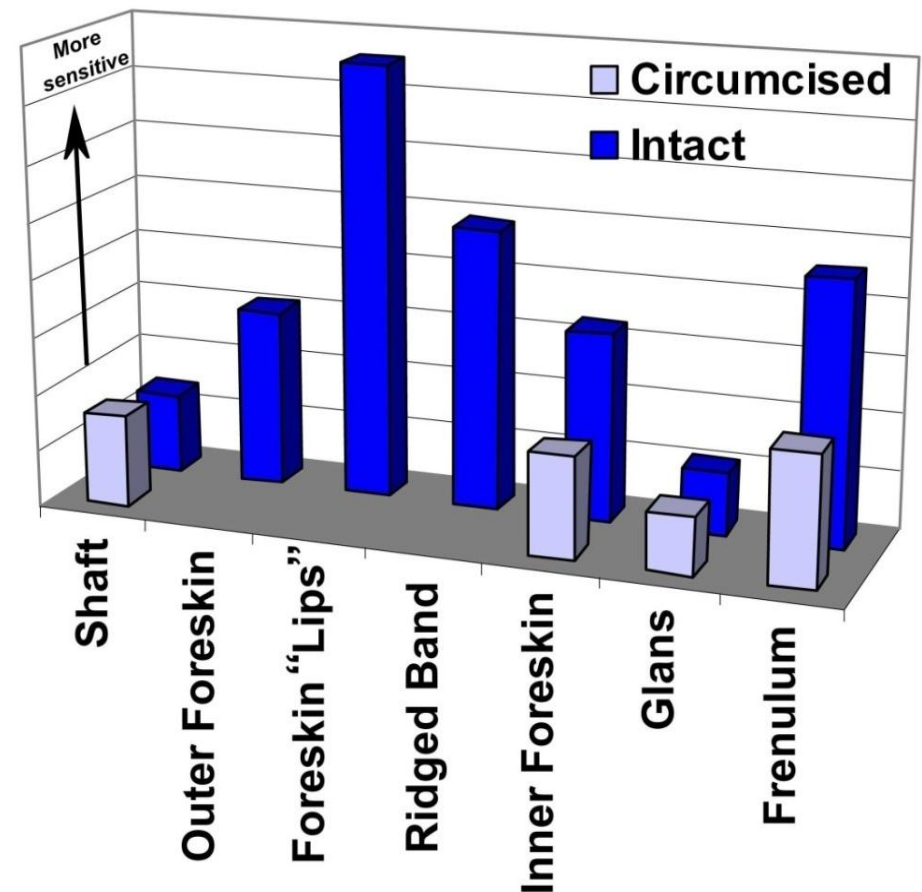
# Foreskin as a Rolling Bearing



# Fine-touch Sensation

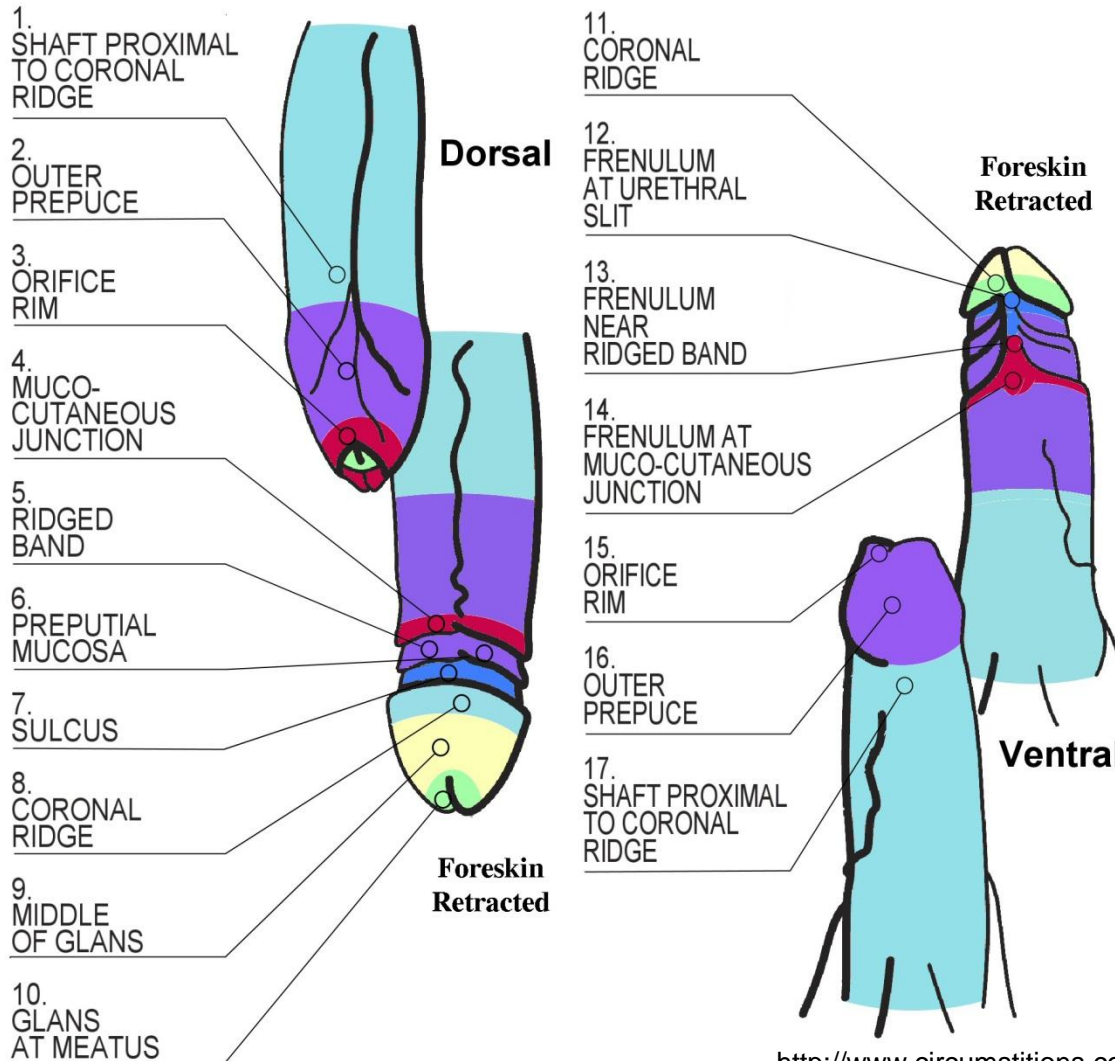
- 2007 study
- Semmes-Weinstein monofilament testing
- **CONCLUSION:**  
Circumcision removes the most sensitive parts of the penis.

Comparative Penile Sensitivity

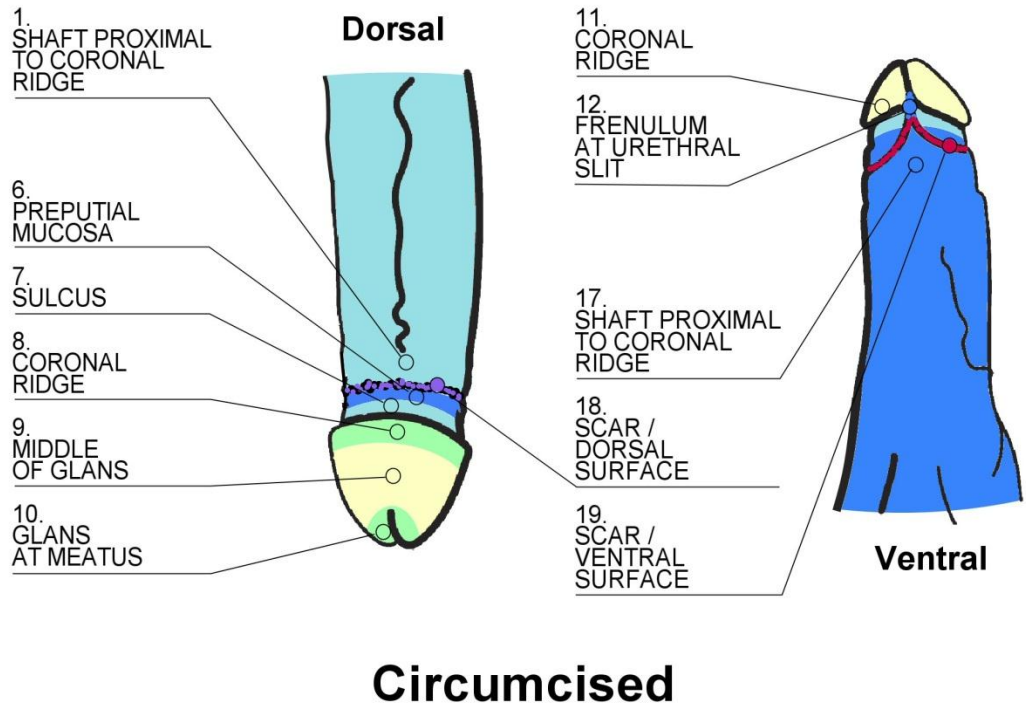
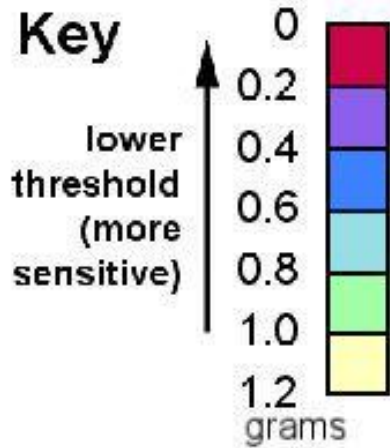


Sorrells ML, Snyder JL, Reiss MD, *et al.*  
Fine-touch pressure thresholds in the  
adult penis. *BJU Int* 2007;99:864-9.

# Sensation: Intact



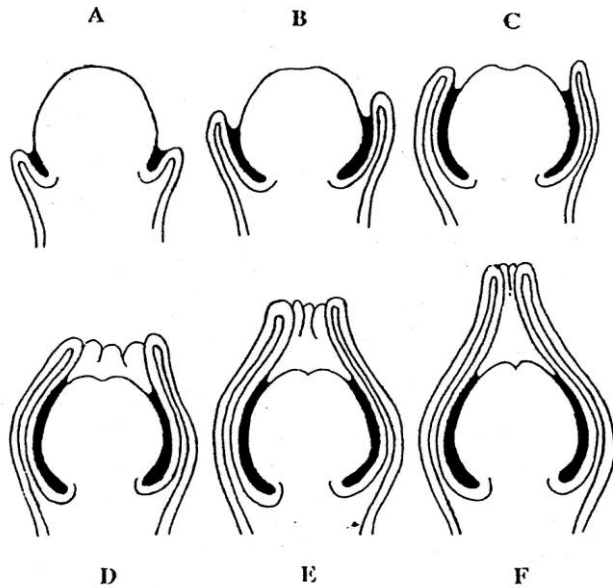
# Sensation: Circumcised



# Protection

- Foreskin protects against:
  - uncomfortable abrasion against clothing
  - cold
  - urine & feces in diaper
- Protects the delicate urinary opening
  - up to 10% of circumcised boys will suffer from meatal stenosis
- Inner foreskin contains immunologically active cells
  - similar to other mucous membranes

# Natural Infant Penis



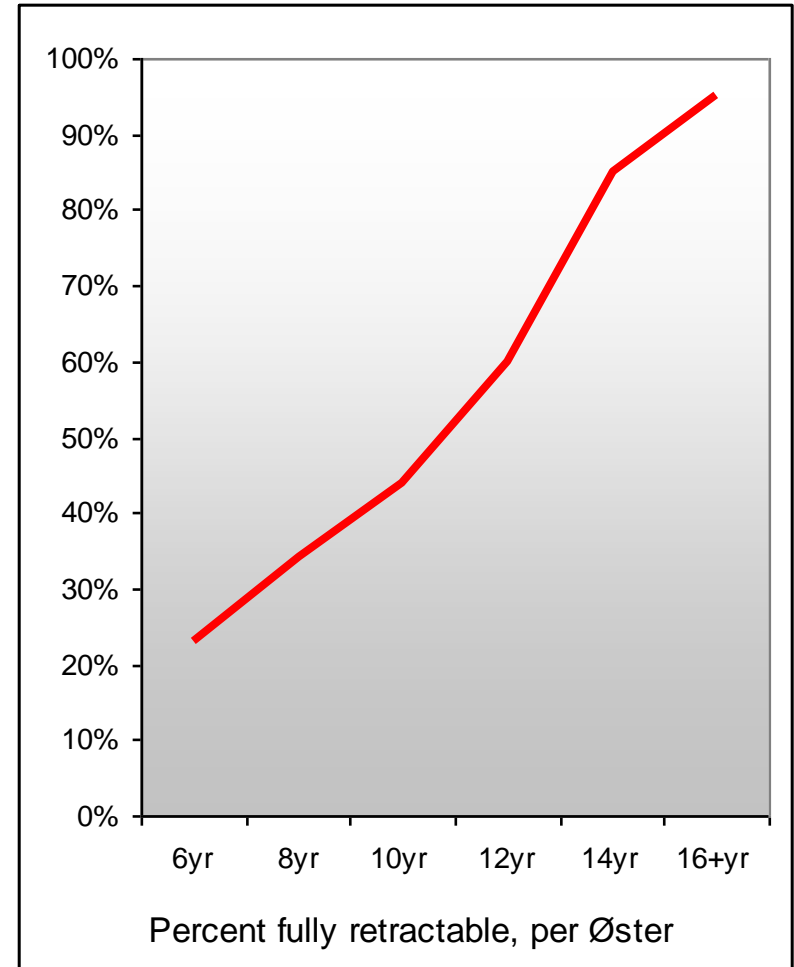
- **Fused to glans**
- Tight outlet
- Overhang

# Two Processes Leading to Retractability

- #1: Separation of the inner foreskin from the glans
- #2: Loosening of the foreskin opening
- Variable timing
  - Separation vs. Loosening
  - Typical age range: 2–16, average 10-11
  - Process does **not** need to be rushed
- Factors:
  - Boy's own handling, erections, penile growth, hormones

# Age of Retractability

- Øster 1968 (Denmark)
- ~2000 boys, ages 6 -17
  - Percent fully retractable:
    - 50% by age 10
    - 97% by age 17
- **CONFIRMED**
  - Kayaba 1996, Imamura 1997, Concepcion Morales 2002, Ishikawa 2004, Thorvaldsen 2005, Agarwal 2005, Ko 2007



# Care of the Foreskin: It's Easy!

- What NOT to do:
  - Never forcibly retract a child's foreskin!
  - Tell grandparents, babysitters, day care, and doctors
- Cleaning before the foreskin is retractable:
  - Wash the outside only
  - Avoid bubble baths & other harsh chemicals
- Cleaning after the foreskin is retractable (“Three Rs”)
  - Retract the foreskin
  - Rinse with clean warm water (soap not recommended)
  - Replace the foreskin back over the glans

# Phimosis

- Inability of the foreskin to retract in a **MATURE** male
- Non-retractable foreskin is **NORMAL** in children
- Often misdiagnosed & inappropriately used to justify newborn or child circumcision
- *True (adult) phimosis can be treated without circumcision*
  - *Steroid cream, stretching, preputioplasty*
  - *Some men who have phimosis are not bothered*

# Foreskin Irritation

- SYMPTOMS:
  - Redness, swelling
- REMEMBER:
  - Foreskin is doing its job!
- POSSIBLE CAUSES:
  - Diaper rash
  - Chemical or mechanical irritation
  - Transient “separation inflammation”
  - Imbalance of bacterial flora
  - Infection
- PREVENTION AND CARE:
  - Warm tub soaks, barrier cream, air drying
  - Avoidance of: soap, bubble bath, excessive chlorine, commercial wipes, detergent residue, etc.
  - Replenish healthy bacteria
    - Apply liquid acidophilus topically and take orally
  - Appropriate antimicrobial, if needed
  - Teach hand washing

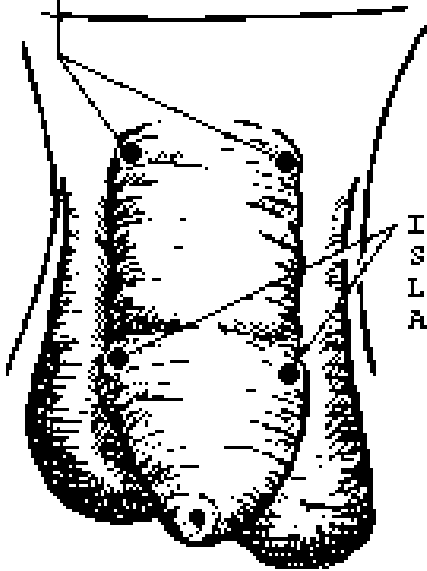
***Contrary to myth, the foreskin is not prone to infection!***

# Pain and Pain Reduction

- CIRCUMCISION IS PAINFUL
- Babies feel and remember pain
- AAP 1999: recommend use of “procedural analgesia”
- Anesthesia does not eliminate the pain
  - Operator skill, pain of injections, post-operative pain
- Not all doctors use anesthesia
- General anesthesia is required for children after the newborn period
  - older babies cannot be effectively restrained

# Pain reduction methods

INJECTION SITES FOR  
DORSAL PENILE NERVE BLOCK



INJECTION  
SITES FOR  
LOCAL  
ANESTHESIA

- INJECTION (NERVE BLOCKS)
  - Subcutaneous ring block (best)
  - Dorsal penile nerve block (DPNB)
    - Only addresses dorsal nerves
- TOPICAL
  - EMLA cream

Subcutaneous  
ring block

Photo courtesy of Dr. Larry Veltman



# Circumcision Devices



[www.circumcisioninfo.com/gifs/clamps1.jpg](http://www.circumcisioninfo.com/gifs/clamps1.jpg)

# Initial Steps

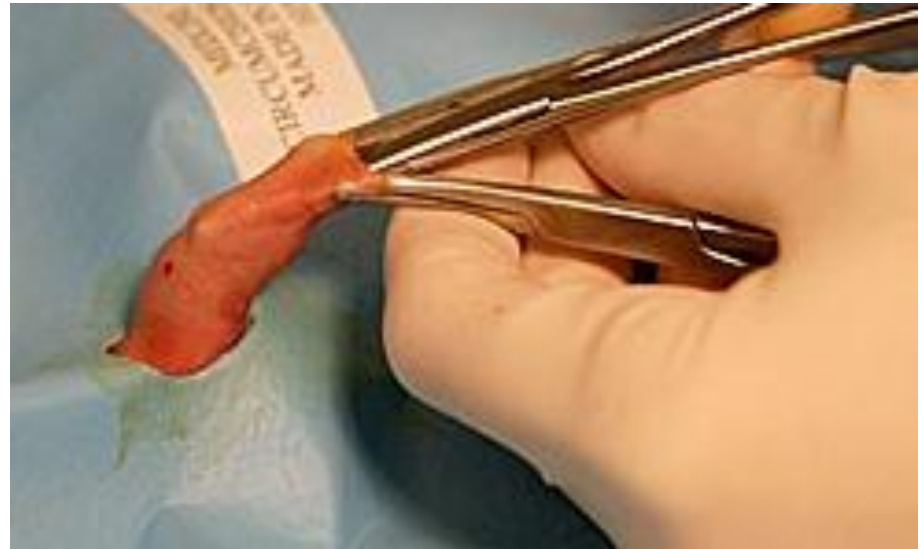


Baby on  
“Circumstraint” board

Dorsal penile nerve block



Separating the foreskin from the glans



# Gomco Clamp Procedure



Dorsal crush



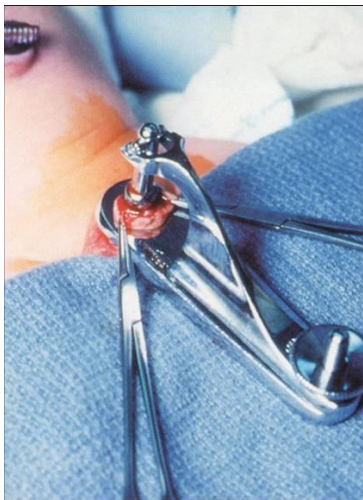
Dorsal slit



Inserting bell



Pulling through baseplate



Device assembled

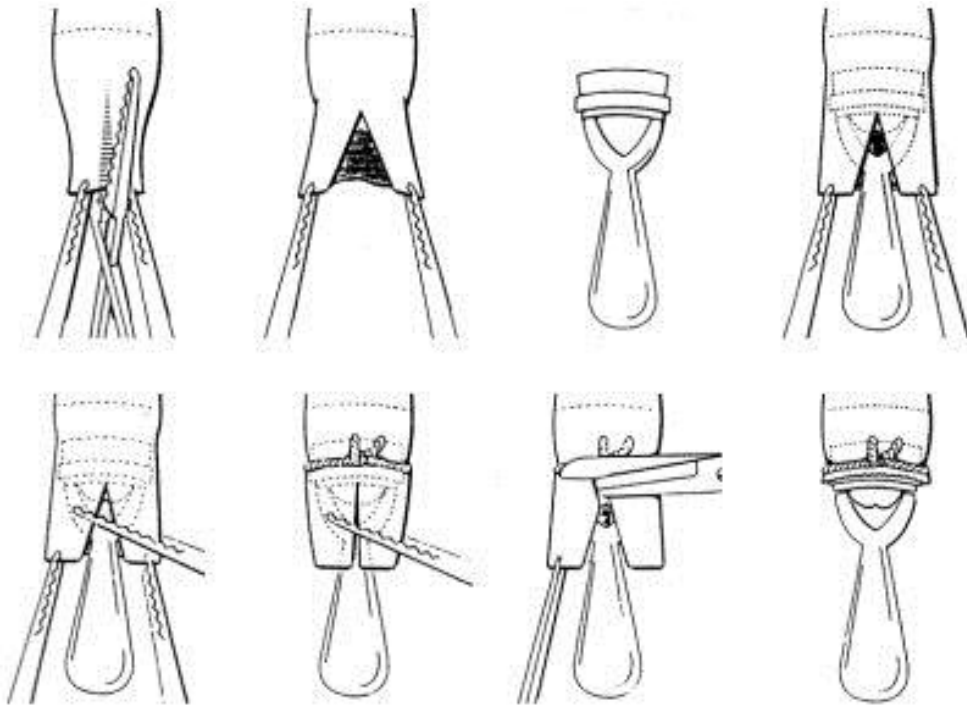


Removing bell



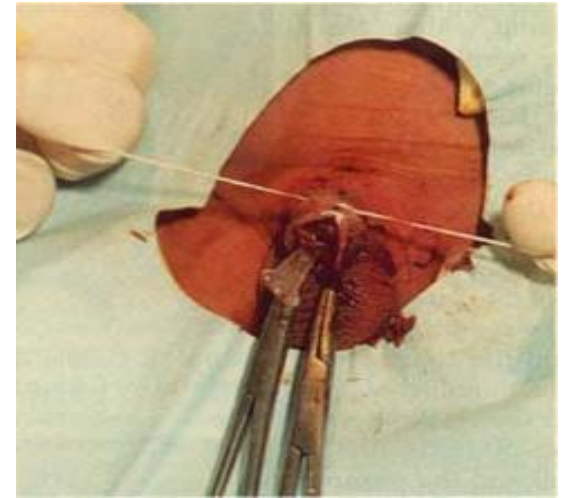
Gomco result

# Plastibell Procedure



Plastibell procedure DOES involve cutting

Ring stays in place 5-8 days



Applying ligature



Plastibell result

# Post-Operative Care

## Care of circumcised newborn:

- Follow physician's instructions
- Pain relief
- Clean wound, change gauze, apply Vaseline (Gomco)
- Watch for bleeding, signs of adhesions and infection
- Console a newborn in pain (esp. during urination)
- Healing takes 7-10 days

## Care of non-circumcised newborn:

- Clean outside of penis
  - at baths and diaper changes
  - similar to rest of diaper area

# Circumcision Risks

- A “safe and quick” procedure? Risks “rare and minor”?
- Risk rates: 0.2% - 0.6% ? (conservative)
- HOWEVER...
  - “A realistic figure is 2-10 percent.”
    - Williams N, Kapila L. Complications of circumcision. Br J Surg 1993; 80:1231-36.
  - Rates do not include:
    - Sexual harms
    - Psychological harms
  - Some complications do not manifest till years later
- Approx. 1% of boys will need corrective surgery
- *No national system for collecting data*

# Complications & Problems



Intact penis, retracted

Circ scar,  
keratinization

Scarring of glans

Meatal stenosis



Adhesions

Buried penis

Too much  
skin removed

Too much  
skin removed 30

# Other Complications

- Post-operative infection
  - including MRSA
- Blocked urethra (esp. Plastibell)
- Post-operative bleeding
  - dangerous in newborns
  - hidden by absorbent diapers

# Catastrophic

- Damage to or loss of the glans (head)
- Loss of the entire penis
  - electro-cauterization
  - surgical mishap
  - infection
- Death
  - 2-3 per year reported in media
  - some estimate 100 deaths in U.S. each year



# Other Possible Side Effects

- Newborn
  - Difficulty breastfeeding
  - Fussiness
  - Interference with mother-infant interaction/bonding
  - Excessive sleeping
- Adult
  - Tight or uncomfortable erections
  - Curved penis
  - Hairy shaft
  - Sexual dysfunction especially in older men
    - ED, delayed ejaculation
  - PTSD

# Medical Rationales

- Argument: removal of the foreskin has potential medical benefits
  - “risks of not circumcising”
  - “no health benefits of having a foreskin”
  - This framing *pathologizes* the foreskin
- Fact: the foreskin is a *normal* body part
  - Parents are not provided a list of other body parts to remove from their newborn with “benefits & risks” of each

# Medical Arguments

- Unscientific foundation of start of circumcision
- Not medically necessary
- A medical-benefits or "therapeutic" justification requires:
  1. benefits sought outweigh the risks and harms
  2. only reasonable way to obtain these benefits, and
  3. necessary to the well-being of the child.
- **None of these conditions is fulfilled for routine infant male circumcision.**

# Potential Medical Benefits

- Reduction in UTIs (first year)
  - UTIs are uncommon (1%) & treatable
  - Baby girls have more UTIs
- Reduction in Penile Cancer
  - Rare (1 in 100,000), only affects elderly men
- Reduction in Cervical Cancer
  - Related to HPV, best prevented through safe sex
- Reduction in STDs and HIV
  - Problems with studies; safe sex (condoms) still required
  - U.S. has high rates of circumcision and high rates of STDs

# Cultural, not Medical

- Not recommended by medical organizations<sup>1</sup>
  - Some neutral
  - Some actively discourage it
- Most physicians: no compelling medical reason
- Parents' motivations:
  - Social concerns
  - What they have heard from family or friends

1. <http://www.cirp.org/library/statements/>

# Social Rationales

- “fit in to society” or “he’ll get teased”
  - circumcision rates have decreased
  - communal showering less common
  - good parenting can promote child’s self-esteem
- “a boy should look like his father”
  - no scientific evidence to support this idea
  - easy to explain differences
  - what if the father had lost a finger?
- “women prefer circumcised partners”
  - not true in non-circumcising cultures
  - O’Hara study: women who experienced both prefer intact
  - some women are intrigued & interested

# Ethical Considerations

- Newborn Circumcision:
  - Medically unnecessary
  - Removes *healthy* tissue
  - Performed without the child's consent
- ***What would he choose if the decision was left to him?***
  - We can't know for sure, but...
  - Circumcision is irreversible, and
  - Most men who were not circumcised as babies do not choose to get circumcised as adults

# Resources

- [www.Circumcision.org](http://www.Circumcision.org)
- [www.CircumcisionDecisionMaker.com](http://www.CircumcisionDecisionMaker.com)
- [www.DrMomma.org](http://www.DrMomma.org)
- [www.TheWholeNetwork.org](http://www.TheWholeNetwork.org)
- [www.IntactAmerica.org](http://www.IntactAmerica.org)
- [www.NOCIRC.org](http://www.NOCIRC.org)
- **Videos**: [www.YouTube.com/Bonobo3D](http://www.YouTube.com/Bonobo3D)
  
- **Local**: [www.ColoradoNOCIRC.org](http://www.ColoradoNOCIRC.org)
- **Pamphlets**: [www.ColoradoNOCIRC.org/pamphlets](http://www.ColoradoNOCIRC.org/pamphlets)

These slides:

[http://coloradonocirc.org/files/presentations/birthnetwork\\_2012\\_01\\_18.pdf](http://coloradonocirc.org/files/presentations/birthnetwork_2012_01_18.pdf)