

Birth Control Methods (partial list)

6/07

Behavioral Methods

- **Abstinence** – refraining from sexual intercourse
- **Coitus interruptus** – “withdrawal method”
- **Periodic Abstinence** – no sexual intercourse when near ovulation time
 - **Temperature method** – ovulation determined by charting basal body temperature (BBT)
 - 0.4F – 0.8F rise in BBT
 - **Cervical mucus, Ovulation or Billings method (Natural Family Planning)** – ovulation determined by observation of discharge of cervical mucus
 - **Calendar method** – ovulation determined with menstrual history
 - **Standard days** – avoid unprotected sex on days 8-19 of menstrual cycle (beads)
 - **Symptothermal method** – ovulation determined using two or more of the above

Barrier Methods

- **Condom**
 - sheath of animal membrane or latex placed over erect penis
 - Blocks release of semen into vagina
- **Vaginal pouch** – “female condom”
 - 2 flexible rings connected by a polyurethane sheath
 - one ring inside the sheath fits over cervix
 - other ring remains outside vagina and covers external genitals
- **Diaphragm, Cervical Cap, Shield, Sponge**
 - dome-shaped device that fits over cervix
 - spermicidal agent

Hormonal Methods

Combination Estrogen/Progesterone

- **Birth control pill** - BCP/oral contraceptives
 - low dose progestin & estrogen (combination pill)
 - 21 days of active pills and 7 days of placebo pill
 - Mode of action:
 - neg feedback at anterior pituitary to lower secretion of FSH & LH
 - mimics pregnancy → blocks follicle development & ovulation
 - thickens cervical mucous to plug opening
 - thins endometrium making implantation difficult (maybe)
 - Risks: increased possibility of blood clots, heart attacks, HBP and strokes (esp smokers)
- **Seasonale/Seasonique** – introduced November, 2003 and May, 2006
 - Chemically identical to most BCP
 - Differs from BCP in how taken
 - 84 days of active pills (12 weeks)
 - menstrual period every 91 days (four per year)
 - greater chance of side effects associated with BCP
- **Ortho Evra** – “the patch” - introduced in 2001
 - Birth control patch delivers low dose progestin & estrogen through the skin (transdermally) to the bloodstream
 - Replace weekly
 - FDA warning of risk of blood clots due to higher estrogen dosage using patch (2006)
- **Lunelle** – once-a-month shot
 - Intramuscular injection of low levels of estrogen and progesterone-like chemicals
- **NuvaRing** - Vaginal Ring
 - flexible, transparent plastic device that slowly releases estrogen and progestin
 - replace every three weeks

Progestin only

- **Minipill** – progestin only (no estrogen)

- Modes of action: thickens cervical mucus, thins endometrium & maybe stop ovulation
- Side Effects: irregular menstrual bleeding (NO estrogen side effects like blood clots)
- **Depo-Provera** – “the birth control shot”
 - Intramuscular injection of progesterone-like chemicals (high dose)
 - Modes of action: stops ovulation, thickens cervical mucus, thins endometrium
 - A shot every three months
 - Risks: irreversible loss of bone density (2004)
- **Norplant** – taken off the market in July, 2002
 - thin tube of progesterone-like chemicals implanted under skin
 - ~ five year duration

Chemical methods

- **RU486** - “abortion pill”
 - First drug blocks action of progesterone
 - Either prevents implantation (early) or terminates placental function (later)
 - Causes endometrium to slough off (as in menses)
 - Second drug (prostaglandin) induces uterine contractions
 - Embryo/fetus pushed out through vagina
 - Heavy bleeding from uterus for about ten days
- **“Emergency contraception”** – “the morning-after pill”
 - Double or more doses of BCP
 - Taken within 72 hours of sexual intercourse to prevent or end pregnancy
 - Mechanisms of action:
 - Ovulation inhibited
 - Ovulation delayed
 - Endometrial lining irritated to block implantation

Prevention of Implantation

Intrauterine Device (IUD) Copper (Paragard) and Hormonal (Mirena)

- small plastic T-shaped object placed into uterus
- impedes the sperm's journey to the fallopian tubes & prevents implantation to uterine wall
- copper inactivates the sperm in the cervical mucus; progestin degrades endometrium

Surgical methods

Sterilization – renders someone incapable of reproduction

- **Vasectomy**
 - male sterilization where part of vas deferens is removed
 - performed at each testis
 - sperm cells blocked from becoming part of ejaculate
- **Tubal ligation**
 - both uterine tubes tied and cut
 - closes off path between sperm cell and oocyte
 - performed through abdominal wall

Abortion – surgical procedure to terminate a pregnancy

- both the developing unborn and placenta are removed from the uterus utilizing surgical instrumentation and/or pharmaceutical agents

Non-Surgical Sterilization

Essure Permanent Birth Control System

- first non-surgical method of sterilizing women
 - approved by FDA in November, 2002
- thin tube used to thread a tiny spring-like device through the vagina and uterus into each fallopian tube
- coils irritate the linings of the fallopian tubes causing scar tissue to grow and eventually permanently plug the tubes (~3 months for complete blockage)

Potential side effects exist for all forms of birth control. Please speak to your physician or pharmacist for additional information.