

Objectives:

1. Contraception
2. STDs

For more information:

- [Planned Parenthood](#)
- [FMU Student Health Center](#)
- Your personal physician



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FMU's Student Health Services

Monday - Friday

Hours: 8:30 a.m.- 12:30 p.m. & 1:30 p.m.- 4:30 p.m.

Students are strongly encouraged to make an appointment to be seen.

University Center, 2nd floor

(843) 661-1844 – Office

Birth Control Options available:

Birth Control Pills
 Ortho Evra Patch
 Nuva Ring
 Depo-Provera Injections
 Administration of Plan B

Screening available:

Chlamydia and Gonorrhea screening
 Pregnancy Tests are free
 Bacterial Vaginosis, Yeast Infections, and Trichomoniasis screening is free
 Pap Smear

**** Please don't go to Pregnancy "Crisis Centers" for info. on pregnancy, birth control, Plan B, etc.... They give inaccurate info. Please see a REAL physician.**

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2. Avoidance methods (76 – 88% effective)

c) Calendar method = track your menstrual cycle for fertile days, and avoid sex during those days.



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2. Avoidance methods

d) _____ – pull out penis before ejaculation. Depends on self control. (78% effective)

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3. Breast feeding

_____ = *breast*

feeding

"Lactational" refers to breastfeeding, and

"amenorrhea" means not having your period. (98% effective)

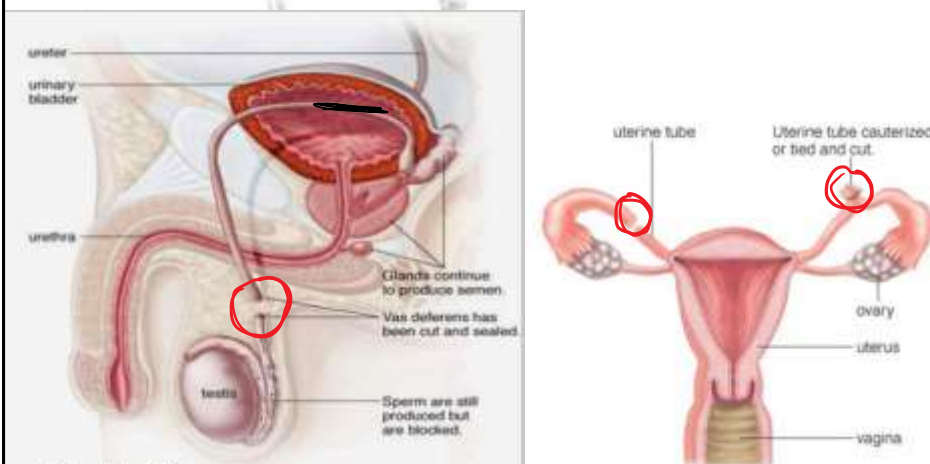
- Only effective during first 6 months, and if nurse every 4 hrs during day, and 6 times during night.
- Using breast pump doesn't seem to work.

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4. Permanent methods = irreversible (99% effective)

_____ = cut vas deferens

_____ = cut
fallopian tubes



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5. _____ (71% effective)

- > NOT reliable as sole form of contraception.
- > Does NOT protect against STDs.

Foams, creams, contraceptive films, gels, suppositories

The Sponge = barrier with spermicide (76 – 88% effective).

> Placed into vagina 10 – 15 min before sex.

> Contains spermicidal agent (ex. Nonoxynol-9) that kills sperm or inhibits their movement. (Try “test spot” first!)

> Need to apply fresh each time before sex.

> Best when used in combination with another form of BC.

> Can be irritating to some men and women (try different brands).



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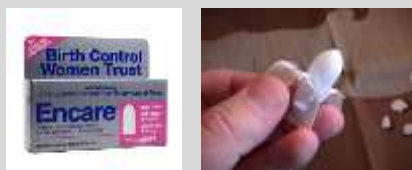
Vaginal Contraceptive Film (“Strip”) = Thin spermicide-embedded sheet place into vagina before sex, dissolves w/vaginal fluids.

> New strip applied with each sexual encounter.



Contraceptive Spermicidal Suppositories

(tablet or pellet inserted into vagina before sex)



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6. _____

Male condom (85% effective)

Female condom (79% effective)

Cervical cap (71 - 86% effective)

Diaphragm (88% effective)

Only form of BC that protects genitals against STDs

Diaphragm (use w/spermicide)

Cervical cap (use w/spermicide)

Male condom Female condom

uterus cervix covered vagina

contraceptive cream or jelly diaphragm

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6. Barrier Method that isn't contraceptive, but protects from STDs.

Dental Dam – rectangular latex sheet that can be used as a barrier to STDs for oral sex - protecting against direct contact between the mouth and the vagina or anus

dental dam (used on vagina and anus)

STRAWBERRY GRAPE BANANA MINT VANILLA

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7. [The Pill \(99% effective – if used correctly\)](#)

PREVENTS OVULATION!
It does NOT cause abortion.


[There are many people that confuse (ignorantly, or purposefully) contraceptives with abortion. As nurses, you will have to be the voice of **biologically & medically accurate** info.]



TIME GENOME FLIPPER PROTEINASE | ASTRIDULLI GARDISE WAKATANGI | WINDSAPLE | PERSIMONACTOR | REVOLUTED

U.S. + WORLD
Brett Kavanaugh Referred to Contraception as 'Abortion-Inducing Drugs' During Confirmation Hearing

Was elected to the US Supreme Court in 2018. Will have a say in making, and overturning, laws that can last for generations. Click [HERE](#) for link.



Me, after hearing that...



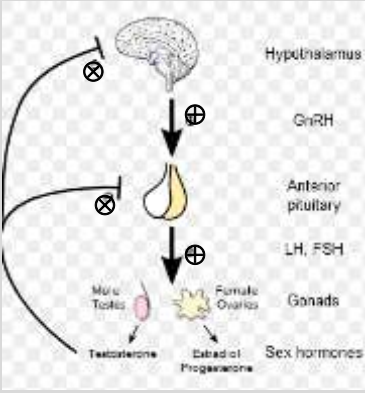

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7. [The Pill \(99% effective – if used correctly\)](#)

PREVENTS OVULATION!
It does not cause abortion.

[There are many [people](#) that confuse (ignorantly, or purposefully) contraceptives with abortion.]

- The pill delivers synthetic **estrogen & progesterone**

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7.

The Pill (99% effective – if used correctly)



PREVENTS OVULATION!

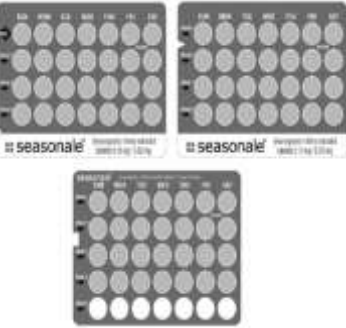
It does not cause abortion.

[There are many [people](#) that confuse (ignorantly, or purposefully) contraceptives with abortion.]

- The pill delivers synthetic **estrogen & progesterone**
- Rising blood estrogen & progesterone inhibit (by negative feedback) hypothalamic **GnRH** & pituitary **LH & FSH**
- Low pituitary LH & FSH inhibits egg development and prevents ovulation.
- Also reduces endometrial growth (good for people w/endometriosis)
- Also thickens cervical mucus (barrier to sperm)


Typical hormonal pill has 21 days of “active” (contains hormones) pill where endometrium thickens slightly but no egg ovulated, and 7 days of “placebo” (hormone-free) pill, when menstruation occurs.

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Seasonale = low dose estrogen & progesterone. Take 84 days active pill followed by 7 days placebo. Repeat.

Result = have only 4 periods / year. Good for people w/endometriosis or ovarian polycystic ovarian syndrome or immediate family history of ovarian cancer..



Lybrel (Anya) = take active pill 365 days/year (no placebo = no periods)

Great for people w/endometriosis, polycystic ovarian syndrome, or immediate family history of ovarian cancer.

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Medications known to interfere with birth control pill:



- Certain antibiotics:

rifampin (Rifadin®), and to a lesser extent:

penicillin, amoxicillin, ampicillin, sulfamethoxazole/trimethoprim (Bactrim®), tetracycline, minocycline, metronidazole (Flagyl®) and nitrofurantoin (Macrobid® or Macrochantin®).

- The antifungal Griseofulvin

- Certain HIV medicines

- Certain anti-seizure medicines (these are sometimes also used to treat psychiatric disorders like bipolar disorder)

- The herb St. John's Wort

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Hormone Injections: (94% effective)

Depo-Provera – injection of progesterone (progestin) once every 3 months.

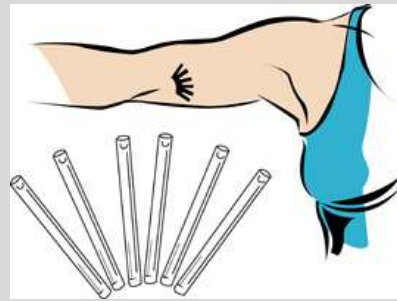


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Hormone Implants: (99% effective)**Implanon, Nexplanon**

– contains hormone progestin.
Implants last 3 - 5 years.



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7.

Hormonal Patch: Ortho Evra (91% effective)

Contains estrogen & progestin.

New patch put on every week for 3 weeks,
go patch-less for 1 week.



*The patch isn't for everyone – **high levels of hormones in patch (higher than other methods)**, because it's transdermal. People w/ history of blood clots, stroke, or estrogen-sensitive cancers (breast, ovarian, uterine) should avoid this form BC.*

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7. Hormonal and/or copper-based

Intrauterine device (IUD): (99% effective)

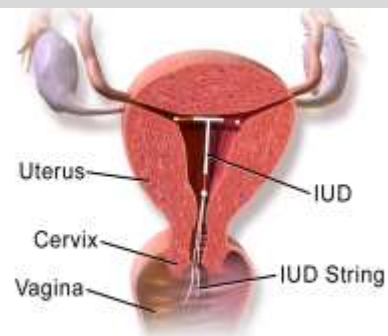
> Small T-shaped device inserted into uterus by doctor.

- > More expensive than other forms
- > Must be inserted by physician,
- > Can sometimes shift out of place,
- > BUT can last 10 -12 yrs!

- > **Mirena, Kyleena, Liletta, and Skyla** contains progesterone (good 3 – 7 yrs)
- > **ParaGard** contains small amt. copper. (good 12 years!)

> Progesterone works by negative feedback to inhibit GnRH, LH, & FSH preventing ovulation, thickening cervical mucus. Copper disrupts sperm movement.

It does NOT cause abortion!



Intrauterine Device (IUD)

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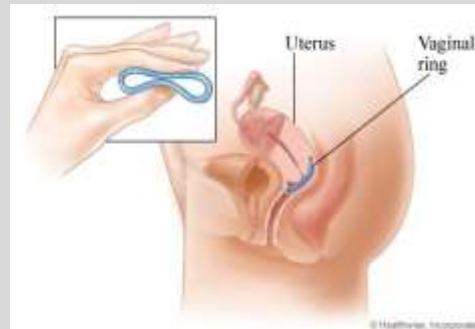
7. Cervical Ring (NuvaRing): (91% effective)

> small ring containing estrogen and progestin placed over the cervix.

> Put fresh ring in, stays in place 3 weeks, & go without ring for 1 week (no hormone, have period).

> **OR** keep ring in for 4 weeks to skip period.

> effectiveness depends on proper placement.



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Emergency Contraception: 3 Types

1. Paragard IUD - within 5 days after having unprotected sex.
The most effective type of emergency contraception.

2. Emergency contraceptive pill

Ella (ulipristal acetate) – also effective, but need prescription. Take within 5 days unprotected sex. (It can take up to 6 days for sperm to meet an egg.)

or

Plan B (Levanorgestrel) – No prescription. Over-the-counter.
> Take 3 days after unprotected sex.

> If a woman hasn't ovulated yet, emergency contraception prevents her from ovulating by delivering high dose of progesterone.

> If already ovulated at time of sex, can still get pregnant.

-Plan B does not cause an abortion!

> If you are already pregnant it won't stop it.



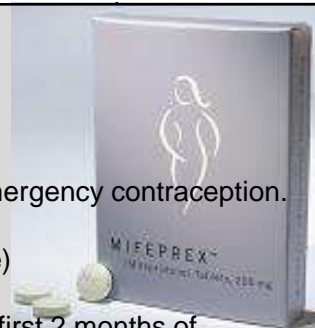
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Chemical Abortion

RU486 (Mifepristone) – THIS causes an abortion.

- Mifepristone can be used in lower doses as emergency contraception.
- At higher doses is abortifacient (97% effective)
- Taken after pregnant, causes abortion during first 2 months of pregnancy (< 8wks) by blocking progesterone receptors.
- Causes loss of placental attachment to uterine wall.
- 2 days after taking mifepristone, need injection of **misoprostol** (**cytotec**) – pronounced “misoprawstawl”
= labor inducer to expel embryo & placenta within 4 – 5 hours.
(If retained can become septic)

Medication abortion is very safe. Serious problems are rare, but like all medical procedures, there can be some risks



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Male Hormonal Birth Control:

Pill – combo of testosterone and progestin to inhibit sperm development (by inhibiting pituitary LH & FSH).

Injection (2003) – 100% effective in clinical trials in Australia (55 men, for 1 year). Hormone injection of progestin turns off normal production of sperm (by inhibiting pituitary LH & FSH).

Implant – testosterone implant inhibits sperm production by inhibiting pituitary LH & FSH.

Gel - testosterone & progestin gel that inhibits sperm production by inhibiting pituitary LH & FSH.

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Male Birth Control – NOT hormonal:

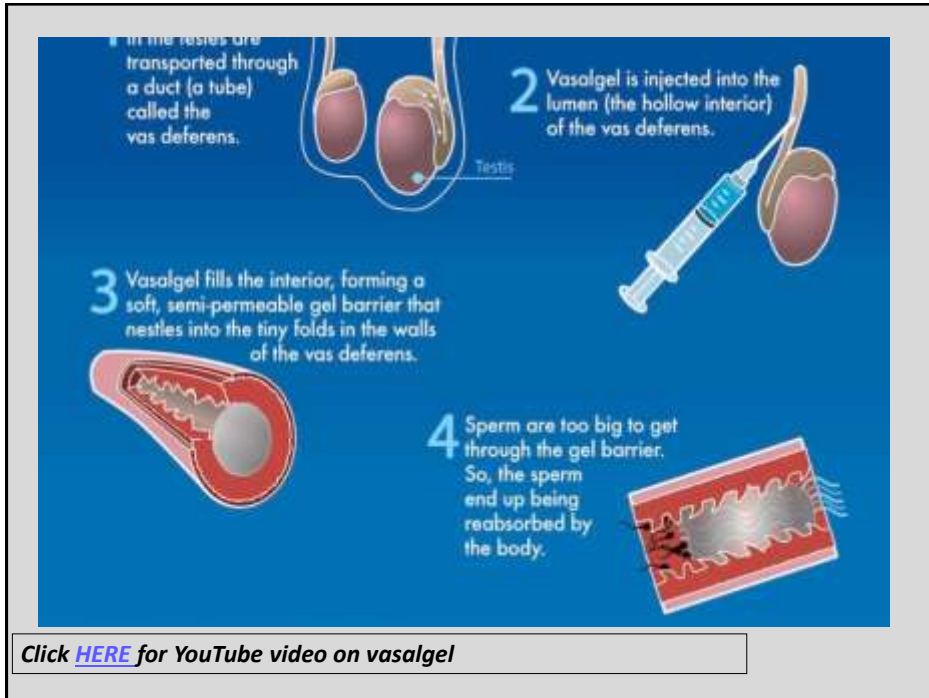
Reversible Inhibition of Sperm Under Guidance (RISUG) or simply “_____”

- Reversible and non-hormonal
- QUICK (10 – 15 min procedure in office)
- Cheap.
- Long-term effectiveness (10 yrs)
- Inject gel into vas deferens (blocks sperm transport)
- Remove when want be getting injection that dissolves gel.
- Studies show quick return to normal fertility.

- In USA, clinical trials began in 2023, for possible introduction to market in 2024.

<http://www.sciencealert.com/reversible-male-birth-control-just-passed-another-trial-and-could-be-on-sale-within-2-years>

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Review:

Contraceptive methods:

- Abstinence
- Avoidance
- Breast feeding
- Permanent (vasectomy or tubaligation)
- Spermicides
- Barrier (male/female condoms, cervical cap, diaphragm)
- Hormonal (pill, injections, implants, patches, IUD, cervical ring, emergency contraception)
- Abortion drugs: RU-486 (mifepristone) followed by cytotec
- Male birth control: Vasalgel

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7. Sexually Transmitted Diseases (STDs)

- 1/20 of the people in the US infected with STDs.
- Almost half of those infected are <25 years old. (2018 CDC data)
- Can result in mild disease, infertility, severe disease, and death.
- Many have few or no symptoms, so are passed unknowingly to partners
- Some STDs can also be passed to infants during birth

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Sexual Behavior in College Students

- Approximately 90% of college students are sexually active
 - ~26 % of those surveyed reported consistent use of condoms

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2789340/>

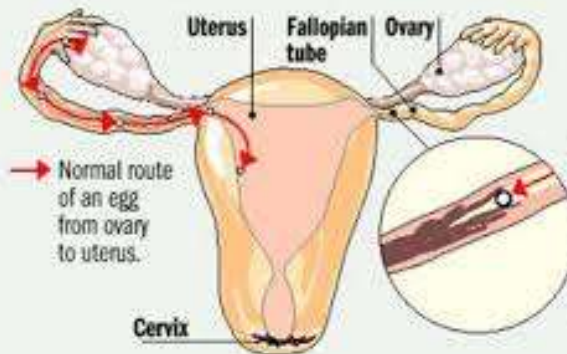
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Bacterial STDs

1. **Chlamydia** – caused by *Chlamydia trachomatis*, is the most frequently reported infectious disease in the U.S.. Highly contagious and often without noticeable symptoms. may cause discharge, pelvic pain, or no symptoms at all.

Rates of chlamydia infection in USA are INCREASING!

CHLAMYDIA THE EFFECTS



Chlamydia causes a build-up of scarring that can block the fallopian tube and prevent fertilisation.



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Bacterial STDs

2. **Gonorrhea** -caused by the bacterium *Neisseria gonorrhoeae*. Painful urination, discharge, genital puss, or no symptoms at all. Is becoming resistant to most antibiotics!



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Bacterial STDs

3. Syphilis – caused by *Treponema pallidum*. Infection has 3 stages:



Stage 1: Chancres
("shankers")
= hard, painless
bumps at site of entry,
last 1 – 5 weeks.



**Stage 2: Reddish,
brown rash** over
entire body.



Stage 3: Gummas
("gum-ah")
= lesions on exterior
and interior of body.



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Viral STDs

1. Herpes Simplex Virus (HSV) – simplex 1 (cold sores)



HSV can be latent, and then reactivate into painful blisters, which show up at sites of infection.

→ no cure; treatment is to minimize outbreak severity

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Viral STDs

1. Herpes Simplex Virus (HSV) – simplex 2 (genital)



CDC says 1 in 6 Americans infected with Herpes simplex 2 virus.

HSV can be latent, and then reactivate into painful blisters, which show up at sites of infection.



→ no cure; treatment is to minimize outbreak severity

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Viral STDs

2. HPV – over 40 strains!

Present in 50% of sexually active adult population. Can cause polyps and warts at site of contact. Can lead to increased risk for cancer.

Vaccine! (Gardasil)

Cervical polyps



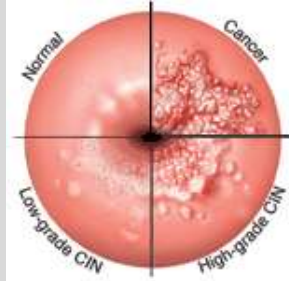
As viewed through a speculum

Sagittal view



Vaginal warts

Cervical cancer stages



Cervical warts



Throat cancer?



Penile warts

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Viral STDs

3. HIV:

- Nearly 35 million people worldwide are infected.
- Approximately 1.4 million people in North America are infected.
- Virus attacks immune system (T-cells). Your body is supposed to produce millions of T-cells daily. T-cell counts is a method to track progression of HIV infection.

-4 stages of HIV:

- 1. Acute primary infection** (some people's immune system defeats virus)
Flu-like symptoms, soreness, fever.
- 2. Latent infection** - virus can lie dormant in body for 10 years, but still infectious.
- 3. Symptomatic infection** - viral load increases, drop in T-cells, opportunistic infections, weight loss.
- 4. AIDS** - immune system compromised, T-cell counts < 200 cells/cubic ml blood.

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Other common STDs (non bacterial or viral):

STD caused by protozoan:

Trichomoniasis (*Trichomonas vaginalis*)

70% of infected people do not show symptoms.

Symptoms range from mild irritation to severe inflammation within 5 to 28 days after infection, but might develop symptoms much later.

Men may feel itching or irritation inside the penis, burning after urination or ejaculation, or some discharge from the penis.

Women may notice itching, burning, redness or soreness of the genitals, discomfort with urination, or a thin discharge with an unusual smell that can be clear, white, yellowish, or greenish.



**Penile inflammation
trichomoniasis**



**Cervix inflammation
trichomoniasis**

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STD's* caused by fungi

A) Jock itch (*Tenia cruris*)

itching or a burning sensation in the groin area, thigh skin folds, or anus. It may involve the inner thighs and genital areas



Inner thigh inflammation with *T. cruris*



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STD's* caused by fungi

B) Yeast infections (*Candida albicans*)

Can occur in men or women.

C. albicans lives in 80% of the human population without causing harmful effects, although overgrowth of the fungus results in **candidiasis**.

Common as vaginal yeast infection or in mouth as "thrush"



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Other common STDs:

STD's caused by parasites:

Pubic lice or crabs (*Pediculosis pubis*)

Pubic lice is a parasitic insect that feeds exclusively on blood.

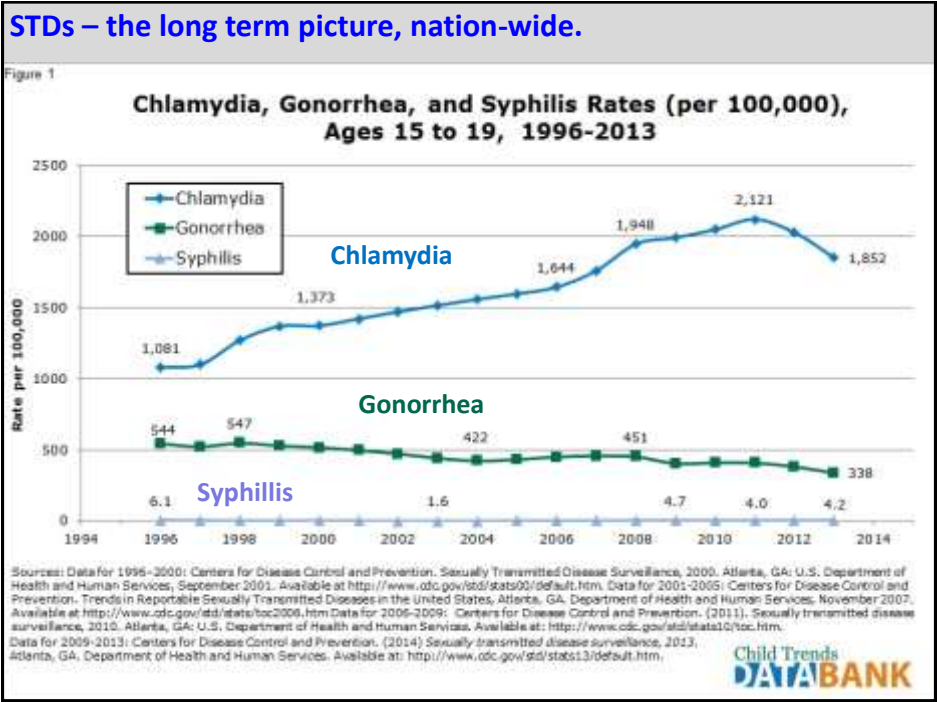
Can be spread by intimate contact with an infected person. Can live in any body area covered by hair, even eyelashes!



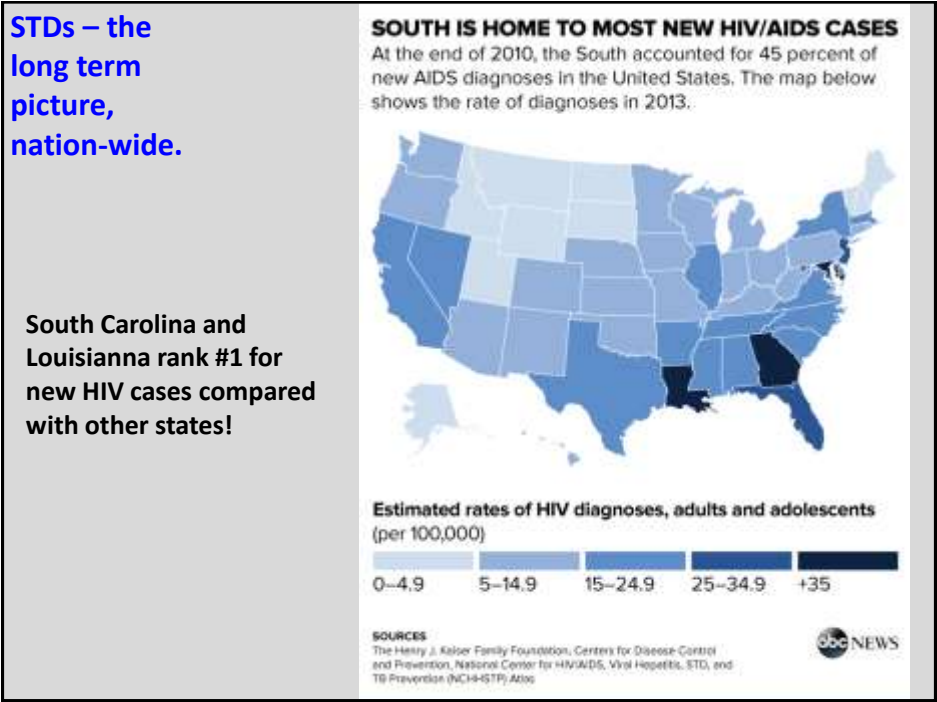
Pubic lice on groin

Pubic lice on eyelashes

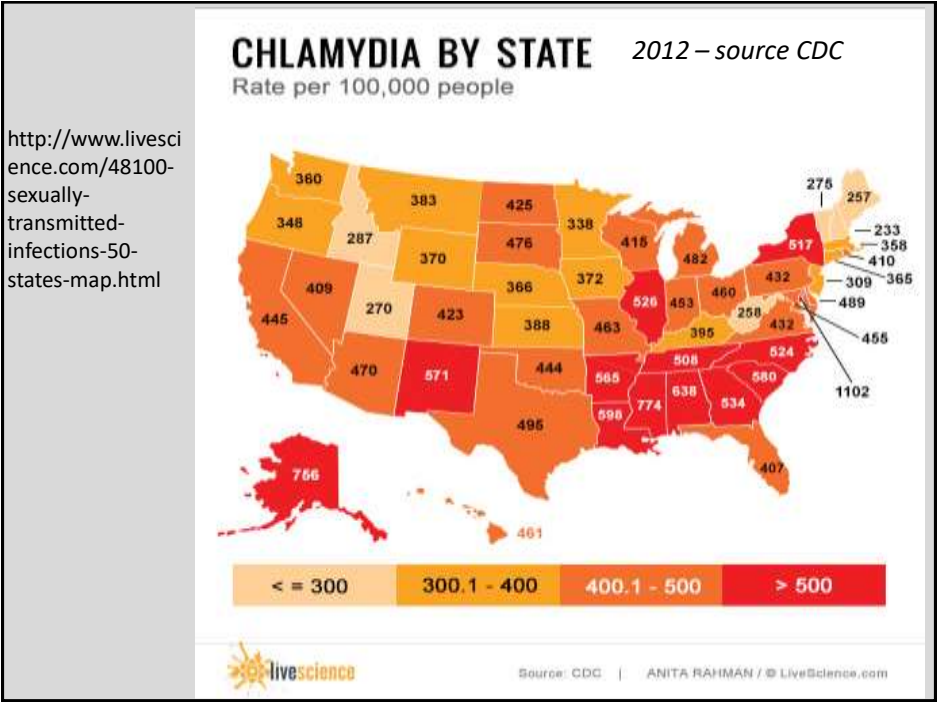
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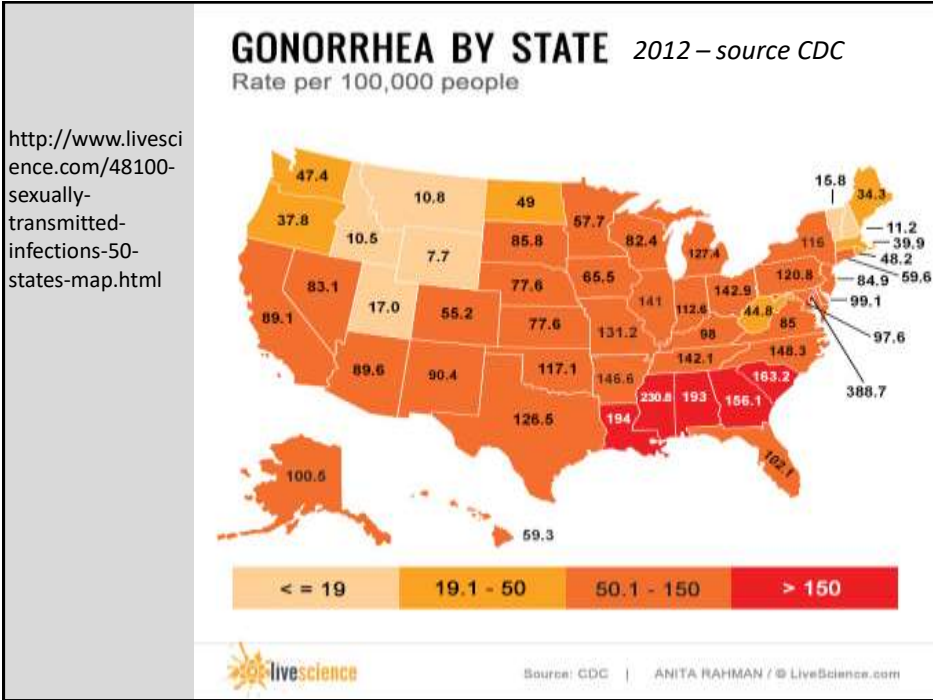
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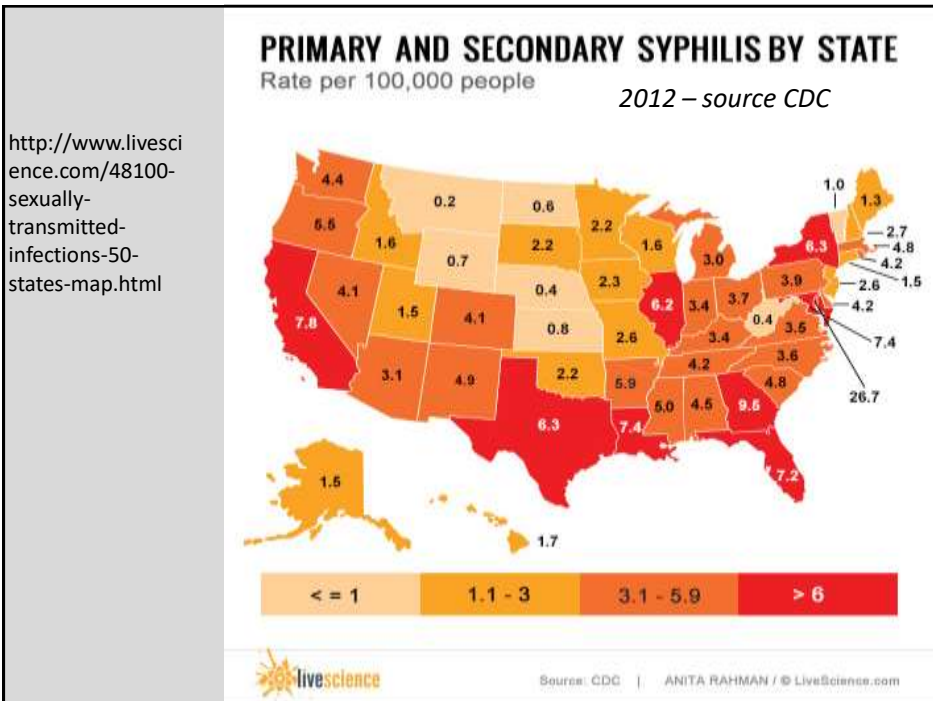
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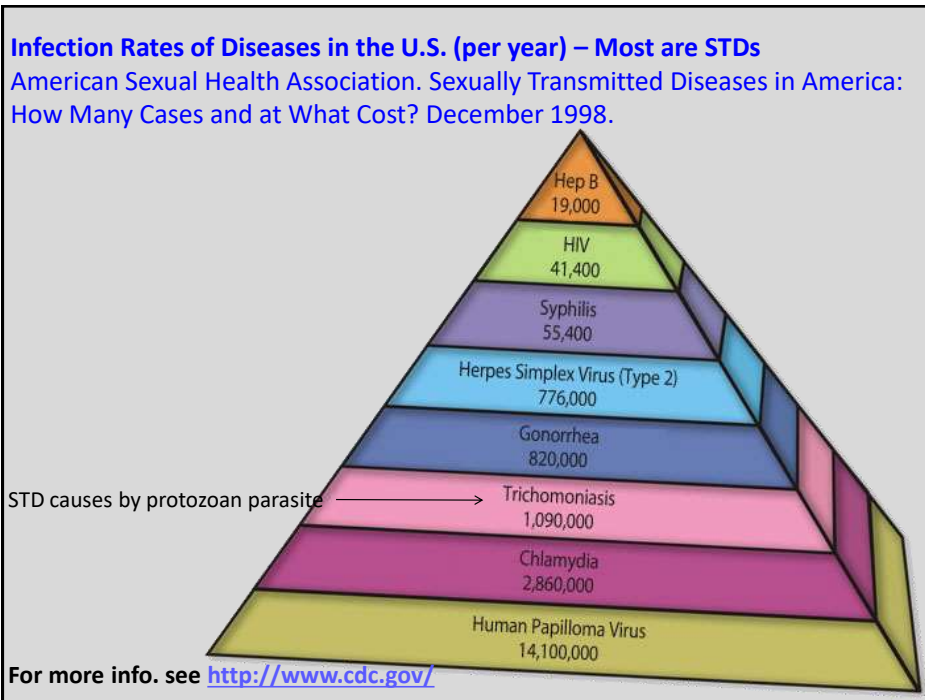
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<http://www.livescience.com/48100-sexually-transmitted-infections-50-states-map.html>

<http://www.livescience.com/48100-sexually-transmitted-infections-50-states-map.html>



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Review:

STDs

- Bacterial (Chlamydia, Syphilis, Gonorrhea)
- Viral (HIV, HPV, Herpes)
- Protozoan (Trichomoniasis)
- Fungal (Jock itch, yeast infections)
- Parasites (Pubic lice)
- Infection rates in US/year (most to least common)

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