

# Teens, Young Adults, and STDs

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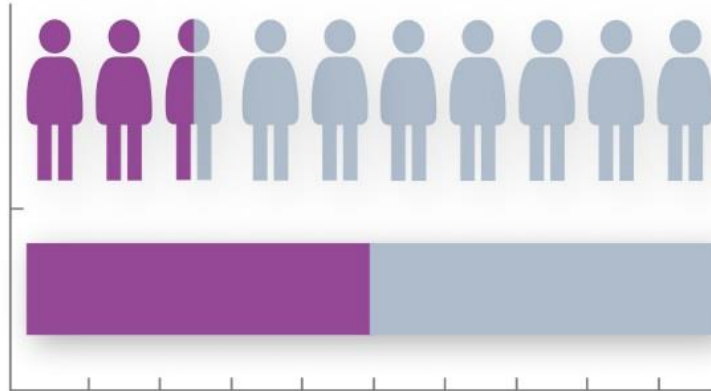
# What are STDs?

- Infections spread through sexual contact
  - Oral sex
  - Anal sex
  - Vaginal sex
  - Skin-to-skin contact
  - Other contact with bodily fluids

## Youth bear disproportionate share of STIs

Americans ages 15-24 make up just **27%** of the sexually active population

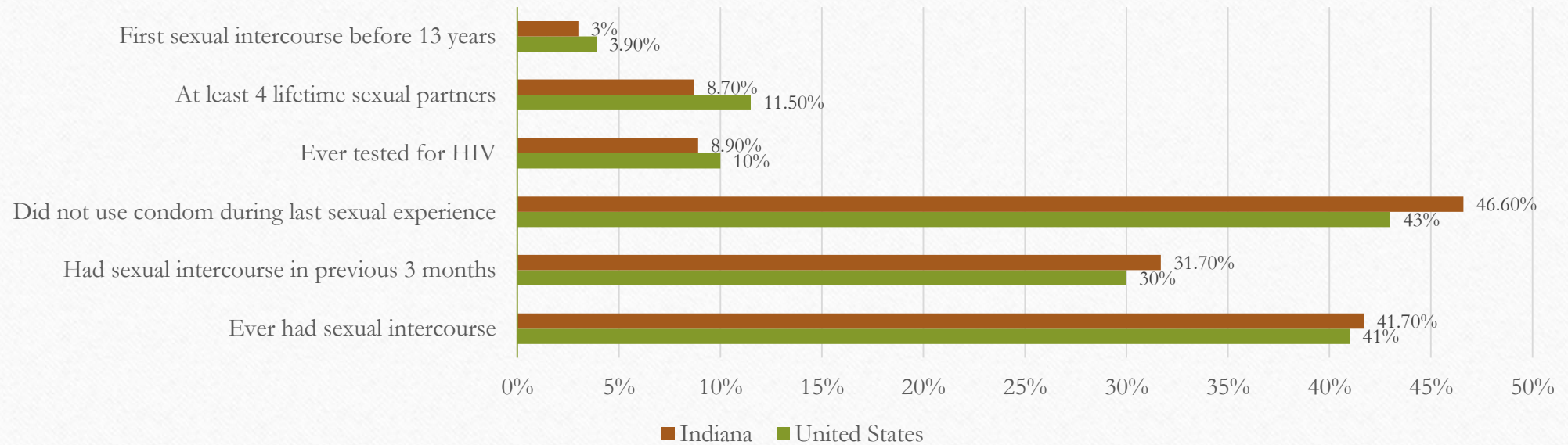
But account for **50%** of the **20M** new **STIs** in the U.S. each year



CDC. *Sexually Transmitted Diseases (STDs): STD Prevention Infographics*, 10 Dec. 2015. <https://www.cdc.gov/std/products/infographics.htm>

# 2015 High School Survey

2015 High School Study: United States vs. Indiana



# Why are younger people at greater risk?

Not comfortable discussing protection with partners

## Unique factors place youth at risk for STIs



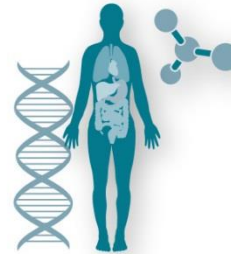
### Insufficient Screening

Many young women don't receive the chlamydia screening CDC recommends



### Confidentiality Concerns

Many are reluctant to disclose risk behaviors to doctors



### Biology

Young women's bodies are biologically more susceptible to STIs



### Lack of Access to Healthcare

Youth often lack insurance or transportation needed to access prevention services



### Multiple Sex Partners

Many young people have multiple partners, which increases STI risk

CDC. *Sexually Transmitted Diseases (STDs): STD Prevention Infographics*, 10 Dec. 2015. <https://www.cdc.gov/std/products/infographics.htm>

# How to protect yourself?

## Use Condoms

Using a condom correctly every time you have sex can help you avoid STDs.

## Talk With Your Partner

Talk with your sex partner(s) about STDs and staying safe before having sex.

## Get Tested

Many STDs don't have symptoms, but they can still cause health problems.

## Practice Abstinence

The surest way to avoid STDs is to not have sex.

## Get Vaccinated

The most common STD can be prevented by a vaccine.

## Have Fewer Partners

Agree to only have sex with one person who agrees to only have sex with you.

CDC. *Sexually Transmitted Diseases (STDs): STD Prevention Infographics*, 10 Dec. 2015. <https://www.cdc.gov/std/products/infographics.htm>

# How do you know you have an STD?

**OVER ONE MILLION PEOPLE  
ARE INFECTED WITH AN STD EVERY DAY**

**NORTH AMERICA (UNITED STATES)**

19 MILLION AMERICANS ARE INFECTED WITH STDS ANNUALLY



**BUT ONLY HALF ARE AWARE OF IT**

**25%**

OF TEEN GIRLS ARE  
LIVING WITH AN STD

- May or may not have any symptoms
- Usually cannot tell by looking at someone
- Get tested
  - FindSTDTest.org for testing locations

Sterling, MD. Jeffrey. *Straight, No Chaser: STDs-Chlamydia Infections*, 27  
Apr. 2017. <https://jeffreysterlingmd.com/tag/chlamydia-infection/>

# Treatment Guidelines

- Not all can be cured
- Medication may help with symptoms
- Treat *ASAP* if curable
- Take *ALL* medication
- Do not have sex until treatment completed or 7 days after



Always **follow** CDC screening and treatment guidelines



**Report** treatment failures to your health department's STD program



**Prevent** reinfection by notifying and treating partners

CDC. *Sexually Transmitted Diseases (STDs): STD Prevention Infographics*, 10 Dec. 2015. <https://www.cdc.gov/std/products/infographics.htm>

# Bacterial Vaginosis

## Symptoms

- Thin white or gray discharge
- Vaginal pain, itching, burning
- Strong fish-like odor
- Burning with urination
- Itching around vagina

## Health Risks

- Increase chance of contracting or spreading HIV
- Increase chance of other STDs
- Can cause pelvic inflammatory disease
- Pregnancy complications

- Not an STD but can result from sex
- Bacterial imbalance in vagina
- Most common vaginal infection for women 15-44
- Treat with antibiotics

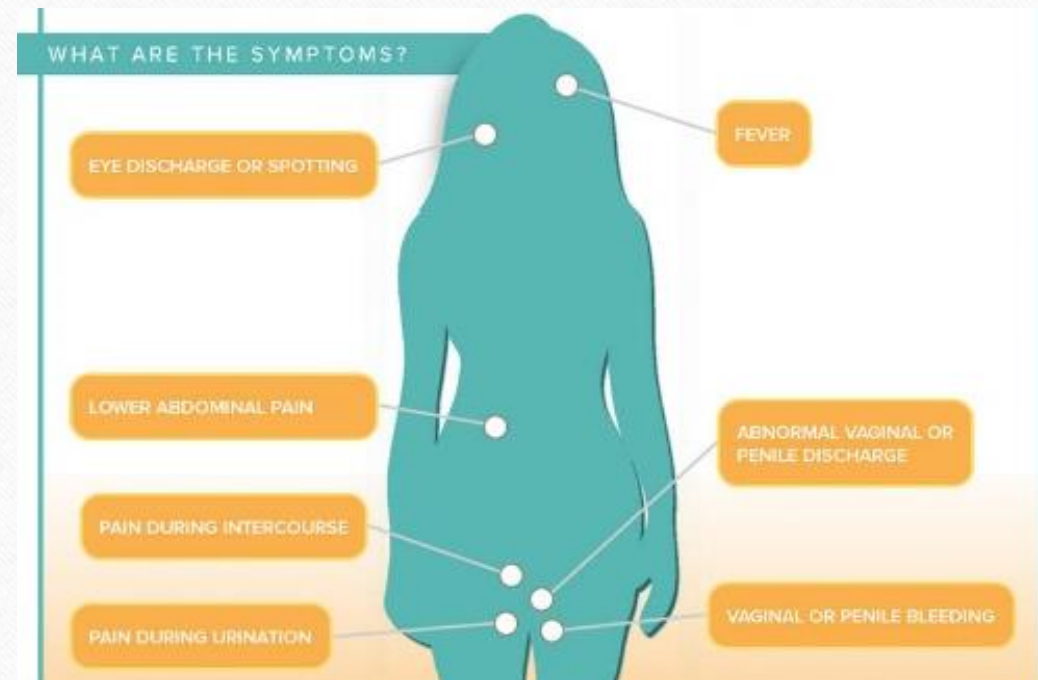


# Chlamydia

- Very common
- Spread through sexual activity
- May pass to baby during childbirth
- Treat with antibiotics

## Health Risks

- Infertility
- Cause PID
- Pregnancy complications
- Increase chance of HIV



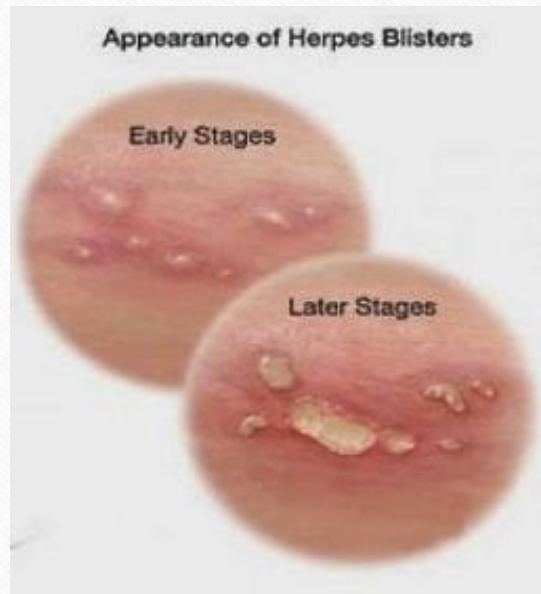
Findatopdoc.com. *Men's Health: Chlamydia in Men*, n.d.  
<https://www.findatopdoc.com/Men-s-Health/Chlamydia-in-Men>

# Genital Herpes

- Caused by HSV-1 and HSV-2
- Estimated 776,000 new cases in US each year

## Health Risks

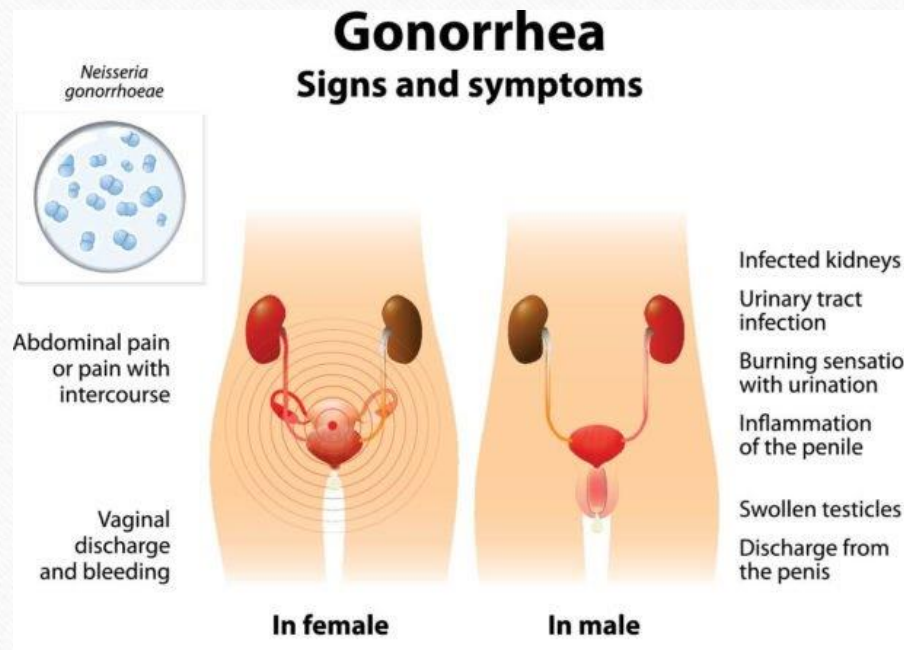
- Meningitis
- Encephalitis
- Increase HIV chance
- Pregnancy complications



- Spread by sexual contact, saliva, or contact with herpes sore
- Not all affected areas covered by condom
- No cure
- Anti-viral medications help with symptoms

Spatel. Careinfo.in. *Genital Herpes Causes, Symptoms and Treatment*, n.d.  
<http://careinfo.in/2017/03/genital-herpes/>

# Gonorrhea



American Pregnancy Association. *Gonorrhea*, Aug. 2015.  
<http://americanpregnancy.org/womens-health/gonorrhea/>

- Also called “the Clap”
- Very common, esp. 15-24 years old
- Spread through sexual activity
- May pass to baby during childbirth
- Treat with antibiotics

## Health Risks

- Infertility
- PID
- Life-threatening infection
- Increase chance of HIV

# Hepatitis B

- About 850,000-2.2 million in US chronically infected
- Spread through sexual activity and blood
- May pass on during pregnancy and birth
- Prevent with vaccine
- No cure but treatment available
- May lead to liver failure, cancer, death

While most people with hepatitis B don't have symptoms, if they do occur they may include:



Flamm, MD. Steven L. Liberate Health. *Hepatitis B*, Mar. 2014.  
[http://liberatehealth.us/liberate\\_condition/hepatitis/hepatitis-b-condition-full-deck/](http://liberatehealth.us/liberate_condition/hepatitis/hepatitis-b-condition-full-deck/)

# HIV/AIDS

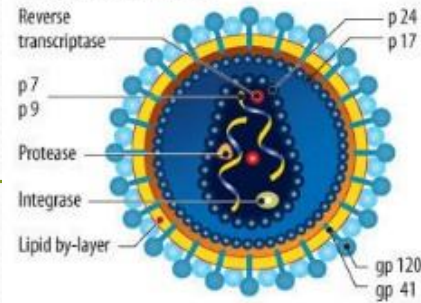
- 22% of all new HIV diagnoses in 2015 were 13-24 year olds
- More at risk after getting other STDs
- Pre-exposure prophylaxis available for those at very high risk

Positive Med. *16 Signs That May Indicate HIV*, 14 May 2013.  
<http://positivemed.com/2013/05/14/16-signs-that-may-indicate-hiv/>

## Symptoms and spread of HIV and AIDS

Human immunodeficiency virus (HIV) causes Acquired Immune Deficiency Syndrome (AIDS)

### The AIDS virus



Human immunodeficiency virus (HIV) penetrates the human body > weakens the immune system > affects cells that fight infection (T-lymphocytes or CD4) > The body is unable to fight infection > This results in one or several serious diseases

### How the infection spreads



### Symptoms

- Fever lasting over a month
- Diarrhea lasting over a month
- Unexplainable weight loss of 10 percent of body mass or more
- Protracted pneumonia
- Constant cough
- Protracted and relapsing virus, bacterial and parasitic diseases
- Sepsis
- Lymph nodes remain swollen for over a month
- Sub-acute encephalitis

### AIDS is the final stage of the disease

- Cancerous AIDS (Kaposi's sarcoma and brain lymphoma)
- Neuro-AIDS (various diseases of the central nervous system and peripheral nerves)
- Numerous AIDS-related infections

**!** The virus can remain inert inside the human body for 10-12 years

### Diagnostics

AIDS centers offer free tests to detect virus antibodies using immune-ferment analysis

### Treatment

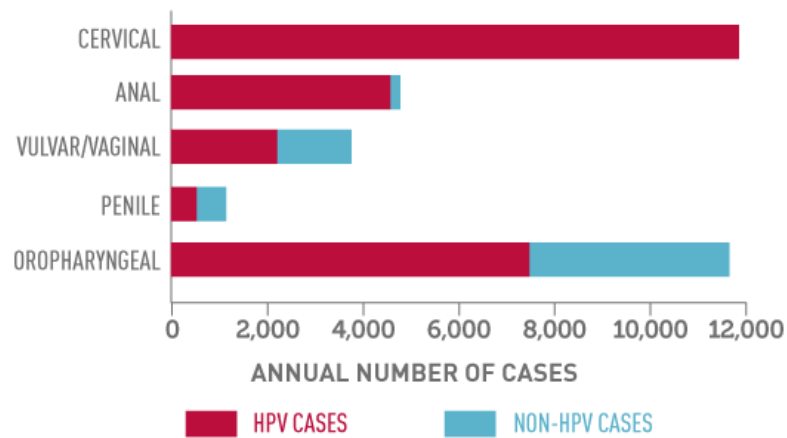
No cure for AIDS has been found. Some treatments make it possible to seriously extend the lifespan of HIV-positive individuals and to improve their quality of life

**!** After the virus enters the bloodstream, it takes the human body between 25 days and three months to create the required number of antibodies necessary for detection in blood tests. Patients may test negative during this "window period."

# HPV/Genital Warts

## PROPORTION OF CANCERS CAUSED BY HPV IN THE UNITED STATES

HPV infection causes virtually all cases of cervical cancer and a substantial proportion of several other cancers.



www.cancer.gov

Source: Schiller JT and Lowy DR. Understanding and learning from the success of prophylactic human papillomavirus vaccines. *Nat Rev Microbiol* 2012; 10(10): 681-692.

NIH National Cancer Institute. *Infographics from NCI*, n.d. <https://www.cancer.gov/multimedia/infographics>

- Most common STI in US
- Almost all sexually active people get it
- Spread during sexual activity or skin-to-skin contact
- Not all affected areas covered by condom
- May develop genital warts and itching
- Vaccine available 9-26 years of age
- Get routine Pap tests as indicated
- Can pass to baby during childbirth

# Pelvic Inflammatory Disease

- Complication of untreated STDs
- Increased risk if sexually active and 25 years old or younger
- Treat with antibiotics

## Health Risks

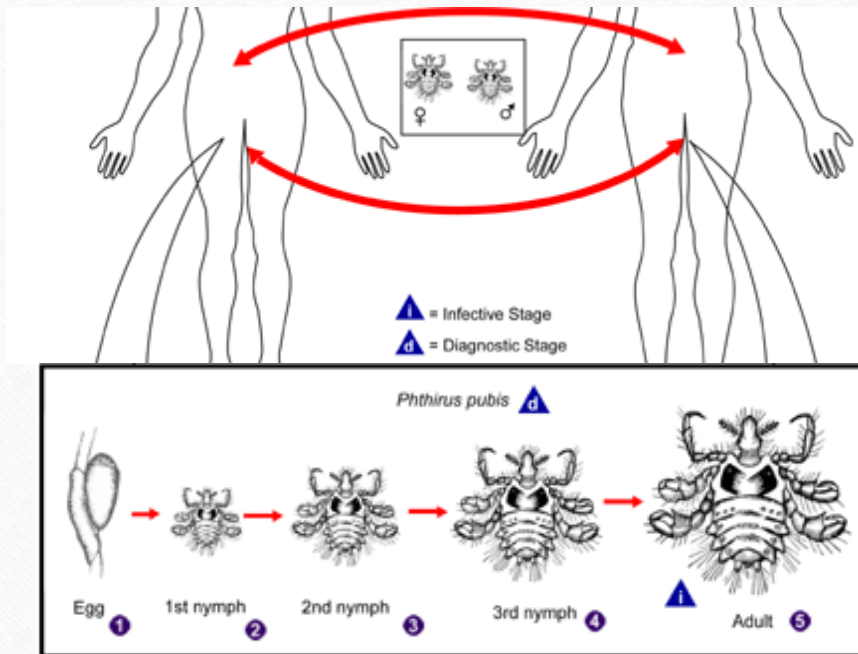
- Tubal blockage
- Ectopic pregnancy
- Infertility
- Long-term pelvic pain



**Fever**  
**Burning urination**  
**Lower abdominal pain**  
**Bleeding between periods**  
**Pain and/or bleeding with sex**  
**Unusual malodorous vaginal discharge**

*Zee News. Antibiotics are Only Solution for Infertility Caused by Pelvic Inflammatory Disease: Study, 17 Sep. 2016. <http://zeenews.india.com/health/antibiotics-are-only-solution-for-infertility-caused-by-pelvic-inflammatory-disease-study-1930427>*

# Pubic Lice



CDC. *Parasites-Lice-Pubic "Crab" Lice*, 17 Mar. 2015.  
<https://www.cdc.gov/parasites/lice/public/biology.html>

- Also called crab lice or “crabs”
- Spread through sexual or close, personal contact
- May also be found in other coarse body hair
- Over-the-counter medication
- All infested should be treated
- Hot wash and high heat dry bedding and clothes

## Symptoms

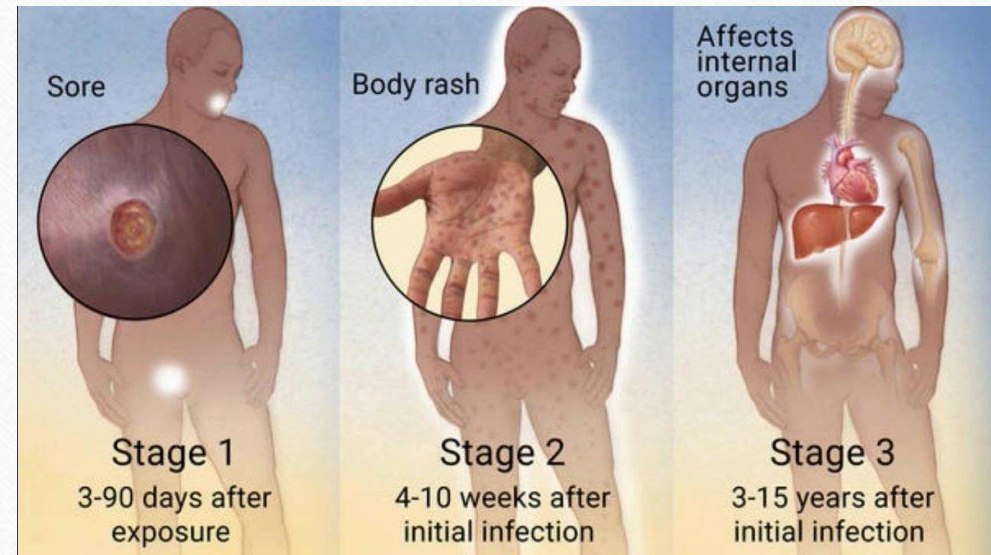
- Visible lice or nits
- Itching



# Syphilis

- 326 primary and secondary cases reported in Indiana in 2015
- Spread by direct contact with syphilis sore, sexual activity, from mother to unborn baby
- Not all areas may be covered by condom
- Treat with antibiotics ASAP
- May lead to permanent organ damage and/or death

**Primary > Secondary > Latent > Tertiary**



Burrell Street. Twitter. #Syphilis, 7 Jun. 2017.  
<https://twitter.com/BurrellStreet/status/872461908867137537>

# Congenital Syphilis

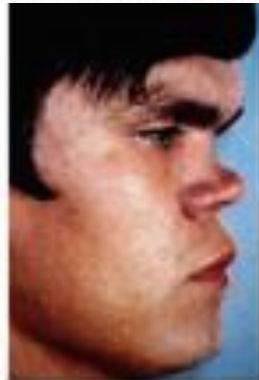
## Stigmata of Congenital Syphilis



Rhinitis (snuffles)

Frontal bossing & saddle nose deformity

Hutchinson's teeth: widely spread, peg-shaped upper central incisors



Alexfirempng. Quizlet. *Block 6 Week 4*, n.d.  
<https://quizlet.com/2677207/block-6-week-4-flash-cards/>

- Passed from infected mother during pregnancy
- Recent increase in cases
- Treat with antibiotics ASAP

## Signs and Symptoms

- Bone deformity
- Severe anemia
- Enlarged liver and spleen
- Jaundice
- Brain and nerve problems
- Meningitis
- Skin rashes
- Seizures

# Trichomoniasis

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- Symptoms:
  - Itching, burning, redness, genital soreness
  - Burning with urination
  - Penile or vaginal discharge
  - Pain with intercourse
- Health risks:
  - Increase risk of getting or spreading STDs
  - Pregnancy complications



About 3% of women and a total of 3.7 million persons in the U.S. population have *Trichomonas vaginalis*, a sexually transmitted parasitic infection curable with a single dose of the right antibiotics, but most infected people never get tested or treated.

CDC. *Parasites- Neglected Parasitic Infections (NPI)*, 13  
Apr. 2017. <https://www.cdc.gov/parasites/npi/>



# References

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Centers for Disease Control and Prevention. "Sexually Transmitted Diseases." *CDC.gov*, 4 Aug. 2016.

<https://www.cdc.gov/std/life-stages-populations/stdfact-teens.htm>. Accessed 26 Oct. 2017.

Hirsch, MD, Larissa. "STDs." *KidsHealth.org*, Oct. 2014. <http://kidshealth.org/en/parents/talk-child-stds.html#>. Accessed 26 Oct. 2017.

Indiana State Department of Health. "HIV/STD/Viral Hepatitis." *ISDH.in.gov*, 2017. <http://www.in.gov/isdh/17397.htm>. Accessed 26 Oct. 2017.

Mayo Clinic. "STD Symptoms: Common STDs and Their Symptoms." *MayoClinic.org*, 18 Mar. 2015.

<https://www.mayoclinic.org/diseases-conditions/sexually-transmitted-diseases-stds/in-depth/std-symptoms/art-20047081>. Accessed 26 Oct. 2017.

TeenSource. "STDs-Sexually Transmitted Diseases." *TeenSource.org*, n.d. <http://www.teensource.org/std>. Accessed 26 Oct. 2017.