**Hep B**

* How do you get it?
  + - Blood, including fluids contaminated with blood (unprotected sexual contact, blood transfusion, sharing used needles)
* Symptoms
  + - Fatigue
    - Nausea and vomiting
    - Loss of appetite
    - Jaundice
    - Pale feces/dark urine
    - Pain in upper right part of abdomen
    - Itching all over the body
* Half of people show no symptoms
* Chronic Hep B: infection lasts over 6 months, and may never go away
  + - Only 5-10% of adults develop chronic infection, much higher in children
    - Can cause scarring of the liver as well as liver cancer.
* Diagnosis: blood tests
* No cure for chronic Hep B, but preventable with a vaccine
* Treatment: anti-retroviral drugs
  + - Usually started when blood tests show that liver functions are deteriorating and the amount of replicating virus is rising

**Hep C**

* How do you get it?
  + - Blood borne and mother to child during birth
    - Sharing needles, blood transfusions, unprotected sex
* What are the symptoms?
  + - 80% of people no symptoms
    - Symptoms may not show up for over 10-20 years
    - Similar symptoms to Hepatitis B
* Chronic Hep C, like chronic Hep B, can lead to cirrhosis and liver cancer
* Diagnosis: blood test
* The cure rate with medication is approximately 50%. Those who do not respond to medications may need a liver transplant.

**Oral Herpes**

* Symptoms?
  + - Infection of the mouth and lips
    - Painful sores
    - Fever and muscle aches
    - commonly asymptomatic
* How do you get it”
  + - touching infected saliva, skin or mucous membranes (lips, mouth, nostrils, ears, eyelids, genital area, anus)
* Progression: 3 Stages
  + - **primary infection**
    - **Latency (dormant or quiet stage)**
    - **Recurrence**
* There is no cure but medication (antiviral drugs like Denavir or Valtrex) does exist to shorten outbreaks and lessen symptoms

**Genital Herpes**

* How do you get it?
  + - sexual intercourse and oral sex
    - Skin-to-skin contact
* Progression and recurrence:
  + - Lesions, then progress to ulcers,
* There is no cure but medications do exist to shorten outbreaks and lessen symptoms

**Chlamydia and Gonorrhea**

* Chlamydia and gonorrhea are most common sexually transmitted infections caused by bacteria
* Spread is through vaginal, anal or oral sex, and from mother to baby during birth
* Treatment is with antibiotics
* Limiting sexual partners and safe sex practices are most effective prevention
* Symptoms:
  + Often asymptomatic
  + Discharge, painful urination, fever, abdominal pain, tender testicles
* Diagnosis:
  + Cervical secretions
  + Cotton swab inserted into penis and sent to the lab for testing

**Head Lice**

* Live on the head and lay eggs
* Easily spread
  + - Direct contact or sharing hairbrushes
    - Check Family Members
* Symptoms
  + - Itchy scalp
    - See nits in hair
    - Live lice near scalp
* Treatment
  + - Insecticides (Found in special shampoo)
    - Noninsecticide
    - Wash bedsheets in hot water

**Scabies**

* Burrows under skin
  + - Very itchy lesions, worse at night
    - Small papules
* Spread
  + - Highly contagious with personal contact, infected bedding, sexual relations, handshaking
* Diagnosis
  + - See burrows
* Treatment
  + - Topical **Permethrin**
    - Wash bedsheets and clothing with hot water
* Prevention
  + - Do not share clothes, towels, bedsheets

**Syphilis**

* *Treponema pallidum* infection
* Symptoms
* **Primary syphilis:** Ulcer
* **Secondary syphilis:** Systemic Symptoms
* **Tertiary syphilis**: Neurologic, cardiovascular, gummatous
* **Latent syphilis**: Asymptomatic
* **Congenital syphilis**: to fetus in utero
* Transmission
  + - Sexually transmitted
    - Direct contact
* Treatment
  + - **Penicillin G**
    - Doxycycline or tetracycline
    - Abstain from sex during treatment

**Tuberculosis**

* Spread airborne from droplets from coughs, sneezes, talking
* Contributing Factors
  + - Immunosuppressed
    - Diabetes
    - Alcohol
    - Injection drug use
* Asymptomatic Primary Infection
* Symptomatic Primary TB
  + - Immunocompromised (ex: AIDS)
* Secondary TB
  + - Reactivation
* Symptoms
  + - Lungs common infection area
    - Low grade fever
    - Night sweats
    - Weight loss
    - Chest pain
    - Chronic cough
    - **Depending on organs seeded, variety of symptoms**
* Diagnosis
  + - Skin test: exposure in the past
    - Chest X-ray: possibly see granuloma
    - Sputum acid-fast stain and culture: active infection
* Treatment
  + - Fight bacteria with multiple drugs for a long time (~year)

**HIV**

* Human immunodeficiency virus (HIV)
* Spread
  + - Sexual activity
    - Blood transfusions
    - Needle sharing
    - Mother to fetus
  + Enter T-helper cells, which are cells that help protect the body from getting sick
* Acute viral illness
* Clinical latency (average 8 years)
* Constitutional Symptoms
* AIDS
  + - PCP pneumonia
    - Toxoplasmosis brain mass
    - Cryptococcal meningitis
    - Mycobacterium avium-intracellular
    - CMV
* Diagnosis
  + - Viral RNA
    - Antigens p24 **AIDS**
      * + CD4 T-lymphocyte count less than 200
* Treatment
  + - **Antiretroviral therapy**
* Prevention
  + - * Avoid needle sharing, unprotected sex, become educated!