COMMON INFECTIOUS DISEASE -SERIES 6

This article is the last in a series of educational material on specific Infectious Diseases.

SEXUALLY TRANSMITTED DISEASE/INFECTION (STD/STI): these infections are caused by a bacteria, virus, or parasite through oral, anal, and vaginal intercourse and genital touching. In some instances, nonsexual transmission can occur during childbirth or through blood transfusion. The most common STDs are HPV, Chlamydia, Gonorrhea, Genital Herpes, Syphilis, and HIV/AIDS. Those caused by bacteria are curable. Those caused by a virus cannot be cured; one is infected lifelong and there is always the chance to infect sexual partners. Left untreated, the risk to become infected with another STD goes up, ie HIV. Untreated STD infection can also lead to infertility, organ damage, certain types of cancer, and death.

Many individuals are asymptomatic but can still pass the infection on to others. Early detection through screening and treatment by your healthcare provider is important to prevent the spread of STDs.

HPV (Human Papillomavirus): this is the most common STD with more than 100 types, some causing genital warts and cancers. One can be asymptomatic for years, then develop symptoms. Most cases (9 out of 10), the virus will go away on its own within 2 years. People with weakened immune systems are at greatest risk for complications of HPV infection. Personal contact in public swim pools and showers also increases the risk of contracting HPV.

Preventative measures include using a condom correctly and being in a mutually monogamous relationship. Vaccination with Gardasil 9 is important and recommended for preteens, starting at age 11 or 12 years through the age of 26 years.

There is no testing approved to find out if you carry the virus. There are tests to screen for cervical cancer, a cancer caused by HPV, for women age 30 years and older.

Chlamydia: this is the most reported bacterial STD reported in the US and most easily cured. Symptoms include painful urination and lower abdominal pain, vaginal discharge/bleeding and painful sex in women, penile discharge and testicular pain in men.

Antibiotic treatment halts the infection but does not repair any permanent damage that occurred. Reinfection is common. Multiple infections in women can lead to reproductive health problems.

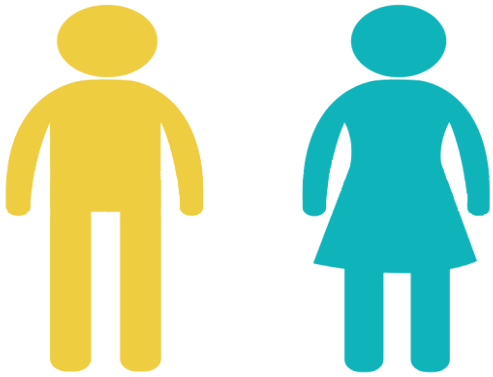
During childbirth, the bacteria can be spread to the infant, causing pneumonia or eye infection.

(**Chlamydia**, cont.)

The risks for contracting Chlamydia include sex before age 25 years, having multiple sex partners, history of STD, and no regular condom use.

Preventative measures include regular use of condoms and limit the number of sex partners, get screened regularly from your healthcare provider, and avoid douching (it reduces the number of good bacteria in the vagina).

Diagnosis is made through urine testing and taking a swab of any discharge for the presence of bacteria. Retesting should be done in 3 months following treatment with antibiotics.



Gonorrhea: a bacterial infection affecting the urethra, cervix, rectum, and throat. An individual may be asymptomatic. If symptoms appear, the following may be experienced:

- Male- painful urination, penile discharge(pus), pain and swelling of the testicles.
- Female-painful urination, vaginal discharge (thick, cloudy) or bleeding between periods or after sex, abdominal or pelvic pain. Anal itching may also occur in both male and female.

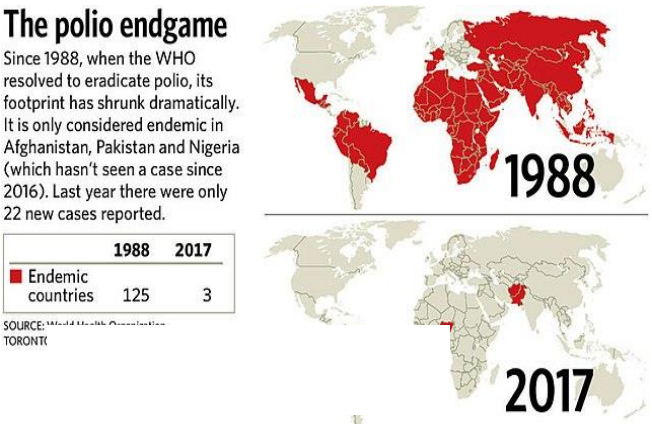
Diagnosis is through urine testing for the bacteria and swabbing the affected area. There are at-home test kits(swab) available for women.

Treatment is with antibiotics and includes the sexual partner(s). Unfortunately, drug-resistant strains of gonorrhea have occurred. Very specific antibiotics are prescribed. It is important to abstain from sex until you are seen by your healthcare provider and alert sex partners so they can seek testing/treatment needed.

Gonorrhea infection in pregnant women can affect babies during delivery, causing an eye infection.

Resources: cdc.gov, mayoclinic.org

POLIO(POLIOMYELITIS): caused by the poliovirus that attacks the nervous system, specifically the spinal cord. It can cause paralysis that is life-long or life-threatening (affecting the respiratory muscles used for breathing). There are 3 types: Type 1, Type 2, Type 3 of which Types 2 & 3 have been eradicated in 2015 and 2019. The virus is highly contagious and lives in the throat and intestines. Food and water can become contaminated through an infected person's stool. The poliovirus is transmitted through ingestion of contaminated water and food, sharing food and utensils, children putting contaminated objects (such as toys) in their mouth. Droplets from a cough or sneeze from an infected person can be a source of transmission but is not very common. The disease can spread just before or up to two weeks after symptoms appear.



Polio is rare in the US due to vaccination but can be acquired through travel. The disease mainly affects children under age 5 years. However, any age can get polio if they are unvaccinated or travel/live in areas where there is polio.

Some individuals who do not experience symptoms can still spread the disease. Those who are symptomatic may complain of a sore throat, fever, fatigue, nausea, headache, and stomach pain lasting 2-5 days, then recovering on their own.

Diagnosis is made by a healthcare provider completing a physical exam and taking a medical and vaccination history. Body fluid samples, ie stool, urine, sputum, blood, and spinal fluid, may be tested and an MRI of the spine done.

Complications include meningitis, occurring in 1-5 out of 100 people. Paralysis or weakness, also known as Post- Polio Syndrome (PPS), shows up later in life, anywhere from 15-40 years later. These symptoms include muscle weakness, muscle atrophy, loss of muscle function, mental and physical fatigue, joint pain, and scoliosis. While these are not life-threatening, they can impact activities of daily living. There is no cure for PPS, only symptom management and lifestyle changes. Exercises to increase muscle strength and reduce tiredness is one form of treatment. Mobility aids such as a cane or wheelchair and ventilation equipment may be needed.

Prevention is primarily through vaccination. There are 2 types of vaccine: IPV (Inactive Poliovirus Vaccine) and OPV (Oral Poliovirus Vaccine). IPV is the only vaccine used in the US. OPV is administered as drops in the mouth and much used in other areas worldwide. A one- time IPV booster may be given to those traveling to high- risk areas and healthcare workers caring for polio patients or handling lab specimens. Another effective means of prevention is proper handwashing with soap and water. Alcohol-based hand sanitizers do not kill the polio virus.

Resources: medlineplus.gov, cdc.gov