

Syphilis: Treatable, but still deadly

By: Stefanie Botelho

*~ Venereal syphilis is a sexually transmitted disease caused by the bacterium *Treponema pallidum*, which can be identified in a corkscrew shape while viewed through a microscope.*

~ The first sign of this disease is a sore called a chancre, which looks like an ulcer in appearance, and is found where the person came in direct contact with the virus.

~ This disease is almost always passed through sexual contact, which includes oral, vaginal, and anal sex. In rare cases, if a sore is located in the mouth, syphilis can then be transmitted through open mouth kissing.

~ The sore then heals after a few weeks without treatment. This is when the primary stage of syphilis ends.

~ The secondary stage usually begins about three to six weeks after the chancre appears. This stage involves a rash that can cover the whole body, or only certain areas. This brown-spotted rash almost always develops on the palms and the soles of the feet of the victim.

~If still not treated, the syphilis enters the third stage, latent syphilis. At this point, no more symptoms are present, and the disease cannot be transferred to another person.

~ The last stage of the disease is called tertiary syphilis. At this point, the bacteria begins damaging the interior of the body, causing mental disorders, heart disease, and organ failure.

~Fortunately, syphilis is treatable at all stages of the infection. Injections of penicillin are effective in eliminating the disease. After treatment, the recovering patient should continue to get tested to be sure that the disease is eliminated.

~ Pregnant women can also spread the disease to their unborn children, which leads to serious complications, such as anemia and jaundice. Treatment once again requires vaccinations of penicillin.

Help, Treatment, and Answer Resources

**Centers for Disease Control and Prevention
888-232-3228**

<http://www.cdc.gov>

**National STD and AIDS 1-
Hotline**

**1-800-227-8922 or 1-800
342-2437**

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In today's modern world, health and safety are not items to be taken lightly. From terrorism to cancer, this Earth is not the place it once was. One aspect of health that poses a very serious threat to modern society is the spread of sexually transmitted diseases. While many of these diseases are both preventable and treatable, these diseases are still running rampant not only in the United States, but throughout the world. It is now believed that 1 in 3 people will suffer a STD (sexually transmitted disease) in their lifetime. A STD that, despite treatment options, still exists in our society is the infection called Venereal Syphilis, or syphilis as its more commonly known. While this disease is curable and diminishing as time goes on, it is still important for the public to recognize this problem as a threat and treat it with the necessary precautions. It is only after this that this disease can finally be erased from our communities once and for all.

In order to get rid of a disease, one must fully understand it. Venereal Syphilis is caused by the bacteria *Treponema pallidum*. This bacterium is very fragile, and when viewed under a microscope, is in a corkscrew shape. *Treponema* is a strain of bacteria, with variations causing different diseases in varied animals. *Treponema pallidum* is the bacterium which causes syphilis, and appears to only affect human beings. This infection is usually passed through sexual contact, including oral, vaginal, and anal sex. This disease can even be passed if an infected individual has a sore in their mouth and kisses another individual. This bacterium can only survive in dark, warm, moist areas. The bacterium is transmitted by passing from the sore of the infected person and being absorbed in the lining of the mouth, vagina, or anus. It can also be transmitted through open skin wounds. Another way that syphilis is transmitted is the passing on from mother onto unborn child. If a child contracts syphilis in this manner, it is often born with serious mental and physical disorders.

Syphilis is often deemed “The Great Imitator”, due to the fact that the initial symptoms so closely resemble others symptoms of other sexually transmitted diseases. The first sign of this disease is an ulcer called a chancre which appears where the individual was infected. It can take up to three months for this ulcer to appear, but usually develops within two to six weeks. Since the sore is painless and can often develop in spots not visible to the eye, such as the inside of the mouth or the interior of the vagina, it often goes undetected. This sore then heals on its own after a few weeks, whether the person gets it treated or it goes undetected. This stage is considered primary syphilis.

If the infection is not taken care of then, the disease continues to develop in the next stage, secondary syphilis. This stage is characterized by a rash that affects the skin, leaving brown spots about the size of a penny. This rash develops about three to six weeks after the initial chancre appears. Depending on the person, the rash can cover the whole body or only certain areas, but in almost every case, the skin rash affects the victim’s soles of the feet as well as the palms of the hands. These sores are very contagious, and in this stage, the infection can be spread very easily, through both non-sexual and sexual contact. Once again this rash heals on its own after a few weeks or months if it goes untreated. If the infected person remains without care, the rashes will appear and disappear over the span of one or two years. During these two years, the infected individual may suffer other symptoms, such as light fever, tiredness, sore throat, mild headaches, sporadic hair loss, and swollen glands. All these symptoms will once again go disappear on their own, even if treatment is not found. This stage being the so-called chronic stages of venereal syphilis.

After the secondary stage, the infection morphs into latent syphilis, in which the person is no longer contagious and does not display any symptoms of the disease. Often, once this stage

hits, the infected individual will not display the beginning symptoms of syphilis ever again, even if they remain untreated.

The next and final stage of this disease is by far considered the most serious. Called tertiary syphilis, it affects about one-third of individuals who suffered from latent syphilis. This portion of the disease involves the bacteria seriously harming many aspects of the body, including the heart, eyes, brain, bones, joints, nervous system, and practically every other part of the body. This stage can linger for several years, and can result in mental illness, loss of site, nerve problems, heart diseases, and can lead to death.

Syphilis can only be officially diagnosed by a trained doctor. Ways that the doctor can identify syphilis is by viewing the patient's symptoms, testing the possibly infected person's blood, and also viewing a sample under a microscope, where the doctor can identify the shape of the syphilis bacteria. Since it is possible for the blood test to come out wrong, seeing as that the signs of the disease may have not appeared in the blood yet, two blood tests are taken to assure accuracy. Through these steps, a doctor can not only identify whether a person is infected with syphilis, but can also tell what stage its in.

Fortunately, this disease is treatable in every stage of development. The treatment involves injections of penicillin into the victim. If the victim is allergic to this drug, either the doctor can prescribe another medicine that breaks down the body's allergic reaction to the drug or supply another drug. Syphilis is curable in all stages of the disease, although the damage done during the last stages of the disease on internal organs and brain matter are irreversible.

While syphilis is curable, often, many people go for so long because they don't even realize they have it. Unfortunately, if a pregnant woman has the disease and it goes untreated, not only will she suffer the disease, the baby has a 40-70% chance of contracting the disease. A

syphilis-infected baby can show symptoms in the manner of chancres, jaundice, anemia, varied cry patterns, and deformities in the formation of the body. A baby's syphilis is treated in the same way as adult syphilis. In the odd cases that the syphilis is not detected while the child is an infant, as the being grows, it will almost definitely develop the characteristics of late stage syphilis as it approaches its teenage years.

Another complication that is directly involved with syphilis is the more increased factor of contracting another deadly sexually transmitted disease, HIV, which then leads to the lethal AIDS. Since syphilis results in open sores on sensitive areas, the HIV virus is more easily spread, and the damaging effects of the disease also breaks down the body's defense mechanisms, making the spread of HIV that much easier.

Although syphilis is curable, there are still many research projects going on at the present time to make the treatment easier and more accessible to the general public. This includes attempting to expand the testing of venereal syphilis, from just blood tests to seeing if the disease is testable in urine and saliva tests. Scientists are also attempting to see how the immune system attacks this disease. Once this is discovered, it will be easier to meld these answers into a vaccination that will hopefully be available on the market as soon as possible, which will eliminate this troubling disease once and for all.

Prevention of this disease involves the basics of protecting yourself from all STD's. This includes safe sex, which involves using condoms, monogamy with a tested and uninfected partner, and of course the ultimate safe sex-abstinence.

Once treated, within 24 hours, the syphilis bacterium is no longer contagious. Treated individuals should continue to get tested for two years after the initial treatment, just in case there is the rare instance in which the individual is still harboring the disease.

In closing, while syphilis is still a threat to modern society, with safety measures, effective treatment, and further research, there is high hopes in the medical community that syphilis may be erased once and for all. This goal will only occur if the public continues to be educated about this disease and preventive methods. This goal may seem difficult to obtain, but I personally believe that sometime soon, this dwindling disease will become obsolete as both a serious disease and threat.

Web Site Critiques

A. Medline Sites

1. <http://www.medscape.com/viewarticle/472048?src=search>

This site was both informative and seemingly accurate. It seemed to be from a reliable source and contained actual case info concerning a failing method to treat syphilis using a different drug than the traditional penicillin.

2. http://www.medscape.com/viewarticle/465134_2

This site was good as it followed a patient's case and was accurate in aligning with all the other information I had found on this disease. It was also in a professional language with seemingly reliable sources which left the reader with confidence in what they just read.

3. <http://www.medscape.com/viewarticle/464815?src=search>

This site was very professional, and full of percentages which were provided by the National Disease Center. I would highly recommend this website for anyone who is looking for concrete evidence for research purposes.

B. Professional Medical Information

1. <http://www.netdoctor.co.uk/diseases/facts/syphilis.htm>

This webpage offers clear insight into the recognition, treatment and prevention of this disease. It was in accordance with the other information found, and was easy to comprehend and digest.

2. <http://www.niaid.nih.gov/factsheets/stdsyph.htm>

This site was very informative. It offered in depth insight into the stages of the development of this disease, which gave the viewer more insight into the details of this disease which other websites left out.

3. http://www.mercksource.com/pp/us/cns/cns_hl_adam.jspzQzpgzEzzSzppdocszSzuszSzcnszSzcontentzSzadamzSzencyzSzarticlezSz001327zPzhtm
Seemed very reliable ~ offered good advice on what to do once infected with the disease, such as who you should contact, etc. Would be a fantastic resource if one believed they had contracted the disease and wanted to find out more about it.
4. <http://www.cdc.gov/std/Syphilis/STDFact-Syphilis.htm>
Site contained great facts about the disease which were in line with the other reliable websites I found. Also linked HIV and syphilis together in a way which made complete sense and informed the viewer even further.

C.) Statistics

1. <http://www.mndaily.com/daily/1999/11/18/news/new3>
This website documents the steady decline of Minnesota's syphilis population. I deem it valuable as it presents valid information and actual statistics.
2. <http://www.cdc.gov/nchstp/od/news/RevBrochure1pdfSyphilis.htm>
This site appeared very professional and reliable. It documented the progress of Syphilis with a lot of detail and also focused on congenital syphilis, which showed more knowledge to the viewer.
3. <http://www.avert.org/stdstatisticusa.htm>
This webpage delivered cold, hard facts. It was very informative and applied the knowledge supplied in the site and broke it down for the viewer, comparing different categories.
4. http://www.healthypeople.gov/document/HTML/Volume2/25STDs.htm#_Toc489706324
This site was very informative in a sturdy, clinical manner. It was just facts, and the almost medicinal way it was delivered was very reassuring to the reader and proved to be a great study of case studies.

D. Consumer Health Education

1. <http://vhaaidsinfo.cio.med.va.gov/aidsinfo/Newsletters/PHE/phe19.htm>
This website provides very detailed information about the syphilis disease. One key feature is the extent of detail it goes into while discussing treatment procedures and pinpoints different aspects of the disease.
2. <http://www.studentaffairs.yorku.ca/healthed/std9.htm>
This site was good and simple, with all its facts dependable and in line with all the other information I found. The sections were clear and made the format easy to follow.

3. <http://www.sparks.org/library/healthguide/IllnessConditions/topic.asp?hwid=crhw195071>

This site lists places where one can get help for this and other diseases. It lists the names, addresses, and websites of these places along with a telephone number, making these recommended places easy to contact. Would highly recommend for anyone with serious questions or the desire to get tested.

4. <http://www.goaskalice.columbia.edu/0842.html>

Great site enlisting a question and answer format with key information about syphilis. Shows one person's concerns about how long syphilis can go undetected and still be treatable. Resource seems reliable and knowledgeable.

Back to Betty C. Jung's Web site	http://www.bettycjung.net/
Back to Fact Sheet Directory	http://www.bettycjung.net/Pch202fs.htm