What is Gonorrhea?

Gonorrhea is a sexually transmitted bacterial infection; it is the second most commonly reported communicable disease in Indiana and in the U.S. The Centers for Disease Control and Prevention (CDC) estimates that more than 800,000 Americans will contract gonorrhea each year, and it is most common among young adults 15-24 years of age. Gonorrhea is spread by oral, vaginal or anal sex with someone infected with the bacteria. Gonorrhea is easily treated and cured with antibiotics; however, untreated gonorrhea may lead to more serious infection, infertility, heart trouble, skin disease, arthritis and blindness. Pregnant women can spread gonorrhea to their baby during childbirth, leading in some cases to pneumonia or even blindness in the baby.

Fast Facts
- Gonorrhea is curable.
- Drug resistant gonorrhea is a real threat.
- Latex condoms used the right way every time will greatly reduce the chance of infection.
- Permanent damage from untreated gonorrhea cannot be reversed.
- Patients should take all medication for the entire duration, and should not share medication.
- Patients should wait 7 days until they and all partners have completed treatment before having sex again.
- CDC STD Treatment guidelines are found at www.cdc.gov/std/tg2015/

For additional information on gonorrhea in Indiana, please visit: www.in.gov/isdh/17440.htm
GONORRHEA

Testing
Any sexually active person is at risk and should be tested for gonorrhea. Testing for gonorrhea is site specific (the infection can be in different parts of the body) so make sure to let your doctor know if you have been engaging in oral, vaginal or anal sex so the test can be administered in the correct area.\(^3\)

Treatment

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<th>Preferred treatment</th>
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<td>Ceftriaxone 250mg injection PLUS Azithromycin 1 g PO for adults and adolescents with uncomplicated gonorrhea infection. This is the only recommended regimen for pharyngeal (throat) infections.(^4)</td>
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Azithromycin is prescribed \textit{simultaneously} with Ceftriaxone to boost the efficacy of the Ceftriaxone and reduce resistance. Also, many patients are often co-infected with gonorrhea and Chlamydia, so dual therapy with a regimen effective against Chlamydia is routinely recommended, regardless of Chlamydia test results.\(^4\)

Health Disparity: Age

The rates of gonorrhea infection are different among age groups in the U.S. population, and that holds true for Indiana. Young Hoosiers are about 12 times more likely to suffer an infection of gonorrhea than older Hoosiers [Fig 2].

This disparity may be linked to barriers to quality prevention services, inability to pay for treatment, confidentiality concerns and discomfort with treatment facilities designed to serve adults.\(^5\)

Health Disparity: Race

African American Hoosiers are about \textbf{12 times} more likely to suffer an infection of gonorrhea than White or Hispanic Hoosiers [Fig 3]. In 2012, the U.S. infection rate for African Americans was more than 5 times the rate for other races/ethnicities.\(^5\) This disparity may be linked to barriers to quality prevention services, fear and distrust of health care systems and economic inequality.\(^5\)

Drug Resistant Gonorrhea

Gonorrhea has rapidly developed resistance to all known classes of antibiotics except one, and there are new strains that are showing resistance to that remaining class of antibiotics.\(^1\) New strains are being found in the U.S. now and are only curable with high doses of antibiotics or intravenous antibiotics.\(^7\) To reduce the risks of resistance, it is important to complete all medications.

Public Health concerns regarding antibiotic resistance include:

\begin{itemize}
  \item \textit{Epidemics come with high costs}- If total antibiotic resistance develops, this means there will be no effective treatment and more tests, cases and medical expenses for the healthcare system.\(^6\)
  \item \textit{Sterility and poor pregnancy outcomes}- Untreated gonorrhea increases infertility rates; more women can develop Pelvic Inflammatory Disease (PID); and some women will be at risk for ectopic pregnancy (fetus implants outside the uterus), which could result in death of both the fetus and the mother.\(^1,6\)
\end{itemize}

References