

MEDICAL BREAKTHROUGHS **RESEARCH SUMMARY**

TOPIC: BLOCKING GONORRHEA: NEW VACCINE ON THE WAY?
REPORT: MB #4741

BACKGROUND: Gonorrhea is a sexually transmitted disease (STD) that infects the mucous membranes of the reproductive tract, including the cervix, uterus, and fallopian tubes in women, and the urethra in women and men. The CDC estimates approximately 1.14 million new infections occur in the United States each year, and as many as half occur among young people aged 15-24. Gonorrhea is transmitted through sexual contact with the penis, vagina, mouth, or anus of an infected partner, and can also be spread perinatally from mother to baby during childbirth. People who have had gonorrhea and received treatment can be reinfected if they have sexual contact with an infected person.

(Source: <https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea-detailed.htm>)

COMPLICATIONS AND SYMPTOMS: Gonorrhea, left untreated, can cause serious and permanent health problems. In women, it can spread into the uterus or fallopian tubes and cause pelvic inflammatory disease. This can lead to internal abscesses and chronic pelvic pain, and ultimately, infertility. In men, gonorrhea may be complicated by epididymitis, and in rare cases, this may lead to infertility. Gonorrhea can spread to the blood and cause disseminated gonococcal infection (DGI). DGI is characterized by arthritis, tenosynovitis, and/or dermatitis, and can be life-threatening. Signs and symptoms of urethral infection in men include dysuria or a white, yellow, or green urethral discharge that usually appears one to 14 days after infection. When a woman has symptoms, they are often so mild and nonspecific that they are mistaken for a bladder or vaginal infection. The initial symptoms include dysuria, increased vaginal discharge, or vaginal bleeding between periods.

(Source: <https://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea-detailed.htm>)

NEW GONORRHEA ANTIBIOTIC: The results of a trial in The New England Journal of Medicine, show that zoliflodacin, a single-dose oral antibiotic with a mechanism of action that differs from current available therapies, was highly effective in treating patients with urogenital and rectal gonorrhea infections. The need for new treatment options has grown urgent as resistance to the current treatment regimen of azithromycin and ceftriaxone rises worldwide. "The results are very encouraging, because we have not had a new drug come down the pipeline in a long time for gonorrhea, and this is the perfect time, now that we are starting to see resistance," said lead investigator Stephanie Taylor, MD, a professor of medicine and microbiology at Louisiana State University School of Medicine. The results pave the way for the phase 3 trial, which will be conducted in the Netherlands, South Africa, Thailand, and United States. Results from that trial will determine whether zoliflodacin will be approved and become an alternative option for treating gonorrhea.

(Source: <https://www.cidrap.umn.edu/news-perspective/2018/11/new-gonorrhea-antibiotic-shows-efficacy-small-trial>)

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If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at mthomas@ivanhoe.com