

# CDC Issues New Recs to Stave Off Untreatable Gonorrhea

August 10, 2012 By Tim Horn

---

When it comes to treating gonorrhea, the U.S. Centers for Disease Control and Prevention (CDC) are now down to “last resort” efforts to prevent the bacteria responsible for the sexually transmitted illness (STI) from becoming completely resistant to all available antibiotics. According to [new guidelines](#) released by the agency on Friday, August 10, health care providers are being urged to start using the powerful injected antibiotic Rocephin (ceftriaxone) and to strictly follow post-treatment testing practices to effectively control the disease in the U.S.

The CDC notes that gonorrhea has developed resistance to every antibiotic recommended for treatment of *Neisseria gonorrhoeae*, the bacterium responsible for gonorrhea, leaving only a class of drugs called the cephalosporins, which include Suprax (cefixime) and Rocephin. In turn, the recommended first-line therapy for gonorrhea has been Suprax, an oral antibiotic, combined with either Zithromax (azithromycin) or doxycycline.

Now the CDC is concerned about an uptick in laboratory data showing that Suprax is becoming less effective in treating *N. gonorrhoeae*. Continued use of the drug, the agency worries, may prompt the bacterium to develop resistance to all cephalosporins. The CDC is therefore recommending that Suprax no longer be prescribed and Rocephin—which needs to be administered by a health care provider—used in its place, along with either Zithromax or doxycycline.

“As cefixime is losing its effectiveness as a treatment for gonorrhea infections, this change is a critical pre-emptive strike to preserve ceftriaxone, our last proven treatment option,” said Kevin Fenton, MD, director of the CDC’s National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention. “Changing how we treat infections now may buy the time needed to develop new treatment options.”

To guard against the threat of drug resistance, the guidelines outline additional follow-up steps health care providers should take to closely monitor for Rocephin treatment failure. According to the new recommendations, patients who have persistent symptoms should be retested with a culture-based gonorrhea test, which can identify antibiotic-resistant infections. The patient should return one week after re-treatment for another culture test—called a test-of-cure—to ensure the infection is fully cured.

In some instances, the CDC notes, Suprax may be needed as an alternative treatment option. If Rocephin is not readily available, for example, providers may prescribe a dual therapy of Suprax plus either Zithromax or doxycycline. Zithromax may be given alone if a patient has a severe allergy to cephalosporins. However, to closely monitor for resistance, if either of these alternative regimens is prescribed, providers should perform a test-of-cure one week after treatment.

Gonorrhea is the second most commonly reported communicable disease in the United States, with more than 700,000 new cases reported annually. Typically spread through sexual activity, it disproportionately affects vulnerable populations such as minorities who are marginalized because of their race, ethnicity or sexual orientation.

Untreated gonorrhea can cause serious and permanent health problems in both women and men. Gonorrhea is a common cause of pelvic inflammatory disease (PID), affecting roughly 750,000 women every year in the United States. It can be painful and may lead to internal abscesses—pus-filled “pockets” that are hard to cure. PID can also lead to fallopian tube damage and ultimately cause infertility or increase the risk of ectopic pregnancy.

In men, gonorrhea can cause epididymitis, a painful condition of the ducts attached to the testicles that may lead to infertility if left untreated.

Gonorrhea can also spread to the blood or joints, which can be life threatening. Additionally, gonorrhea can make it easier to either transmit or become infected with HIV.

Over the past 40 years, the rate of resistance to multiple gonorrhea treatments has sharply increased, rendering historically effective antibiotics like sulfonamides, penicillin, tetracycline and fluoroquinolones largely ineffective. In 2009 alone, more than 23 percent of gonorrhea samples tested by the CDC were highly resistant to at least one or some combination of these drugs.

The revised guidelines are one aspect of CDC’s response to the threat of untreatable gonorrhea. The agency is also offering guidance on steps state and local health departments can take to keep a watchful eye on the emergence of drug resistance.

In addition to closely monitoring for resistance nationally, CDC is also working with the World Health Organization to monitor for emerging resistance on the global level.

The agency is also collaborating with the National Institutes of Health to test new combinations of existing drugs. It is also imploring researchers and pharmaceutical companies to prioritize research to identify or develop new, effective drugs or drug combinations.