

CDC Changes Recommendations for Gonorrhea Treatment Due to Drug Resistance

Few Treatment Options Remain for One of Nation's Most Common STDs

The Centers for Disease Control and Prevention (CDC) no longer recommends antibiotics known as fluoroquinolones (ciprofloxacin, ofloxacin, and levofloxacin) as a treatment for gonorrhea in the United States. This limits the options available to treat gonorrhea, one of the most common sexually transmitted diseases in the United States.

The recommendation was prompted by new data released in CDC's *Morbidity and Mortality Weekly Report (MMWR)* showing that fluoroquinolone-resistant gonorrhea is now widespread in the United States among heterosexuals and men who have sex with men (MSM). The data showed the proportion of drug-resistant cases among heterosexuals rising above the recognized threshold of 5 percent for changing treatment recommendations. CDC had recommended fluoroquinolones no longer be used to treat gonorrhea in MSM when this threshold was crossed in earlier years.

The new data, from CDC's Gonococcal Isolate Surveillance Project (GISP) in 26 U.S. cities, showed that among heterosexual men, the proportion of gonorrhea cases that were fluoroquinolone-resistant *Neisseria gonorrhoeae* (QRNG) reached 6.7 percent in the first half of 2006, an 11-fold increase from 0.6 percent in 2001.

Recommended options for treating gonorrhea are now limited to a single class of antibiotics known as cephalosporins. Public health officials believe the lack of treatment options underscores the need for accelerated research into new drugs, as well as increased efforts to monitor for emerging drug resistance, especially to cephalosporins.

"There is also an urgent need for new, effective medicines to treat gonorrhea. We are running out of options to treat this serious disease," said Dr. Kevin Fenton, Director of CDC's National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. "Increased vigilance in monitoring for resistance to all available drugs is essential."

While significant resistance to cephalosporins has not been observed to date, CDC is working with state and local health departments to monitor emerging cephalosporin resistance. CDC is urging health departments to maintain or develop capacity to perform cultures for *Neisseria gonorrhoeae* and to assess any gonorrhea treatment failures for possible resistance. In addition, CDC is working with the World Health Organization to strengthen international efforts to monitor for the emergence of cephalosporin resistance and with government and industry partners to identify and evaluate promising new drug regimens. These additional measures are critical for the control of gonorrhea.

Oral fluoroquinolones were recommended as first-line treatments for gonorrhea in 1993. But drug resistant cases have increased steadily in recent years, rising first in the western United States

and then among MSM nationwide. In 2002, CDC recommended that fluoroquinolones not be used to treat gonorrhea infections acquired in California and Hawaii, and in 2004 that the drugs no longer be used to treat MSM with these infections.

The new CDC analysis shows an increase in the past five years in the overall proportion of gonorrhea cases that are fluoroquinolone-resistant – from less than 1 percent in 2001 to 13.3 percent in the first half of 2006. The analysis also indicated that fluoroquinolone resistance is widespread geographically. Resistant cases were seen across the United States in the first half of 2006 (in 25 of the 26 cities in the analysis), and sharp increases occurred from 2004 to 2006 in several cities, including Philadelphia (from 1.2 percent to 26.6 percent of gonorrhea cases) and Miami (from 2.1 percent to 15.3 percent). In addition, the analysis showed QRNG continued to rise among MSM; 38 percent of MSM gonorrhea cases were QRNG in the first half of 2006, compared to 1.6 percent in 2001.

Within the class of cephalosporins, CDC now recommends ceftriaxone, available as an injection, the preferred treatment for all types of gonorrhea infection (genital, anal, and throat). For genital and anal gonorrhea, there are some alternative oral cephalosporin treatments that physicians can consider, but there are currently no recommended alternatives for pharyngeal infection.

Additional information on available gonorrhea treatments can be found at:

www.cdc.gov/std/gonorrhea/arg/.

“New treatment recommendations are critical if we are to continue to see progress in controlling gonorrhea,” said Dr. John Douglas, director of the Division of STD Prevention. “We cannot afford to lose ground against a disease that continues to affect roughly 700,000 Americans each year.”

Gonorrhea is the second most commonly reported infectious disease in the United States after chlamydia. In 2005, 339,593 cases were reported nationwide, although experts believe the actual number of cases may be twice that. Following a substantial decline in national gonorrhea rates from 1975 to 1997, overall rates appear to have leveled off in recent years.

States participating in GISP include Alabama, Arizona, California, Colorado, Florida, Georgia, Hawaii, Illinois, Louisiana, Maryland, Michigan, Minnesota, Nevada, New Mexico, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Texas, and Washington.

Please contact your local Health Department if you have any questions.

Public Health Districts & Counties

