Gonorrhea Is On Its Way To Being Unstoppable

By Krystal Alexander — July 20, 2016

The issue of antibiotic resistance continues to rear its ugly head with The Centers For Disease Prevention and Control (CDC) recent release of a surveillance study on the antimicrobial susceptibility of Neisseria gonorrheae. The results of this study reinforced something that we previously knew—there has been a continuing increase in reduced azithromycin and ceftriaxone susceptibility of the bug over a one year period.

A report that was published in the CDC Morbidity and Mortality Weekly Report (MMWR), analyzed data that was collected through the Gonococcal Isolate Surveillance Project (GISP)— a program that began in 1986 in order to monitor trends in antimicrobial susceptibilities of N. gonorrhea strains across the United States. Gonorrhea isolates were collected from the urethral samples of male patients at 27 different sites, and then were tested for antibiotic susceptibility. The results were troubling.

Of the 5,093 isolates collected in 2014, 25.3 percent were resistant to tetracycline, 19.2 percent to ciprofloxacin, and 16.2 percent to penicillin. Resistance to these antibiotics has been well documented, so none of this should come as no surprise.

What is even more troubling is the increase in resistance to azithromycin. In 2014, reduced susceptibility to the drug was 2.5 percent—an increase from 0.6 percent the year before. Fortunately, none of these isolates were showed resistance to both ceftriaxone and azithromycin.

This is fortunate, because current recommendations for treatment of gonorrhea call for the use of ceftriaxone and azithromycin in combination. So, it is easy to be concerned if ceftriaxone resistance proliferates, since some of these azithromycin-resistant strains would eventually become resistant to the combination. During that same year, resistance to ceftriaxone rose from 0.4 to 0.8 percent.

There were 350,062 reported cases of gonorrhea in 2014—a rate of 110.7 cases per 100,000 people. While monitoring antimicrobial resistance is important, it is now time to plan for the inevitable—the gradual decrease of treatment options for gonorrhea. Antibiotic research has increased over the past decade, but it is still a fraction of what it was 30 years ago. Additionally,
we really can’t afford to overlook the simplest remedy of all—safe sexual practices with the proper use of condoms.