# THE ENHANCED GONOCOCCAL ANTIMICROBIAL SURVEILLANCE PROGRAM (EGASP) IN THAILAND, NOVEMBER 2015 - OCTOBER 2017

# Authors:

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#### Introduction:

Continuous monitoring of antimicrobial resistant *Neisseria gonorrhea* (NG) is essential to determine patterns of resistance. The Thailand Ministry of Public Health, the Centers for Disease Control and Prevention, and the World Health Organization began the Enhanced Gonococcal Antimicrobial Surveillance Programme (EGASP) in 2015 to monitor NG antimicrobial susceptibilities; Thailand is EGASP's first surveillance site.

#### Methods:

Symptomatic males who attended one of two sentinel sites, Bangrak Hospital (BH) and Silom Community Clinic @TropMed (SCC), had demographic and clinical data collected and two urethral swabs for a Gram stain and NG culture. All NG isolates had antimicrobial susceptibility testing (AST) to determine minimum inhibition concentrations (MICs) for Ceftriaxone (CRO), Cefixime (CFM), Azithromycin (AZI), Gentamicin (GEN), and Ciprofloxacin (CIP) using E-test with alert values and breakpoint (CRO  $\geq$ 0.125, CFM  $\geq$ 0.25, AZI  $\geq$ 2.0, GEN  $\geq$ 16 µg/mL; resistant to CIP was  $\geq$ 1.0 µg/mL).

## **Results:**

From November 2015 - October 2017, 1,785 specimens were collected: 1,315 (74%) specimens were from BH and 470 (26%) were from SCC. Of 995 specimens (56%) with positive NG culture, 994 had AST results. Among the 918 men with at least one NG infection, the median age of men was 29 years (range: 14-76 years), 570 men (62%) had sex with women only, 286 (31%) had antibiotic use in the last 2 weeks. After completing antimicrobial treatment for NG, 59 men (6%) had at least one repeat NG infection. All NG isolates were susceptible to CRO, CFM, and GEN; 1

isolate had an elevated AZI MIC at 2  $\mu\text{g/mL},$  and 917 isolates (92%) were resistant to CIP.

# **Conclusion:**

During the first two years of EGASP Thailand, most isolates were found to be susceptible to all tested antimicrobials except CIP. Continued surveillance for antimicrobial resistant NG is critical to assess trends and to monitor for the emergence of resistance.

# **Disclosure of Interest Statement:**

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the U.S. Centers for Disease Control and Prevention.