Background

Gonorrhea
- Neisseria gonorrhoeae has developed resistance to all previously recommended therapies:
  - Sulfonamides, penicillins, tetracyclines, fluoroquinolones, macrolides, cephalosporins
  - Ceftriaxone PLUS azithromycin is the last remaining recommended treatment regimen

Multi-Drug Resistance
- A standard definition of multi-drug resistant gonorrhea is just now being established
- This is the first report of US trends of multi-drug resistant (MDR) and extensively-drug resistant (XDR) gonorrhea using this standard definition
- Penicillins and tetracyclines have a long history of high and sustained resistance in gonorrhea
- Therefore, both antibiotics are excluded from these MDR and XDR definitions

Methods

- Gonococcal Isolate Surveillance Project (GISP) monitors US antimicrobial susceptibility trends in N. gonorrhoeae
- Collects urethral gonococcal isolates from symptomatic men attending participating STD clinics
- Antimicrobial susceptibility testing done by agar dilution
- Minimum inhibitory concentrations (MIC) are used to identify isolates with resistance or reduced susceptibility (elevated MIC)

Conclusions

- MDR and XDR gonorrhea has remained low over the past 30 years
- Dual treatment with cephalosporins and macrolides is the last remaining recommended therapy for N. gonorrhoeae
- Until new treatment options become available, a combination of surveillance and use of appropriate treatment are needed to delay further resistance

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