Neisseria gonorrhoeae, the causative agent of gonorrhoea remains a global public health issue and is the second most commonly reported STI. The Canadian STI Guidelines have been evolving; combination gonorrhea therapy is recommended. Comparing 2010 and 2012 there has been a decline in the proportion of isolates resistant to at least one antibiotic or if the provincial laboratories do not conduct antimicrobial susceptibility testing. In 2011, 238 STs were identified: the most common STs were ST1407, ST3307 and ST3550 at 15.3%, 9.3% and 5.9% respectively. In 2012, 258 STs were identified; the most common STs were ST1407, ST2400 and ST3150 at 11.1%, 7.3% and 6.6% respectively. Isolates are submitted to the National Microbiology Laboratory between 2010-2012. Isolates are submitted when the provincial laboratories do not conduct antimicrobial susceptibility testing or if the isolate has been classified as resistant to at least one antibiotic or if the provincial laboratories do not conduct antimicrobial susceptibility testing.

Background:

INTRODUCTION

Neisseria gonorrhoeae isolates submitted to the National Microbiology Laboratory have been determined by agar dilution to be CRDG or CipR with other resistances Ce, Cx, or both. There has been a decline in the proportion of isolates resistant to antibiotics other than cefixime, ceftriaxone, azithromycin, ciprofloxacin, and spectinomycin. The MICs of the 3rd generation cephalosporins have been increasing over time. The MICs of the 3rd generation cephalosporins have been increasing over time. One of the challenges faced by the laboratories that perform surveillance of antimicrobial resistance in N. gonorrhoeae is a lack of robust and standardized methods. One of the challenges faced by the laboratories that perform surveillance of antimicrobial resistance in N. gonorrhoeae is a lack of robust and standardized methods. The MICs of the 3rd generation cephalosporins have been increasing over time. One of the challenges faced by the laboratories that perform surveillance of antimicrobial resistance in N. gonorrhoeae is a lack of robust and standardized methods. The MICs of the 3rd generation cephalosporins have been increasing over time. One of the challenges faced by the laboratories that perform surveillance of antimicrobial resistance in N. gonorrhoeae is a lack of robust and standardized methods.

RESULTS

• In 2012, 25% (9/3036) of isolates tested in all provinces across Canada were found to be resistant to at least one antibiotic.
• In 2012, the resistance to penicillin was 20.3% (615/3036), tetracycline was 30.3% (920/3036), erythromycin was 23.2% (702/3036), cefixime was 28.5% (862/3036) and ceftriaxone was 25.6% (770/3036).

• The MICs of the 3rd generation cephalosporins have been increasing over time.