Background N. gonorrhoeae azithromycin resistance (MIC ≥ 2 mg/L) increased from 1.7% to 30.9% between 2013 and 2017 in Quebec, Canada. The Quebec sentinel network aims to 1) maintain a sufficient number of cultures for antimicrobial resistance surveillance; 2) link antimicrobial susceptibility surveillance to epidemiological and clinical information; and 3) monitor treatment failures. We herein examine the associations between N. gonorrhoeae azithromycin resistance and epidemiological/clinical characteristics.

Methods Three regions participated: Montréal (two clinics recruiting mostly men having sex with men (MSM)), Montréal (22 clinics recruiting mostly heterosexuals) and Nunavik (participated only in 2016, recruited mainly heterosexual Inuit people). One strain per year, per individual was selected. When data was presented for 2015–2017 (2015 was incomplete), the most recent strain per individual was considered. Proportions were compared using chi-square tests.

Results Between September 2015 and December 2017, 68% of episodes (840/1240) had a culture performed and 571 strains for 2015, 270 strains in 2017 and 469 strains for 2016. The median age of 316 participants (269 men) was 27.6 years (range 16.3–68.4). They reported a median of 7 days (range 1–28) duration between onset of symptoms and presentation for clinical care. The median TTP was 14 days (range 1–252). Sexually transmitted infections and one rectal infection were examined. We further evaluated the efficacy and tolerability of gentamicin+azithromycin for treatment of uncomplicated rectal and pharyngeal gonorrhoea.

Conclusion Specific demographic, behavioural and clinical factors were associated with TTP in individuals with symptomatic gonorrhoea. Detailed knowledge of these factors can be used to prioritise and optimise gonorrhoea management and prevention.

Disclosure No significant relationships.