

BC Centre for Disease Control Provincial Health Services Authority

The impact of including throat and rectal swabs for chlamydia and gonorrhea testing online in British Columbia, Canada



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Introduction

- GetCheckedOnline (GCO) is a comprehensive, online sexually-transmitted infection (STI) testing service in British Columbia, Canada, which includes urine nucleic acid amplification testing (NAAT) for Chlamydia trachomatis (CT) and Neisseria gonorrhoeae (GC)
- In 2016, responding to mounting evidence of missed infections with urine-only screening, self-collected throat and rectal swabs were added

Methods

- We retrospectively analyzed all CT/GC-related testing episodes conducted through GCO from 2016 to 2018
 - Urine testing is recommended for all GCO clients
 - Rectal swabs are recommended to clients reporting receptive anal sex in the past 3 months
 - Throat swabs are recommended to men who have sex with men (MSM) who indicate giving oral sex in the past 3
 months
 - GCO clients can "opt-out" of any recommended tests
 - We assessed test uptake, percent positivity by specimen collection site, and the proportion of CT/GC infections
 detected at each site

Objective

 To describe the uptake of throat and rectal swabs for CT/GC screening and missed diagnoses that would occur if swabs were not available

Results

- Test completion of recommended tests (Figure 1) and percent positivity (Figure 2) varied by bio-specimen collection site
- Among women, 3760 CT/GC urine test episodes were conducted, with 560 (15%) including rectal swabs
- Among MSM, 3088 CT/GC urine test episodes were conducted, with 2587 (84%) including throat swabs and 1635 (53%) including rectal swabs
- Urine testing detected 95% of CT/GC infections among women but only 26% of those among MSM (Figure 3)

Figure 2: CT/GC test percent positivity by STI and collection site

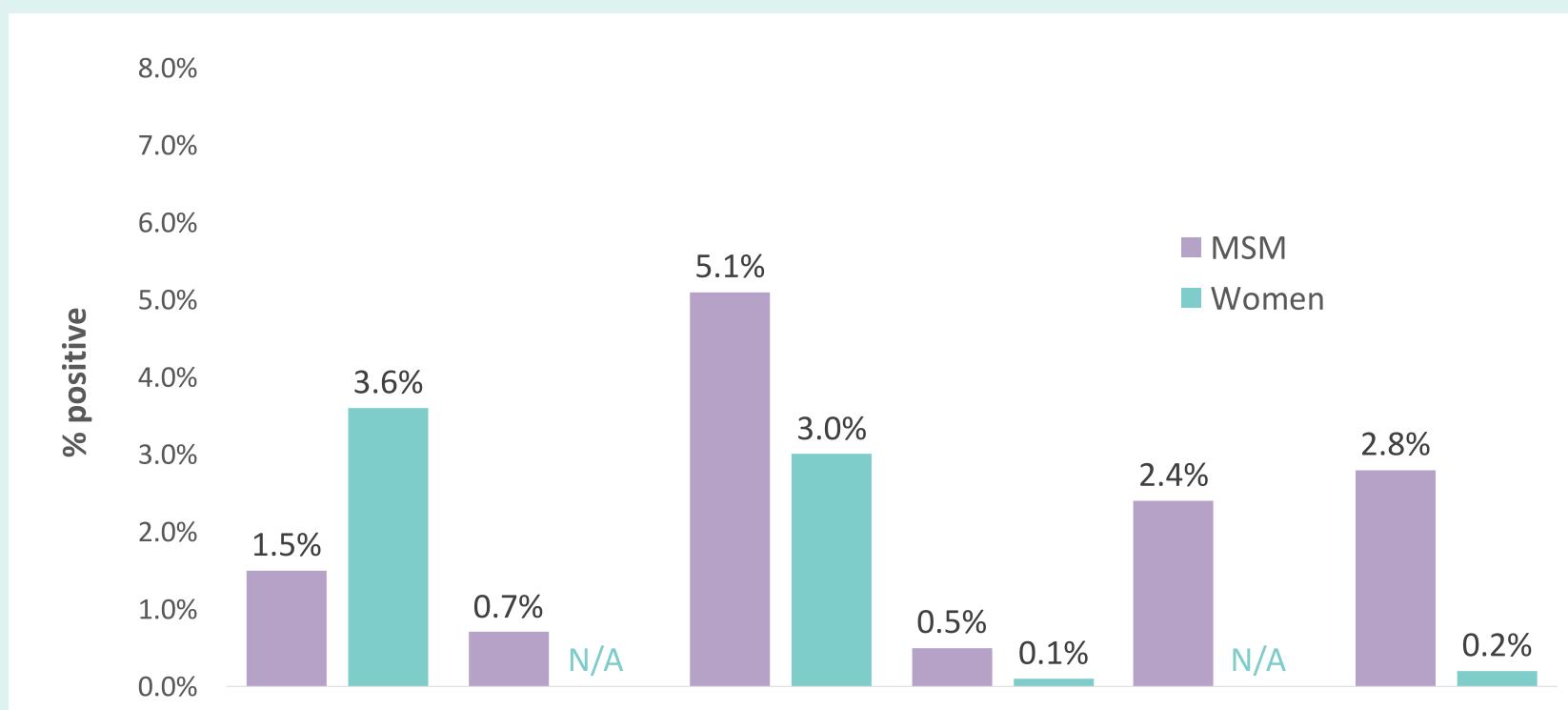
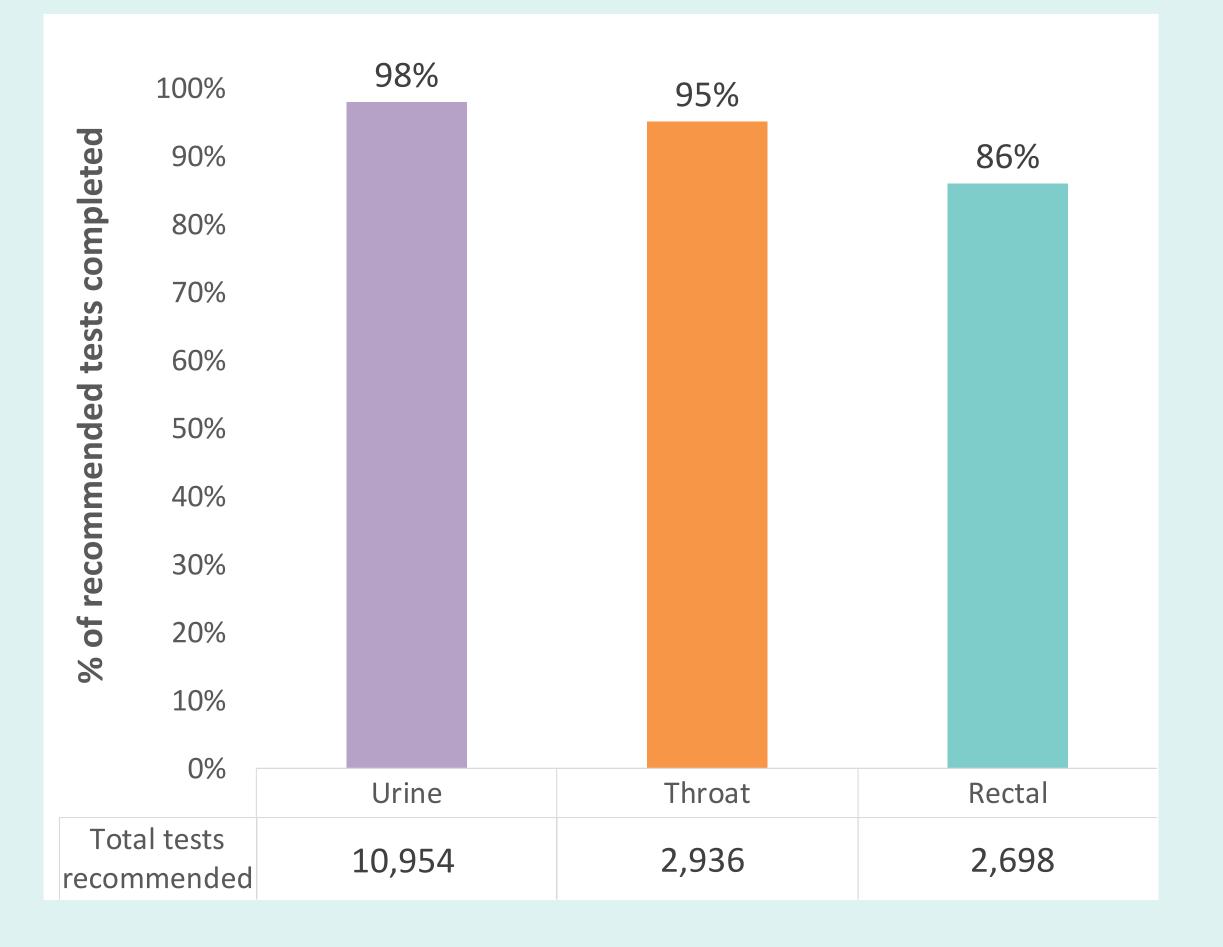
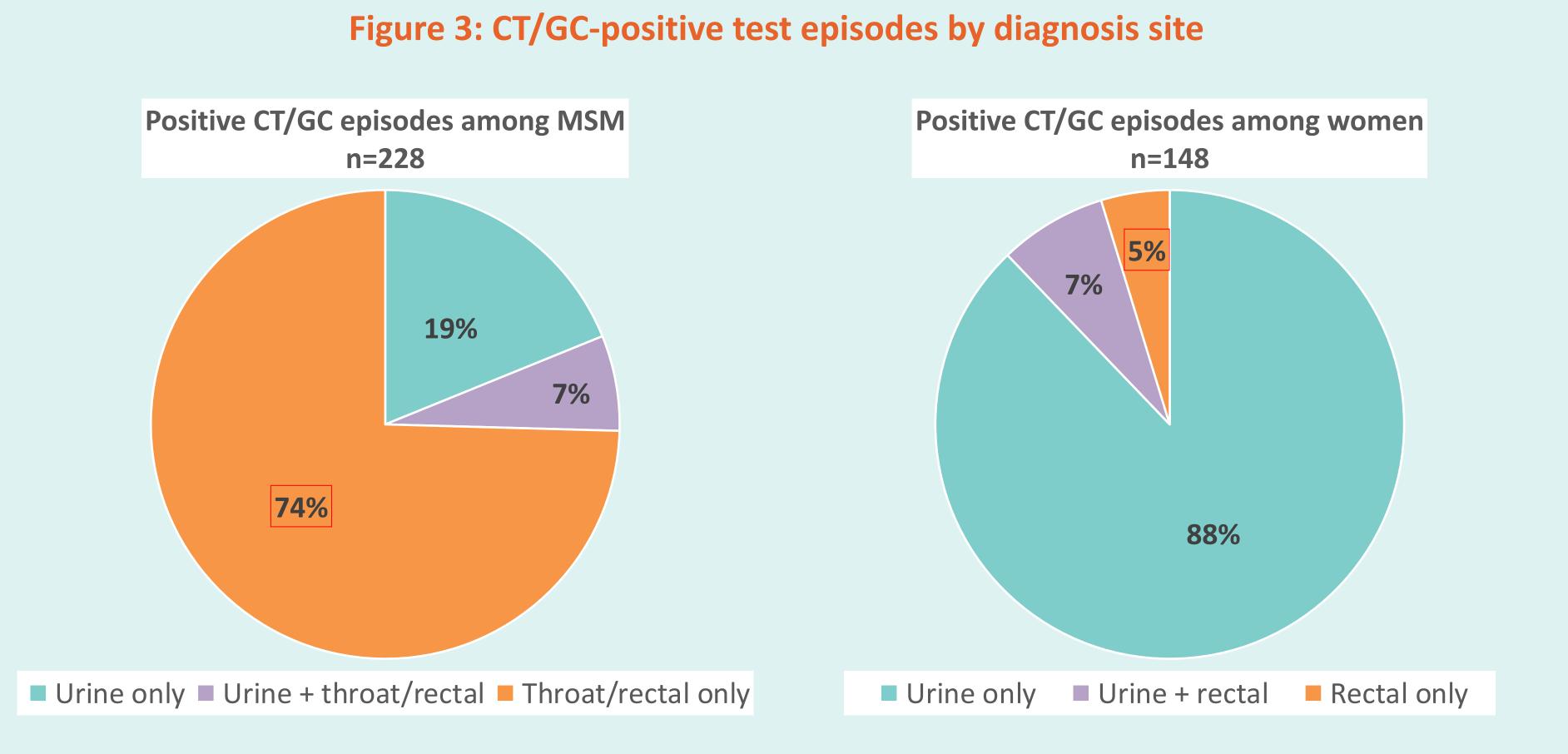


Figure 1: Percent of recommended CT/GC tests completed by specimen collection site



CT – urineCT – throatCT – rectalGC – urineGC – throatGC – rectal

STI – specimen collection site



Conclusions

- Overall, the majority of GCO clients recommended for self-collected throat and rectal swabs submitted samples
- CT- and GC-positivity differs by specimen collection site and by population
- Among women, almost all CT/GC infections were detected among urine samples
- Approximately three-quarters of CT/GC infections among MSM would have been missed if swabs had not been offered
- Online STI testing services should provide comprehensive biospecimen collection when indicated to facilitate CT/GC detection and treatment





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The authors have no conflicts of interest to disclose.To talk during or after the conference please email mark.gilbert@bccdc.ca
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