

MEMORANDUM

DATE: January 31, 2025

RE: Changes in reporting and interpretation of N. gonorrhoea susceptibility tests

Dear colleagues,

Most infections with Gonorrhea (GC) are now diagnosed with direct PCR. Patients are generally treated empirically based on local and national treatment recommendations either at the time of initial visit or immediately upon the positive result which ensures treatment, speeds patient tracing and reduces the risk of ongoing transmission.

A minority of patients have cultures performed for GC. The BCCDC public health lab (PHL) performs susceptibility testing on all isolates of N. gonorrhoea cultured in the province of BC providing summaries of epidemiologic trends locally. Specimens are then forwarded to the National Microbiology Laboratory who does further testing and reporting to the Public Health Agency of Canada (PHAC). These data are collated regularly and compared to current guidelines to ensure they remain appropriate. A recent meeting of federal and provincial/territorial partners has resulted in new recommendations that have been adopted by the BCCDC PHL and will result in changes in interpretations and reported drugs.

Changes in Breakpoints for 3rd Generation Cephalosporins and Azithromycin

PHAC has recommended adoption of new breakpoints for interpreting 3rd generation cephalosporins with GC. Previously, there was no MIC at which an organism was called resistant, however this has been called into question and conflicts with international standards (e.g. EUCAST). The changes include a new "R" category has been as well as the use of the category 'susceptible dose dependent' (SDD) to clarify organisms which may require higher antibiotic doses to achieve cure. Likewise, there has been a single doubling dilution adjustment in the MIC breakpoint for Azithromycin to better reflect the distinction between wild-type and resistant populations.

	Previous			Current	
_	Category	MIC		Category	MIC
Ceftraixone	S	≤ 0.25		S	<0.125
				SDD	0.125
	R			R	≥ 0.25
Cefixime	S	≤ 0.25		S	<0.25
	I			SDD	0.25
	R			R	≥ 0.5
Azithromycin	S	≤ 1		S	< 1
	I			I	
	R	≥ 2		R	≥ 1



MEMORANDUM

Removal of tetracyclines from routine reports

The PHL has been reporting all drugs tested. However, antimicrobial stewardship best practice includes cascading drug options to preferentially report first-line and favoured drugs. Tetracyclines are third line drugs with testing challenges, including a lack of breakpoint for doxycycline, the most used drug. Therefore, we have stopped routinely reporting tetracycline. We will continue to test, and results can be accessed upon request and will continue to be included in epidemiologic reporting.

There may be a small period between this memo and when some of the changes take place, however these interpretations should be used going forward. Please reach out with any questions or concerns.

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