

The following antibiogram represents the antibiotic susceptibility results of bacterial pathogens isolated from stool cultures submitted to LifeLabs British Columbia from January 1, 2020 to December 31, 2023. Calculations are performed as outlined in the Clinical and Laboratory Standards Institute (CLSI) document M39 5<sup>th</sup> edition (2022). The collected microbiologic data may not accurately estimate the true prevalence of antibiotic susceptibility because testing was performed on a selected subset of isolates. Results with fewer than 30 isolates are excluded from the antibiogram to ensure a reliable percentage of susceptible strains.

Many bacterial gastrointestinal pathogens cause self-limiting infections and do not require antibiotic treatment. The LifeLabs BC gastroenteritis antibiogram will no longer be available after 2024 resulting from the shift from traditional bacterial culture to molecular testing using the infectious diarrhea panel. (IDP).

ORGANISM	Ampicillin	Trimethoprim-Sulfamethoxazole	Ciprofloxacin	Tetracycline	Azithromycin	Ceftriaxone
Aeromonas species*, % susceptible	R	96	99	99		98
n =		677	664	664		774
Campylobacter jejuni/coli*, % susceptible	R	R	55	65	100	
n =			55	55	59	
Salmonella species#, % susceptible	91	94	85		@	99
n =	326	292	318			338
Shigella species, % susceptible	19	12	21		31	91
n =	243	225	230		113	243
Vibrio species*, % susceptible	R	97	100	97	@	
n =		32	37	37		
Yersinia species*, % susceptible	R	100	99	99		100
n =		822	878	927		980

\*Gastrointestinal infection with *Aeromonas* species, *Campylobacter* species, non-cholera *Vibrio* species, and *Yersinia* species tends to be self-limited so routine antibiotic treatment may not be required except in severe illness or in patients who are immunocompromised or frail.

# Treatment of gastroenteritis caused by non-enteric *Salmonella* (i.e. *Salmonella* species other than *S. Typhi* and *S. Paratyphi*) is not typically recommended for healthy people >6 months or <50 years of age. Treatment is recommended in older patients/patients with vascular grafts to reduce the risk of endovascular infection, or in those with severe symptoms.

@ Azithromycin may be a reasonable treatment option for *Salmonella* and *Vibrio* infections when clinically indicated; however, LifeLabs has not tested enough isolates to generate a meaningful antibiogram.

	90-100% of isolates are susceptible to the antibiotic indicated ( <b>GOOD CHOICE</b> )
	51-89% of isolates are susceptible to the antibiotic indicated ( <b>INTERMEDIATE CHOICE</b> )
	0-50% of isolates are susceptible to the antibiotic indicated ( <b>POOR CHOICE</b> )
	The organism is inherently resistant to the antibiotic indicated <b>OR</b> is not recommended due to poor clinical response and/or poor activity
	Antimicrobial susceptibility testing not performed