

Increase in *Campylobacter ureolyticus* Reports — Alaska, 2025

Background

Campylobacteriosis is a reportable condition in Alaska. Although most reported *Campylobacter* infections are not identified to the species level, *Campylobacter jejuni* is the most commonly reported species; six additional *Campylobacter* species are also occasionally reported statewide (Table). *Campylobacter ureolyticus* is an anaerobic species increasingly recognized as a clinically significant human pathogen associated with both gastrointestinal and extra-intestinal diseases, such as abscesses, bloodstream infections, and soft tissue infections, which often require hospitalization.^{1,2}

During 2021–2025, Alaska reported 90–164 *Campylobacter* infections annually (Table). In 2025, a marked increase in *C. ureolyticus* reports prompted a public health investigation.

Table. Number of Reported *Campylobacter* Detections by Species Classification and Year — Alaska, 2021–2025

Species Classification	2021	2022	2023	2024	2025
<i>C. jejuni</i> (including subspecies)	46	87	77	32	9
<i>C. ureolyticus</i>	1	3	2	3	19
Other <i>Campylobacter</i> species	5	6	14	11	8
Unspecified <i>Campylobacter</i> *	38	39	71	82	122
Total number of reported <i>Campylobacter</i> detections	90	135	164	128	158

*Reports without species-level identification.

Methods

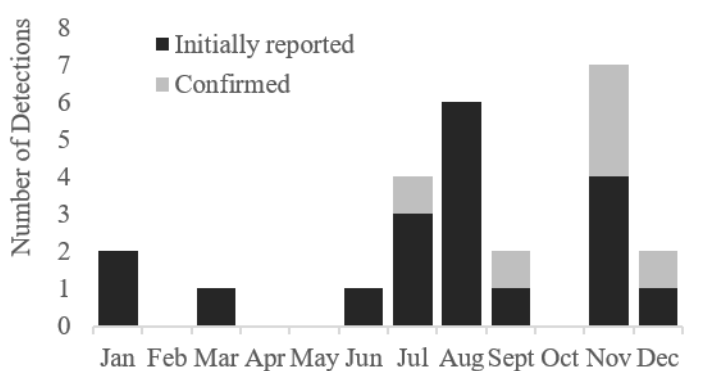
We reviewed surveillance records and clinical information to assess the increase in reported *Campylobacter ureolyticus* infections. Alaska Section of Epidemiology (SOE) staff collaborated with clinical laboratories, infection prevention personnel, the Alaska State Public Health Laboratory, and Centers for Disease Control and Prevention (CDC) staff to investigate potential healthcare-associated transmission, laboratory contamination, changes in testing practices, and epidemiologic links between cases.

Results

Nineteen *C. ureolyticus* reports were identified in Alaska in 2025, including 14 (74%) from a single healthcare facility (Facility A). Because most reports originated from Facility A, SOE reviewed the facility's laboratory testing and reporting practices. The review found no evidence of changes in testing protocols or diagnostic platforms that would explain the increase. Instead, the increase was largely explained by 13 reports from polymicrobial specimens that had been incorrectly reported as *C. ureolyticus*. Under the facility's standard laboratory procedures, which were consistent with American Society for Microbiology guidance for culture workup and reporting,³ these specimens should have been classified as "mixed flora" and therefore should not have been reported to SOE as *C. ureolyticus*. Following review of the complete laboratory records, these 13 reports were reclassified as non-cases.

After reclassification of these 13 reports, six confirmed *C. ureolyticus* detections remained statewide in 2025 (Figure), which exceeded the annual totals observed during 2021–2024 (Table). The six confirmed cases occurred in patients aged 35–71 years (median: 56 years); five (83%) were female. Cases were reported from the Southcentral, Interior, Arctic, Northwest, and Western regions of Alaska. All confirmed detections were from extraintestinal specimens, including ankle, blood, breast, buttock, and urine. Two (33%) patients were hospitalized, and one (17%) died during the investigation period, although the contribution of *C. ureolyticus* infection to the hospitalizations and death could not be determined. Whole-genome sequencing performed on a subset of isolates demonstrated no evidence of genetic clustering.

Figure. Initially Reported and Confirmed *Campylobacter ureolyticus* Detections, by Month — Alaska, 2025*



*Confirmed detections reflect cases remaining after epidemiologic and laboratory review of initial reports.

Discussion

Although most of the apparent increase in *C. ureolyticus* reports during 2025 was attributable to nonstandard laboratory reporting practices involving polymicrobial cultures, confirmed detections remained above Alaska's historical baseline. Whether this reflects improved species-level detection, a true increase in occurrence, or both remains uncertain and warrants continued monitoring.

Historically, *C. ureolyticus* may have been under-detected because of its distinct growth requirements and limitations of routine *Campylobacter* culture methods.² As diagnostic technologies and species-level identification methods become more widely available, additional detections may be expected.⁴ Ongoing surveillance, species-level characterization, and epidemiologic investigation will be important for determining whether *C. ureolyticus* detections reflect true infections and for identifying potential sources, exposure pathways, and transmission patterns. These findings highlight the importance of reviewing laboratory reporting practices when interpreting increases in uncommon pathogens. They also indicate that *C. ureolyticus* might be an underrecognized cause of extraintestinal infection in Alaska.

Given the uncertain epidemiology of *C. ureolyticus*, SOE created a specific *C. ureolyticus* patient interview form to capture a wide range of potentially relevant exposures, including contact with domestic or wild animals, consumption of untreated water, and other food preparation practices. These additions aim to improve our ability to evaluate potential environmental and zoonotic sources of exposure, generate hypotheses regarding transmission, and inform future investigations.

Recommendations

- Report suspected or confirmed *Campylobacter* cases to SOE within 2 working days. To report: call 907-269-8000, or fax 907-561-4239. [The report form can be found here.](#)
- Submit all *Campylobacter* isolates or original source material, including *C. ureolyticus*, to the Alaska State Public Health Laboratory: 5455 Dr. Martin Luther King Jr Ave, Anchorage, AK 99507 (phone: 907-334-2100). Per [7 AAC 27.007\(e\)](#).

References

- Duerden B, Bennet KW, Faulkner J. Isolation of *Bacteroides ureolyticus* (*B. corrodens*) from clinical infections. *Journal of Clinical Pathology* 1982;35:309–312.
- O'Donovan D, Corcoran GD, Lucey B, Sleator RD. *Campylobacter ureolyticus*: A portrait of the pathogen. *Virulence* 2014;5(4): 498–506.
- Leber AL, Burnham CAD, editors. *Clinical Microbiology Procedures Handbook*. 5th ed. Washington, DC: American Society for Microbiology Press; 2023.
- Maki JJ, et al. Species delineation and comparative genomics within the *Campylobacter ureolyticus* complex. *Journal of Clinical Microbiology* 2023;61(5):e00046-23.