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Another Cause of Diarrheal Illness - *Campylobacter fetus*

Although recognized for more than 50 years as causing a variety of diseases in domestic animals, *Campylobacter* bacteria have been recognized only recently as human enteric pathogens. The clinical expression of *Campylobacter* enteritis is quite variable however, and the true incidence of this illness is not yet known.

Campylobacter bacteria are thin, curved, gram-negative rods. While several species have been identified in animals, only two subspecies have been identified to cause human disease: *Campylobacter fetus*, subspecies *intestinalis* and *Campylobacter fetus*, subspecies *jejuni*.

Enteritis is the most commonly recognized manifestation of *Campylobacter* infection at the present time. Illness often begins with intermittent cramping abdominal pain. Diarrhea is typically mild to moderate but can be profuse and watery. In many patients, the stools become blood-streaked. Severe abdominal pain frequently occurs. Vomiting occurs in less than one-third of the patients. Fever and other constitutional symptoms appear early in the illness in a majority of reported cases. The severity of illness is variable, but in most cases symptoms last several days and are self-limited. In some patients, the illness may persist for two weeks or more. *Campylobacter* may cause acute colitis and can mimic acute ulcerative colitis.

Infection with *Campylobacter* occurs by ingestion of the bacteria. The incubation period has been reported as ranging from two to eleven days. Epidemiologic parameters of *Campylobacter* transmission have not been clearly defined. In the past two years, outbreaks of illness caused by *Campylobacter* have been associated with the following: dogs, poultry, raw milk, waterborne transmission, travel to Mexico, and children in day care center settings. At this time, the ratio of symptomatic to asymptomatic infection is unknown.

Beginning in June 1981, the Section of Communicable Disease Control began to record reported cases of *Campylobacter* infection in Alaskans. Between June - November 1981, a total of 21 laboratory confirmed *Campylobacter* enteritis cases were reported. The age of the patients ranged from two-and-a-half years to 73 years. Eleven cases were females; and 10 cases were males. In spite of epidemiologic investigation, no sources of infection were uncovered, and no links were found among these cases.

No controlled clinical trials of treatment of *Campylobacter* enteritis have yet been done. Erythromycin has been clinically successful in treating *Campylobacter* enteritis and has been shown to eradicate the organism rapidly from stools. Erythromycin-resistant strains have been observed, emphasizing the need to carefully consider risks and benefits of antibiotic treatment.

The Section of Communicable Disease Control is very interested in learning more about *Campylobacter* infections in Alaska. We request that all patients with enteritis or other systemic illness who have *Campylobacter* isolated from stool or blood cultures be reported to the Section of Communicable Disease Control in Anchorage by contacting Charles Ryan, M.D. or John Middaugh, M.D. at 272-7534 so that we can attempt to determine the source of infection and mode of transmission. The Section of Laboratories can provide assistance in isolating the organism.