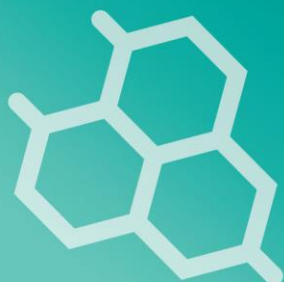


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ABSTRACT

Campylobacter has recently emerged as a significant contributor to bacterial foodborne and waterborne diarrheal infections, posing significant public health threats globally, including in both low-income countries and developed nations such as Europe and the USA. This pathogen is a primary cause of gastrointestinal infections, significantly elevating the burden of *Campylobacter*-related illnesses worldwide. As a commensal microorganism in the gastrointestinal tracts of numerous wild and livestock animals, as well as avian species, *Campylobacter* typically spreads via the fecal-oral route through the consumption of contaminated food and water, leading to zoonotic infections. The prevalence of *Campylobacter* infections, primarily attributed to *C. jejuni* and *C. coli*, has seen a notable increase, alongside the emergence of new *Campylobacter* species documented globally. Beyond gastrointestinal inflammation, it is associated with extra-intestinal disorders such as septicemia, meningitis, reactive arthritis, and Guillain-Barré Syndrome. In Southeast Asian countries, *Campylobacter* infections are commonly linked with traveler's diarrhea. Moreover, the rising antimicrobial resistance among *Campylobacter* species poses a significant public health challenge, compromising the efficacy of treatment measures. Our study aims to provide a comprehensive overview of *Campylobacter* infections, with a specific focus on Asian countries in the Southeast region, which necessitates effective remedial strategies and ensuring food safety. This review addresses *Campylobacter* pathogenic species, isolation and diagnosis, reservoirs, transmission pathways, epidemiology of outbreaks, prevention and treatment options, antibiotic resistance, and the control of antibiotic usage. This study will facilitate further research into *Campylobacter* infections globally and support

preventive initiatives, including health surveillance, rapid diagnostic services, identification of causative agents, vaccination of reservoir animals, and maintenance of proper food hygiene practices.



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