Visual Abstract

Drug Associated with *C. difficile* Infection (CDI): A Pharmacopeia Wide Case-Cohort Study

Methods

Exposure: non antibiotic and antibiotic use in past 1-90 days

Outcome: first incidence of *C. difficile* (testing, hospitalization and treatment data)

16,196 cases **549,831 controls**

Analysis: Adjusted regression for age, sex, year-quarter, region, comorbidities, drug exposure

Results

Selected Drugs		Population-Attributable Risk (95% CI)
antibiotic	amoxicillin-clavulanate	**12.4** (10.3 to 12.5)
antibiotic	ciprofloxacin	**12.4** (9.3 to 9.8)
antibiotic	cephalexin	**8.8** (8.5 to 9.0)
antibiotic	clindamycin	**8.4** (8.3 to 8.4)
non-antibiotic	pantoprazole	**7.9** (6.8 to 8.9)
non-antibiotic	ferrous fumarate	**5.5** (5.0 to 6.0)
non-antibiotic	metformin	**-5.0** (-6.7 to -4.0)

Conclusion

This study provides insights into CDI etiology, and avenues for stewardship and drug repurposing to combat CDI

Brown KA, Coburn B, Hernandez A, Langford BJ, Leung V, MacFadden D, Rooney AM, Schwartz KL, Daheman N. The Journal of Infectious Diseases, 2025

CIHR IRSC Canadian Institutes of Health Research Instituts de recherche en santé du Canada

Public Health Ontario | Santé publique Ontario

IC/ES