2026
University of Toronto Microbiology & Infectious Disease Research Days

AGENDA
Main Programming Day, May 28

Room 3154, Medical Sciences Building, 1 King's College Circle

Presented by

UNIVERSITY OF TORONTO | EPIC Emerging & Pandemic Infections Consortium

In collaboration with

U of T's Division of Infectious Diseases, Department of Medicine, and postgraduate medical and clinical microbiology program, the Division of Infectious Diseases at The Hospital for Sick Children and the Institute of Health Emergencies and Pandemics.

With support from BIOMÉRIEUX

EPIC is a collaborative initiative between the University of Toronto and five hospital partners.

SickKids | Sinai Health | Lunenfeld-Tanenbaum Research Institute | Sunnybrook Research Institute | UNITY HEALTH TORONTO | UHN Canada's Hospital

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Abstract Booklet

May 27th - 28th, 2026

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In collaboration with U of T's Division of Infectious Diseases, Department of Medicine, and postgraduate medical and clinical microbiology program, the Division of Infectious Diseases at The Hospital for Sick Children and the Institute for Health Emergencies and Pandemics at the Dalla Lana School of Public Health.

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Poster 20

A Systematic Review of Lifestyle Interventions for Neuropathy and Neuropathic Pain: Alcohol Consumption and Avoidance

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Background: Neuropathy and neuropathic pain (NP) are globally prevalent, remain difficult to manage, and are often exacerbated by underlying lifestyle factors. Alcohol use, particularly in the context of chronic consumption or dependence, is a recognized contributor to peripheral nerve damage, yet its association with neuropathy/NP has not been systematically evaluated. This systematic review synthesizes the current evidence on alcohol exposure, including quantity, frequency, and dependency, and its effect on the incidence, prevalence, and severity of neuropathy/NP. Methods: This systematic review included observational studies assessing alcohol consumption patterns or dependence in relation to neuropathy/NP outcomes and was conducted in accordance with PRISMA guidelines. Exposure types were analyzed independently, and pooled odds ratios and relative risks were generated when sufficient data were available. The review was registered with PROSPERO number 484158. Results: Following de-duplication and exclusions, 76 studies were included, comprising cohort (n=15), case-control (n=12), and cross-sectional (n=49) designs. While associations varied by study design and exposure category, alcohol dependence and consumption were more consistently linked with in-creased neuropathy incidence and severity, including electrophysiological evidence of compromised function. Notably, in studies examining alcohol cessation, abstinence was linked to clinical improvements in neuropathy/NP symptoms such as {burning paresthesia, weakness….}. While heterogeneity and risk of bias were present, largely due to the subjective classification of alcohol exposure and a lack of universally applied objective neuropathy measurement tools, multiple pooled estimates reached statistical significance. Conclusion: Evidence supports a potential role of alcohol use, especially dependence, in the development and progression of neuropathy/NP. Abstinence may offer therapeutic benefit, though further abstinence- and/or harm reduction related interventional studies are required to clarify causality and guide low-cost, adjunctive strategies for alcohol-related neuropathy/NP.