C2E2SPOTLIGHT

CENTRE for Clinical Epidemiology and Evaluation

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Nicotine-Based E-Cigarettes: The Caveats to Harm Reduction

E-cigarettes come in different forms with most having a battery, a heating element and a place to hold liquid. The liquid contains glycerin and propylene glycol to aerosolize the contents and usually contains nicotine as well as artificial flavoring. When heated, other chemicals may be released. Through heating, the liquid is vaporized and then inhaled. As such, use of an e-cigarette is commonly referred to as vaping. Recent data indicates that 23% of Canadian high school students and 15% of the general population in Canada have tried an e-cigarette.

The US Centre for Disease Control states that nicotine-based e-cigarettes may help cigarette users to quit tobacco smoking but also point out that this doesn't mean that e-cigarettes are safe. In fact, the US CDC states, "E-cigarettes are not safe for youth, young adults, pregnant women, or adults who do not currently use tobacco products." The Public Health Agency of Canada (PHAC) states that vaping can increase exposure to harmful chemicals and can lead to nicotine addiction while Health Canada supports e-cigarettes as a harm reduction tool. The vaping industry (dominated by 'big tobacco', with a history of denying evidence regarding harms of its product) promotes vaping as conferring a net benefit in spite of the risks.

In this context, major issues remain, including: a) what is the state-of-art in terms of toxicity of these products and what are the unknowns that need be resolved to inform our decision-making; b) should e-cigarettes be available, unrestricted, as a harm reduction tool for existing tobacco users, or should they only be made available through government-regulated health care providers; c) what should be the role of the tobacco and vaping industry in this setting? Our expert panel will discuss this issue of critical public health importance.

Panel

Dr. Mark Tyndall is the former Executive Director of the BCCDC and former Deputy Provincial Health Officer for BC. He is a Professor at the University of British Columbia's Faculty of Medicine in the School of Population and Public Health. His research looks at addiction, poverty, homelessness, drug policy and harm reduction including vaping. Dr. Tyndall also serves as an expert advisor on harm reduction to the Vaping Industry Trade Association (VITA).

Dr. Chris Carlsten is a Professor of Medicine, Canada Research Chair in Occupational and Environmental Lung Disease and holds the Astra-Zeneca Chair in Occupational and Environmental Lung Disease at UBC. He is the Director of the Air Pollution Exposure Laboratory and also holds adjunct positions at the Peter Wall Institute, the UBC School of Population and Public Health and the Centre for Heart Lung Innovation.