

**Please consider for: Poster**

**Pediatric Exposures to Marijuana: A ChEHC Case Series**

Lesley J. Brennan<sup>1</sup>, Alvaro Osornio-Vargas<sup>1,2</sup>, Anne Hicks<sup>1,6</sup>, Alexander Doroshenko<sup>1,3,4,5</sup>, Nicholas Wawryk<sup>1</sup>, Donald Spady<sup>1</sup>, and Irena Buka<sup>1,2</sup>

*1 Children's Environmental Health Clinic, Child Health Clinic, Misericordia Site, Edmonton, AB 2 Department of Pediatrics, Faculty of Medicine and Dentistry, University of Alberta 3 Division of Preventive Medicine, Faculty of Medicine and Dentistry, University of Alberta 4 School of Public Health, University of Alberta 5 Medical Officer of Health, Alberta Health Services 6 Department of Pediatrics, Faculty of Medicine and Dentistry, University of Alberta*

Legalization of marijuana across Canada may become a reality in the summer of 2018 if the proposed Cannabis Act is passed. This act will legalize marijuana purchase and consumption by anyone age 18 or older. It would also permit adults to grow marijuana plants within their home for their own use.

Marijuana use is associated with adverse health effects, including increased risk of mental health diagnoses, and airway inflammation. Among adolescents, chronic marijuana use impairs cognitive function and reduces IQ. Prenatal exposure to marijuana increases poor birth outcomes, and adversely affects cognition and behavior in childhood.

The Children's Environmental Health Clinic (ChEHC) is designed to address the impacts of environmental exposures on Children's Health. By integrating clinical, research, and educational components, this clinic, unique in Canada, considers known environmental factors to assess exposures and provide appropriate care and advice. Several cases of pediatric exposure to marijuana have been referred to our clinic. Some of these cases present the concern of marijuana being grown and processed in the home and/or adults smoking marijuana in the home and around children. Other cases involve prenatal exposure or teen experimentation with marijuana. These cases present many of the questions that will increasingly be highlighted after marijuana legalization, as the unique effects of pediatric exposures at different developmental stages become more common.

This case series and a literature review will be presented in preparation for legalization of marijuana use in Canada, focusing on available evidence in American States where marijuana is already legal and the pediatric population has been monitored. Research exploring accidental and intentional exposures by children to marijuana products and the related health concerns will help prepare ChEHC and inform clinical care providers and government bodies at all levels, and guide data collection as Canada moves forward.

Given the health risks associated with marijuana and the potential for increased pediatric exposures in the near future, it is critical that Canada is appropriately informed to protect vulnerable populations, including children.