



DEPARTMENT OF PEDIATRICS ALBERTA CHILDREN'S HOSPITAL 2888 Shaganappi Trail NW Calgary, AB, Canada T3B 6A8

September 20, 2017

From: Jeffrey Buchhalter MD, PhD, Director, Comprehensive Children's Epilepsy Centre at ACH

Re: Cannabinoid Use in Epilepsy

Beginning in 2013, the members of the Comprehensive Children's Epilepsy Centre (CCEC) at ACH have evaluated the evidence relating to the use of medical marijuana for its efficacy and safety in epilepsy. There continue to be anecdotal reports regarding the efficacy of compounds contained in marijuana (MJ), specifically tetrahydrocannibinol and several cannabinoids. There has been one study using <u>pharmaceutical grade CBD</u> that demonstrated efficacy in the same proportion of patients seen in many anti-seizure drug trials with a significant rate of adverse effects. The compound, Epidiolex ®, has not as yet been approved by the FDA in the USA and is not available in Canada. In addition, the reports of adverse effects related to the artisanal formulations that are available continue to increase. And there is a growing body of evidence from basic science laboratories as to the deleterious effects of MJ/CBD on the developing brain. Finally, MJ/CBD has not been endorsed by any national or international expert organization for use in epilepsy. Therefore, the CCEC thought it would be useful to put together a "policy statement" that guides our practice.

- MJ/CBD will not be prescribed, authorized or its acquisition facilitated by our providers for any seizure type or epilepsy syndrome until efficacy & toxicity information is available for pharmaceutical grade compounds.
- We strongly discourage the use of any formulation of MJ/CBD that is produced by an unregulated laboratory without the same quality controls as pharmaceutical laboratory as serious adverse effects could occur.
- Anyone under our care who has seizures that are not responsive to previously tried therapies according to established care pathways will be discussed at a scheduled Epilepsy Conference. Recommendations for additional treatment possibilities will be made.
- We consider it our obligation to inform patients/families as to the most recent scientific evidence regarding efficacy and toxicity.
- We strongly encourage patients/families to let us known if MJ/CBD is being used so that any change in clinical status can be understood in the context of all the medications & other substances that the patient is taking.
- The above can and will change based upon new evidence as it becomes available.