The National Academy of Sciences, Engineering, and Medicine recently published a large research review on the use of medicinal cannabis entitled “The Health Effects of Cannabis and Cannabinoids: The Current State of Evidence and Recommendations for Research”. Senator Kimpson distributed this to the Subcommittee on March 13, 2019. Below the major points and conclusions of this 2017 study are summarized. Parenthesis cite specific chapters and studies within the large review paper.

**There is conclusive or substantial evidence that cannabis or cannabinoids are effective:**

* For the treatment of chronic pain in adults (cannabis) (4-1)
* As antiemetics in the treatment of chemotherapy-induced nausea and vomiting (oral cannabinoids) (4-3)
* For improving patient-reported multiple sclerosis spasticity symptoms (oral cannabinoids) (4-7a)

**There is moderate evidence that cannabis or cannabinoids are effective for:**

* Improving short-term sleep outcomes in individuals with sleep disturbance associated with obstructive sleep apnea syndrome, fibromyalgia, chronic pain, and multiple sclerosis (cannabinoids, primarily nabiximols) (4-19)

**There is limited evidence that cannabis or cannabinoids are effective for:**

* Increasing appetite and decreasing weight loss associated with HIV/AIDS (cannabis and oral cannabinoids) (4-4a)
* Improving clinician-measured multiple sclerosis spasticity symptoms (oral cannabinoids) (4-7a)
* Improving symptoms of Tourette syndrome (THC capsules) (4-8)
* Improving anxiety symptoms, as assessed by a public speaking test, in individuals with social anxiety disorders (cannabidiol) (4-17)
* Improving symptoms of posttraumatic stress disorder (nabilone; a single, small fair-quality trial) (4-20)

**There is limited evidence of a statistical association between cannabinoids and:**

* Better outcomes (i.e., mortality, disability) after a traumatic brain injury or intracranial hemorrhage (4-15)

**There is limited evidence that cannabis or cannabinoids are *ineffective* for:**

* Improving symptoms associated with dementia (cannabinoids) (4-13)
* Improving intraocular pressure associated with glaucoma (cannabinoids) (4-14)
* Reducing depressive symptoms in individuals with chronic pain or multiple sclerosis (nabiximols, dronabinol, and nabilone) (4-18)

**There is no or insufficient evidence to support or refute the conclusion that cannabis or cannabinoids are an effective treatment for:**

* Cancers, including glioma (cannabinoids) (4-2)
* Cancer-associated anorexia cachexia syndrome and anorexia nervosa (cannabinoids) (4-4b)
* Symptoms of irritable bowel syndrome (dronabinol) (4-5)
* Epilepsy (cannabinoids) (4-6)
* Spasticity in patients with paralysis due to spinal cord injury (cannabinoids) (4-7b)
* Symptoms associated with amyotrophic lateral sclerosis (cannabinoids) (4-9)
* Chorea and certain neuropsychiatric symptoms associated with Huntington’s disease (oral cannabinoids) (4-10)
* Motor system symptoms associated with Parkinson’s disease or the levodopa-induced dyskinesia (cannabinoids) (4-11)
* Dystonia (nabilone and dronabinol) (4-12)
* Achieving abstinence in the use of addictive substances (cannabinoids) (4-16)
* Mental health outcomes in individuals with schizophrenia or schizophreniform psychosis (cannabidiol) (4-21)