



Laurie Emerson, Executive Director  
NAMI Vermont  
January 19, 2016  
Committee: Senate Judiciary Committee  
Re: Comments on Bill S.241 and S.95

Good Morning. My name is Laurie Emerson. I am the Executive Director of the National Alliance on Mental Illness of Vermont (NAMI Vermont) located in Williston, Vermont. NAMI Vermont is the independent Vermont chapter of the National Alliance on Mental Illness, a statewide non-profit, grassroots, volunteer organization comprised of family members, friends, and individuals affected by mental illness. As our mission, NAMI Vermont supports, educates and advocates so that all communities, families, and individuals affected by mental illness can build better lives.

NAMI Vermont would like to share our comments on Bill S.241 and S.95 that your committee is reviewing.

NAMI Vermont is expressing caution about the legalization of recreational marijuana because of the adverse health effects of cannabis use, particularly the effects on the brain of youth and young adults, and the lack of public knowledge about these adverse effects. It is well documented that the brain is not fully developed until the age of 25, and recent scholarship shows that cannabis-induced alterations can negatively affect the development of the prefrontal cortex, one of the last areas of the brain to finish development that is a center for impulse controls, as well as planning and organization behaviors<sup>1</sup>. Long-term or heavy use of marijuana has also been linked with increased risk of developing psychosis disorders including schizophrenia<sup>2</sup>. Perhaps more scientific inquiry is needed on the health risks of marijuana use, but there is enough information to cause serious concerns.

Despite these concerns, many in the public believe marijuana to be a relatively harmless substance. Vermont needs a comprehensive public education effort on the risks and adverse health effects known to accompany use of marijuana. The potency of marijuana has increased 103% from 1998-2008<sup>3</sup>. We need to protect vulnerable individuals from the risk of developing psychosis, schizophrenia, and other psychotic disorders. In Vermont, approximately 23,000 adults and 6,000 youth and teenagers face serious mental illness.

Dr. Rettew from University of Vermont Children's Hospital has stated that legal recreational marijuana will bring 10,000 additional Vermont cannabis users and over 3,000 new Vermonters with cannabis use disorder. Our mental health system is not prepared to handle 20 new cases of cannabis induced psychosis<sup>4</sup>. Vermont's Level 1 Psychiatric Hospitals and Crisis Beds are already at capacity. What will happen to those people who seek care at the emergency room for a mental health crisis? Emergency rooms will be backed up with patients without a place to receive care because of the increased demand for treatment.

The legislature and state should consider that any tax revenues gained will need to be adjusted with the likely increases in psychiatric disorders treatment in emergency rooms and at psychiatric hospitals. There will be a need for more substance abuse treatment with the 10,000 additional cannabis users<sup>5</sup>.

The financial impact to treat psychosis in a Level 1 hospital is \$2,277 a day. The average length of stay is between 75-100 days totaling between \$170,000 and \$227,000 per patient. With 20 new cases

needing treatment the cost soars between \$3.4 and \$4.5 million. This does not take into account needing a new hospital with 20 new beds or outpatient care once someone is discharged.

The statement in S.95's draft that lawful regulation of marijuana can mitigate "inherent public health and safety risks of the illegal marijuana market" and provide "a net reduction in public harm and an overall improvement in public safety" are unfounded. In Colorado the black market for marijuana was described as "thriving," in The Rocky Mountain High Intensity Drug Trafficking Area's September 2015 report, which also reported rising rates of unregulated marijuana-related crime<sup>6</sup>. These indications from Colorado, a state only two years into legal marijuana, are that a net *increase* in public harm, and in the overall use of marijuana is more likely. The overall increase in use will bring increased prevalence of the adverse mental health effects of marijuana use. Likewise, the statement in S.241's draft that regulated marijuana will prevent "drugged driving and the exacerbation of any other adverse public health consequences of cannabis use," are questionable. Reports from Colorado also showed a 32% increase in marijuana-related traffic deaths and a 45% increase in "positive marijuana results of active THC primarily related to driving under the influence<sup>6</sup>." This seems to indicate that in practice elsewhere, regulated marijuana *has* exacerbated drugged driving and other adverse public health consequence, with meaningful implications on the prevalence of mental illness in Vermont.

People come to NAMI when their family is struck with mental illness. They need education, information, support, and resources. This devastating illness causes such severe trauma that changes lives forever. It is difficult for anyone to understand this impact unless they have lived through this experience. We need to protect those individuals who may be susceptible to developing psychosis and schizophrenia. We don't need or want 20 new cases of cannabis induced psychosis or over 3000 new cases of cannabis use disorder. We ask that you, as legislators, consider the implications that legal recreational marijuana will have on mental health.

Thank you for your time and listening to our comments.

Respectfully submitted by: Laurie Emerson, Executive Director, NAMI Vermont

#### References:

1. Volkow et al. "Adverse Health Effects of Marijuana Use." *The New England Journal of Medicine*: Vol. 370 No 23, June 5, 2014, 2219-2227.
2. Schollenbarger et al. "Impact of cannabis use on prefrontal and parietal cortex gyrification and surface area in adolescents and emerging adults" *Developmental Cognitive Neuroscience*: Vol 16, Dec 2015, 46-53.
3. Drug Survey Data: University of Vermont Children's Hospital, Dr. Rettew Lecture
4. University of Vermont Children's Hospital, Dr. Rettew Lecture
5. Source: University of Mississippi, National Center for Natural Products Research, Potency Monitoring Project Quarterly Report 107 (January 2010)
6. Rocky Mountain High Intensity Drug Trafficking Area. *The Legalization of Marijuana in Colorado: The Impact*. Volume 3: September 2015.  
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