

## **EXECUTIVE SUMMARY**

# **Marijuana in Vermont and the Increased Economic Burden of Schizophrenia**

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### **INTRODUCTION:**

The RAND Report on the possible legalization of marijuana in Vermont proposes to offer a cost-benefit analysis that would enable a fully informed discussion of the pros and cons of legalization. This white paper aims to show that the report falls short on the “cost” side by illustrating how just one social impact of marijuana use – an increase in cases of schizophrenia – would adversely impact the state’s economy, costing nearly as much or more than any revenues generated by sales.

Co-author Christine L. Miller is a pharmacologist with a focus on neuroscience, widely published in peer-review journals and a reviewer for more than a dozen scientific journals, including Schizophrenia Bulletin, Biological Psychiatry and the Journal of Neuroscience.

Co-author Dean Whitlock is a Vermont-based writer who has worked in the field of substance abuse prevention and community health since 2009. He is a member of Smart Approaches to Marijuana in Vermont (SAM-VT).

### **CONCLUSIONS:**

Although calculating the social costs of legalizing marijuana is complicated, as the RAND Report points out, it *is* possible, as shown repeatedly in studies of the social costs of tobacco and alcohol use. It is the authors’ contention that legalization of marijuana will result in an increase in many mental health disorders, as outlined by the American Psychiatric Association, including: anxiety disorders, depressive disorders, bipolar I disorder, antisocial disorder, obsessive compulsive disorder and psychotic disorders. The document looks at how an increase in just one mental health disorder due to marijuana use – schizophrenia – would cost Vermont taxpayers an estimated \$4.9 to \$11.1 million in additional health care dollars annually. It would also bankrupt families and adversely affect communities.

The most conservative estimates of the cost of treating additional cases of schizophrenia alone would be barely covered by the estimated \$7.4 million garnered through legalized sales of marijuana.

## **PROCESS:**

-- Analysis of studies identifying marijuana use as a causal factor in mental health disorders, and the validity of long-term observational studies.

-- Analysis of link between genetic predisposition for mental disorders and risk for marijuana-induced psychosis. The authors show how a family history of psychosis pertains to nearly 10 percent of the population, too many individuals at risk to discount.

-- Analysis of assertion that there has not been a large increase in the incidence of psychosis in line with the rise of marijuana use. Data collection on incidence of psychotic disorders in the US has been spotty over time, making it impossible to draw any conclusions about the relationship with the more continuous and robust data available on marijuana use rates.

-- Calculation of cost to society of treating the most expensive mental disorder, schizophrenia, now and after legalization, based on the RAND report's prediction of increased amounts of consumption after legalization.

The authors pull from 38 studies (footnoted at end of document) to support their conclusions.

## **RECOMMENDATIONS:**

The authors advocate against the legalization of marijuana. They quote Dr. John Hughes, a University of Vermont researcher who has studied marijuana and tobacco use for decades, who wrote "I think most scientists would conclude that recreational use [of marijuana] is harmful."

The authors contend that the RAND Report failed to acknowledge documented links between marijuana use and mental health disorders, and the costs of treating them. Legalization would very likely cost more than it would bring in. The authors focus on schizophrenia because it is among the most expensive disorders to treat. They estimate it would cost Vermont taxpayers an additional \$4.9 and \$11.1 million annually, against a projected marijuana sales income of \$7.4 million.

## **FOR FURTHER INFORMATION:**

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