Authored by Solmaz Amiri, DDes; Pablo Monsivais, PhD, MPH; Michael G. McDonell PhD ;Ofer Amram, MSc, PhD;
September, 2019

WASHINGTON STATE UNIVERSITY

Elson S. Floyd
College of Medicine
WASHINGTON STATE UNIVERSITY

CHaSE
Community Health and
Spatial Epidemiology Lab

Click for the online version of the report: https://www.chaselab.net/Cannabis/Cannabis.htm

How does the growth of Washington state's cannabis industry relate to neighborhood socioeconomic characteristics?

Authored by: Solmaz Amiri, DDes; Pablo Monsivais, PhD, MPH; Michael G. McDonell, PhD; Ofer Amram, MSc PhD;   September, 2019

Background

Recreational use of cannabis is legal in the District of Columbia and 10 states. Washington State was first to legalize the recreational use of cannabis in 2012. Despite the growing legal availability of recreational cannabis, little is known about the impact of cannabis outlet availability on our local communities. The Washington State Liquor and Cannabis Board (WSLCB) regulates and enforces cannabis licensing. Cannabis license applications are considered under three categories of producers, processors, and retailers (see box at right.)

> **Producers** grow cannabis plants for wholesalers, processors, and other cannabis producers.
>
> **Processors** are involved with processing, packaging, and labeling useable cannabis or cannabis-infused products for wholesale to retailers.
>
> **Retailers** sell cannabis and cannabis-infused products to consumers.

How the Study was Conducted

We examined trends in availability of cannabis licensed cannabis businesses (i.e., producers, processors, and retailers) across communities in Washington State from 2014 to 2017. We used WSLCB's data to quantify the number of licensed cannabis businesses for Washington's 1,446 census tracts in 2014, 2015, 2016, and 2017. We used Singh's Area Deprivation Index to stratify census tracts into three groups based on the socio-economic characteristics of communities (least-deprived, middle-deprived, and most-deprived). Singh's Area Deprivation Index includes seventeen community measures in four domains of poverty, housing, employment, and education. Analyses allowed for the spatial and temporal characterization of cannabis businesses in relationship to neighborhood socioeconomic characteristics, accounting for similarities based on neighboring census tracts.

What the Study Found

Of the 1,446 census tracts in Washington State, we found the following:

- The density of all licensed cannabis outlets increased over time. Most-deprived areas have increased likelihood of licensed cannabis producers', processors', and retailers' density when compared to least-deprived areas.

Authored by Solmaz Amiri, DDes; Pablo Monsivais, PhD, MPH; Michael G. McDonell PhD ;Ofer Amram, MSc, PhD;
September, 2019

- 79 census tracts had at least one cannabis producer in 2014, which increased to 305 tracts in 2017.
- 104 census tracts had at least one cannabis processor in 2014, which increased to 290 tracts in 2017.
- 77 census tracts had at least one cannabis retailer in 2014, which increased to 275 tracts in 2017.
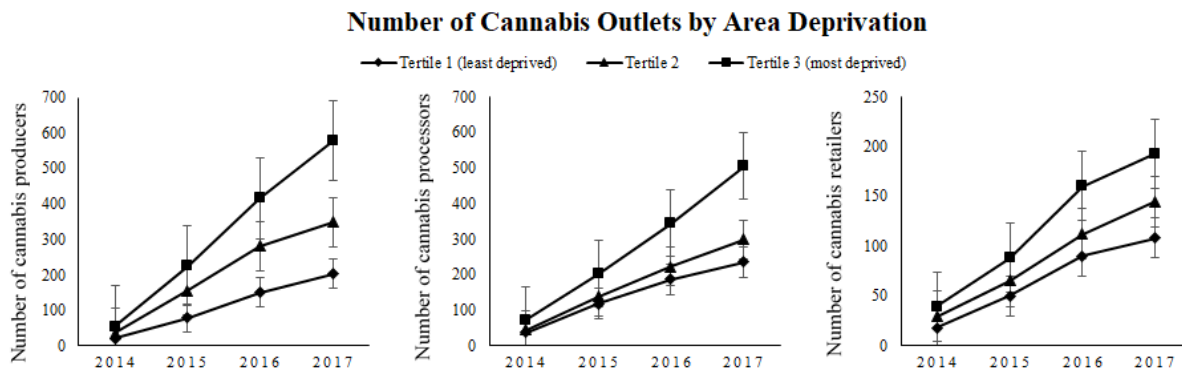
Number of Cannabis Outlets by Area Deprivation

Figure 1 Growth in the number of cannabis outlets, with the most substantial growth in the number of cannabis outlets occurring in more deprived communities.

Implications of this Study

The results showed disparity with respect to licensed cannabis outlet density in Washington State over time. The findings call for initiatives, policies, and research that decrease disparities in cannabis outlet locations.

Click for the online version of the report: https://www.chaselab.net/Cannabis/Cannabis.htm