

# Marijuana Prevention Initiative

Policies, Practices and Prevention Efforts Impacting Youth  
Access to and Use of Marijuana  
in San Diego County



LIVE WELL  
SAN DIEGO

**Prepared by the Center for Community Research  
for the County of San Diego,  
Health and Human Services Agency, Behavioral Health Services**

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### I. Introduction

Although the general public appears increasingly tolerant of marijuana, emergent research demonstrates various harms associated with marijuana use, including negative impacts on the adolescent brain. It is important for the public to understand the health and public safety implications of marijuana, especially since access to and use of marijuana will likely increase if California voters approve its legalization for recreational use in 2016. It is critical for public health officials to examine the general public's perceptions of marijuana and understand the impacts of legalization in other states where recreational marijuana use is currently permitted.

Perceptions of marijuana in both San Diego County and the state of California have been partly shaped by a series of policies. Local prevention efforts aim to reshape those perceptions so that the general public can become more aware of the harms associated with marijuana use. A timeline of significant legislation related to marijuana sales and use is provided below.

### Overview of Key Marijuana-Related Policies and Regulations

The laws surrounding marijuana are convoluted, complex and continue to be modified. At the federal level, marijuana is classified as a Schedule I drug under the Controlled Substance Act. However, the State of California has permitted qualified patients to use marijuana for medical purposes since 1996. Several court rulings and additional policies have subsequently impacted state and local access to and use of marijuana.

**1996.** California voters passed Proposition 215, also known as the Compassionate Use Act. The voter initiative was supported by 56% of voters and gave Californians the right to use marijuana for medical reasons if recommended by a doctor. California was the first state to pass a medical marijuana law.

**2001.** The U.S. Supreme Court ruled there was no medical exception to federal marijuana laws, meaning that it was still illegal to sell or distribute the drug even when state laws, like those in California, allow it.

**2004.** The Medical Marijuana Program (MMP) Act (SB 420) required the California Department of Public Health to develop a program to voluntarily register medical marijuana users and their caregivers. County participation in the program was mandated.

**2005.** The San Diego County Board of Supervisors filed a lawsuit to overturn Proposition 215 and SB 420. The California Supreme Court rejected the lawsuit in November 2006. Two years later, the San Diego County Board of Supervisors filed an appeal, which was also rejected. The U.S. Supreme Court refused to hear the case on May 19, 2009.

**2008.** Then-Attorney General Jerry Brown established the "Guidelines for the Security and Non-Diversion of Marijuana Grown for Medical Use." The guidelines were issued to ensure that marijuana grown for medical purposes would remain secure and would only be used by authorized patients. It also

aimed to help patients and caregivers understand how to cultivate, transport, possess, and use marijuana legally and to guide law enforcement in enforcing California laws.

**2009.** San Diego County implemented the Medical Marijuana Program (MMP), as mandated by the State, and began issuing Medical Marijuana Identification Cards (MMIC) on July 6. San Diego County issued a total of 582 MMICs during FY 2014-15.

**2010.** The County of San Diego approved the Medical Marijuana Collective Program Facilities Ordinance. The ordinance outlines how and where medical marijuana collectives can operate, under the supervision of the Sheriff's Department, in the County's unincorporated areas.

**2010.** Governor Arnold Schwarzenegger reduced marijuana possession to an infraction.

**2011.** San Diego County amended the existing Medical Marijuana Collective Facilities Ordinance to specify zones of operation. There are 150 designated locations in unincorporated San Diego County where medical marijuana facilities can operate.

**2014.** The City of San Diego adopted an ordinance allowing four dispensaries in each of the municipality's nine council districts.

**2014.** On November 5, California voters approved Proposition 47, which reduced the penalties for many drug possession charges, from a felony to a misdemeanor.

**2015.** In September, California statewide marijuana regulatory policies were adopted with the passage of packaged legislation (CA AB 243, AB 266 and SB 643). The new Medical Marijuana Regulation and Safety Act (MMRSA) will establish California's first statewide regulatory system for medical marijuana businesses. The new legislation will govern processing, cultivation, testing, transportation and distribution of medical marijuana. Subsequently, CA AB 21, a critical MMRSA clean-up bill, has passed to remove a previous deadline and ensure sufficient time for local control by cities and counties.

**2016.** San Diego County extended a moratorium on new medical marijuana dispensaries in unincorporated areas through March 2017; this gives the County more time to modify existing regulations for medical marijuana businesses.

**Looking Ahead** – Research underway by the Center for Medical Cannabis Research at the University of California, San Diego will be supported by the MMRSA. The research will lay the groundwork for new marijuana-specific field sobriety tests and other tools to detect drug-impaired drivers.

### **San Diego County Marijuana Prevention Initiative (MPI)**

The County of San Diego, Health and Human Services Agency, Behavioral Health Services (BHS) has funded the current Marijuana Prevention Initiative (MPI) since 2012 to reduce youth access to and use of marijuana. The MPI works in collaboration with each of San Diego County's six contracted Regional Prevention Providers to prevent youth marijuana use by informing the public of the drug's harmful effects. It draws from several local data sources to contextualize the scale and scope of youth marijuana use in San Diego County and shares the data with prevention providers, law enforcement, parents,

educators, and youth. The MPI sources data from the California Healthy Kids Survey (CHKS) reports, San Diego County Community Surveys, San Diego County BHS Alcohol and Drug Services Treatment Admissions reports, and other local sources. Additionally, the MPI reviews and compiles state and national level data to identify trends and track changes in youth marijuana use over time.

## II. Use and Impact Data

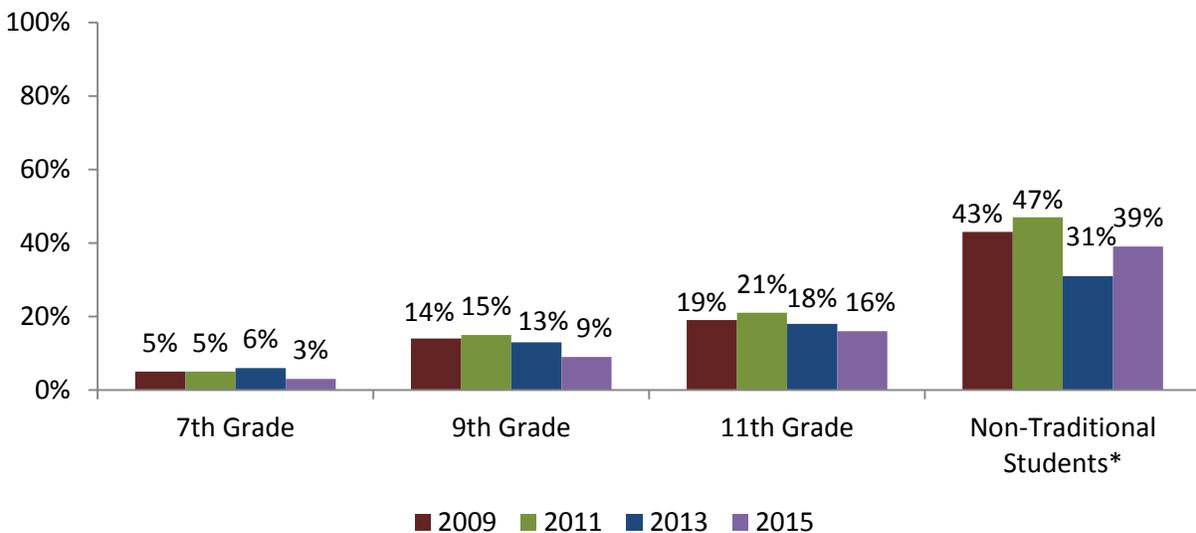
### California Healthy Kids Survey (CHKS) for San Diego County

The California Healthy Kids Survey (CHKS) is administered in most San Diego County school districts. It surveys middle and high school youth attending both traditional/mainstream and non-traditional/alternative schools (e.g., continuation schools). The MPI analyzes bi-annual San Diego County CHKS reports to track past 30-day use, daily use, perception of harm, and ease of access to marijuana.

Figures 1-4 below show trends for past 30-day use, daily use, perception of harm, and ease of access among 7<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grade students (CHKS, 2009-2015). It is important to note that the response rate for non-traditional students was lower in 2013 than in 2009, 2011, and 2015. The lower response rate may account for differences between 2013 findings and findings from other years for this population.

**Past 30-Day Use.** According to the 2015 CHKS Main Report for San Diego County, the percentage of students who reported using marijuana in the past 30 days has decreased for all grade levels since 2009 (Figure 1).

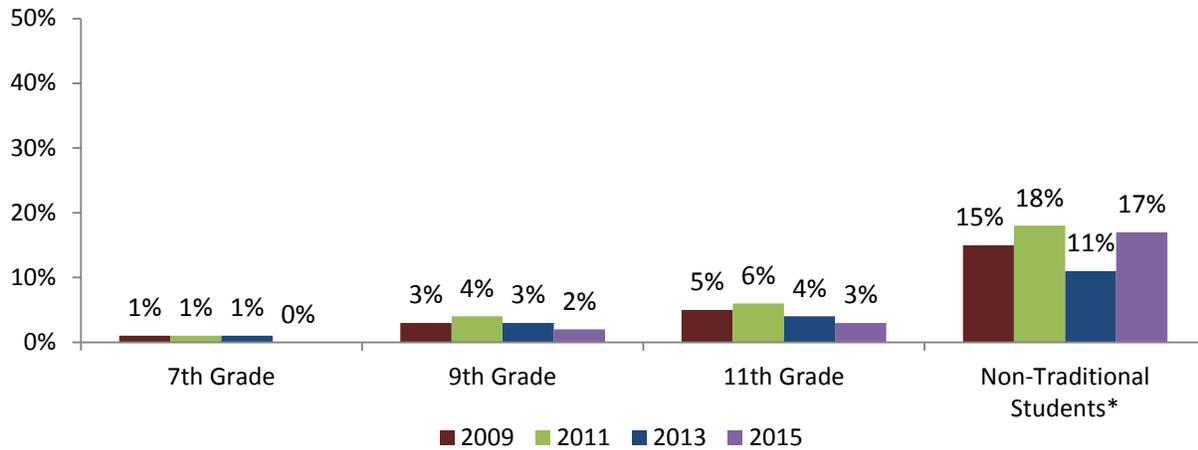
**Figure 1. Students Reporting Past 30-Day Use of Marijuana by Grade Level**



\*The response rate for non-traditional students participating in the 2013 Survey was lower than in 2009, 2011, and 2015, which may in part account for the decrease in reported past 30-day use rates among this population in 2013.

**Daily Use.** Daily marijuana use has declined slightly across 7<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> graders since 2011. However, daily use is up among non-traditional students (i.e., in 2015 compared with 2009). Daily use is defined as using marijuana 20 or more days in the past 30 days (**Figure 2**).

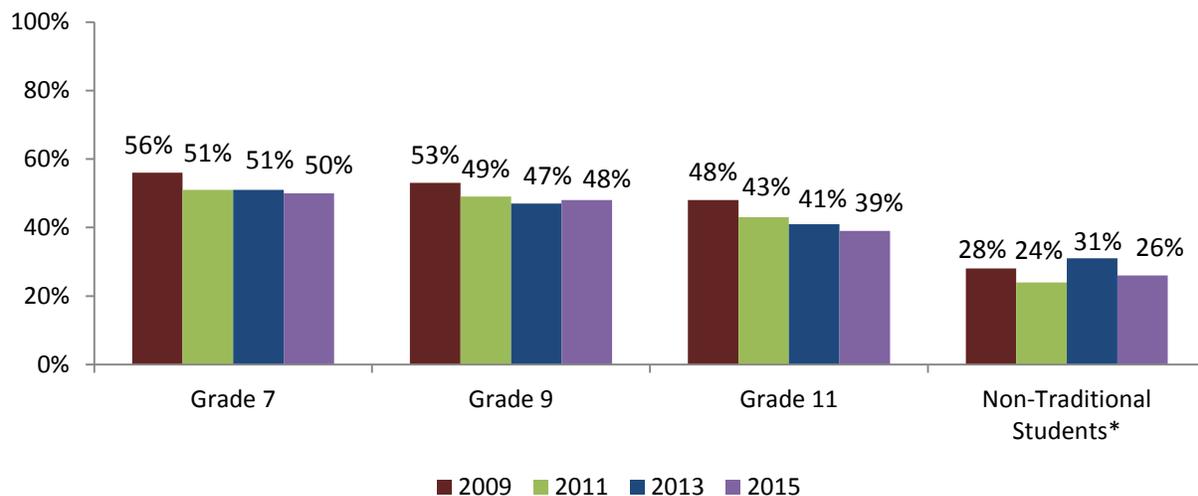
**Figure 2. Students Reporting Daily Use of Marijuana by Grade Level**



\*The response rate for non-traditional students participating in the 2013 Survey was lower than in 2009, 2011, and 2015, which may in part account for the decrease in reported daily use rates among this population in 2013.

**Perception of Harm.** According to the 2015 CHKS Main Report for San Diego County, the percentage of students reporting that people greatly risk harming themselves physically and in other ways by smoking marijuana “once or twice a week” has decreased since 2009. In 2015, approximately half of 7<sup>th</sup> and 9<sup>th</sup> graders reported that people risk harming themselves greatly by smoking marijuana once or twice a week, and slightly more than 1 in 4 nontraditional students agreed (**Figure 3**).

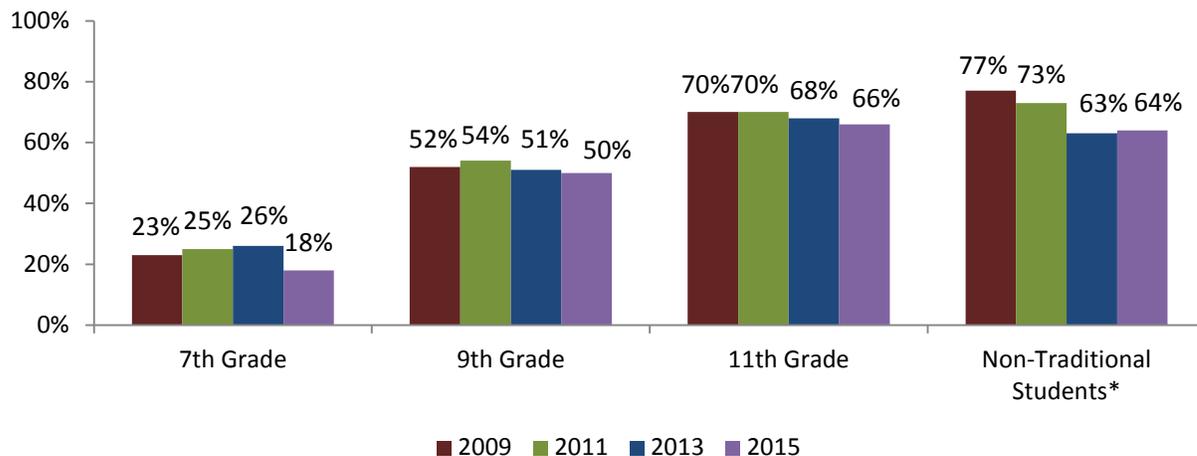
**Figure 3. Students Reporting That People Risk Harming Themselves Greatly By Smoking Marijuana Once or Twice a Week**



\*The response rate for non-traditional students participating in the 2013 Survey was lower than in 2009, 2011, and 2015, which may in part account for the increase in perception of harm rates among this population in 2013.

**Ease of Access.** The percentage of students who think that marijuana is “very easy” or “fairly easy” to obtain has been decreasing among all grade levels since 2009. The sharpest decline has been among 7<sup>th</sup> graders between 2013 and 2015. Still, in 2015, more than half of high school students and almost two-thirds of non-traditional students reported that marijuana is very easy or fairly easy to get (**Figure 4**).

**Figure 4. Students Reporting That Marijuana is Very Easy or Fairly Easy to Obtain**



\*The response rate for non-traditional students participating in the 2013 Survey was lower than in 2009, 2011, and 2015, which may in part account for the decrease in ease of access rates among this population in 2013.

While the MPI’s prevention work targets all youth ages 12 to 25 in San Diego County, the CHKS metrics presented above identify youth attending non-traditional schools (i.e., alternative/continuation schools) as particularly at risk for substance use/abuse. The MPI therefore advises County-funded Regional Prevention Providers to allocate additional prevention time and resources toward this population.

### The San Diego County Community Survey

The San Diego County Community Survey was developed by the Center for Community Research (CCR) in close collaboration with members of the San Diego County Prevention System to systematically collect and assess alcohol and other drug-related (AOD) perceptions and opinions. The survey was administered in both English and Spanish to a diverse sample of adult residents in all 18 municipalities and the unincorporated regions of San Diego County. County-contracted Regional Prevention Providers first administered the survey in 2011, and again in 2014 and 2016. A total of 1,829 surveys in 2011; 1,871 surveys in 2014; and 2,023 surveys in 2016 were collected and analyzed. The findings from the Community Surveys have allowed the Prevention System to monitor trends and track changes in community AOD-related perceptions and opinions over time and to identify emerging issues of concern. The majority of survey items have remained consistent across the three survey administrations (i.e., 2011, 2014, and 2016); however, a few items have been added, modified, or deleted over the course of the administration periods to meet the evolving needs of the San Diego County Prevention System and are indicated where appropriate in the tables below. **Tables 1 and 2** present findings from Community Surveys for items concerning marijuana use and regulation (CCR, 2011, 2014, 2016).

**Community Perceptions Related to Marijuana Use.** In the most current administration year (i.e., 2016) just over three-quarters (77%) of San Diego County residents participating in the countywide

Community Survey agreed that it is harmful for people under 21 years old to smoke marijuana. Overall, perceptions related to the harmfulness of smoking marijuana have decreased since the first survey administration in 2011 (**Table 1**). In 2011, 55% of respondents indicated believing that smoking marijuana once a month was harmful to someone’s health, compared to 50% of respondents in 2014. Similarly, in 2011, 80% of respondents believed smoking marijuana every day or every week to be harmful to someone’s health compared to 76% in 2016.

<b>Table 1. 2011, 2014 &amp; 2016 Community Survey Findings</b>			
<b>Percent of Respondents Indicating that the Following Items Are Harmful to Someone’s Health</b>			
<b>Survey Item</b>	<b>2011</b> (n=1,774-1,775)	<b>2014</b> (n=1,821-1,836)	<b>2016</b> (n=1,507-1,509)
Smoking marijuana if a person is under 21 years old*	–	76%	77%
Smoking marijuana once a month**	55%	50%	–
Smoking marijuana every day or every week	80%	77%	76%

\*Item added to the Community Survey in 2014

\*\*Item deleted from 2016 Community Survey.

**Level of Community Support for Medicinal Marijuana Regulatory Policies.** The Community Survey also asked respondents to indicate their level of support for marijuana regulatory policies. As shown in **Table 2** below, support for a law regulating medical marijuana businesses (i.e., similar to the ways in which pharmacies or alcohol businesses are regulated) increased slightly from 69% in 2011 to 73% in 2014. Residents’ support for policies banning medical marijuana businesses remained fairly consistent from 2011 to 2014 (51% vs. 50%, respectively). It should be noted that the terms “medical” and “medicinal” were removed from the survey items during the 2016 survey administration. Thus, in 2016, 70% of survey respondents supported a law regulating marijuana businesses; and 54% of respondents supported a local ban on marijuana businesses.

<b>Table 2. 2011, 2014 &amp; 2016 Community Survey Findings</b>			
<b>Percent of Respondents Indicating that They Support the Following Medicinal Marijuana Policies</b>			
<b>Survey Item</b>	<b>2011</b> (n=1,767-1,780)	<b>2014</b> (n=1,828-1,831)	<b>2016</b> (n=1,056-1,376)
A law regulating medical marijuana businesses – similar to the way alcohol businesses and regular pharmacies are regulated*	69%	73%	70%
A local ban on medicinal marijuana businesses*	51%	50%	54%

\*The terms "medical" and "medicinal" were deleted from the Survey Item for the 2016 Community Survey administration.

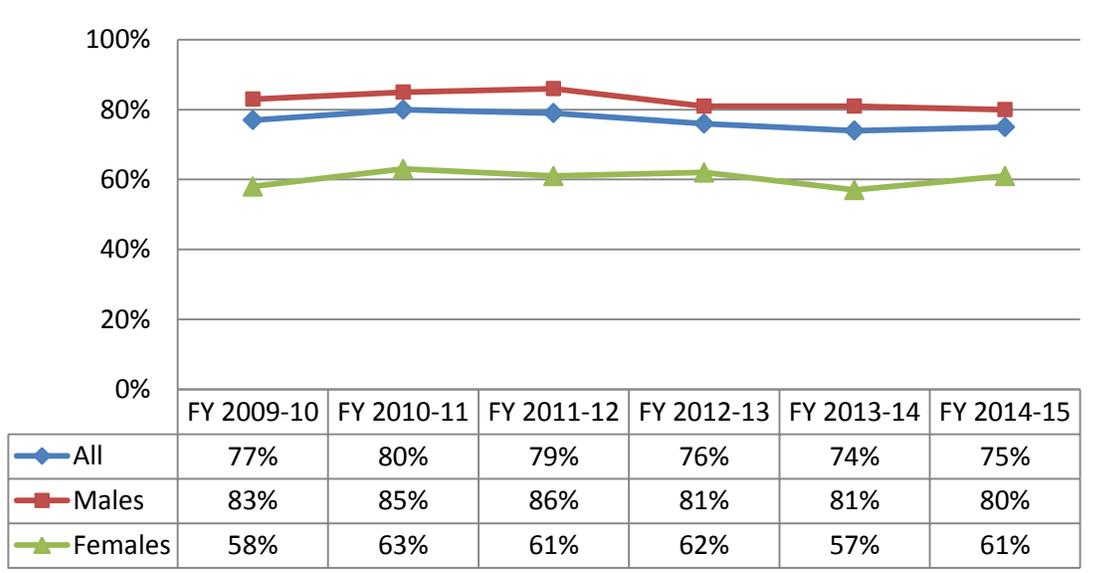
### San Diego County Alcohol and Drug Services Treatment Data

For each fiscal year, the County of San Diego Behavioral Health Services develops a report detailing the number of clients admitted to County-funded treatment facilities for substance use disorders. The MPI

tracks several indicators provided in these annual reports to gauge the scope and scale of marijuana abuse among San Diego County youth.

**Figure 5** below depicts the percentage of adolescents, ages 17 and under, admitted to a County-funded treatment facility who reported marijuana as their primary substance of choice, relative to other substances. Admissions for marijuana addiction decreased from FY 2010-11 to FY 2011-12 and have since remained fairly constant. The percentage of males admitted primarily for marijuana use is significantly higher than the percentage of females. In FY 2014-15, 80% of males and 61% of females identified marijuana as their primary drug of choice (County of San Diego, Behavioral Health Services, 2016).

**Figure 5. San Diego County-Funded Treatment Facilities Admissions: Adolescents (≤ 17) Reporting Marijuana as Their Primary Drug of Choice by Fiscal Year**

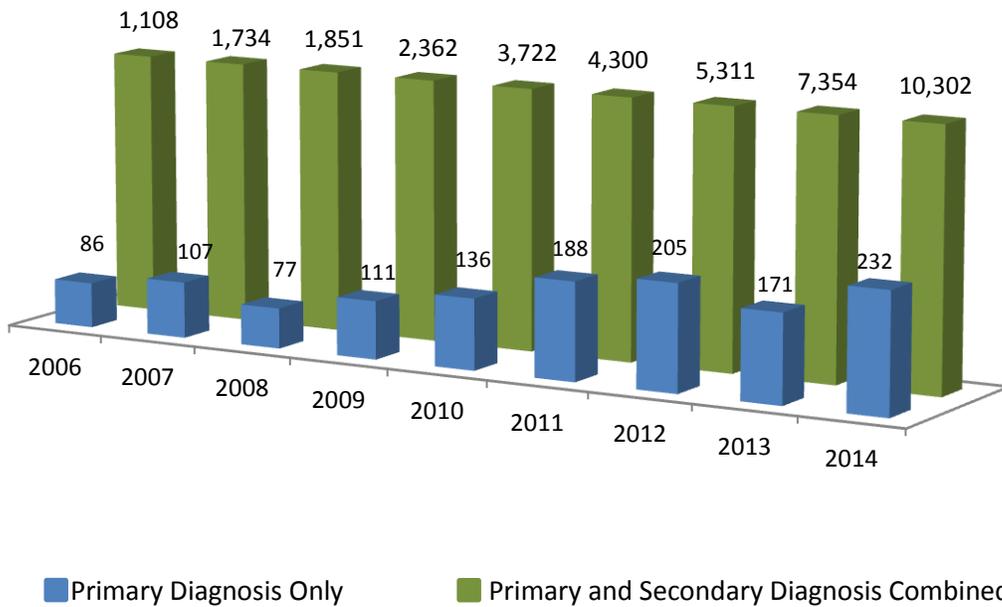


### San Diego County Emergency Department Discharge Data

Local emergency department discharge data also points to an increased trend in marijuana related harms. The most recent available data show a 170% increase in the number of people who were discharged from emergency departments with cannabis listed as the primary diagnosis.

Between 2006 and 2014, the number of persons discharged from Emergency Departments in San Diego County with cannabis listed as a primary diagnosis increased 170%, from 86 in 2006 to 232 in 2014. The number of persons discharged from San Diego County Emergency Departments with cannabis as a primary or secondary diagnosis combined increased 830%, from 1,108 to 10,302 (**Figure 6**) (California Office of Statewide Health Planning and Development, 2016).

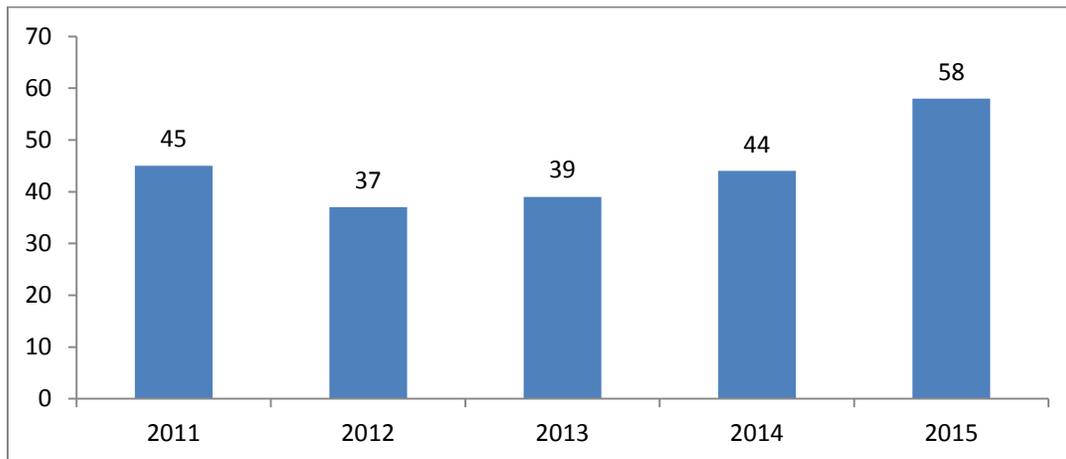
**Figure 6. Number of Emergency Department Discharges for Cannabis-related Diagnoses in San Diego County: 2006-2014**



**Marijuana Human Exposure Cases for San Diego County**

Figure 7 below depicts the number of cases (unique individuals) handled by the California Poison Control Center for calls related to marijuana exposure from persons living in San Diego County. Each year displayed includes all persons (of any age) and dispositions/outcomes for the cases, including cases “resolved on-site” (i.e., from the location of the call), “treated/released from health care facility,” and “admitted to health care facility.”

**Figure 7. Number of Marijuana Human Exposure Cases for San Diego County: 2011-2015\***



\*Timeframe for 2011-2014 is from January-December; timeframe for 2015 is from January-November.  
 Source: California Poison Control Center, personal communication (March 2015).

### III. Local Landscape: Prevention and Collaboration

The MPI's ongoing prevention strategy focuses on educating and informing the public about the harms associated with adolescent marijuana use. To this end, the MPI collaborates with numerous partners across various sectors to ensure widespread prevention messaging. The MPI Program Manager is a frequent guest speaker at regional, state, and national conferences and webinars. Most recently, the MPI Program Manager was a featured speaker at the 2015 National Prevention Network conference in Seattle, where community norms and San Diego County prevention efforts were discussed with more than 300 professionals.

The MPI also collaborates with public health experts and scientists from local universities who are actively researching the impacts of marijuana on the adolescent brain. Through its collaborations, the MPI has developed a series of materials regarding youth marijuana use, including a Key Local Data Points of Consideration (POC) document, a CHKS School District Snapshot, PowerPoint presentations, information cards, medical marijuana dispensary maps, and data-driven resources about drugged driving. It is the MPI's position that consistent messaging may be an effective strategy for marijuana preventionists to achieve the same level of success as tobacco preventionists have had in decreasing tobacco use among youth.

To broaden its reach, in March 2014, the MPI launched a user-friendly website ([mpisdcounty.net](http://mpisdcounty.net)) as a repository for sharing key resources and data. To date, the website has had more than 75,000 visits. Many of MPI's collaborating agencies feature MPI-developed prevention materials, resources, and links on their websites as well. The MPI also showcases its media collaborations through an MPI "YouTube" page.

To guide prevention efforts and enhance media messaging, the MPI established and continues to collaborate with a team of local experts – the Key Leadership Team (KLT). The KLT began meeting in 2012 with partners from: Californians for a Drug Free Youth; San Diego County Sheriff's Department; San Diego County Probation; San Diego County Office of Education; San Diego Unified School District; Grossmont School District; University of California, San Diego; Scripps Mercy Hospital; McAlister Institute; and Friday Night Live.

Together, the MPI and its partners have successfully facilitated multiple forums and media events for public engagement and education. A few examples of such collaborations include partnerships with:

- ✓ Grossmont High School District to hold a School Resource Officer (SRO) Emerging Drug Trend Training, where over 80 SRO's from throughout the County attended (2013).
- ✓ The San Diego County Office of Education (SDCOE) and BHS to hold a media event describing how edible products affect health and school performance (2014).
- ✓ SDCOE and BHS to develop a County Custom Module on the CHKS to ask youth additional questions about marijuana use (2015).
- ✓ In addition, the MPI is a member of the San Diego Unified School District Advisory Council and the Grossmont District Student Attendance Review Board.

The MPI's capacity is enhanced by its close collaboration with the six County-funded Regional Prevention Providers. Examples of effective collaborations include: a Cherokee Point Elementary Community forum in partnership with SAY San Diego (2014); a drugged driving news conference with North Inland Community Prevention Program (NICPP), which launched the "Put Drugged Driving on Your Radar" campaign (2015); and, in partnership with SAY San Diego, a "Juvenile Justice Issues" community

forum in Southeast San Diego, where a Superior Court Judge and other community leaders addressed marijuana-related juvenile justice, health and treatment issues (2015).

Other regional coalition prevention efforts include educating parents/community members and sharing information around limiting access to drug paraphernalia, provisions for marijuana storefront operations, and control of marijuana advertising targeting youth. The East County Live Well San Diego community coalition, which was formed to address youth marijuana use, access and availability, meets regularly to develop strategies for addressing regional concerns over youth marijuana use.

## **IV. Emerging Trends**

### **Current Dispensary Operations in San Diego County**

San Diego County has identified 150 locations where medical marijuana dispensaries/collectives may be permitted. As of January 2016, there were two legal/permitted dispensaries (and four pending) operating within the County's unincorporated region. In March 2016, the County imposed a moratorium on new medical marijuana dispensaries through March 2017; this gives the County more time to modify existing regulations for medical marijuana businesses.

At the municipal level, the City of San Diego has adopted an ordinance allowing four dispensaries in each of its nine council districts, with some limitations on proximity to youth-sensitive locations. Many other San Diego County municipalities have opted to ban medical marijuana dispensaries from operating within their jurisdictions.

The MPI has developed a Marijuana Dispensary Map depicting legal/permitted and illegal/non-permitted dispensaries that were operative as of January 2015. Dispensaries operating near youth-sensitive locations are also highlighted on the map. It is important to note that the transient nature of illegally operating dispensaries limits the long-term utility of the map.

### **Impacts of Recreational Marijuana Use in Colorado and Washington**

Voters in the states of Colorado and Washington approved recreational marijuana use in 2012, yet recreational sales did not begin until 2014. Authorities continue to modify their approaches to implementing policies to regulate sales, potency limits, advertising, and driving under the influence.

Several recent reports have identified some of the initial public health impacts related to the legalization of marijuana for recreational use in Colorado and Washington. An understanding of these impacts can better inform California's prevention efforts. The impacts described below highlight specific areas of concern for public health.

#### **Colorado:**

- In Colorado, traffic fatalities involving drivers who tested positive for marijuana accounted for 7% of total traffic fatalities in 2007; by 2013, that percentage had increased to 17% (NHTSA/FARS, 2013; RMHIDTA, 2014).

- In January 2014, the Colorado State Highway Patrol initiated its DUID (Driving Under the Influence of Drugs) program to monitor drug impairment by the type of drug involved. In 2014, 874 citations for DUID were issued, of which 77% involved marijuana in combination with other substances, and 41% involved marijuana only (RMHIDTA, 2015).
- In 2013, the Colorado Department of Transportation Drug Recognition Experts (DRE) found evidence of marijuana use in 62% (330 of 531) of impaired driving evaluations, as confirmed by toxicology results (RMHIDTA, 2014).
- In 2014, the first year in which marijuana retailers began selling recreational pot, calls to the Rocky Mountain Poison and Drug Center for marijuana exposure increased over 70% from 2013 and nearly 150% from 2012 (RMHIDTA, 2015). Additionally, 45 of the 151 calls received in 2014 involved children ages eight or younger (Johnson, 2015).
- Rates for both marijuana-related emergency room visits and hospitalizations have been trending upward in Colorado since medical marijuana was commercialized in 2009. In 2013, there were 248 emergency department related visits (per 100,000 in population), up from 148 (per 100,000) in 2011. Persons between 18 and 25 years old accounted for the highest rates of marijuana-related emergency room visits in both 2011 and 2013 (RMHIDTA, 2015).
- Discharge rates in Colorado for marijuana-related hospitalizations increased 89% between 2007 and 2013, from 130 marijuana-related discharges in 2007 to 246 in 2013 (per 100,000 in population). The highest rates of marijuana-related hospital discharges in both 2011 and 2013 were among young adults (RMHIDTA, 2015).
- THC (the main psychoactive compound in marijuana) extraction lab explosions increased 167% from 12 in 2013 to 32 in 2014. In addition, injuries related to THC extraction lab explosions increased 67% from 18 in 2013 to 30 in 2014 (RMHIDTA, 2015).
- The latest 2014/2015 data show that Colorado had the nation's highest percentage of youth using marijuana in the past 30 days. In 2011/2012, it had the nation's fourth highest percentage. (RMHIDTA, 2016).

#### **Washington:**

- According to the Washington Traffic Safety Commission's (WTSC) 2015 report on impaired driving, the number of drivers involved in fatal crashes who tested positive for THC nearly doubled from 2013 to 2014, the first year that marijuana sales became legal in the state. At the same time, the percentage of drivers involved in fatal crashes who tested positive for *active* THC, meaning they had recently used, also increased from 65% in 2013 to 85% in 2014 (WTSC, 2015).
- In 2014, approximately half of the drivers involved in fatal crashes who tested positive for THC exceeded the 5 ng/ml THC limit (WTSC, 2015).

- In the first six months since marijuana was legalized for recreational use, 745 drivers who were stopped by the Washington State Patrol for driving under the influence tested positive for THC. By comparison, 1,000 drivers tested positive for THC over the *two-year period* from 2011 to 2012 (RMHIDTA 2014).
- Calls to the Washington Poison Center for marijuana exposures increased 56%, from 158 calls in 2013 to 246 in 2014. Approximately 20% of the calls in 2014 involved children ages 12 or under (Johnson, 2015).

## V. Next Steps

### Identifying Priority Areas for Public Health and Safety in San Diego County

As identified above, the initial impacts of legalized recreational marijuana use on public health and safety in Colorado and Washington highlight priority areas at a local level. First, given the above statistics illustrating increased trends in impaired driving, local jurisdictions need to focus on addressing and preventing THC-impaired driving. Second, data stemming from Colorado have identified harms specific to edible marijuana products. Colorado has reported several deaths associated with ingestion of edible marijuana products and have expressed challenges in regards to oversight/regulation of these types of products. Edible marijuana products pose a unique concern, as it is difficult to determine and monitor the amount of THC in the product.

### Unregulated Edible Marijuana Food Products

While all grocery-type food and snack products are federally regulated by the FDA and include local oversight to safeguard the consumer, the FDA does not regulate edible marijuana products. In San Diego County, Ordinance # 10060 prohibits the sale of medical marijuana food or drink products, but it could allow the dry ingredients to be sold together, much like a cake mix. Consumers can then simply add the wet ingredients at home.

The following facts highlight additional reasons why edible marijuana products pose a significant concern to public health:

- ✓ All drugs and over-the-counter medications are regulated, but medicinal marijuana products have no such oversight.
- ✓ Marijuana food and snack product packaging is often youth-friendly and difficult to discern that the products do indeed contain marijuana.
- ✓ Edible marijuana often leads to longer and more unpredictable highs than smoking marijuana.
- ✓ Side effects of eating marijuana include hallucinations, paranoia, and high anxiety.

## Drugged Driving

Drugged driving issues have increased across the nation, according to NHTSA's 2013-14 Roadside Survey of Alcohol and Drug Use by Drivers (Berning et al., 2015):

- ✓ One in five drivers who were stopped and voluntarily participated in the survey, tested positive for at least one drug that could affect safety behind the wheel.
- ✓ The number of drivers with marijuana in their system jumped by nearly 50% since 2007.
- ✓ Drugs other than alcohol are involved in about 18% of motor vehicle driver deaths.
- ✓ Statewide, drug-involved crash fatalities increased over the past decade (Daoud, et al., 2015).

## Increased Emphasis on Prevention

As marijuana-related attitudes shift and policies change both nationally and statewide, prevention and treatment resources will need to increasingly target younger youth. Treatment data show that marijuana is the number one drug of choice for youth ages 12 through 17 indicating early onset of marijuana use. Therefore, prevention efforts need to begin before youth reach middle school level. Outreach efforts are also particularly important for students at non-traditional schools, for whom marijuana use is more prevalent. At non-traditional schools, youth are also placed with peers who have similar drug and behavioral problems. Additionally, as perceptions of marijuana's harm have been declining, more work is needed to address marijuana's health implications.

There are many environmental prevention strategies that can be employed to better target and reach the youth demographic. For example, targeted prevention campaigns can be implemented throughout the school year to discuss health, emerging trends, and harms associated with today's marijuana. Social media campaigns can be developed in conjunction with local schools, colleges, and universities. Ongoing "emerging drug trend" trainings (that highlight local trends specific to marijuana and/or synthetic marijuana use) can be implemented at local schools for teachers, mental health staff, social workers, nurses, and School Resource Officers who work with youth. Data identifying drug-related issues and concerns can be collected and shared with neighboring schools and parents. On-campus treatment resources can also be made easily accessible for both students and their parents, and treatment literature could be disseminated directly to parents and youth at Student Attendance Review Board meetings.

Key stakeholders representing the health and research fields need to be recruited for media campaigns and lectures to better inform parents. Research needs to be made accessible for a general audience. Materials should be made available in English, Spanish, and other languages as needed to reach diverse communities. It is also important to have Spanish-speaking experts available to address questions at community forums, news events, and other public health venues across San Diego County so that mono-lingual Spanish speaking residents have access to critical information. Above all, the prevention message pertaining to marijuana use needs to be *clear, uniform, and consistent*.

If California voters approve recreational marijuana use in 2016, access to data that track the impacts of marijuana use – including expulsions, incarcerations, drugged driving, and emergency room visits – will become even more important for informing prevention activities and policy advocacy. Additionally, successful prevention campaigns in Colorado and Washington can serve as examples for California.

Prevention experts in Colorado and Washington can also identify areas of growing concern that might affect Californians.

To prevent marijuana-impaired driving, the State of California should adopt a uniform set of drugged driving standards, including a THC nanogram per milliliter limit, and use trained Drug Recognition Experts to determine possible impairment. Aggressive prosecution (e.g., enhanced use of vertical prosecution teams) of drugged drivers needs to be prioritized. Finally, the State should launch an educational awareness campaign to inform the public about the hazards of drugged driving. There have been successful collaborations to tackle drugged driving in Orange County and these collaborations can serve as models for San Diego and other counties.

For marijuana-infused food products, adopting restrictions and developing guidelines limiting packaging that appeal to youth is a high priority. Marijuana food products, extracts, and oils must have product-warning labels, clearly stating the product contains THC. THC limits in edible products should also be adopted and enforced.

Finally, the prevention community can learn from extant research on alcohol outlet density and community harm from alcohol use. Density of marijuana retail outlets should be determined at the local level, using zoning ordinances. These ordinances should consider factors, such as proximity to adjoining outlets and youth-sensitive locations that may impact local neighborhoods. Local planning and land use agencies should be actively involved in addressing community concerns by soliciting public comment when locations are being considered. Dedicated resources must be allocated to ensure that any new or existing policies/regulations are enforced.

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