



# Cannabis Data and Information

California Cannabis Health Information Initiative

# **Surveillance System**

Cannabis Public Health Surveillance System Existing Population-Based Surveys

Adult Users

Parents

Youth Risk Behavior Survey (YRBS)

Youth

California Student Tobacco Survey (CSTS)

California Healthy Kids Survey (CHKS) National Survey on Drug Use and Health (NSDUH)

Behavioral Risk Factor Surveillance System (BRFSS)

California Adult Tobacco Survey (CATS)

## Pregnancy and Breastfeeding

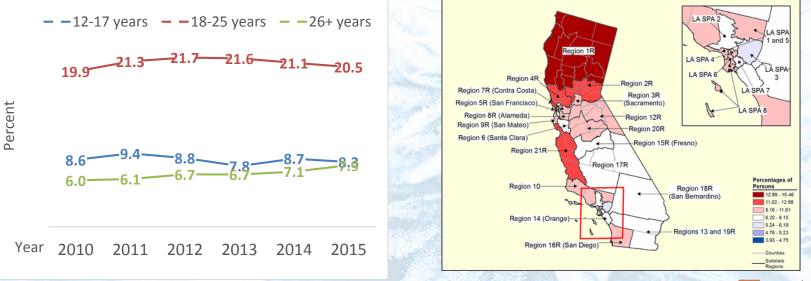
Maternal and Infant Health Assessment (MIHA)



# **Current Usage**

#### Self-Reported Cannabis use in the Past Month Among Californians Aged 12 and Older

National Survey on Drug Use and Health, Substance Abuse and Mental Health Services Administration





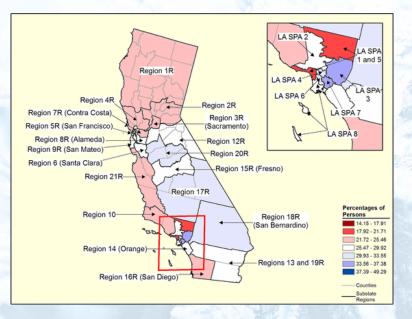
California Department of PublicHealth

Source: Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2009-2015. <u>https://www.samhsa.gov/data/population-data-nsduh</u>

# **Perceptions of Great Risk**

#### Perceptions of Great Risk from Smoking Cannabis Once a Month among Californians Aged 12 and Older

2012-2014 National Survey on Drug Use and Health, Substance Abuse and Mental Health Services Administration



Source: Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2012, 2013, and 2014.



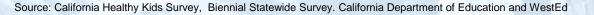
# **Usage Among Youth**

## Self-Reported Cannabis Use in the Past Month Among 7<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> Graders in California

California Healthy Kids Survey, California Department of Education/WestEd

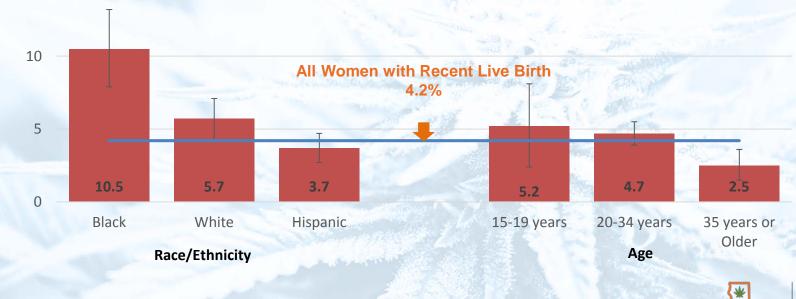


PublicHealth



# **Usage During Pregnancy**

Self-Reported Use of Cannabis During Pregnancy 2016 Maternal and Infant Health Assessment (Provisional)



Source: Provisional 2016 Maternal and Infant Health Assessment (MIHA) Data. Provisional MIHA estimates are weighted to preliminary California birth certificate data and will differ slightly from MIHA estimates weighted to the final 2016 Birth Statistical Master File. Prepared by: Center for Family Health / Maternal, Child and Adolescent Health Division / Epidemiology, Surveillance and Federal Reporting. 2017.

Percent of Women Reporting Marijuana Use

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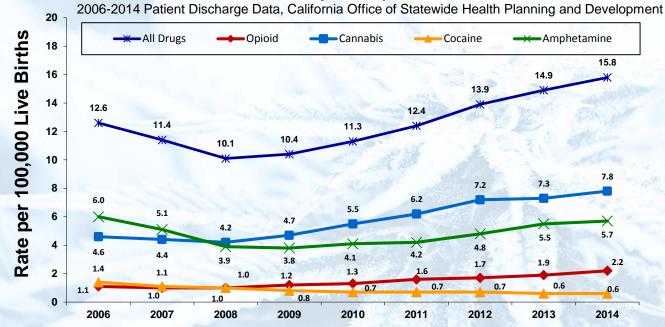
**During Pregnancy (95%** 

15



# **Drug Use Diagnosis at Delivery**

## Drug Use Diagnosis by Drug Type for California Women at Delivery Hospitalization



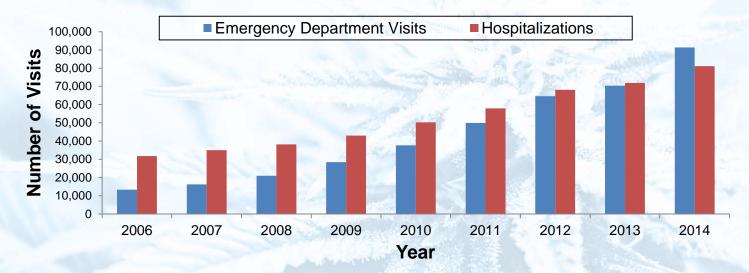




# **Healthcare Visits**

#### Emergency Department Visits and Hospitalizations with a Cannabis-Related Diagnosis in California\*

Emergency Department and Inpatient Discharge Data, California Office of Statewide Health Planning and Development



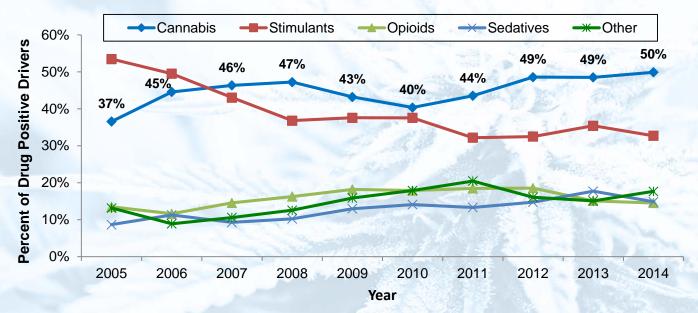
\*Any mention of cannabis dependence (ICD-9-CM code 304.3) or cannabis abuse (ICD-9-CM code 305.2) in patient record. Source: CDPH Office of Statewide Health Planning and Development, Emergency Department Data and Inpatient Discharge Data Prepared by: California Department of Public Health, Safe and Active Communities Branch. 2017. Report generated from http://epicenter.cdph.ca.gov



# **Fatal Motor Vehicle Crashes**

## Drugs Detected among Drivers Testing Positive for Drugs in Fatal Motor Vehicle Crashes in California

2005-2014 Fatal Analysis Reporting System, National Highway Traffic Safety Administration

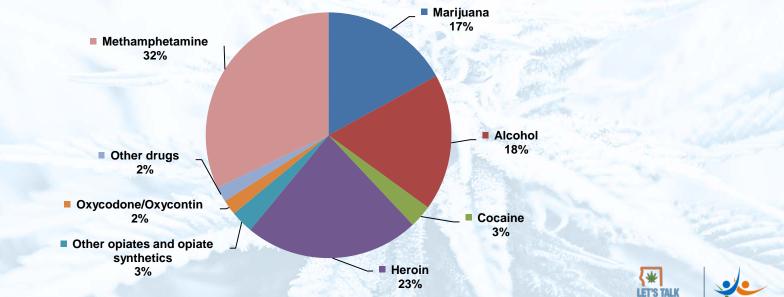




# **Substance Use Disorder Treatment**

## Primary Drug Reported at Admission\* to Publicly Funded Substance Use Disorder Treatment Programs

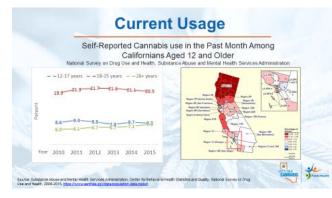
2014-2015 California Outcomes Measurement System Treatment, Department of Health Care Services



**PublicHealt** 

\*The primary drug reported at treatment admission is defined as the drug causing the greatest dysfunction to the beneficiary at the time of admission. Source: 2017 Statewide Needs Assessment and Planning Report, California Department of Health Care Services http://www.dhcs.ca.gov/formsandpubs/publications/Documents/SNAP\_2017\_Report\_FINAL.pdf

**Slide Title:** "Self-Reported Cannabis use in the Past Month Among Californians Aged 12 and Older"



**Source Type:** National Survey on Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality

Years: 2010 - 2015

**Source Description:** The National Survey on Drug Use and Health is an

annual population-based survey administered to randomly selected individuals age 12 and older by the <u>Substance Abuse and Mental Health Services Administration</u>. The survey collects information on substance use, behavior, health, attitudes and consequences. California's sample is approximately 4,500, of which the responses are weighted to provide representative population estimates.

**Graph:** The graph on the left shows the trend of past month cannabis use for three different age groups from 2010-2015. (Orange=12-17 years; Red=18-25 years; Green=26 years and older).

- In the years 2010-2015 the highest rate of past month cannabis use was seen in the 18-25 year old age group (19.9% to 21.7%), followed by youth aged 12-17 years (7.8% to 9.4%), and adults 26 years and older (6.0% to 7.9%).
- About 1 in 5 Californians aged 18-25 (19.9% to 21.7%) had used cannabis in the past month for the years 2010-2015.
- The prevalence of use among adults 26 and older increased by 32% from 6% to 8% over the six-year period.

**Map:** The map on the right shows the geographic variation in California of the prevalence of cannabis use in the past month for the years 2012-2014 by substate regions. (Red=higher prevalence; Blue/white=lower prevalence)

- Higher rates of use occurred in the most northern counties (indicated by the darkest red color) with prevalence estimates of 12.9%-15.5%.
- Prevalence estimates of 8-11% are seen in the remaining northern areas and coastal areas (indicated by the lighter red colors).
- Much of southern California has lower prevalence of use, with the lowest prevalence (5.2%-6.2%) seen in LA county.



# Let's Talk Cannabis Data Slide Deck

**Slide Title:** "Perceptions of Great Risk from Smoking Cannabis Once a Month among Californians Aged 12 and Older"



**Source Type:** National Survey on Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality

Years: 2012 - 2014

**Source Description:** The National Survey on Drug Use

and Health is an annual population-based survey administered to randomly selected individuals age 12 and older by the <u>Substance Abuse and Mental Health Services</u> <u>Administration</u>. The survey collects information on substance use, behavior, health, attitudes and consequences. California's sample is approximately 4,500, of which the responses are weighted to provide representative population estimates.

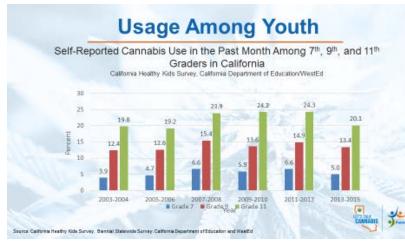
**Map:** The map shows the geographic variation in California of the estimates of perceptions of great risk from smoking cannabis once a month for the years 2012-2014 by substate regions. (Red=lower percentages of Californians perceiving great risk from smoking cannabis once a month; Blue/white= higher percentages of Californians perceiving great risk from smoking cannabis once a month)

- Less people in the northern counties and coastal counties perceive great risk from smoking cannabis once a month, about 21-25%.
- Much of southern California has more people that perceive great risk from smoking cannabis once a month (over 25%) compared to the rest of the state.
- Interestingly, the lowest and highest percent of people who perceive great risk from smoking cannabis once a month are both in LA County.
- This slide can be paired with slide "Cannabis use in the Past Month Among Californians Aged 12 and Older" to show relationship of perceptions of risk and prevalence of use.
- The geographic pattern of perceptions of great risk somewhat mirrors the pattern seen in the prevalence of past month use map.





**Slide Title:** "Self-Reported Cannabis Use in the Past Month Cannabis Use Among 7<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup> Graders in California"



Source Type: California Healthy Kids Survey (CHKS), California Department of Education and WestED

Years: 2012 - 2014

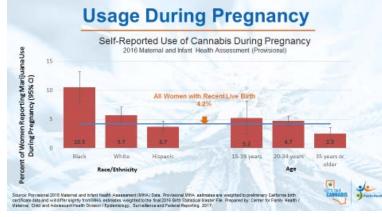
Source Description: The California Healthy Kids Survey is a biennial

statewide survey administered to randomly selected representative sample of students in grades 7, 9, and 11 throughout California. The survey collects information on students' attitudes, behaviors, and experiences, of which substance use is a key area assessed. The sample for the 2013-2015 survey was approximately 36,000 students.

**Graph:** The graph displays the trend of past month cannabis use for students in grades 7, 9, and 11 from 2003-2015. (Orange= Grade 7; Blue=Grade 9; Green= Grade 11)

- The prevalence of past month cannabis use increases with age, with the highest rates of use seen among 11<sup>th</sup> graders (greater than 20%).
- The rate of past month cannabis use among 11<sup>th</sup> graders was four times that of 7<sup>th</sup> graders throughout 2003-2015.





Slide Title: "Self-Reported Use of Cannabis During Pregnancy"

**Source Type:** Maternal and Infant Health Assessment (MIHA), California Department of Public Health, Maternal, Child and Adolescent Health Division

Year: 2016

Source Description: The Maternal and Infant Health Assessment is a statewide representative survey of women

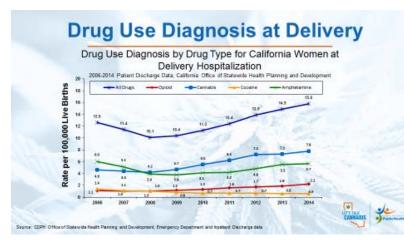
with a recent live birth in California aged 15 years and older. The survey collects information about maternal and infant experiences and maternal attitudes and behaviors before, during and after pregnancy. MIHA is California's equivalent of <u>CDC's Pregnancy</u> <u>Risk Assessment Monitoring System (PRAMS)</u>. Nearly 7,000 women are surveyed annually, of which the responses are weighted in order for the findings to be representative of the more than half million women who give birth in California each year.

**Graph:** The graph displays new (provisional) data reflecting the addition of one cannabis-related questions in the 2016 MIHA survey ("During your most recent pregnancy, did you use marijuana or weed in any way (like smoking, eating or vaping)?")

- Overall in 2016, the rate of marijuana use among women with a recent live birth in California was 4.2%.
- Preliminary data show that there are significant disparities in the use of cannabis during pregnancy, with higher rates of use among Black women and younger women.
  - Five percent of youth (age 15-19) reported use during pregnancy, which is slightly higher than the proportion of childbearing women represented in that age group (4.2%).
  - In terms of race/ethnicity, Black women self-reported the highest proportion of cannabis use with 10.5% of respondents reporting use during pregnancy. This is nearly twice the 'rate' of the population of Black women who give birth (5.6%).
- Estimates for other race/ethnicity groups (e.g., Asian/Pacific Islander and American Indian/Alaska Native) are not shown due to small samples sizes and low statistical reliability.



**Slide Title:** "Drug Use Diagnosis by Drug Type for California Women at Delivery Hospitalization"



**Source Type:** Patient Discharge Data (PDD), California Office of Statewide Health Planning and Development

Years: 2006-2014

**Source Description:** The California Office of Statewide Planning and Development <u>patient discharge data</u> contains information on

patients discharged from all non-Federal hospitals in California. Drug diagnoses are based on ICD-9-CM codes found in the patient record. There are two codes for cannabis diagnosis: cannabis dependence (304.3) and cannabis abuse (305.2).

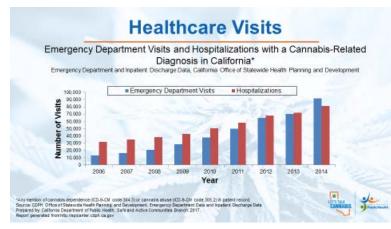
**Graph:** The graph shows the prevalence of drugs present at the time of deliver hospitalization for resident California women in 2006-2014.

- Prevalence of cannabis has increased in the childbearing population since 2008 through 2014.
- In 2014, 7.8% of women with a delivery hospitalization tested positive for cannabis, a 70% increase from 2006 (4.6%).
- It is unknown who is getting tested and why, so increased prevalence trends may
  reflect an actual increase in the prevalence of use among pregnant women or an
  increase in testing for cannabis. Some counties have universal screening. It is also
  difficult to know how recent the cannabis use was, given that cannabis can stay in
  the body for a while and with greater use, the longer it will stay in the body. Finally,
  there are a number of lab tests for cannabis which may vary in sensitivity and
  specificity and which measure different metabolites of cannabis.
- Codes used for the rates were identified via national measures as published by:
  - Thompson J.L., Kuklina E.V. & Bateman B.T., et al. (2015). Medical and Obstetric Outcomes Among Pregnant Women With Congenital Heart Disease. Obstet Gynecol., 126:346–54. (Numerator)
  - Kuklina E.V., Whiteman M.K. & Hillis S.D., et al. (2008). An enhanced method for identifying obstetric deliveries. Matern Child Health J., 12(4):469-77. (Denominator)





**Slide Title:** "Emergency Department Visits and Hospitalizations with a Cannabis-Related Diagnosis in California"



**Source Type:** Patient Discharge Data (PDD) and Emergency Department (ED) Visit data, California Office of Statewide Health Planning and Development

Years: 2006-2014

**Source Description:** The California Office of Statewide

Planning and Development <u>patient discharge data</u> contains information on patients discharged from all non-Federal hospitals in California. The <u>emergency department data</u> contains information on patients who were admitted to an emergency department in California, then treated and released, or transferred to another facility. Data were obtained from California Department of Public Health's EpiCenter: California Injury Data Online: <u>http://epicenter.cdph.ca.gov/</u>

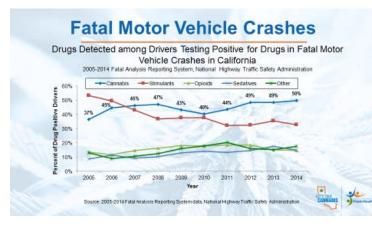
**Graph:** The graph shows the number of emergency department visits and hospitalizations that had any mention of a cannabis diagnosis (cannabis dependence or cannabis abuse) in the patient record in 2006-2014.

- Both emergency department visits and hospitalizations with any mention of a cannabis diagnosis have increased over the time period 2006-2014.
  - Emergency department visits increased from 13,316 to 91,361 (a 586% increase)
  - Hospitalizations increased from 31,728 to 81,137 (a 156% increase)
- In 2014, the number of emergency department visits with any mention of a cannabis diagnosis (n=91,361) surpassed the number of hospitalizations (n=81,137) for the first time in this time period.
- Drug diagnoses are based on ICD-9-CM codes found in the patient record. There are two codes for cannabis diagnosis: cannabis dependence (304.3) and cannabis abuse (305.2).



# Let's Talk Cannabis Data Slide Deck

**Slide Title:** "Drugs detected among Drivers Testing Positive for Drugs in Fatal Motor Vehicle Crashes in California"



Source Type:

Fatality Analysis Reporting System (FARS), National Highway Traffic Safety Administration

Years: 2005-2014

#### **Source Description:**

The <u>Fatality Analysis Reporting</u> <u>System</u> is national data system that collects annual data on fatal injuries occurring in motor vehicle

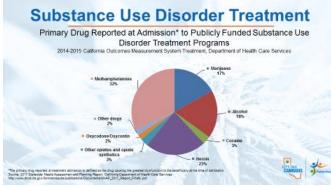
traffic crashes. Drug test information is available for approximately 40% of drivers involved in fatal crashes.

**Graph:** The graph shows the drugs detected among drivers who tested positive for drugs that were involved in a fatal motor vehicle crash in 2005-2014.

- Cannabis was the most common drug detected among drivers who tested positive for drugs (45% overall), and since 2007 has been the most prevalent drug among drug positive drivers.
- There was a 36% increase over the ten-year period in the presence of cannabis among drivers who tested positive for drugs, from 37% to 50%.
- In 2014, 50% of drivers who tested positive for drugs had cannabis in their system.
- A drug positive driver is one that tested positive for at least one drug. A positive drug test indicates that a drug was present in a driver's system, but does not indicate the person was impaired by the drug, concentrations or amount of drug are not recorded in the data.



**Slide Title:** "Primary Drug Reported at Admission to Publicly Funded Substance Use Disorder Treatment Programs"



**Source Type:** California Outcomes Measurement System Treatment (CalOMS Tx) data, Department of Health Care Services (Reported in 2017 Statewide Needs Assessment and Planning Report)

Years: 2014-2015

Source Description: The California Outcomes Measurement System Treatment data system is the statewide database that provides data on all beneficiaries receiving substance use disorder treatment services from publicly monitored treatment programs and all narcotic treatment programs. Data collected includes treatment utilization, admission and discharge information, outcome measures and program performance measures. Data are pulled from the <u>Department of</u> <u>Health Care Services' 2017 Statewide Needs Assessment and Planning Report</u>.

**Graph:** The graph shows the primary drug that was reported by beneficiaries of substance use disorder treatment at the time of treatment admission in 2014-2015.

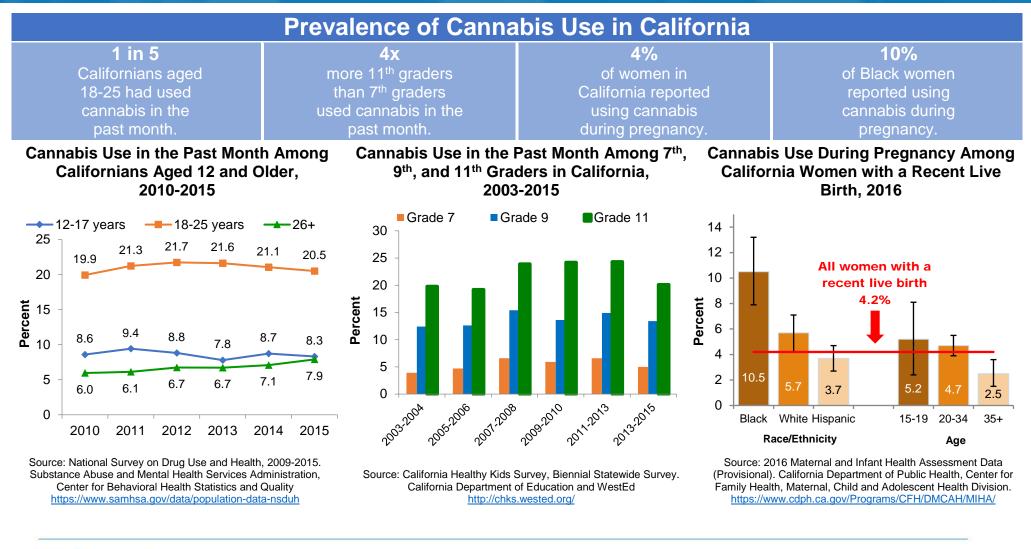
- Cannabis is the third most prevalent primary drug for treatment (17%), following treatment for methamphetamine (32%) and heroin (23%).
- The primary drug reported at treatment admission is defined as the drug causing the greatest dysfunction to the beneficiary at the time of admission, there may be poly-drug treatment occurring.





# **Cannabis in California**

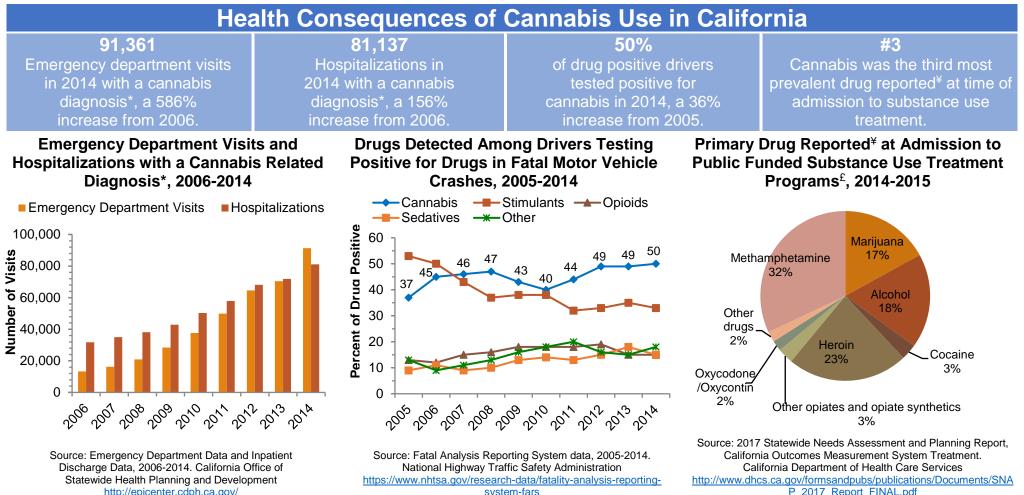
Prevalence of Use and Health Consequences





# Cannabis in California

Prevalence of Use and Health Consequences



http://epicenter.cdph.ca.gov/

California Department of PublicHealth

Website: www.letstalkcannabisca.com Email: letstalkcannabis@cdph.ca.gov

\* Cannabis diagnosis includes any mention of cannabis mental disorders of dependence (ICD-9-CM 304.3) or abuse (ICD-9-CM 305.2) in patient record.

<sup>¥</sup> The primary drug reported at treatment admission is the drug reported to be causing the greatest dysfunction to the beneficiary at time of admission.

<sup>£</sup> Public funded substance use disorder treatment only, does not represent private or all treatment available.

Current Population-Based Surveys, Administrative and Crash Report Data for California

Data Source	Type of Data	Population	Frequency and Year of Most Recent Data	Cannabis Topics Covered	State and Local Data Availability	Data Administrator and Online Data Resources
Youth Risk Behavior Survey	Population- based survey	Middle School students High School Students	Bi-Annual 2015	<ul> <li>2 questions (Middle School):</li> <li>Use (ever)</li> <li>Age of first use</li> <li>4 questions (High School):</li> <li>Use (ever and recent)</li> <li>Age of first use</li> <li>Frequency of use</li> </ul>	<ul> <li>Statewide</li> <li>4 larger urban school districts (Los Angeles, San Diego, San Francisco, Oakland)</li> </ul>	Centers for Disease Control and Prevention <u>https://www.cdc.gov/healthyyouth/data/</u> <u>yrbs/data.htm</u> California Department of Education <u>http://s-r-g.org/data-</u> <u>analysis/?page=projects_yrbs</u>
California Student Tobacco Survey	Population- based survey	Middle School students High School Students	Bi-Annual 2015-2016	<ul> <li>10 questions:</li> <li>Use (ever and recent)</li> <li>Frequency of use</li> <li>Social</li> <li>Health education in school</li> </ul>	Statewide	California Department of Public Health, California Tobacco Control Branch <u>https://www.cdph.ca.gov/Programs/CC</u> <u>DPHP/DCDIC/CTCB/Pages/SurveyInstr</u> <u>ument.aspx</u>
California Healthy Kids Survey	Population- based survey	Middle School students High School Students	Annual 2013	<ul> <li>7 questions (Middle School):</li> <li>Use (ever and recent)</li> <li>Frequency of use</li> <li>Method of use</li> <li>Perceptions</li> <li>Access</li> <li>8 questions (High School):</li> <li>Use (ever and recent)</li> <li>Frequency of use</li> <li>Method of use</li> <li>Perceptions</li> </ul>	<ul> <li>Statewide</li> <li>County</li> <li>School District</li> </ul>	California Department of Education http://chks.wested.org/ Online query http://chks.wested.org/query-chks/



Website: www.letstalkcannabisca.com

Current Population-Based Surveys, Administrative and Crash Report Data for California

Data Source	Type of Data	Population	Frequency and Year of Most Recent Data	Cannabis Topics Covered	State and Local Data Availability	Data Administrator and Online Data Resources
National Survey	Population-	12 years and	Annual	<ul><li>Access</li><li>Cessation attempts</li><li>40 questions:</li></ul>	Statewide	Substance Abuse and Mental Health
on Drug Use and Health	based survey	older	2015	<ul> <li>Use (ever and recent)</li> <li>Age of first use</li> <li>Frequency of use</li> <li>Attitudes and perceptions</li> <li>Access</li> <li>Recommendation by a healthcare professional</li> <li>Cessation attempts</li> <li>Mental and physical health problems</li> </ul>	20 Substate regions	Services Administration https://www.samhsa.gov/data/sites/defa ult/files/NSDUH-FFR1-2015/NSDUH- FFR1-2015/NSDUH-FFR1-2015.pdf California Report https://www.samhsa.gov/data/sites/defa ult/files/California BHBarometer_Volum e_4.pdf
				<ul> <li>Behavior and social relationships</li> <li>Substance abuse treatment or counseling</li> </ul>		California Substate Regions https://www.samhsa.gov/data/populatio n-data-nsduh/reports?tab=38



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Current Population-Based Surveys, Administrative and Crash Report Data for California

Data Source	Type of Data	Population	Frequency and Year of Most Recent Data	Cannabis Topics Covered	State and Local Data Availability	Data Administrator and Online Data Resources
Behavioral Risk Factor Surveillance System	Population- based survey	18 years and older	Annual 2016	<ul> <li>2 questions (Track II)</li> <li>Recent use</li> <li>Frequency of use</li> <li>16 questions (Track III)</li> <li>Recent use</li> <li>Frequency of use</li> <li>Method of use</li> <li>Age of first use</li> <li>Recommendation by a healthcare professional</li> <li>Driving after use</li> <li>Attitudes and perceptions</li> <li>Secondhand smoke</li> </ul>	<ul> <li>Statewide</li> <li>County</li> </ul>	California State University Sacramento http://www.csus.edu/research/phsrp/brf ss.html Centers for Disease Control and Prevention https://www.cdc.gov/brfss/index.html California Department of Public Health, Center for Chronic Disease and Health Promotion https://www.cdph.ca.gov/Programs/CC DPHP/DCDIC/CDSRB/Pages/Program- Landing2.aspx
California Adult Tobacco Survey	Population- based survey	18 years and older	Annual 2016	<ul> <li>17 questions</li> <li>Recent use</li> <li>Method of use</li> <li>Frequency of use</li> <li>Age of first use</li> <li>Recommendation by a healthcare professional</li> <li>Driving after use</li> <li>Attitudes and perceptions</li> </ul>	Statewide	California Department of Public Health, California Tobacco Control Branch <u>https://www.cdph.ca.gov/Programs/CC</u> <u>DPHP/DCDIC/CTCB/Pages/SurveyInstr</u> <u>ument.aspx</u>



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Current Population-Based Surveys, Administrative and Crash Report Data for California

Data Source	Type of Data	Population	Frequency and Year of Most Recent Data	Cannabis Topics Covered	State and Local Data Availability	Data Administrator and Online Data Resources
				Advertising     Secondhand smoke		
Maternal and Infant Health Assessment	Population- based survey	Women 15 years and older who had a recent live birth	Annual 2016 (provisional)	<ul> <li>2 questions</li> <li>Use during pregnancy</li> <li>Use postpartum</li> </ul>	<ul> <li>Statewide</li> <li>35 Counties</li> <li>9 Regions</li> </ul>	California Department of Public Health, Maternal Child and Adolescent Health Division <u>https://archive.cdph.ca.gov/data/survey</u> <u>s/MIHA/Pages/MaternalandInfantHealth</u> <u>Assessment(MIHA)survey.aspx</u>
Inpatient Discharge Data	Administrative Health	All California residents	Annual 2014	Cannabis dependence (ICD-9-CM 304.3) Cannabis abuse (ICD-9-CM 305.2)	<ul><li>Statewide</li><li>County</li></ul>	California Office of Statewide Health Planning and Development <u>https://www.oshpd.ca.gov/HID/Patient-</u> <u>Discharge-Data.html</u> California EpiCenter: Injury Data Online <u>http://epicenter.cdph.ca.gov/</u>
Emergency Department Visit Data	Administrative Health	All California residents	Annual 2014	Cannabis dependence (ICD-9-CM 304.3) Cannabis abuse (ICD-9-CM 305.2)	<ul><li>Statewide</li><li>County</li></ul>	California Office of Statewide Health Planning and Development <u>https://www.oshpd.ca.gov/HID/ED-AS-</u> <u>Data.html</u> California EpiCenter: Injury Data Online <u>http://epicenter.cdph.ca.gov/</u>



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Current Population-Based Surveys, Administrative and Crash Report Data for California

Data Source	Type of Data	Population	Frequency and Year of Most Recent Data	Cannabis Topics Covered	State and Local Data Availability	Data Administrator and Online Data Resources
Fatality Analysis Reporting System Data	Crash Reports	Fatalities occurring in motor vehicle traffic crashes	Annual 2015	Drug testing results (cannabis positive or negative) for drivers and fatal victims involved in motor vehicle traffic crashes	<ul><li>Statewide</li><li>County</li></ul>	National Highway Traffic Safety Administration, Fatality Analysis Reporting System <u>https://www.nhtsa.gov/research- data/fatality-analysis-reporting-system- fars</u>



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