



SANTA CLARA COUNTY
Behavioral Health Services

Marijuana Prevention in the Post-Legalization Era

Sue Nelson, EdD

Children, Family and Community Services Division

Prevention Training Academy
San Mateo County
July 25, 2017



Presentation purposes

- Factors impacting use and the consequences of use
- The key points of Prop 64 that impact prevention efforts
- The concerns, challenges, and opportunities for local control
- The new proposed BMCR regulations, the concerns of the marijuana industry, and our concerns as preventionists



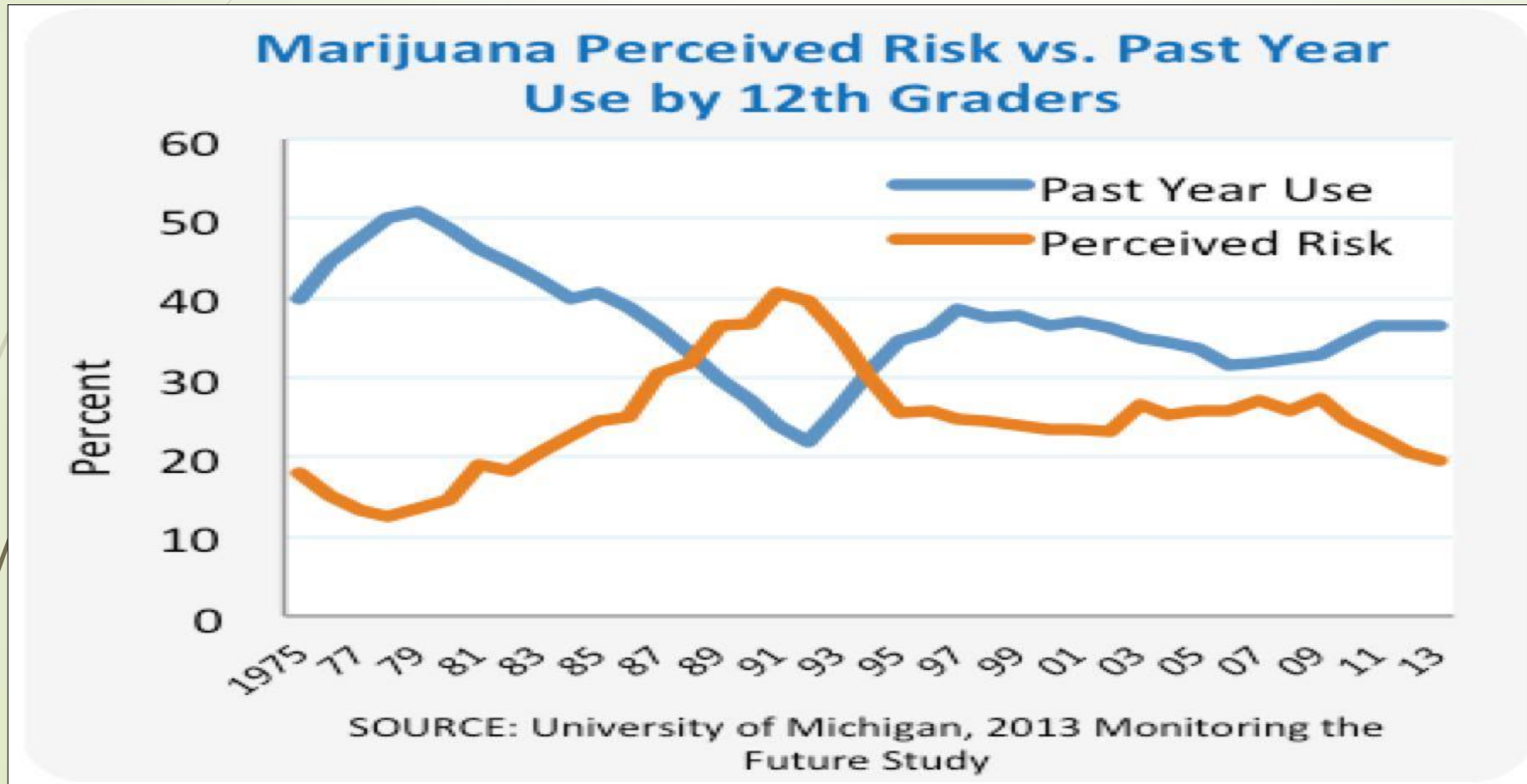
What do we know substance use?

- ▶ 90% of adults drink alcohol, and 80% of US alcohol sales are consumed by 20% of those who drink.
 - ▶ The published rate for alcohol use disorder is 6%
- ▶ 15% of adults smoke cigarettes
 - ▶ 9% are addicted to nicotine
- ▶ The addiction potential for marijuana is similar
 - ▶ If legalization leads to increased availability, addiction numbers will increase similar to alcohol and nicotine, along with the risks and costs.

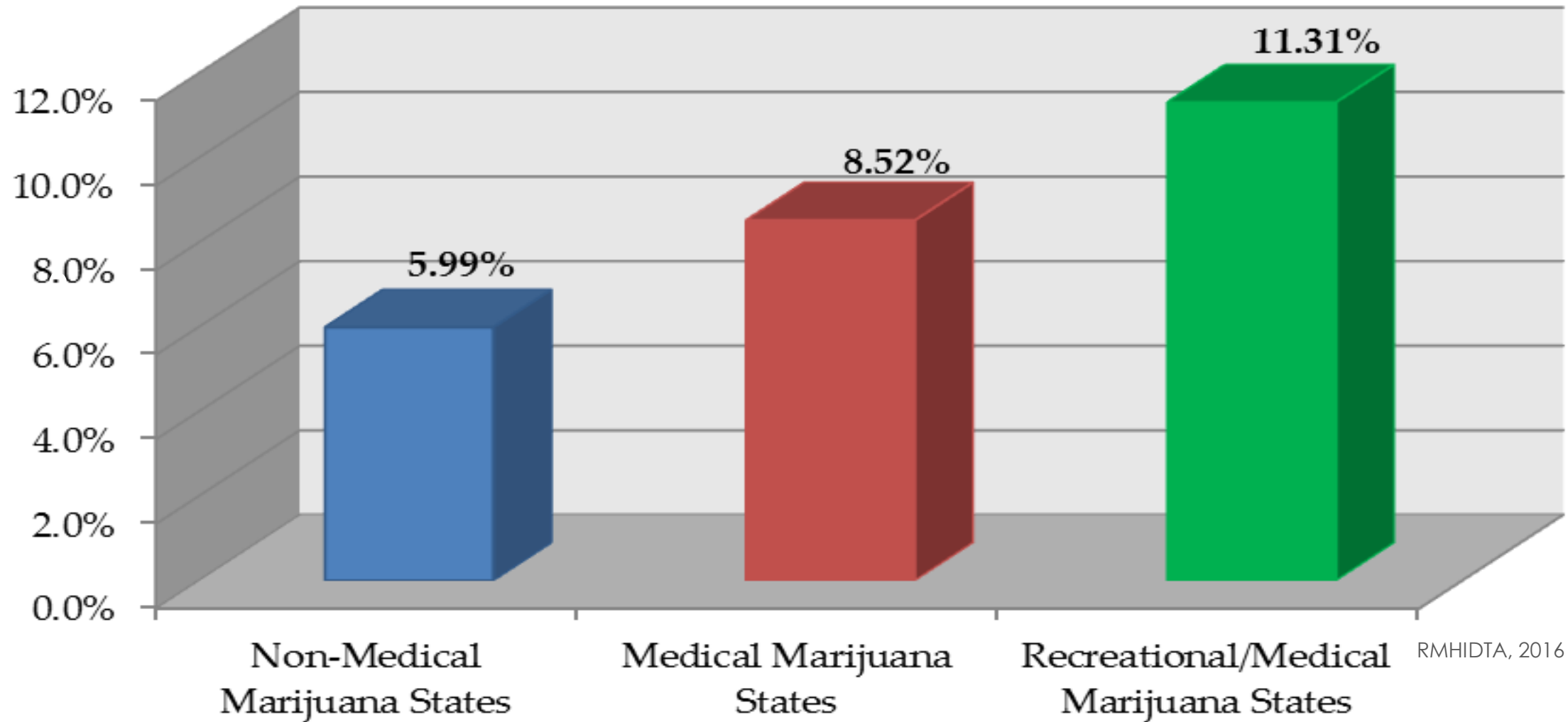
Addiction: Does age at first use matter?

- ➔ 9% percent of people who try marijuana become addicted
- ➔ 17% of youth who begin use before age 18 become addicted
- ➔ Daily users before age 17 have increased risk of later dependence and use of other drugs

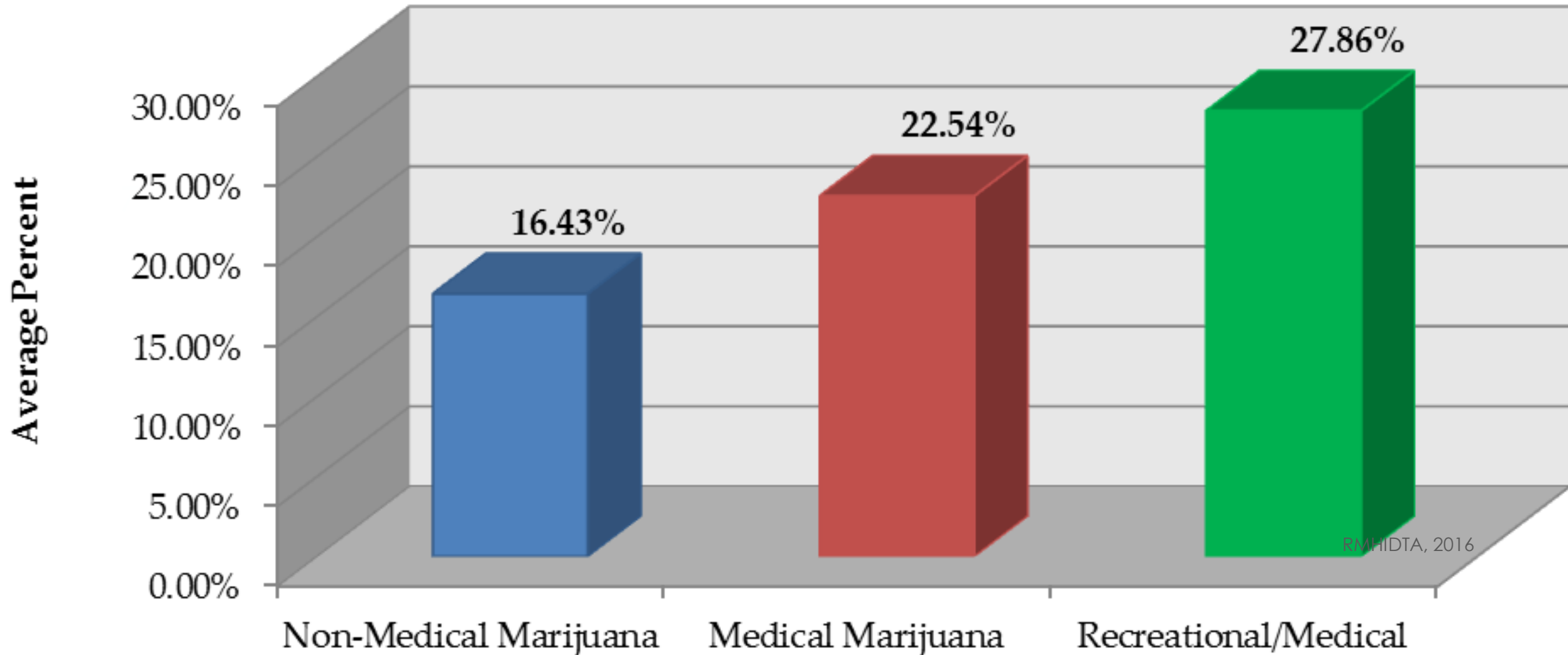
What's the relationship between perceived risk and use?



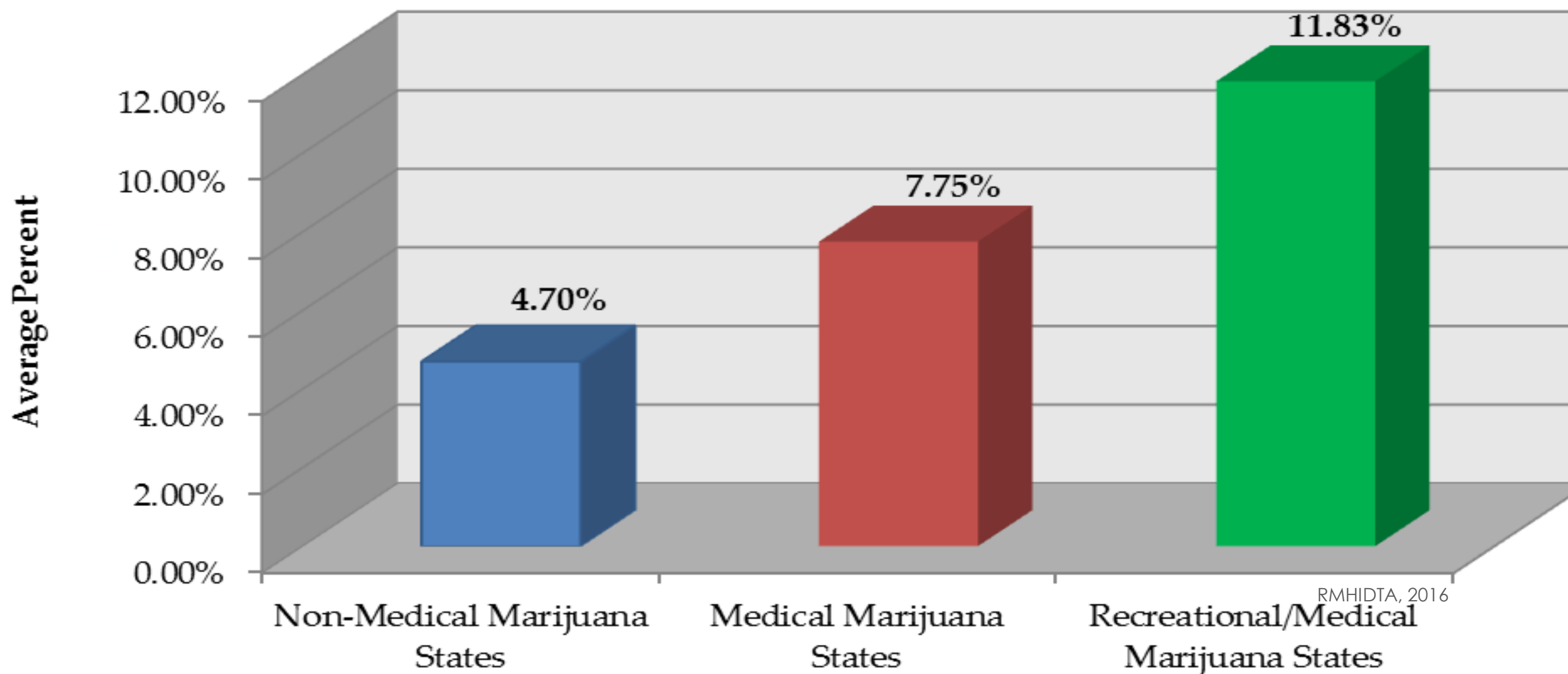
Average Past Month Use by 12 to 17 Years Old, 2013/2014



Average Past Month Use by 18 to 25 Years Old, 2013/2014

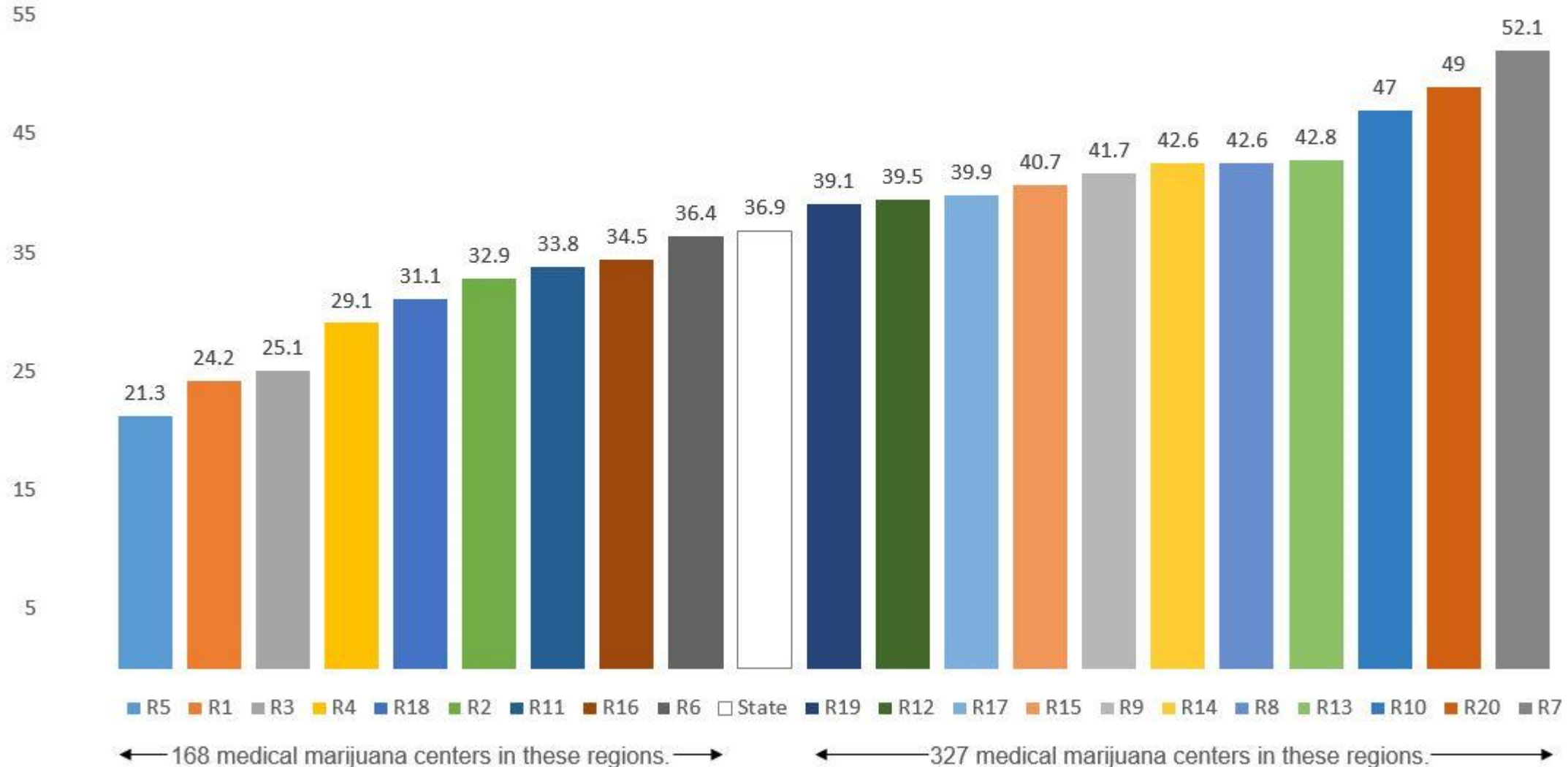


Average Past Month Use by 26+ Years Old, 2013/2014



Colorado High School Students' Lifetime Marijuana Use, 2013

With few exceptions, regions with lowest rates of use have fewest medical marijuana centers (total 168).
 Regions with highest rates of use have most medical marijuana centers (total 327).



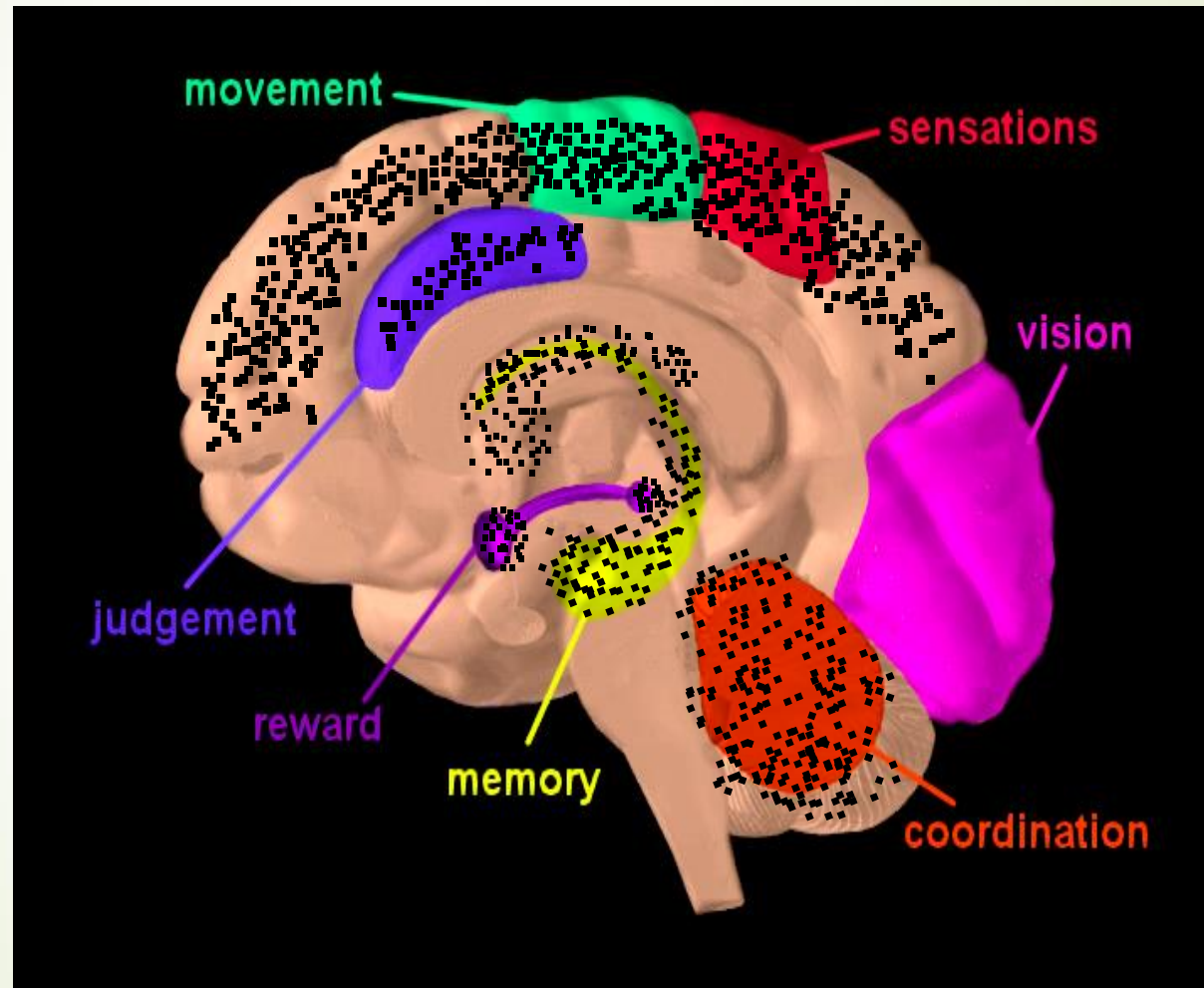
Sources: 2013 Colorado Healthy Kids Survey; Colorado Department of Revenue, MED Licensed Medical Marijuana Centers.

Isn't potency the same as it used to be?

- ▶ THC averaged about 1-2 percent in the 60s
- ▶ THC averaged about 3.5 percent in 1985
- ▶ THC averaged 14.5 percent in 2012.
- ▶ Today THC averages about 15%
- ▶ Colorado averages almost 19% and some samples contain 30 percent.

Cannabinoid receptors are located throughout the brain

**THE BRAIN
CONTINUES TO
DEVELOP UP
TO AGE 25**



Does marijuana affect academic performance?

- Youth that use regularly exhibit a 6 to 8 point drop in IQ that remains in adulthood
- Youth that smoke every weekend for two years are
 - Almost six times more likely to drop out of high school than non-smokers
 - More than three times less likely to enter college
 - More than four times less likely to earn a college degree

What about adult consequences of use?

Studies have found a relationship for marijuana users and:

- Increased work absences and tardiness
- Accidents
- Worker's compensation claims
- Job turnover
- Increased likelihood of needing socioeconomic assistance
- Lower income
- Higher unemployment levels

Secondhand Smoke

- Secondhand tobacco smoke is estimated to cause ~50,000 US deaths per year, mostly from cardiovascular disease.
- Secondhand tobacco smoke impairs the ability of arteries to vasodilate or expand when needed.
 - The impairment is temporary but extended exposure leads to long term impairment.
 - Arteries return to normal functioning in less than thirty minutes.
- One minute of secondhand marijuana smoke impairs arteries for up to 90 minutes.
- Secondhand marijuana smoke impairs arteries longer than secondhand tobacco smoke.



Secondhand marijuana smoke and children

- ▶ An Colorado inpatient sample of infants admitted for respiratory compromise found 1 in 6 had detectable amounts of marijuana in their systems.

Is it safe during pregnancy?

- ▶ Use during pregnancy is associated, with
 - ▶ increased risk for stillborn births.
 - ▶ increased startles and tremors, high pitched cries, and decreased responses to stimuli in newborns.
 - ▶ inattention and impulsivity at age 10.
 - ▶ academic underachievement, especially spelling and reading
 - ▶ lower school performance and memory abilities than children not exposed. decreased attentiveness, visual memory and problem solving skills.
 - ▶ early onset of use
 - ▶ frequency of use at age 14
 - ▶ increased marijuana use at age 22
 - ▶ changes in the placenta
- ▶ Infants exposed to second-hand marijuana smoke have twice the possible risk of SIDS as unexposed babies.



18

Room damage due to marijuana grow



Power theft



Figure 10. Multiple packets of anticoagulant rodenticides found surrounding an illegal marijuana grow site within the southern Sierra Nevada fisher (*Martes pennanti*) project.



Gabriel MW, Woods LW, Poppenga R, Sweitzer RA, Thompson C, et al. (2012) Anticoagulant Rodenticides on our Public and Community Lands: Spatial Distribution of Exposure and Poisoning of a Rare Forest Carnivore. PLoS ONE 7(7): e40163. doi:10.1371/journal.pone.0040163 <http://journals.plos.org/plosone/article?id=info:doi/10.1371/journal.pone.0040163>



What about BHO: Butane honey oil?

- BHO can commonly be 75% THC
- A dose of BHO is the equivalent of 64 "old school" joints
- If this were alcohol, it would be like going from 1 light beer to dozens of shots of vodka
- The high lasts up to ten hours
- Can be taken orally, melted in butter, topically mixed with petroleum jelly, or smoked with a water pipe (dabbing) or vape pen

Vacuum Purging



Closed Loop method





**PROPOSITION 64: LOCAL
JURISDICTIONS AND
REGULATORY ISSUES**



INDOOR PERSONAL CULTIVATION

Jurisdictions can prohibit outdoor cultivation on a personal residence property, but they may not “completely prohibit” growing six marijuana plants inside a personal residence or in an accessory structure to a private residence. They can, however, “reasonably regulate” indoor personal cultivation. A personal residence is defined as a house, apartment unit, a mobile home or similar dwelling (AUMA, Section 4).

Local Control Indoor Grow Considerations:

- Cities and counties can require a permit and fee prior to cultivating up to six plants indoors.
- Jurisdictions can require written consent of the property owner prior to cultivation.
- Jurisdictions can limit extraction methods, which include a variety of volatile and non-volatile compounds.
- Jurisdictions can create regulations on *how* marijuana may be grown in residences.
- Prior to the commencement of personal indoor marijuana cultivation entities may consider requiring adequate mechanical locking or electronic security systems.

INDOOR PERSONAL CULTIVATION, cont.

Local Control Indoor Grow Considerations:

- ▶ Require that marijuana cultivation area(s), whether in a secure structure or inside a residence, shall not be accessible to persons under 21 years of age.
- ▶ Jurisdictions can specify that the authorized grower resides full time in the residence where the cultivation occurs and does not participate in cultivation in any other location in the town.
- ▶ Cities may require that the plants be available for periodic inspection to determine if
 - ▶ There are no more than six plants
 - ▶ If a fire hazard exists
 - ▶ If there is mold accumulation
 - ▶ If water use is excessive
 - ▶ If there is undue hazard for youth and children
 - ▶ The residential structure continues to function at all times as a fully functioning residence.
 - ▶ Require that the marijuana be kept on the premises and available for inspection by the Chief of Police or his/her designee.

RETAIL ISSUES

Local jurisdictions can regulate business license requirements, local zoning, and prohibit businesses, but not, as noted in Chapter 4, restrict grows inside personal residences. No licensee shall be located within a 600 foot radius of a school, day care center or youth center (AUMA, Section 6, Chapter 5).

➤ *Retail Considerations:*

- Local jurisdictions can increase the radius around schools, day care centers or youth centers and can also add other “youth sensitive areas.” Should they be within 600 feet or more of colleges, churches (which often hold AA meetings), treatment facilities, apartment complexes, homes, or parks?
- What security staffing and other safeguards should retailers be required to provide?
- What hours should outlets be open?
- Should there be restrictions on vending machines or mail orders?
- Jurisdictions may consider requiring training for marijuana retailers on ID recognition strategies in order to prevent sales to minors.

PSYCHEDELICATESSEN: CANNABIS CRAB CAKES



MADE WITH CANNABUTTER AND
CANNABIS OIL
FROM THE CANNASPA IN
ORANGE COUNTY, CA
MARCH, 2017

Route 495 in Secaucus, N.J



ADVERTISING

“Any ads in broadcast, cable, radio, print and digital communications can only occur where at least 71.6 percent of the audience is reasonably expected to be 21 or older” Ads cannot occur on an Interstate or State Highway which crosses state borders. (AUMA, Section 6, Chapter 15).

Advertising Considerations:

- ▶ Almost one-third of audiences can be under 21, and nothing prohibits advertising that targets young adults over 21. Do jurisdictions want to consider stronger limitations on advertising?
- ▶ There are no restrictions on movie theaters. Ads could be shown with R-rated movies.
- ▶ Jurisdictions may want to consider local restrictions for indoor or outdoor advertising for roads that don't cross state borders.
- ▶ Ads cannot occur “within 1,000 feet of a day care center, school for K-12, playground or youth center.” Do jurisdictions want to permit ads near malls, stadiums, fairgrounds, colleges, treatment facilities, hospitals, churches, strip malls, in downtown areas, near parks or in other store windows?
- ▶ Does the jurisdiction want to allow sponsorship of sporting and other events by marijuana-related businesses?

LOCAL DELIVERIES

A local jurisdiction cannot prevent transportation of products on its public roads, but can limit local deliveries. Delivery services must have a licensed brick and mortar location (AUMA, Section 6, Chapter 9).

Local Delivery Considerations:

- ▶ Local deliveries in a jurisdiction can be provided by retailers located in another jurisdiction unless they are prohibited.
- ▶ If a jurisdiction allows deliveries, what are acceptable delivery hours?
- ▶ Should a business license be required for delivery services?
- ▶ Is there ID training for delivery personnel to ensure that ID cards are legitimate?
- ▶ Do Social Host Ordinances include addressing marijuana for youth under age 21?
- ▶ Are Social Host Ordinances thorough enough to ensure that a delivery purchaser who is over age 21, may not share his/her purchase with individuals under age 21?

RESIDENTIAL AND COMMERCIAL OUTDOOR CULTIVATION

Large site licenses will not be issued until January 1, 2023, for outdoor sites larger than one acre and indoor sites greater than 22,000 square feet (AUMA, Section 6, Chapter 6).

- AUMA limits Big Business involvement for five years. Nothing prohibits businesses from owning adjacent properties.
- Peak water diversion occurs during the summer months when water levels are at their lowest, impacting fish and wildlife.
- A typical plants uses four gallons of water per day.
- Jurisdictions can prohibit or restrict both outdoor residential and commercial cultivation.

EDIBLES



Dosage cannot exceed 10 mg of THC per serving, with servings scored. Marijuana or products shall be placed in re-sealable, child-resistant packaging that is not attractive to children. (AUMA, Section 6, Chapter 13).

Edible Considerations:

- ▶ There is no limit on number of servings per item. For example, should a jurisdiction limit the number of servings in a gummy bear, a brownie, a candy bar, or other food items?
- ▶ Should we have a warning stamp if a package contains more than one serving? Should chocolate pieces, or a gummy bear that contains more than one serving, have separate warnings on each dose or serving?
- ▶ Jurisdictions may consider additional food safety regulations and require local health permits and the option to inspect facilities.
- ▶ Should consumption of edibles be banned on public property?
- ▶ Should California consider developing a universal symbol for marijuana, similar to Oregon's symbol?

PERSONAL USE

Smoking cannot occur within 1000 feet of a school, day care or youth center while children are present except on personal residence grounds if it cannot be detected while children are present (AUMA, Section 4).

Local Control Considerations for Personal Use:

- Do we want to allow smoking on personal residence properties which are within 1000 feet of retail outlets, stadiums, treatment facilities, churches, or near parks where youth may congregate and the smoke can be detected?
- If smoking is banned in multiple unit dwellings, does the restriction include marijuana?
- Shall there be restrictions on smoking when the smoke can be detected on neighboring properties or residences?

ENVIRONMENTAL IMPACT ISSUES

Environmental Considerations:

- ▶ If a jurisdiction allows outdoor growing, what are the potential impacts on water quality, wildlife, and water levels?
- ▶ Youth, young adult and adult rates have increased in Colorado. How will this impact our carbon footprint due to increased electricity usage?



FUNDING AND PROP 64

- Reasonable costs for DCA, DFA, SDPH, DFW, Water Resources Board, State Auditor, LAO, EDD, and Industrial Relations
- \$10,000,000 for research for ten years
- \$3,000,000 to CHP for five years
- \$10,000,000, and increasing \$10,000,000 annually until 2022/23, then \$50,000,000 for community reinvestments grants
- \$2,000,000 to UCSD for medicinal cannabis research
- Then: 60% to the Youth Education, Prevention, Early Intervention and Treatment Account
- 20% to the Environmental Restoration and Protection Account
- 20% to the State and Local Government Law Enforcement Account



FUNDING AND PROP 64

- ▶ LAW ENFORCEMENT FUNDS: Section 34019(f)(3)(C)

(C) To the Board of State and Community Corrections for making grants to local governments to assist with law enforcement, fire protection, or other local programs addressing public health and safety associated with the implementation of the Control, Regulate and Tax Adult Use of Marijuana Act. The Board shall not make any grants to local governments which have banned the cultivation, including personal cultivation under Section 11362.2(b)(3) of the Health and Safety Code, or retail sale of marijuana or marijuana products pursuant to Section 26200 of the Business and Professions Code or as otherwise provided by law

Medical Marijuana Proposed Regulations



What about compassionate use for illnesses?

- ▶ There are two medications on the market today, nabilone (Cesamet) and dronabinol (Marinol) that
 - ▶ have controlled dosages
 - ▶ are prescribed by doctors
 - ▶ are purchased like all other drugs at a pharmacy
 - ▶ are quality-controlled
 - ▶ have prescribing information based on research
 - ▶ have no fear of pesticides, contaminants, and the tar in smoked marijuana.
- ▶ Sativex, (50% THC, 50% CBD) which is already approved in other countries, and treats the spasticity of multiple sclerosis, is in FDA trials to treat cancer pain as well.



The Health Effects of Cannabis and Cannabinoids: National Academy of Sciences, January 2017

- Greater frequency of use increases the likelihood of problem use
- Younger initiation increases the likelihood of problem use
- Marijuana use is a gateway drug
- Recent use impairs learning, memory and attention
- Use during adolescence is linked to impairments in academic achievement, employment and income, and social relationships
- The greater the use the greater the risk for psychosis
- Daily use in individuals with bipolar disorder may have greater symptoms than non-users
- Heavy users are more likely to report suicidal thoughts than non-users



BMCR Proposed Regulations for MM

- ▶ Security requirements for all licensed sites
 - ▶ Employee badges, limited access areas and security personnel
 - ▶ 24-hour video surveillance
 - ▶ Alarm systems, commercial grade locks and secure storage
- ▶ Distributors
 - ▶ All MM must go through a distributor prior to dispensary sale
 - ▶ Distributors must arrange for testing and quality assurance
- ▶ Transportation
 - ▶ It must occur in a vehicle or trailer, can't be visible and must be in a locked box
 - ▶ Vehicles must have alarm systems and be secure at all times
 - ▶ Transport personnel must be 21 years or older
 - ▶ All transports must have a shipping manifest



BMCR Proposed Dispensary Regulations

- Free samples are prohibited
- Sales and delivery hours are 6 am to 9 pm
- Goods must be packaged and labeled before arriving at the dispensary
- Before leaving the premises, the purchase must be in an opaque package that is difficult for children to open
- More than 8 oz. of dried flower can't be sold to a customer in a single day unless their recommendation says otherwise
- Deliveries must be made in person to a physical address in California
- Delivery vehicles may not contain more than \$3000 of MM
- The dispensary must be able to immediately locate all delivery vehicles
- No deliveries on publicly owned or leased land

Comments Made During One Hour of the Medical Marijuana Hearing in San Jose

Following is a transcript of the comments made during the first hour of the medical marijuana Public Hearing held in San Jose on June 13, 2017:

- Child resistant packaging can add \$2.50 to the edible price. Packaging also adds to the landfill. You should remove this restriction.
- Edibles are favored by the older generation. One older adult says he needs 1000 mg a day or he would kill himself. Lift the 100 mg limit.
- It is outrageous to have a 100 mg cap on edibles. Patients are used to a certain dose. Now you have a diabetic nightmare if you have to eat a lot of candy bars to get your dose, which means now people will have to pay for this extra food. The 100 mg limit results in waste for the environment because of the extra packaging.
- We should offer free samples- there are free samples of wine in grocery stores.



San Jose's MM Hearing Comments, cont.

- ▶ You should provide trainings for people on how to use marijuana so they can use it appropriately.
- ▶ Let us provide free samples. Providing free samples is a great way to try a breed out a home and see if it works for you.
- ▶ The regs. seem like commercial regs., not medical regs. For example, the dosage limit for packages.
- ▶ Change the DUI laws so people using are treated like functional members of society and can drive. The purpose of medical marijuana is to improve quality of life. Impaired driving is different than functional use.
- ▶ We need to think about public safety- some strains are safer than others. The state should look at the different strains.

HOLIDAY PROMOTIONS: BLACK FRIDAY



Green
BLACK
FRIDAY

FRIDAY NOVEMBER 27TH 11AM TO 7PM

door buster prizes

- * 1st 10 members get a free gram of hash
- * Next 15 members get a free gram of flowers
- * Next 25 members get a cone & lighter gift bag

jackpot gift basket

- * Get 1 raffle ticket for every \$50 spent for a chance to win a gift basket worth \$500

all-day savings

- * Mix & Match buy 3 edibles get the 4th free
- * \$5 off bubble hash
- * \$5 off all 1/8ths
- * \$5 off full melt grams



Peace in Medicine

2015



Delivery Services

- ▶ Delivery hours are set at 6am to 9pm. We don't need state regs on hours so we can accommodate Californian's personal schedules. Leave this up to local regulation.
- ▶ Wellness consultants deliver to seniors. Allow third party licenses for deliveries similar to alcohol regs.
- ▶ We can't deliver on public lands because of the current law. There are many needy patients in public housing which is public land so we need to be able to deliver there.
- ▶ We should use tax money to provide free medicine for the many needy patients who can't afford their medical marijuana and it's going to get worse for them with taxes.
- ▶ Expand home delivery- it reduces the carbon footprint by keeping hundreds of people off the roads. And many benefit from the privacy of home delivery. Many seniors can't drive. And some people use marijuana to prolong life. Part of the taxes should be used for free medical marijuana.



Business concerns

- San Jose won't tolerate limiting the number of dispensaries. It won't work to split medical and recreational- it's too difficult.
- Make it easier for non-profits to easily become for-profit.
- We should allow multiple licenses at the same location – it will reduce spread across a city.
- We should be able to sell the refuse.
- We are a packaging company. If it's too difficult to do business because of all the restrictions we will have a black market and we then limit choices by having fewer businesses.



Business concerns, cont.

- ▶ Can cultivation licenses be stacked on the same site or premise? Will there be a processor license?
- ▶ We need extra money to launch a new business and want to put investors on our boards but not count them as owners. How do you define "good standing?"
- ▶ We already have a vertical structure to our business. Please consider allowing us to keep this structure.
- ▶ We need a definition of good standing to provide the best medicine possible.
- ▶ The hours of operation are restrictive.



Business concerns, cont.

- ▶ Why do transporters need to equip their vehicles with alarm buttons? Car alarms work fine.
- ▶ We need a flexible supply chain for distribution and transportation.
- ▶ It's hard for small businesses to depend on a distributor.
- ▶ Destroying the failed test material- we need an allowance to funnel it to another source or we are creating a black market because it will increase costs.
- ▶ Let us re-use what is rejected by testing. You are driving the cost up for medical patients. For business continuity spell out "good standing" to the counties. Small business are struggling with extra costs like security systems and packaging requirements. They are too stringent to allow small businesses to thrive.



The 2013 Cole Memo to US Attorneys

- Priorities guiding Federal prosecutors under the CSA:
 - Prevent distribution to minors
 - Prevent revenue from sales going to criminal enterprises
 - Prevent diversion from legalized states from going in to other states
 - Prevent state-authorized activity from being used as a cover
 - Prevent violence and firearms in the cultivation and distribution
 - Prevent drugged driving and other adverse public health consequences
 - Prevent growing on public lands and the environmental dangers of production on public lands
 - Prevent possession or use on federal property



Comments & Questions