MARIJUANA TRENDS 2015/16

Annual Summit on Student Engagement and Attendance
September 11, 2015

Funded by the County of San Diego, Health and Human Services Agency, Behavioral Health Services
Joe Eberstein – Program Manager of the San Diego County Marijuana Prevention Initiative and the Center for Community Research Inc.
AGENDA

- Local Data (CHKS) - Treatment
- Academics and Career Impacts
- Marijuana food products
- Drugged Driving
- SDCOE Prevention Collaboration - Trends
Problem Statement: High levels of marijuana use by youth (12-25) in the county negatively affect overall health and contributes to family and community problems.

We support the County Live Well Initiative, Healthy, Safe and Thriving
The political case for 2016 – that the presidential election will bring more young voters to the polls – is particularly true if Hillary Clinton is on the ballot, he notes.

Advocates have had to weigh this against the potential downside of more than two years of on-the-ground experience in states that already have legalized recreational marijuana use.
These 3 Counties were historically the **largest cannabis producing region in the United States.**

- Humboldt County
- Trinity County
- Mendocino County
More drivers than both CO or WA
Mexico border cheap weed coming in, more experimentation with oils and concentrates
San Diego County is the epicenter for Hash Oil Labs
California is the largest domestic producer of cannabis, with massive, illegal farms on public and private land.
Huge black market, cartels make most of their money from marijuana.

Black Market did not go away in CO, they are flourishing because legal weed is too expensive.
CONCENTRATES SUCH AS WAX, BUTANE HASH OIL, EDIBLES

(AVERAGE JOINT CONTAINS 1-3% THC, CONCENTRATES MAY CONTAIN 30-90% THC)
Strength of weed seized by federal authorities has steadily risen over time.

Denver retail outlets advertise strains containing 25%+ THC*.

*THC is tetrahydrocannabinol, the main psychoactive ingredient in marijuana.
Reduce youth access to marijuana by increasing public awareness of the adverse effects resulting from youth marijuana use.

Decrease community acceptance and tolerance of youth marijuana use.
Decrease in perceived risk of harm.
Favorable policies & attitudes toward marijuana.
Higher potency products produced and marketed.
Increase in access to marijuana (delivery, masked products).

The good news ....
- Increasingly available research regarding the effects of marijuana on the adolescent brain.
- Some studies link use to mental health issues and poor academic performance.
County level CHKS FY 2014-15 reports should be available in August/September 2015.

Next CHKS survey cycle begins September 2016

New Module G or County custom module results! Edibles, vaping, access, online and dispensaries
18% of 11th graders reported smoking marijuana in the past 30 days in 2013.

9th, 11th and NT students have seen reductions in use since 2011.

7th graders see a slight increase.

Source: CHKS, 1999-2013

*The response rate for non-traditional students participating in the 2013 Survey was lower than in 2009 and 2011, which may in part account for the decrease in reported perception of harm rates for this population.
Daily marijuana use is defined as smoking pot 20 or more times in the past 30 days.

Daily marijuana use among NT students dropped nearly 7% from 2011.

No decrease in use amongst 7th graders.

Source: CHKS, 1999-2013
ACCESS TO MARIJUANA AMONG SAN DIEGO COUNTY YOUTH

Percentage of students who reported that it is “fairly easy” or “very easy” to get marijuana.

Source: CHKS, 2003-2013
2009-2013 CHKS: Students Reporting that Smoking Marijuana Once or Twice a Week is Not Harmful or Only Slightly Harmful

*The response rate for non-traditional students participating in the 2013 Survey was lower than in 2009 and 2011, which may in part account for the decrease in reported perception of harm rates for this population.
Percentage of 12th Graders Perceiving Marijuana as "Great Risk"

- Regular Use
- Occasional Use

Data from 2005 to 2014 shows a decrease in the percentage of 12th graders perceiving marijuana as a "great risk".
Past 30 Day Marijuana Use among young adults ages 19-28 at the highest level since 1988.

Daily Marijuana Use among young adults ages (19-28) at the highest since 1986!

Source: Monitoring the Future Survey 2013 volume 2 - College Student and Adult ages 19 – 55
Treatment Data
Many substances can be addictive, whether legally distributed or not.

- Alcohol
- Prescription Medicines
- Marijuana
- Tobacco
Delta 9 THC (Tetrahydrocannabinol) is the chemical responsible for most of marijuana's high. THC levels have increased 6 fold over last 20 years.

The pot/cannabis plant has over 400 other chemicals in it.

Some chemicals derived from pot may help control seizures and vomiting. (Cesamet and Marinol)
PERCENTAGE OF YOUTH TREATMENT ADMISSION RATES BY GENDER & AGE RANGE

MARIJUANA AS PRIMARY DRUG OF CHOICE - SAN DIEGO COUNTY TREATMENT PROGRAMS

FY 2009/10

Percentage of Youth Treatment Admissions

- M 12-17: 80%
- F 12-17: 55%
- M 18-24: 26%
- F 18-24: 19%

FY 2010/11

- M 12-17: 85%
- F 12-17: 63%
- M 18-24: 29%
- F 18-24: 18%

FY 2011/12

- M 12-17: 86%
- F 12-17: 61%
- M 18-24: 29%
- F 18-24: 20%

FY 2012/13

- M 12-17: 81%
- F 12-17: 62%
- M 18-24: 31%
- F 18-24: 19%

FY 2013/14

- M 12-17: 81%
- F 12-17: 57%
- M 18-24: 31%
- F 18-24: 20%
# TREATMENT DATA: ADOLESCENT ADMISSIONS BY REGION* (98 OUT OF 117 ADMISSIONS)

Percent of adolescents admitted to a County-funded treatment facility in March 2015 reporting marijuana/hashish as their primary drug of choice.

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Central</td>
<td>33%</td>
</tr>
<tr>
<td>East</td>
<td>22%</td>
</tr>
<tr>
<td>N. Inland</td>
<td>21%</td>
</tr>
<tr>
<td>N. Coastal</td>
<td>11%</td>
</tr>
<tr>
<td>South</td>
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<tr>
<td>Out of State</td>
<td>1%</td>
</tr>
<tr>
<td>Homeless</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Region is determined by the zip code of reported client residence.
Marijuana is the primary drug of choice for youth ages 12-17 in county funded drug treatment, “8 out of every 10 youth were admitted for marijuana addiction in March 2015.”
ACADEMICS AND JOB OUTCOMES
EVERYONE REACTS DIFFERENTLY TO DRUGS USE!

- Metabolism
- Genetic pre-disposition (mental illness and certain drugs)
- Environment

Well Steve Jobs was a pot smoker and look what he did!
Being high, drunk or drugged will not help you succeed and achieve your goals!

Will not enhance motivation!

Will not help in building proper coping skills.

Will not help youth maintain a healthy schedule (school, work, gym, hobbies, relationships and friends).
Observations:

- Adults that may not see marijuana as harmful and tolerance by adults.

- Adults that feel powerless to enforce rules regarding attendance and drug use.

- Drug use and domestic issues at the home. Constant moving!

- Popular reasons for not attending school, scheduling priorities, video games, marijuana use, socialization issues.
Marijuana use is associated with:

- Attention and memory problems
- Slower brain processing
- Difficulty problem-solving
- High rates of skipping class
- Low GPAs
- Lower rates of college entrance
- Failure to complete college

Sources: Arria et al., 2013; Fergusson et al. 2003; Hunt et al., 2010; Medina et al., 2007; SAMHSA, 2009
SAM - Smart Approaches to Marijuana

- One of the most well designed studies on marijuana and intelligence, released in 2012, found that persistent, heavy use of marijuana by adolescents reduces IQ by as much as eight points, when tested well into adulthood. (New Zealand Study)

- This is consistent with an exhaustive meta-analysis examining forty-eight different studies by Macleod and colleagues, published by Lancet, who found that marijuana use is consistently associated with reduced grades and a reduced chance of graduating from school.

Studies have found that marijuana use is linked with dropping out of school, and subsequent unemployment, social welfare dependence, and a lower self-reported quality of life than non-marijuana abusing people.


Sources: MPI website and SAM – Smart Approaches to Marijuana
Middle and high school students (ages 12-17) with a “D” or “F” average reported using significantly higher rates of marijuana use in the past month than those with a “C” average or higher (SAMHSA, 2009).

Young adults (ages 18-23) who did not complete high school reported significantly higher rates of current marijuana use than those who completed high school (SAMHSA, 2009).
FOOD PRODUCTS
Marijuana food products are currently unregulated!

- While all food products and drug products are regulated, there is no federal (FDA) or state oversight of marijuana food products.

- There are no quality control requirements regarding dosage or use to safeguard against unintentional poisoning or overdose.

- Food and snack packaging is youth friendly.
The proliferation of marijuana-infused edibles stunned state and industry leaders, making it one of the biggest surprises during the first year of legal recreational marijuana sales.

Potent cookies, candies and drinks — once considered a niche market — now account for roughly 45 percent of the legal marijuana marketplace.
Oil can be whipped into a *budder* and cooked into products like brownies, cookies, etc.

- Sprayed onto generic candies
- Vaped in vape pens
- Made into drops known as tinctures
May not feel anything for **30 to 60 minutes** (on a full stomach may take nearly two hours to feel full effects).

The high can last **4 to 8 hours** while the effects from smoking can wear off in an hour or less.
PACKAGING THAT APPEALS TO YOUTH

- Advertising and colorful packaging that appeal to youth.
- No FDA approval
- In CO some edible products contained banned hazardous chemicals, mold, bacteria, e coli, salmonella
- No accurate reporting on potency or quality assurance!
HOW MUCH IS TOO MUCH?

- The pot infused cookie contained as much THC as six high-quality joints.

- Takes longer to feel the high, people ingest more than recommended.

- Severe Hallucinations
- Consumed 5 peach tart candies
- Each candy containing 10mg of THC.
- Started becoming jittery and speaking incoherently.
- Shot himself
San Ysidro High School two 14-year females took three of these lozenges at school: One had elevated heart rate of over 150 beats per minute, constricted pupils, cold sweats. The other girl had a decreased heart rate, extremely low blood pressure and dilated pupils.

Originated from San Diego based online company "Kind Bake"

45% THC
SIDE EFFECTS

- Hallucinations
- Paranoia
- Anxiety
- Panic
- Depression
Most people don't realize when we smoke cannabis, 80% of the cannabinoids are burnt off.

We are able to absorb into the blood stream about 20% of the cannabinoids that end up in our lungs.

When eating cannabis we can absorb most of the THC content, close to 95%.
A business/website/advertisements cannot make unsubstantiated claims about a product having medicinal qualities, unless that product has been tested and approved by the FDA.
FDA primarily receives adverse event reports for approved products.

General information on the potential adverse effects of using marijuana and its constituents can come from clinical trials using marijuana that have been published, as well as from spontaneously reported adverse events sent to the FDA.
The FDA only finds out about violations if they are reported to them.

In the complaint state the marijuana company's website and any claims they make that marijuana can be used to treat any medical condition. That is key. They have to claim it can treat medical conditions.

Ask that your complaint be confidential.

Send complaints to

- OUDLCMail@fda.hhs.gov

and to:

- CMail@fda.hhs.gov

Also letters can be sent to the head of the FDA and encourage them to take action.
Send a paper copy to:

Dr. Stephen Ostroff
Acting Commissioner
U.S. Food and Drug Administration
10903 New Hampshire Avenue
Silver Spring, MD 20993
County Collective/Dispensary Ordinance prohibits the sale of edible products!

However, they sell the ingredients to make the edible products.

We do not know the long term impacts to youth from using higher potency marijuana edible products!
The body's response when consuming too much alcohol is to vomit, when taken with marijuana can inhibit an individual's ability to vomit.

- This may lead to alcohol poisoning!

- Alcohol enhances the THC levels in the blood.
Benzodiazepines (Depressant) and Marijuana

- Xanax (aka alprazolam, bars, footballs), Klonopin (aka clonazepam, klonies), Valium (aka diazepam, blues), Ativan (lorazepam), Versed (midazolam).

When mixed with marijuana, the sedative effects of benzodiazepines are increased causing impaired memory, poor concentration and confusion.
Frequent calls for service for people that have taken themselves off of Doctor prescribed mental health medications and supplementing with marijuana.

Most psychototropic drugs require a weaning off period.
The association between adolescent marijuana abuse and future development of psychosis has become accepted in literature.

- The risk of developing long-term psychosis has been found to increase proportionally with increasing frequency of marijuana use.
- Adolescence have an age related risk of developing long-term hallucinations or schizophrenia from abusing marijuana.
- Casual marijuana users showed abnormalities in 2 core brain structures both involving working memory.

Source: In press “Cannabis and the Adolescent Brain” - Pediatric Annals, March 2014; Dr. Robert J. Hilt, MD, FAAP, Assistant Professor of Psychiatry, University of Washington
PUT DRUGGED DRIVING

“ON YOUR RADAR”
- No uniform BAC limit (Alcohol .08)
- Stricter laws to obtain blood samples.
- Perceived risk of impairment from THC is low.
- Prosecutions are low when drugs “only” are involved!
- Metabolism – marijuana can stay in system for 30 to 40 days, does not mean impaired.
How Safe are We in San Diego from Drugged Drivers?

A spate of suspected drugged drivers made news in San Diego County as 2015 began.

A North County driver suffered a broken back when his car was hit. A high-speed chase through San Marcos ended with a man in custody. A woman pleaded guilty to manslaughter after a fatality in University City. An 18-year-old faces felony charges after a wreck in Escondido left his passenger with neck injuries. And a DUI checkpoint off State Route 78 had two drugged-driving arrests.

But drugged driving doesn’t always make headlines and it’s not new.

A 2012 roadside drug survey by the Office of Traffic Safety tested the saliva of more than 3,000 nighttime drivers around California. One out of seven drivers tested positive for at least one drug that could cause impairment. Marijuana and alcohol virtually tied for the most positive drug test results.

Is euphoria of recreational pot clouding our common sense?

By Jim Citroen & John Mendel | 4:30 p.m. March 29, 2014

The euphoria surrounding legalizing pot for recreational use is clouding common sense when it comes to driving. Pot remains the drug of choice for teenagers and research shows that youth are extremely vulnerable to marijuana’s ill effects. Young drivers who smoke pot are at particularly high risk for being involved in a vehicle crash, not only due to overall driver inexperience, but also to the increasing availability of pot products with high levels of THC (delta-9-tetrahydrocannabinol).

In a recent study of 25,200 drivers from six different states including California, drugged driving accounted for more than 28 percent of traffic deaths in 2010, up from more than 16 percent in 1999. Marijuana was the primary drug involved in the increase. It is important to note that five out of six states surveyed have medical marijuana policies in place.

In a recent National Longitudinal Study of Adolescent Health, youths ages 16 and younger who reported using multiple substances including alcohol, tobacco and marijuana were associated with higher rates of substance use dependence as an adult. Early users of all three substances were more than twice as likely to meet the criteria for marijuana dependence. Past 30-day use of marijuana by youths 12 to 17 is highest in medical-marijuana states, according to the Substance Abuse and Mental Health Service Administration State Estimates from 2009-2010.

In Washington state, drivers testing positive for marijuana increased significantly since legalization took place.
PUT DRUGGED DRIVING ON YOUR RADAR!
Motor vehicle-related fatalities accounted for 291 cases in 2014, up from 247 the previous year, an increase of nearly 18%. Accidental pedestrian deaths made up 88 of those cases. Those 88 cases are up from 64 deaths the previous year.

Almost half of the accidental pedestrian deaths who were tested were under the influence of alcohol and/or illicit drugs – most commonly methamphetamine or THC.

Many of those killed were people running across freeways while it was dark outside.
SDCOE
PREVENTION & COLLABORATION
Members of the Marijuana Prevention Initiative's – Key Leadership team.

Author of multiple media pieces and host of media events.

Developed data utilizing current CHKS surveys to track 9 of the largest school districts, rates of drug use. New custom module addressing emerging trends!

Host of trainings with SRO’s, school staff, mental health and educators regarding emerging trends.
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By Jim Cruteinden and Jen Mandel | 4:30 p.m. March 30, 2014

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In a recent study of 23,930 drivers from six different states including California, drug driving accounted for more than 28 percent of traffic deaths in 2010, up from more than 16 percent in 1999. Marijuana was the primary drug involved in the increase. It is important to note that five out of the six states surveyed have medical marijuana policies in place.

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Focus: Trends related to youth and marijuana, synthetic drug, and prescription drug use/abuse; administrative and juvenile justice issues; and campus intervention policies
- Attendance: 80 SROs from across San Diego County

Partners: San Diego County Office of Education, Sheriff’s, Probation, Assistant District Attorney, Grossmont School District and Grossmont College

Key Findings: Almost all SRO Post-Training Survey respondents said:
- The SRO training was relevant to their work
- They learned new AOD-related trends on campus
- They would participate in similar trainings
TRENDS
AVAILABILITY OF DRUGS AND SOCIAL MEDIA

- Easy access to many products
- Delivery services
- Access to many people
- Constant posting of activities!
Youth in possession of grinders.

- Herb is ground up into small consistent pieces, which maximizes surface area.

- Provides an even burning/vaporizing

- No annoying aspect from sticky fingers when breaking up buds by hand, those sticky fingers are soaking up trichomes and hurting potency.
DABBING PARAPHERNALIA

Paper clips, dental tools, small screw drivers and pens with residue at tip.
- Small and easy to hide
- Easy to purchase online
- Don’t really have a smell (Vaping)
- Brownies, cookies, jello, etc. looks just like a typical snacks!
1. Continue reaching out to non-traditional schools and “at risk youth”
   - conduct focus groups, forums, workshops, and recruit at-risk youth to participate in youth group activities.

2. Continue to track dispensaries and proximity to youth-sensitive locations.

3. Engage in information dissemination on dangers through
   - social media, trainings, media events, workshops, and community forums.
Develop media pieces regarding:

- Adolescent health impacts related to marijuana use.

- To inform of the impacts to youth in states that have already legalized marijuana that includes truancy, school performance, youth homeless rates, other drug use trends, drugged driving, developmental issues including brain impacts and mental health issues.

- Emerging trends include: increased use, paraphernalia and vaping, food/snack products, increased potency, delivery services and other access points including phone “apps” available for easy access.
TRAININGS/WORKSHOPS/FORUMS

- September 10th 2015 SARB Summit – SDCOE All Day
- October DHCS – CARS,– follow up to webinar Oct 26,27.
- Community Forum – TBD October
- February 16th 2016 – SDCOE Emerging drug trend training for staff – All day
- May 2016 Drugged Driving Forum (Location TBD)

Proposals submitted with CARS as a follow up to the Webinar - NPN Conference Seattle November 17th – 19th

MPI tracking tool – Who, What ,Where ,When, How many! Conduct surveys of workshops/events- How are you going to use this information.
Multiple resources, info cards, data, PowerPoints available for download.

Half day trainings available marijuana, RX and synthetics.
QUESTIONS?