# **MARIJUANA** & THE WORKPLACE



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of courage

# ASIDE FROM IMPAIRMENT, WHAT OTHER RISKS EXIST?







### Association Between Level of Cannabis Use & Risk of Psychosis

- 571 references, 18 studies
- 66,816 individuals
- Higher levels of cannabis use were associated with increased risk for psychosis in all included studies
- Current evidence shows high levels of cannabis use increase risk of psychotic outcomes
- Confirms a dose-response relationship between the level

#### of use and risk for psychosis



Marconi.A et al. Meta-analysis of the Association Between the Level of Cannabis Use and Risk of Psychosis Schizophrenia Bulletin 42(5):1262 – 1269. Feb 15, 2016 doi: 10.1093/schbul/sbw003







First Episode of Psychosis Due to High Potency Cannabis Use

- Daily use of high potency marijuana increases psychosis risk 5x
- Weekend use nearly triples the risk
- High potency marijuana use alone was

responsible for 24% of psychosis cases



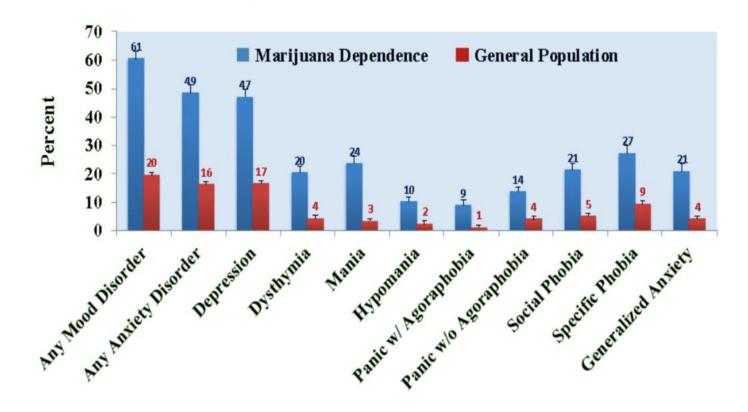
M. DiForti, et al., Proportion of patients in south London with first episode of psychosis attributable to use of high potency cannabis: a case control study. Lancet Psychiatry. February 18, 2015 www.thelancet.com/psychiatry



### Mood & Anxiety Disorders

#### High Rates of Comorbid Mood & Anxiety Disorders Among Respondents with Marijuana Dependence (NESARC)

National Epidemiologic Survey on Alcohol & Related Conditions







### Marijuana Use and Risk of Stroke

34 different studies reviewed by American Heart Assoc. in Stroke Journal

- 64 stroke patients: 80% men, average age: 32
- 81% suffered a stroke within 24 hours following marijuana use
- 1 in 4 stroke patients suffered another stroke after repeat marijuana use
- Marijuana doubles stroke risk in young adults



http://blog.heart.org/evidence-linking-marijuana-and-risk-of-stroke-grows/ http://newsroom.heart.org/news/smoking-marijuana-associated-with-higher-stroke-risk-in-young-adults



# Cannabis Use and Risk of Prescription Opioid Use Disorder in the United States

Mark Olfson, M.D., M.P.H., Melanie M. Wall, Ph.D., Shang-Min Liu, M.S., Carlos Blanco, M.D., Ph.D.

**Objective:** The authors sought to determine whether cannabis use is associated with a change in the risk of incident nonmedical prescription opioid use and opioid use disorder at 3-year follow-up.

Method: The authors used logistic regression models to assess prospective associations between cannabis use at wave 1 (2001–2002) and nonmedical prescription opioid use and prescription opioid use disorder at wave 2 (2004–2005) of the National Epidemiologic Survey on Alcohol and Related Conditions. Corresponding analyses were performed among adults with moderate or more severe pain and with nonmedical opioid use at wave 1. Cannabis and prescription opioid use were measured with a structured interview (the Alcohol Use Disorder and Associated Disabilities Interview Schedule–DSM-IV version). Other covariates included age, sex, race/ethnicity, anxiety or mood disorders, family history of drug, alcohol, and behavioral problems, and, in opioid use disorder analyses, nonmedical opioid use.

**Results:** In logistic regression models, cannabis use at wave 1 was associated with increased incident nonmedical prescription

opioid use (odds ratio = 5.78, 95% CI=4.23-7.90) and opioid use disorder (odds ratio = 7.76, 95% CI=4.95-12.16) at wave 2. These associations remained significant after adjustment for background characteristics (nonmedical opioid use: adjusted odds ratio=2.62, 95% CI=1.86-3.69; opioid use disorder: adjusted odds ratio=2.18, 95% CI=1.14-4.14). Among adults with pain at wave 1, cannabis use was also associated with increased incident nonmedical opioid use (adjusted odds ratio=2.99, 95% CI=1.63-5.47) at wave 2; it was also associated with increased incident prescription opioid use disorder, although the association fell short of significance (adjusted odds ratio=2.14, 95% CI=0.95-4.83). Among adults with nonmedical opioid use at wave 1, cannabis use was also associated with an increase in nonmedical opioid use (adjusted odds ratio=3.13, 95% CI=1.19-8.23).

**Conclusions:** Cannabis use appears to increase rather than decrease the risk of developing nonmedical prescription opioid use and opioid use disorder.

AJP in Advance (doi: 10.1176/appi.ajp.2017.17040413)





#### Opioid Deaths and Legalized Marijuana

Contrary to information that has been published, opioid/opiate deaths in Colorado have increased 33% since legalization of marijuana in 2013. Prescription opioid deaths decreased slightly in 2015 and 2016 but increased to 357 in 2017. Heroin deaths increased 93% from 2013 to 2016 but decreased 7% in 2017.

- Colorado Department of Public Health and Environment, Vital Statistics, 2018.

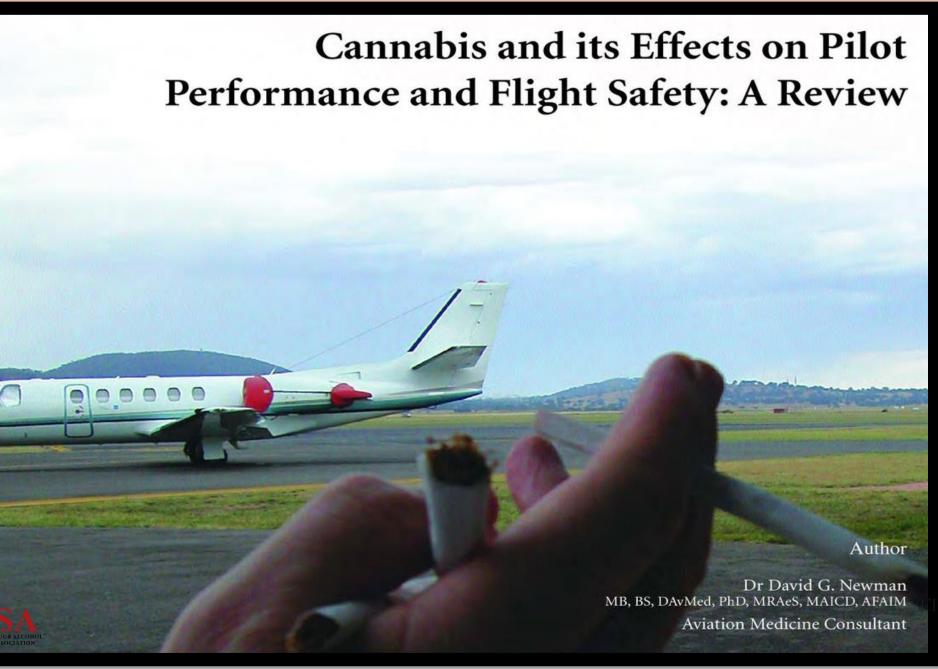


# Of 600 employees surveyed, 48% said they have gone to work high in the past 30 days



Westword, Jan 2018









# 24 Hours After Smoking One Joint

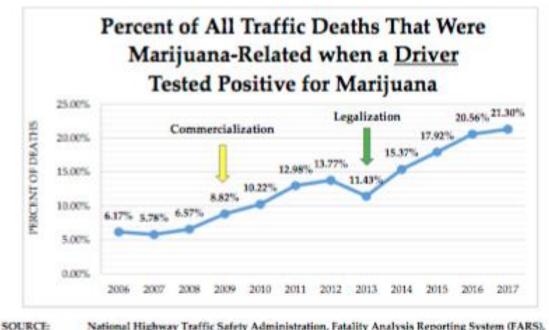
- Difficulty in aligning with and landing on runway
- Increased vertical & lateral deviation from required flight path
- Lateral deviation on approach to land twice pre-marijuana test
- Sig increase in distance from center of runway on touchdown
- One pilot landed off the runway entirely
- Pilots not aware of any impairment





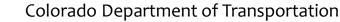
Yesavage JA, Leirer VO, Denari M, Hollister LE. Carry-over effects of marihuana intoxication on aircraft pilot performance: a preliminary report. Am J Psychiatry 1985; 142:1325-9.

57% of marijuana users admit to driving within 2 hours of use



 National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS), 2006-2011 and Colorado Department of Transportation 2012-2017







1 in 5 marijuana users in Colorado reported driving after using marijuana



Keri Headley, Pueblo, CO

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https://www.colorado.gov/cdphe/marijuanause

### **Consider This**

### The leading cause of death for workplace fatalities is:



# DRIVING

Impaired

Distracted

Fatigued

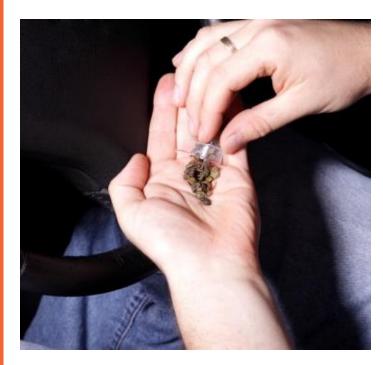






SOURCE: U.S. Dept of Labor Statistics 2018

The National Transportation Safety Board reported on a study of truck drivers from 182 heavy-truck crashes in which the driver was fatally injured:



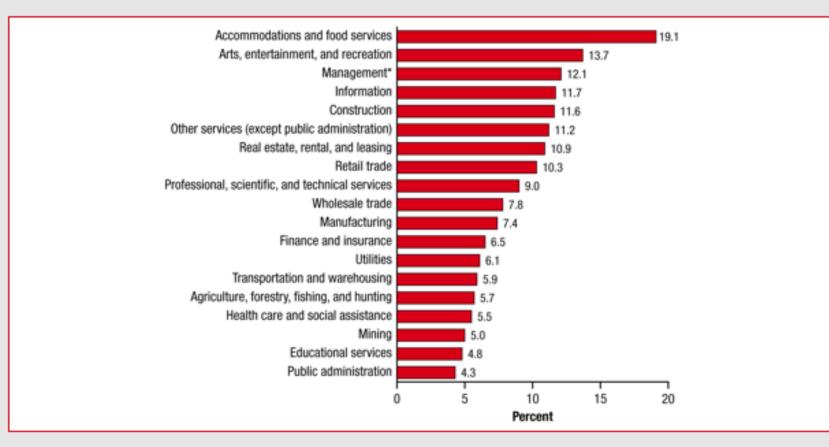
- 1/3 of drivers tested positive for illicit drugs.
- Marijuana and alcohol were found most frequently (13% each) followed by cocaine (9%), other stimulants (8%), and amphetamines (7%).
- 41% of the alcohol and other drug-positive drivers tested positive for multiple drugs.
- Impairment from alcohol and other drugs was determined to be a factor



https://www.ncbi.nlm.nih.gov/books/NBK236258/nt for 87% of cases in which the drivers tested positive for drugs



### Figure 2. Past month illicit drug use among adults aged 18 to 64 employed full time, by industry category: combined 2008 to 2012



\* The full title of this category is "Management of companies and enterprises, administration, support, waste management, and remediation services."

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Surveys on Drug Use and Health (NSDUHs) 2008 to 2010 (revised March 2012) and 2011 to 2012.





### meanwhile ....

"It seems the multi-billion dollar cannabis industry is having some problems with its employees showing up to work stoned.

A recent <u>study</u> published in the *American Journal of Industrial Medicine* finds that a large percentage of those employed in the businesses of growing and selling weed are getting high either before work at some point during business hours -- risking both their safety and that of their co-workers."

#### Too Many Cannabis Industry Employees Impaired At Work



Mike Adams Contributor () I cover various facets of the cannabis culture.



SOURCE: www.forbes.com April 2018





### Substance Use Does Not Equal "SAFE"

- Substance abusers are five times more likely to file a worker's compensation claim.
- Roughly 35% of the industrial injuries that take place in the U.S. involve drugs or alcohol.
- Substance abusers are 33% less productive on the job.
- Absenteeism among substance abusers is significantly higher.







### Safety is the PRIORITY



- Operating machinery under the influence of alcohol or drugs is clearly high-risk.
- Danger also increases when reflexes or judgment are compromised to any degree by drugs or alcohol.
- Substance abusers are responsible for 40% of all industrial fatalities.





# Chicago Tribune

Former Cook County forest preserves worker indicted on reckless homicide, DUI charges in fatal onthe-job crash August 2, 2018



One person was killed and several were injured in a six-vehicle accident on Arlington Heights Road in Elk Grove Village on June 30, 2018. (Elk Grove Village Police Department)

Ey George Houde Chicago Tribune NDDASA NATIONAL DRUG& ALCOI SCREENING ASSOCIATION Prosecutors said Rallings had THC, the active ingredient in marijuana, in his blood when he drove a forest preserve dump truck at 76 mph into a line of five vehicles stopped at a red light at Arlington Heights and Cosman roads in Elk Grove Village. The speed limit there is 30 mph.

Giuseppe Gazzano, 44, of Bloomingdale, was killed, authorities said. Two other people suffered broken legs and others suffered lesser injuries, authorities said.

Rallings was a seasonal employee for the forest preserve supervising a crew of four community service workers that morning, prosecutors said.



# OCBS NEWS

By E.J. MUNDELL | HEALTHDAY | April 13, 2018, 12:57 PM

### Is your waiter stoned? Pot use highest among restaurant workers, study finds

As for job types, "Food Preparation and Serving had the highest prevalence of current marijuana users," Smith's team said, with nearly a third admitting to using the drug.

Next came workers in the arts/entertainment/recreation category, where 27.5% said they'd used marijuana over the past month.

Other fields of work had relatively few pot users. For example, about 10% of transportation workers said they'd recently used the drug, and about 6% of teachers and police said they had done so.

Dr. Robert Glatter is an emergency department physician who's seen the tragic consequences of on-thejob drug use, especially when driving is involved. "Marijuana use, whether long-term or sporadic, has the ability to slow reaction time, impair judgment of distance, and lead to drowsiness -- all which may a. versely affect not only the driver and passengers' safety, but also that of pedestrians," said Glatter, who works at Lenox Hill Hospital in New York City.





quest diagnostics drug test index





Workforce Drug Positivity at Highest Rate in a Decade, Finds Analysis of More Than 10 Million Drug Test Results

May 8, 2018

Prescription opiate positivity rate drops by double digits, while cocaine rises by double digits in certain states

Methamphetamine positivity skyrockets in Midwestern and Southern United States

Marijuana positivity rises considerably in states that recently enacted recreational use statutes, finds national analysis by Quest Diagnostics



**SOURCE:** http://www.questdiagnostics.com/home/physicians/health-trends/drug-testing

## The Quest Diagnostics Drug Testing Index shows the greatest increase in use of all illicit drugs by U.S. employees in 12 years, based on laboratory drug test results.



https://www.questdiagnostics.com/home/physicians/health-trends/drug-testing



According to the U.S. Bureau of Labor Statistics drug and alcohol-related deaths in the workplace soared in 2016 with a spike of more than 30% in a single year.







# The BLS also shows that fatal work injuries in 2016 were the highest since 2008.





https://www.bls.gov/news.release/pdf/cfoi.pdf



# Employee drug use costs U.S. Employers upwards of \$7,000/month in lost revenue



https://www.samhsa.gov

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### What's the BIG DEAL?

### people in the community know whether or not your company is "drug-friendly"

JODS2	Careers	+ Reno, NV	Popular Advice For Emp	ployers		Post Jobs
es	7	AIP	Professional <sup>®</sup>	Part-Time Gigs		
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				💡 Reno, NV	Jobs2Careers	
Search by	y Popularity in F	Reno, Nevada			337 No Drug Test jobs in	Reno, NV!
Search by	y Popularity in F	Reno, Nevada	356 Retail Jobs	259 Administrative Jo		Reno, NV!
		Reno, Nevada		1.00		Reno, NV!
1.034	Customer	Reno, Nevada	358 Retail Jobs	259 Administrative Jo	bs Q51 Customer	
1,034	Customer Felony		<b>358</b> Retail Jobs <b>108</b> Alorica Call	259 Administrative Jo 458 Walmart	bs Gst Customer 161 Cna Jobs	



## **Drug Testing Programs DO WORK**

- Workers who are not in a drug testing program have substance use rates 50% higher than those who are subject to mandatory drug testing.
- The U.S. Department of Transportation's model of drug-free workplace programs have achieved significant improvements in safety and productivity.



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### The Drug Test Alone is NOT ENOUGH

- All supervisors must be trained to detect and document
- Training should be conducted on a regular basis as drug trends change
- The policy, the practices and the testing strategies must work equally







### The Drug Test Alone is NOT ENOUGH

- There must be an assessment of the specific, contemporaneous, articulable observations concerning the appearance, behavior, speech or body odors of the employee
- This requires TRAINING on the signs & symptoms of substance use







### **Impairment Testing**

### When Will We Have a Drug Test that Measures Impairment?

- The short answer is: Not any time soon
- It's extremely complicated
- States or Feds could "force" an impairment standard but it must hold up in court
- Currently 5 ng in whole blood is highly contestable and losing more than winning
- Presence-in-system simply is what it is







### **Be** PREPARED

- Plan, Prepare, Prevent: Incidents of workplace violence
- Actively engage in a progressive safety program
- Address mental health in the workplace
- Don't turn a blind-eye to addiction







### Who Can be Under-the-Influence at Work?

### In addition to greater accidents & injuries:

- Slow response time
- Memory retention problems
- Lack of ability to multi-task
- Apathy & lack of motivation
- Inability to problem-solve and reason
- Decreased ability to handle stressors
- Time & distance tracking problems
- Neuropsychological decline → marijuana-induced psychotic symptoms

http://www.pnas.org/content/111/30/E3149.short

http://www.ncbi.nlm.nih.gov/pubmed/23820822



### **Position Descriptions**

### Define who is safety sensitive and who is not



Articulate why each position description should/may not operate under-the-influence of drugs/alcohol





### **EAP**/SAP

#### what resources will you provide for those who violate the policy?



- Explain how to get help
- Include information on any existing employee assistance program(s)
- Describe the benefits offered by any existing health insurance plan
- Identify local resources that may be available
  - Supply a list of treatment providers, substance

abuse professionals, AA meetings, NA meetings, any local resources that may be helpful

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## Care About People

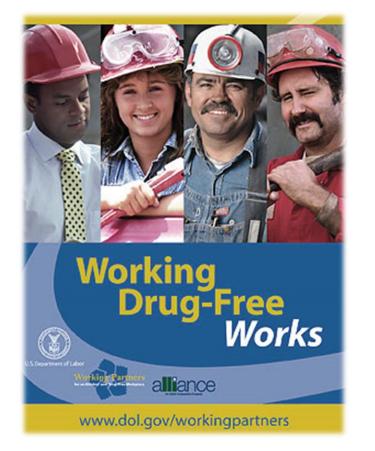








## Employer's Rights



- Employers must speak out to protect workplace safety policies
- Membership organizations, trade associations, foundations, corporations and small business owners
- Make your voices heard in local, state and national policy-making





### Drug-Free Workplace Act of 1988





- Applies to federal contractors with contracts of \$100K or more and federal grantees
- Employer must certify they will provide a drugfree workplace
- Publish and give drug-free workplace policy to covered employees
- Does not require drug testing
- If employee is convicted for a criminal drug offense resulting from a violation occurring in the workplace, the employer must take disciplinary action or refer the employee for rehab or drug abuse program







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