Pharmacology, Medical Marijuana, and Medication Management

Concurrent Session V
Thursday, July 23, 2:30pm
Your Panelists

- Doug Bloch, Teamsters Joint Council 7
- Eddy Canavan, Sedgwick CMS
- Mark Pew, PRIUM
Medical Implications
Times, they are a changing

- California was the first state to pass a medicinal marijuana law with the passage of proposition 215 in 1996

- Now 23 states, the District of Columbia and Guam have passed some form of medical marijuana

- 18 states introduced medical marijuana bills for their 2015 legislative sessions

- Colorado, Washington, Oregon, Alaska and DC now allow recreational use of marijuana

- The majority of the US population live in states that allow medical marijuana
FDA’s criteria for medicine

• To be accepted as medicine, the following criteria must be met:

1. The drug’s chemistry must be known and reproducible
2. There must be adequate safety studies
3. There must be adequate and well-controlled studies proving efficacy
4. The drug must be accepted by qualified experts
5. The scientific evidence must be widely available
Risk list

• Current or past problems with cannabis or other substances
• Active mental illness
• Current, past or family history of psychosis
• Active mood or anxiety disorders
• Suicidal ideation
• Women who are pregnant, planning to become pregnant or at high risk of unplanned pregnancy
• Anyone under 25 years of age
“Medical” gets around

In Colorado, **48.8%** of adolescents admitted to substance abuse treatment obtained their marijuana from someone registered to use medically.
The plant and potency

- 483 known compounds
- Primary ingredients are:
  - THC (tetrahydrocannabinol) – psychoactive (the “high”)
  - CBD (cannabidiol) – more medical application
    - Moderates THC
  - CBN (cannabinol) – weak psychoactive
  - CBG (cannabigerol) – non-psychoactive, associated with glaucoma

- More potent
  - Up through the 1980’s … < 10% THC
  - Now … Up to 30% THC … CBD is low or non-existent
  - Can be up to 70% in edibles, up to 90% in “dabs”
Vaping

- The new smoking
- Extracts active components without combustion
- Nearly eliminates particulate matter or tar
- How to get the highest quality vapor:
  - CBD @ 206.3°C
  - CBN @ 212.7°C
  - THC @ 149.3°C
Edibles

- Marijuana butter ("bud butter") to substitute for standard butter

- But there are complications:
  
  1. Effects take longer to start (processed by digestive system)
     - So it’s easier to ingest more than appropriate
  
  2. Effects last longer
     - ~30 minutes for smoking, several hours for edibles

  3. Dosage can vary

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What are the effects?

• Physical short term – last 3 to 4 hours after use
  – Increased heart rate - Paranoia
  – Dizziness - Anxiety
  – Shallow breathing - Depression
  – Red eyes and dilated pupils - Forgetfulness
  – Dry mouth - Increased appetite
  – Slowed reaction times

• Long term
  – Physical withdrawal symptoms
  – Cravings
  – Irritability
  – Sleeplessness
  – Decreased appetite -- when you stop
Charlotte’s Web

• Marijuana extract high in **CBD**
  – No psychoactive effect
  – Administered as an oil (Realm Oil and Alepsia)
  – Developed in 2011 by the Stanley brothers

• Named after 5-year old Charlotte Figi..
  – First documented in the 2013 CNN series “Weed”
  – Born with Dravet Syndrome (epilepsy)
  – Traditional seizure medications were ineffective
  – 300 seizures per week
  – *Charlotte’s Web* reduced that to 2-3 per month

• The emotional hot button driving legalization
Typical “medical” uses

- The laws in many states define the medical conditions, circumstances and methods of consumption in which an individual can secure and use medical marijuana.

- Examples of allowable conditions include:
  - Cachexia/wasting away - PTSD
  - Chronic/severe pain - Cancer
  - HIV/AIDS - Multiple Sclerosis
  - Epilepsy/seizure disorders - Glaucoma
  - Nausea & vomiting - ALS
  - Hep C - Crohn’s disease
  - Lupus - Complex regional pain syndrome
Is marijuana less dangerous than opioids?
Marijuana is not a dangerous drug?

A 20-year study in Australia

Study from 1993-2013 by Dr. Wayne Hall, University of Queensland

Five major findings:
1. It’s essentially impossible to overdose
   • Requires 15-70 grams
2. It doubles the chance of a driving accident
   • DUI for marijuana not as understood as from alcohol
3. Addiction/dependence can occur
   • 1 in 10 adults, 1 in 6 adolescents
   • Strongly associated with use of other illicit drugs
4. Negatively impacts IQ
   • Only where initiated in adolescence and continued into adulthood
5. Effect on respiratory health is inconclusive
   • Typically smoke tobacco as well
Casual use changes the brain

- Northwestern Medicine and Massachusetts General Hospital/Harvard Medical School study on casual use (1-2 times per week)
  - 20 adults (18-25) who smoked marijuana, 20 who did not

- Scientists examined the nucleus accumbens and the amygdala -- key regions for emotion and motivation, and associated with addiction -- in the brains of casual marijuana users and non-users

- The more joints a person smoked, the more abnormal the shape, volume and density of the brain regions
American Society of Addiction Medicine (ASAM)

“Cannabis is unstable and unpredictable and the drug should be subject to the same standards that apply to other medications. For every disease and disorder for which marijuana has been recommended, there is a better, FDA-approved medication.”
Legal Implications
## The “green” states

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* Recreational use legal also

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Lucky 13
Learn. Network. Repeat.
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<td>Wisconsin</td>
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**NOTE:** Idaho legislature approved, Governor vetoed in 2015
The court of public opinion

“Marijuana is no more dangerous than alcohol” – President Barack Obama

- Pew Research Center national poll in October 2014
  - 52% said marijuana should be legal
  - 45% said marijuana should remain illegal
  - From 2010 to 2013, favoring legalization increased by 11 points

- In 1969, Gallup asked essentially the same question and …
  - 12% said marijuana should be legal

- Pew Research Center national poll in April 2014
  - 15% felt marijuana is harmful to health
    - 69% felt alcohol is harmful to health
  - 23% felt marijuana is harmful to society
    - 63% felt alcohol is harmful to society
We will never provide medical marijuana, ever!

- It is a schedule 1 controlled substance and federally illegal to distribute or utilize
- There are no studies on the efficacy of marijuana to treat the results of an occupational injury
- Peer reviewed medical guidelines, such as ODG, do not recommend it
- It cannot be prescribed by a physician, but only recommended
- Opens the carrier up to secondary complications and exposure
2015 Federal budget provides protection

- US Congress included an amendment that prohibits Department of Justice from using funds to go after state-legal medical cannabis programs

- H.R. 83, “Section 538” (specifically lists the states)
  - President Obama signed it on 12/16/14

- None of the funds made available in this act to the Department of Justice may be used...to prevent...states...from implementing their own state laws that authorize the use, distribution, possession, or cultivation of medical marijuana
The Compassionate Access, Research Expansion and Respect States Act (CARERS) (Senate Bill 683), introduced in the Senate on March 10, 2015

Authored by Rand Paul (R-KY), Corey Booker (D-NJ) and Kirsten Gillibrand (D-NY)

• Reclassify marijuana under the Controlled Substances Act from Schedule I to Schedule II ending the federal ban
• Recognize that the substance has some medical uses
• Permit interstate commerce in cannabidiol (CBD) oils
• Allow banks to provide checking accounts and other financial services to marijuana dispensaries
• Allow Veterans Administration physicians to recommend
• Eliminate barriers to medical marijuana research
The big “green” apple

New York enacted a medical marijuana bill on July 5, 2014

• Physicians are required to register and certify state-disabled patients with defined allowable medical conditions

• Allowed conditions include: Cancer, AIDS, ALS, Parkinson’s, MS, epilepsy, neuropathy, spinal cord spasticity and Huntington’s

• User must apply for an ID card with the department of health and allowed up to a 30 day supply

• State sets the price and taxes on marijuana

• Insurers do not have to pay

• Medical marijuana cannot be smoked
You can blame New Mexico

Vialpando v. Ben’s Auto Servs.

- The workers’ compensation judge found that worker Gregory Vialpando was qualified to participate in the State of New Mexico Department of Health Medical Cannabis program authorized by the Compassionate Use Act

- Such treatment would be reasonable and necessary medical care

- The judge ordered the injured worker pay for the medical marijuana through the program and that the insurance carrier reimburse the worker
You can still blame New Mexico

Maez v. Riley Industrial

- NM Court of Appeals in January 2015 confirmed that “medical” marijuana was reasonable and necessary
  - The patient tested positive for recreational use of marijuana while being prescribed a variety of other drugs (including opioids)
  - The physician decided to certify the marijuana use
  - The physician was deposed and said the patient “has failed traditional pain management and is a candidate for the cannabis program”
  - The Court decided that since the physician confirmed its use that it should be deemed “reasonable and necessary”
  - The ultimate patient-directed care
It’s not marijuana it’s marinol

Louisiana, Creole Steele v. Ricky Stewart

• The workers’ compensation judge found that the use of marinol to control the injured workers pain was a reasonable and necessary medical expense

• The Judge however did not order that the employee be reimbursed

• Upon appeal the third circuit court determined that the judge erred in finding the use reasonable, but not ordering the employee be reimbursed

• The court of appeal amended the original order requiring reimbursement of the cost associated with the marinol
Cockrell v Farmer’s Insurance

- Both the treating physician and agreed medical evaluator felt marijuana was a reasonable and necessary course of treatment.

- In 2012 the local workers’ compensation judge ruled that Cockrell was entitled to be reimbursed for marijuana at the same rate as other FDA approved THC derivatives, such as Marinol.

- Upon appeal the WCAB ruled that Cockrell could not be reimbursed as nothing in CA’s program requires a governmental, private or any other health insurance provider or health care service plan to be liable.

- The judge asserted that a comp carrier is not a health car service plan.

- The WCAB ruled twice that the request for reimbursement was not allowed under the Health and Safety Code.
Coats v. Dish Network

- A paraplegic telephone customer service representative using "medical" marijuana for spasms in compliance with Colorado’s Medical Marijuana Amendment
  - Use was off-duty
- Terminated by Dish Network for testing positive for THC, even though he told them of his use prior to his hire

- Colorado Supreme Court unanimous decision in June 2015
  - Termination was lawful
  - While “medical” marijuana use is lawful in Colorado, its use violates federal law
  - According to Colorado’s Lawful Activities Statute, his activities had to be lawful under both state and federal law
Employer / Labor Implications
**Pre-hire drug screening**

What if an applicant tests positive? Can you refuse to hire?

- ADA does not protect job applicants utilizing illegal drugs
- To date the courts have usually ruled in favor of the employer
- The Oregon Supreme Court held in *Emerald Steel Fabricators, Inc. v. Bureau of Labor and Industries* that an employer was not required to hire an employee who discloses that he would not pass a drug test because of his medical marijuana use
- In Connecticut, Illinois, Maine and Rhode Island, medical marijuana patients are given protected status and employers are prohibited from discriminating against an employee merely due to their status as a medical marijuana patient
You tested positive, but are you high?

Toxicity versus intoxication

• How can you tell whether or not an employee is high if they test positive for marijuana?

• There is no clear method to test for intoxication much like with alcohol

• This is becoming a real challenge for employers to maintain a drug free workplace
Several states have specifically noted the inability to discriminate based on the possession of a medical card.

- **Arizona** - specifically prohibits discrimination based solely on the individual holding a medical marijuana card, unless the patient used, possessed or was impaired by marijuana on the premises of the place of employment or during the hours of employment.

- **Rhode Island** - also has outlawed any type of discrimination based on card holder status. However, the law does not permit any person to undertake any task under the influence of marijuana, when doing so would constitute negligence or professional malpractice or require an employer to accommodate the medical use of marijuana in any workplace.
### You must show intoxication

<table>
<thead>
<tr>
<th>Substance</th>
<th>Urine</th>
<th>Blood</th>
<th>Hair</th>
<th>Saliva</th>
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<tbody>
<tr>
<td>Marijuana - Single Use</td>
<td>1-7+ days</td>
<td>12-24 hours</td>
<td>Doubtful</td>
<td>Not validated (0 -24 hours?)</td>
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<tr>
<td>Marijuana - Regular Use</td>
<td>7-100 days</td>
<td>2-7 days</td>
<td>Months</td>
<td>Not validated (0 -24 hours?)</td>
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<tr>
<td>Amphetamines</td>
<td>1-3 days</td>
<td>24 hours</td>
<td>Months</td>
<td>Not validated (0 -24 hours?)</td>
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<tr>
<td>Cocaine</td>
<td>1-3 days</td>
<td>1-3 days</td>
<td>Months</td>
<td>Not validated (0 -24 hours?)</td>
</tr>
<tr>
<td>Heroin, Opiates</td>
<td>1-4 days</td>
<td>1-3 days</td>
<td>Months</td>
<td>Not validated (0 -24 hours?)</td>
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<tr>
<td>PCP</td>
<td>3-7 days</td>
<td>1-3 days</td>
<td>Months</td>
<td>Not validated (0 -24 hours?)</td>
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How do I deal with positive post accident screens?

- Some states specifically allow for termination due to failing a post-accident drug screen. Examples include Michigan, Colorado & Illinois.

- However, other states like Maine, Connecticut, Delaware and Arizona discuss the need to show the individual is under the influence.

- Minnesota law specifically outlines that an employer generally cannot discriminate against a patient based on a failed drug test for marijuana.

- In 2009, the Montana Supreme Court upheld the dismissal of an employee who tested positive for marijuana in Johnson v. Columbia Falls Aluminum.
California AB 266

Authored by Rob Bonta, D - Oakland

- Creates a marijuana regulatory structure.
- Tiered licensing
- Cultivator, Processor, Transporter, Distributor, Dispensary
- Vertical integration permitted
- Permits total local control over zoning. Local government can ban dispensaries.
- State Board of Equalization is the Regulatory Agency
Is a drug-free work place possible?

Several cases have established that employers are not required to accommodate marijuana utilization

- **Emerald Steel Fabricators, Inc. v. Bureau of Labor & Indus.**, 230 P.3d 518 (Or. 2010)
- **Johnson v. Columbia Falls Alum. Co.**, 213 P.3d 789 (Mont. 2009)
- **Casias v. Wal-Mart Stores, Inc.**, 695 F.3d 428 (6th Cir. 2012)
Impact on a drug-free workplace?

- Workplace safety
  - Which employee is OK to be stoned at work?

- Zero tolerance policy
  - Marijuana <> alcohol, illegal drugs, prescription drugs?

- Judging intoxication / impairment and causality
  - 3.1-4.5 ng/mL (oral) and 3.3-4.5 ng/mL (smoked) plasma levels = 0.05 g% blood alcohol concentration

- Drug testing policies
  - Do not remove THC from drug panels

- Hiring, Termination and Return to Work policies
  - Can’t find anyone to fill jobs?
So, what is an employer/administrator to do?

How does an administrator respond to a request for reimbursement of medicinal marijuana?

- Marijuana is still a schedule 1 controlled substance and therefore illegal
- It is was not prescribed by a physician and therefore self-procured
- It does not represent reasonable and necessary medical care
- The efficacy is not substantiated by any peer reviewed based guidelines such as those outlined in ODG and ACOEM
- The employer should not be held responsible for any side-effects, unintended consequences and adverse drug interactions
Required reading for employers ...

Marijuana in the Workplace: Guidance for Occupational Health Professionals and Employers: Joint Guidance Statement of the American Association of Occupational Health Nurses and the American College of Occupational and Environmental Medicine