

Keep Calm and ... Understand Cannabis

What Employers in the Energy Sector Want to Know About Legalized Cannabis in the Workplace

*Shana Wolch, Partner at McCarthy Tétrault LLP;
Ben Ratelband, Partner at McCarthy Tétrault LLP &
Dan Demers, Senior Manager CannAmm*

OBJECTIVES

// Missing information that matters

// Best practices, lessons learned

// How to ensure a balance of interests

AGENDA

Anticipating Legalization

Legal Framework

Why understanding cannabis matters, is it new

Balance of interests

When is compliance necessary

Medical Cannabis

Ingredients of Success

ANTICIPATING LEGALIZATION



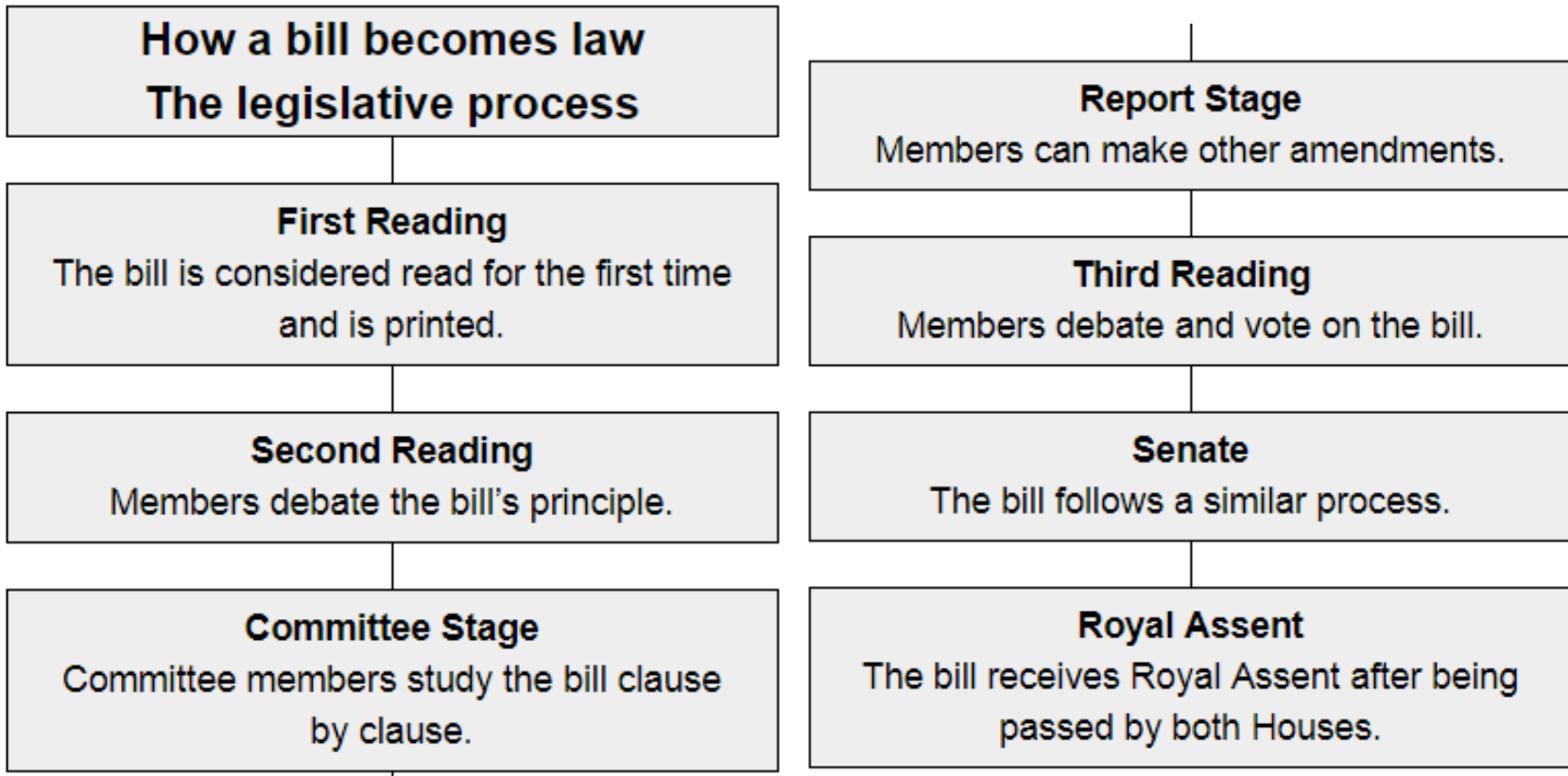
ANTICIPATING LEGALIZATION



- // This picture was taken the first morning after Sweden changed from driving on the left side to driving on the right, in 1967.
- // An illustration of how impactful legislative changes can be and the short-term chaos that can ensue.
- // Big legislative changes are coming to Canada's Cannabis laws... what should we expect?

ANTICIPATING LEGALIZATION

Federal - The Cannabis Act (Bill C45)



Sources

<https://lop.parl.ca/About/Parliament/GuideToHoC/making-e.htm>
<http://www.parl.ca/LegisInfo/BillDetails.aspx?Language=en&Mode=1&billId=8886269>

ANTICIPATING LEGALIZATION

Federal - The Cannabis Act (Bill C45)

Short Title

Cannabis Act

Sponsor

Minister of Justice

Last Stage Completed

Committee Report Adopted in the Senate (2018-05-30)

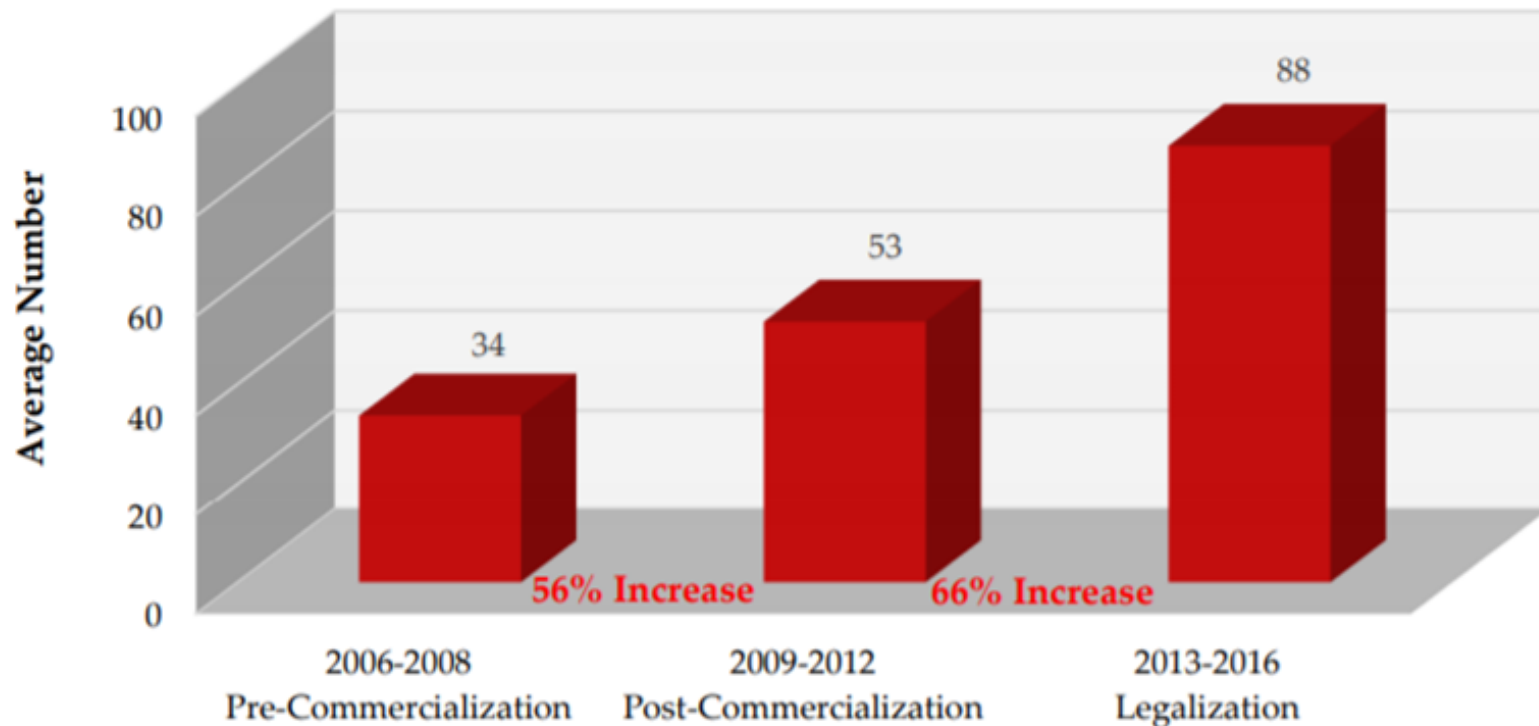
Progress: 

Sources

<https://lop.parl.ca/About/Parliament/GuideToHoC/making-e.htm>
<http://www.parl.ca/LegisInfo/BillDetails.aspx?Language=en&Mode=1&billId=8886269>

ANTICIPATING LEGALIZATION

Average Number of Traffic Deaths Related to Marijuana when a Driver Tested Positive for Marijuana



ANTICIPATING LEGALIZATION

// Workplace Positivity Increases – USA

- “We have been tracking the trends in marijuana positivity in states that have passed medical and recreational marijuana use statutes for several years now. 2016 is the first year since Colorado and Washington approved recreational use that the rates of year-over-year change were sharply higher than the national average,” said Dr. Sample.

Colorado and Washington marijuana positivity increased at a faster rate than the national average

	2012	2013	2014	2015	2016
Washington	1.94%	2.38%	2.75%	2.82%	3.08%
Colorado	1.92%	2.30%	2.62%	2.60%	2.90%
General U.S. Workforce	2.00%	2.10%	2.40%	2.40%	2.50%

WHAT WE ALL NEED TO KNOW... How Complex is Cannabis?



HOW DOES CANNABIS AFFECT US?

// Cannabis = Marijuana

- Cannabis: Sativa, Indica & Ruderalis

The flowering or fruiting tops of the cannabis plant (excluding the seeds and leaves when not accompanied by the tops) from which the resin has not been extracted, by whatever name they may be designated.

1961 United Nations Single Convention on Narcotic Drugs

HOW DOES CANNABIS AFFECT US?

// Multiple Methods of Ingestion

- Smoking/vaporization
- Oral (ingesting edibles / sublingual)
- Rectal administration
- Transdermal delivery
- Eye drops
- Aerosols



HOW DOES CANNABIS AFFECT US?

// Cannabis Strength



World Health Organization

The breeding of different strains has yielded plants and resins with dramatic increases in THC content over the past decade, from around 3% to 12–16% or higher (% of THC weight per dry weight of cannabis) with differences in different countries.

(Radwan et al., 2008; Niesink et al., 2015; Swift, et al., 2013; Zamengo, et al., 2014; Bruci, et al., 2012)

HOW DOES CANNABIS AFFECT US?

// New Preparations

- Shatter
- Budder



HOW DOES CANNABIS AFFECT US?

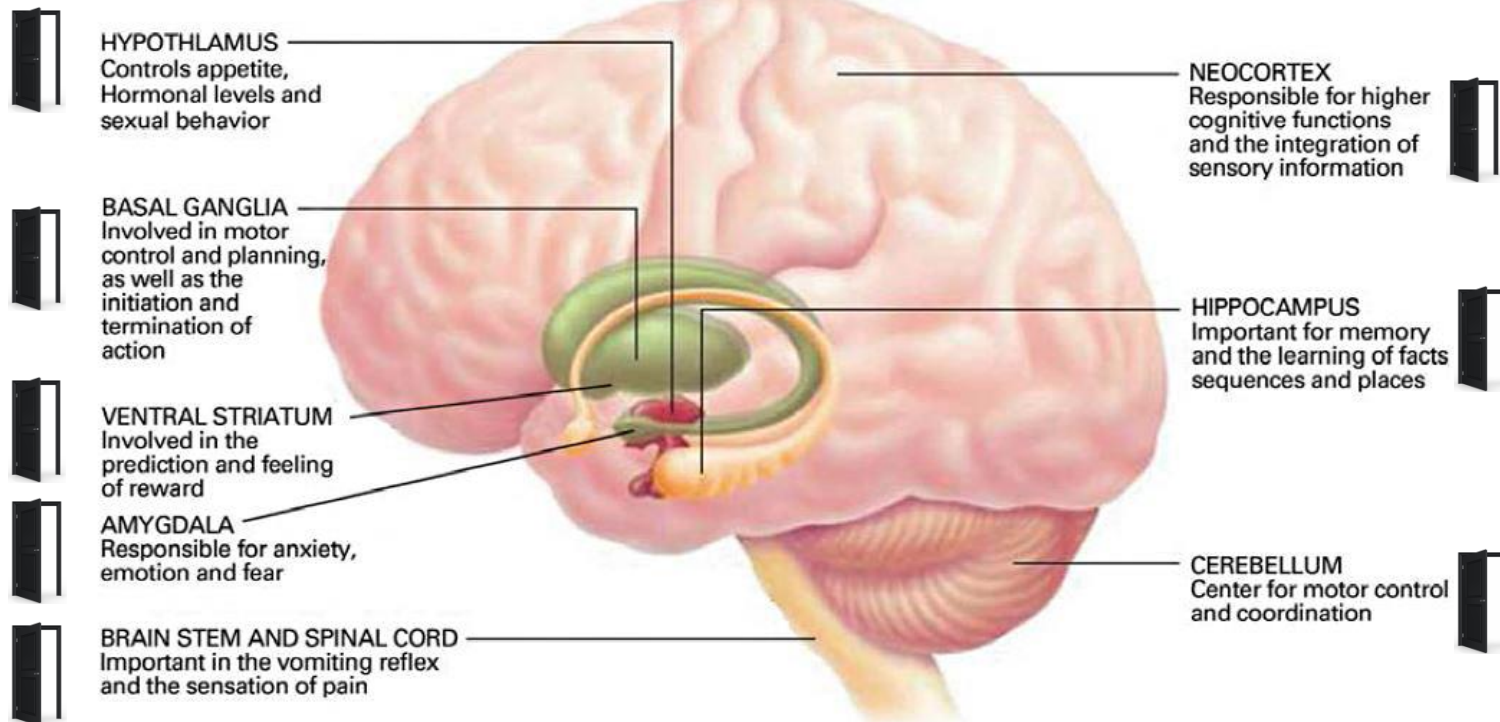
// The “Big 6” Phytocannabinoids

1. **THC** - Delta-9-tetrahydrocannabinol
2. **CBD** - Cannabidiol
3. **CBC** - Cannabichromene
4. **CBN** - Cannabinol
5. **CBG** - Cannabigerol
6. **THCV** - Tetrahydrocannabivarin



HOW DOES CANNABIS AFFECT US?

Marijuana's Effects on the Brain



© Alice Y. Chen, 2004. Adapted from *Scientific American*.

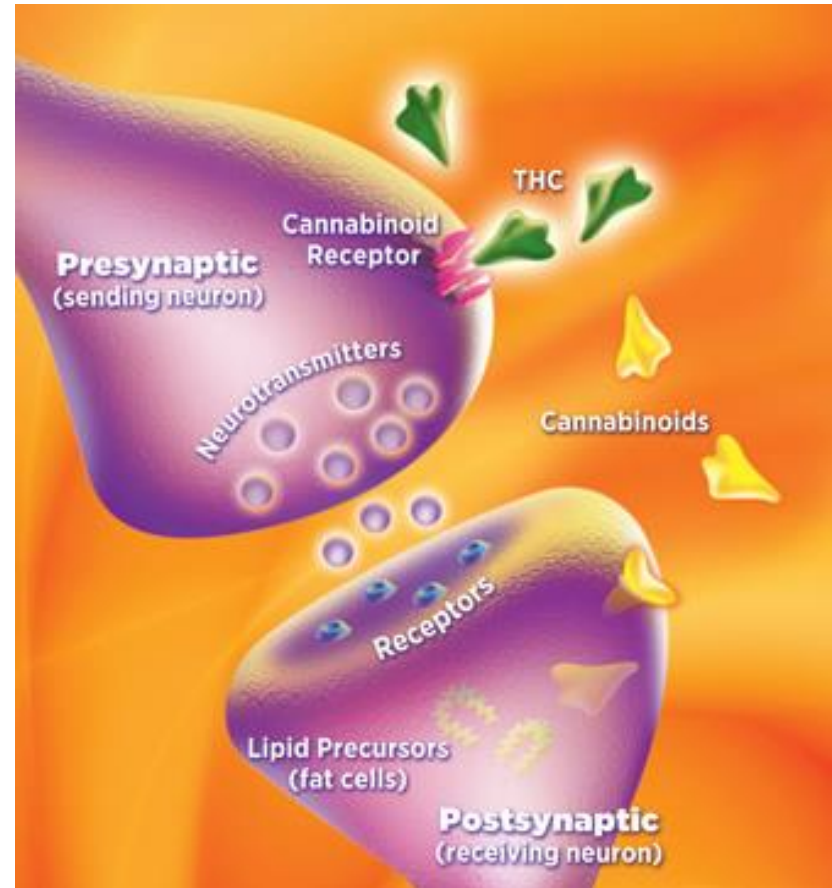
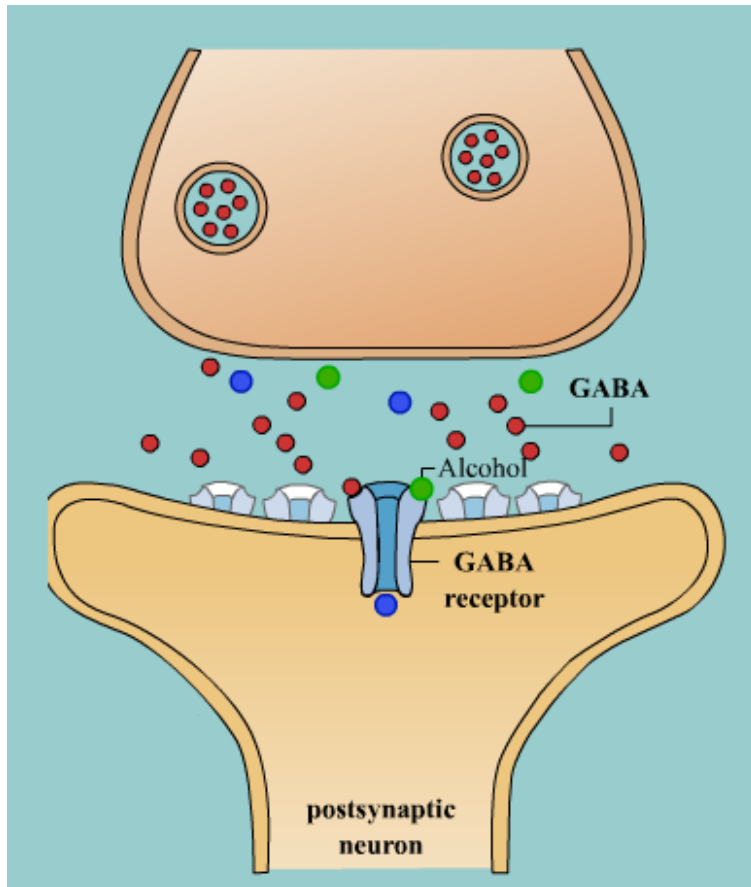
When marijuana is smoked, its active ingredient, THC, travels throughout the body, including the brain, to produce its many effects. THC attaches to sites called cannabinoid receptors on nerve cells in the brain, affecting the way those cells work. Cannabinoid receptors are abundant in parts of the brain that regulate movement, coordination, learning and memory, higher cognitive functions such as judgment, and pleasure.

ALCOHOL vs CANNABIS

What's the Harm in Using "Off the Job"?



ALCOHOL vs CANNABIS



WHAT'S THE HARM IN USING "OFF THE JOB"?



World Health Organization

- // *Complex human/machine performance can be impaired as long as 24 hours after smoking a moderate dose of cannabis and the user may be unaware of the drug's influence. (Leirer, Yesavage & Morrow, 1991)*
- // *Recently abstinent cannabis users (7 hours to 20 days) may experience impairment in attention, concentration, inhibition and impulsivity during the period in which THC and its metabolites are eliminated. The greatest residual deficits in executive function are found following prolonged use of cannabis. (Whitlow, et al. 2004)*



Health Canada
www.hc-sc.gc.ca

The THC in cannabis can impair your ability to drive safely and operate equipment. It can also increase the risk of falls and other accidents. This is because THC can affect your:

- // Coordination, reaction time, ability to pay attention, decision-making abilities, ability to judge distances. Cannabis use can increase the risk of accidents that lead to injury or death during higher-speed activities, such as driving, biking or skiing.
- // **Impairment can last for more than 24 hours after cannabis use, well after other effects may have faded. People who use cannabis regularly may have trouble with certain skills needed to drive safely for weeks after their last use.**
- // Combining alcohol with cannabis greatly increases the level of impairment and the risk of injury or death from accidents. Combining cannabis with other psychoactive substances, especially ones that have sedative effects, such as opioids and benzodiazepines, can increase the effects of the drugs. This combo could increase the risk of injury or harm, particularly with activities like driving.

Source: <https://www.canada.ca/en/health-canada/services/substance-abuse/controlled-illegal-drugs/health-risks-of-marijuana-use.html#s1>

HOW DOES CANNABIS AFFECT US?

// Cannabis's Lingering Effects

- Alertness, divided attention
- Complex reasoning, memory
- Judging distance, speed and time



CANNABIS IN THE WORKPLACE

Legal Framework



CANNABIS IN THE WORKPLACE

1987 Chase Maryland crash

In 1991, prompted in large part by the Chase Maryland crash, the United States Congress took even broader action and authorized mandatory random drug-testing for all employees in "safety-sensitive" jobs in all industries regulated by the U.S. Department of Transportation (DOT) including trucking, bus carriers and rail systems.

2009 Metron Construction Corporation (Metron)

“In addition toxicological analysis determined that at the time of the incident, 3 of the 4 deceased including Mr. Fazilov had marijuana in their system at a level consistent with having recently ingested the drug.”

CANNABIS IN THE WORKPLACE

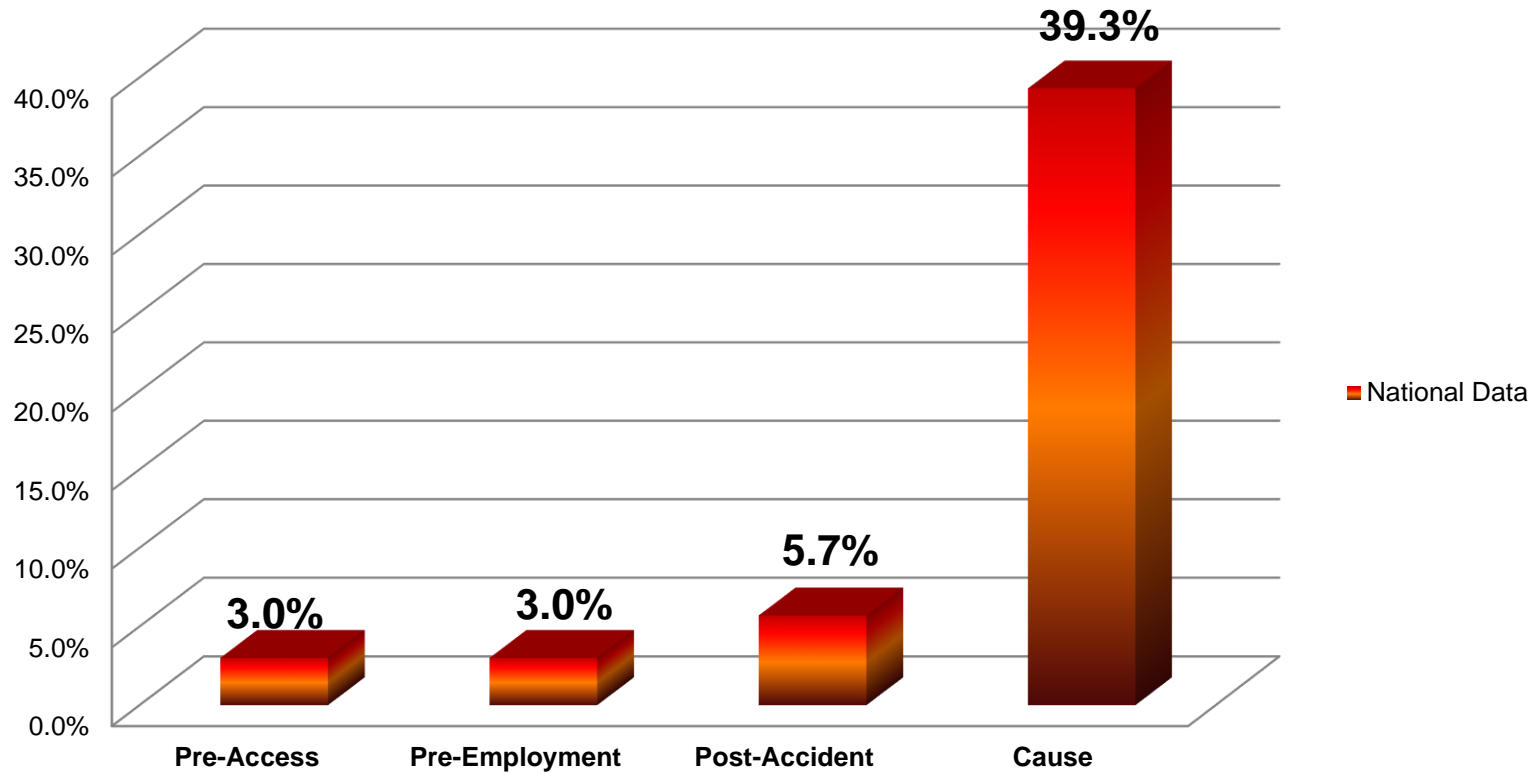
2011 Toronto Transit Commission (TTC)

- Jadranka Petrova, 45, was killed when the bus rear-ended a crane truck on Tuesday, Aug. 30 at Lawrence Avenue East and Railside Road, near the Don Valley Parkway exit.
- Last month, police said a drug test was not administered after the crash but confirmed that a small quantity of drugs had been discovered several hours after the incident.
- "We did locate in his belongings a substance which we believe might be marijuana," Const. Carl Andersen said at the time.
- William Ainsworth, 51, of Toronto has been charged with criminal negligence causing death and possession of cannabis.

Source: <https://toronto.ctvnews.ca/ttc-bus-driver-charged-after-fatal-august-crash-1.710376>

CANNABIS IN THE WORKPLACE

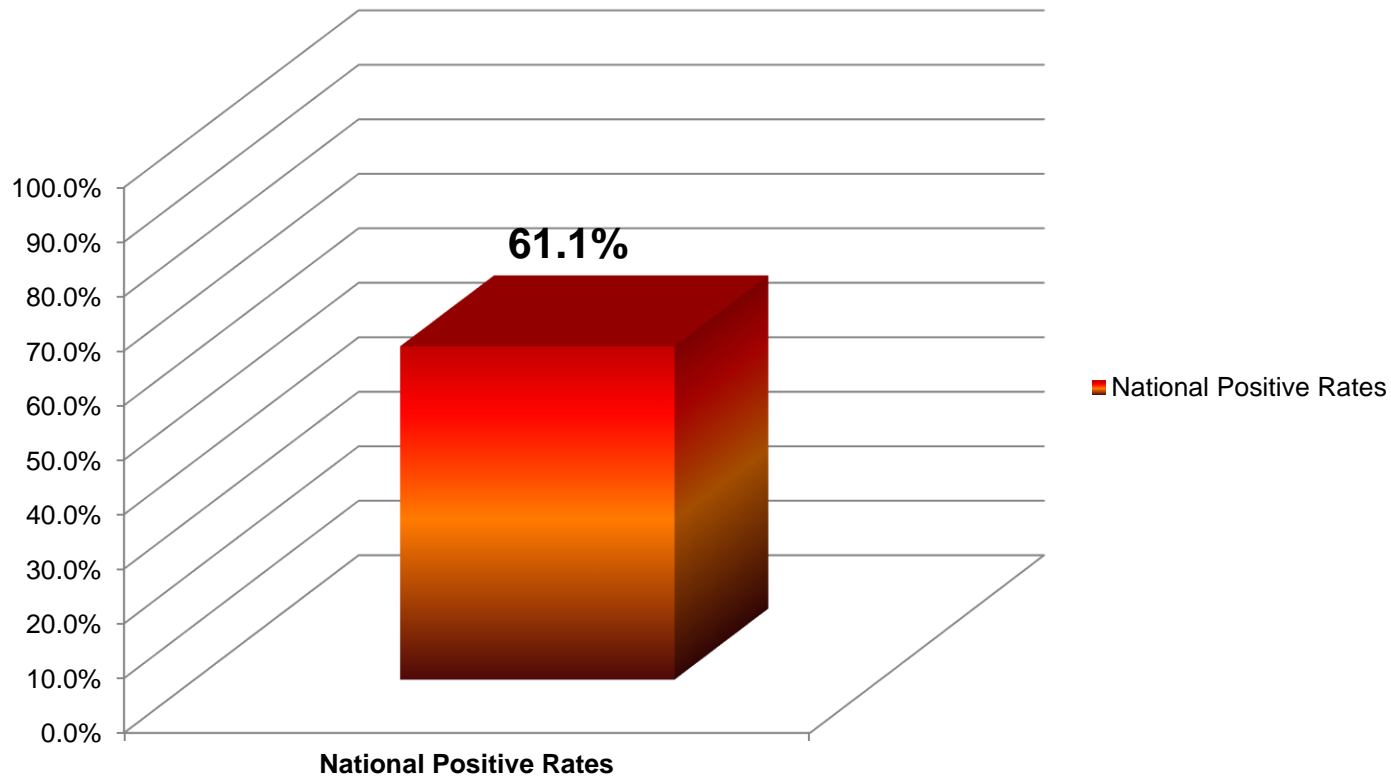
Workplace Positive Rates- 2016



CANNABIS IN THE WORKPLACE

How is Cannabis Contributing to the Positivity Rate?

2016 - Cannabinoid (THC)



STRIKING A BALANCE OF INTERESTS

What are the factors employers must weigh out?



STRIKING A BALANCE OF INTERESTS

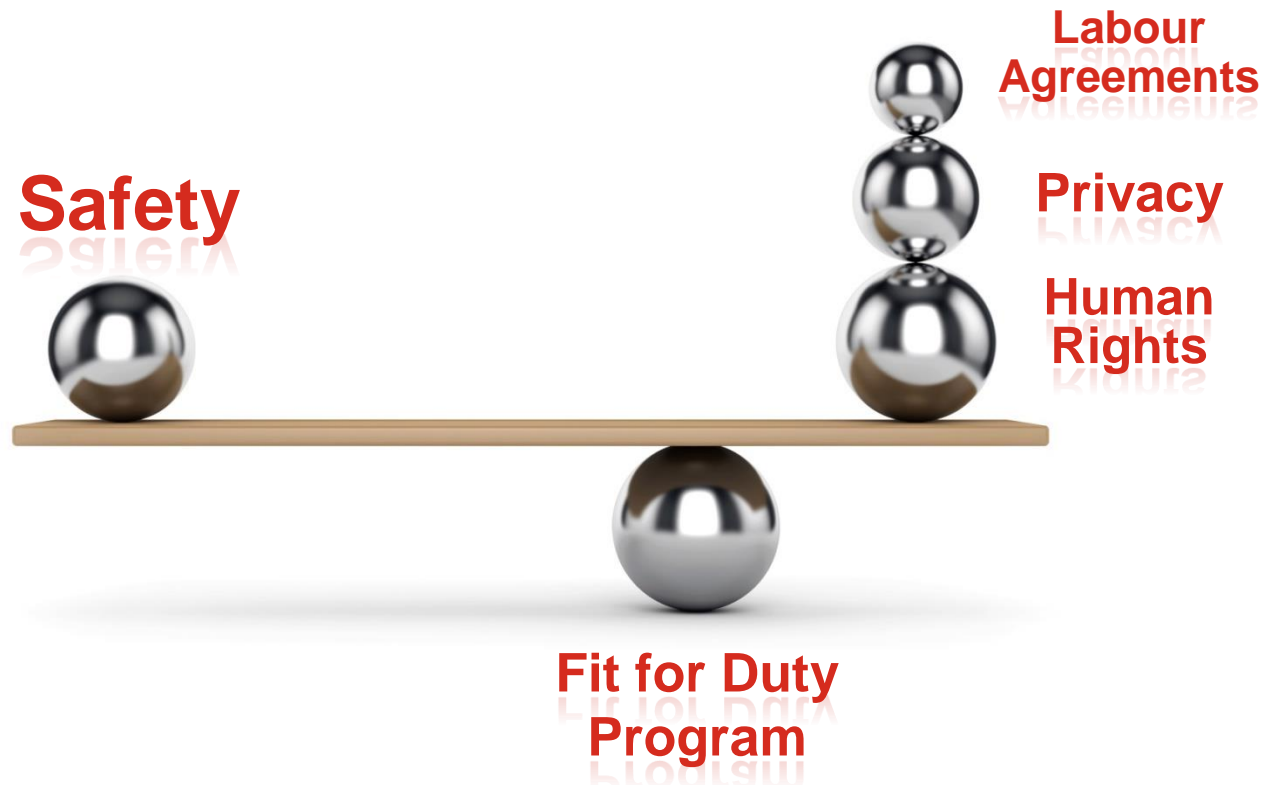
Policy & Procedures

Education & Training

Compliance & Deterrence

STRIKING A BALANCE OF INTERESTS

Finding the Right Balance



STRIKING A BALANCE OF INTERESTS

Focus on “Risk” vs “Impairment”



STRIKING A BALANCE OF INTERESTS

Section 217.1 of the Criminal Code

“Every one who undertakes, or has the authority, to direct how another person does work or performs a task is under a legal duty to take reasonable steps to prevent bodily harm to that person, or any other person, arising from that work or task.”

STRIKING A BALANCE OF INTERESTS

Safety Sensitive Position: Performs activities and/or works in an environment where a temporary lapse in concentration, focus and/or judgment could result in immediate serious injury, harm or death.

Valard Construction: *“The functions associated with the labourer position, while not requiring as much skill, dexterity or mental focus as some other roles, such as a heavy equipment operator, still demand the worker’s undivided focus and a high requirement for mental alertness. Injury to oneself or to one’s co-workers would inevitably occur if such workers were not able to bring their minds at all times to the requirement of safety.”*

STRIKING A BALANCE OF INTERESTS

// Account for Unionized Environment

- Confirm Reasonableness (KVP Test)
 1. Not in conflict with collective bargaining agreement
 2. Reasonable
 3. Communicated clearly and equivocally
 4. Brought to employee attention prior to action
 5. Employee notified of potential consequences addressed
 6. Consistent enforcement

STRIKING A BALANCE OF INTERESTS

// **Avoid Discrimination by Design**

- Verify Bona-Fide Occupational Requirement Exists
 1. Rational
 2. Adopted in good faith
 3. Reasonable necessity

STRIKING A BALANCE OF INTERESTS

// Adhere to Privacy Legislation

- Privacy legislation authorizes collection, use, and disclosure of personal information to extent necessary for management of/entering into employment relationships (and where consented to)
- Information must be confidential and need-to-know

COMPLIANCE & DETERRENCE

What is Reasonable, Necessary & Defensible?



COMPLIANCE & DETERRENCE: SELF DISCLOSURE

CANNABIS USE DISORDER

6 

Total Adolescents

1 

Adolescent users will develop an addiction

10 

Total Users

1 

Users overall will develop an addiction

// Test Medium Options

- Urine
- Oral Fluid
- Hair

// Technology Options

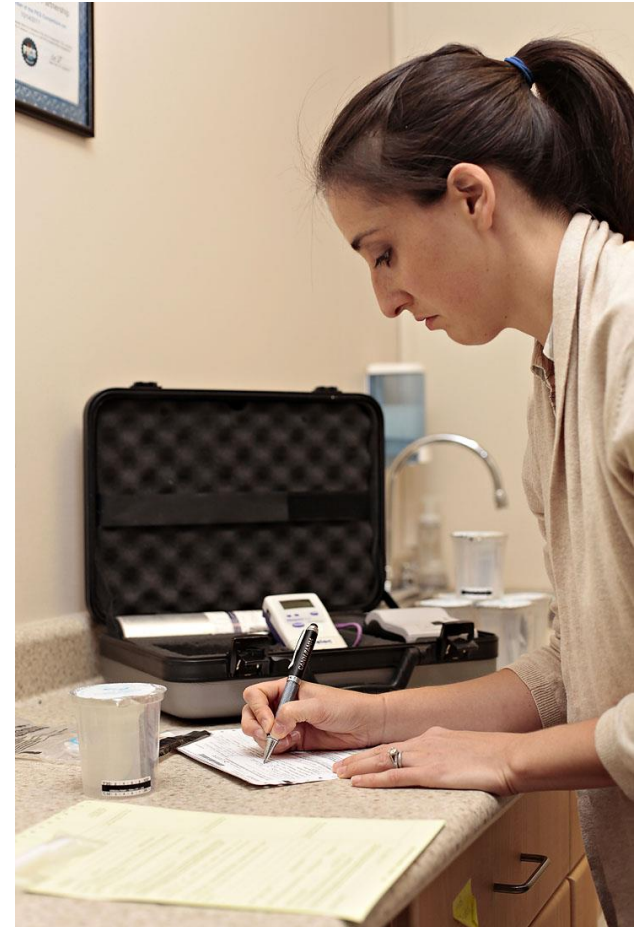
- Laboratory Based
- Instant/Point of Collection Testing (POCT)
- Combination of the above

// Testing Procedures

- Sample Collection
- Custody & Control – Sample Integrity
- Laboratory Testing (SAMHSA Accredited)
- Physician Medical Review (DOT approved)
- Confidential Final Result Reporting

COMPLIANCE & DETERRENCE: TEST REASONS

- // Reasonable Cause
- // Post-Accident/Incident
- // Return to Duty
- // Follow-up
- // Pre-employment
- // Pre-access
- // Random



COMPLIANCE & DETERRENCE: DRUGS OF ABUSE

// Alcohol

// Marijuana (THC)

// Cocaine

// Amphetamines

- Methamphetamine
- Ecstasy (MDMA)
- MDA, MDEA

// Opiates

- Heroin, Morphine and Codeine
- DOT - oxycodone, oxymorphone, hydrocodone, hydromorphone

// Phencyclidine (PCP)



Cut-off levels for each of the drugs tested are determined by the United States Department of Health and Human Services (DHHS).

THE FULL PICTURE OF MEDICAL CANNABIS

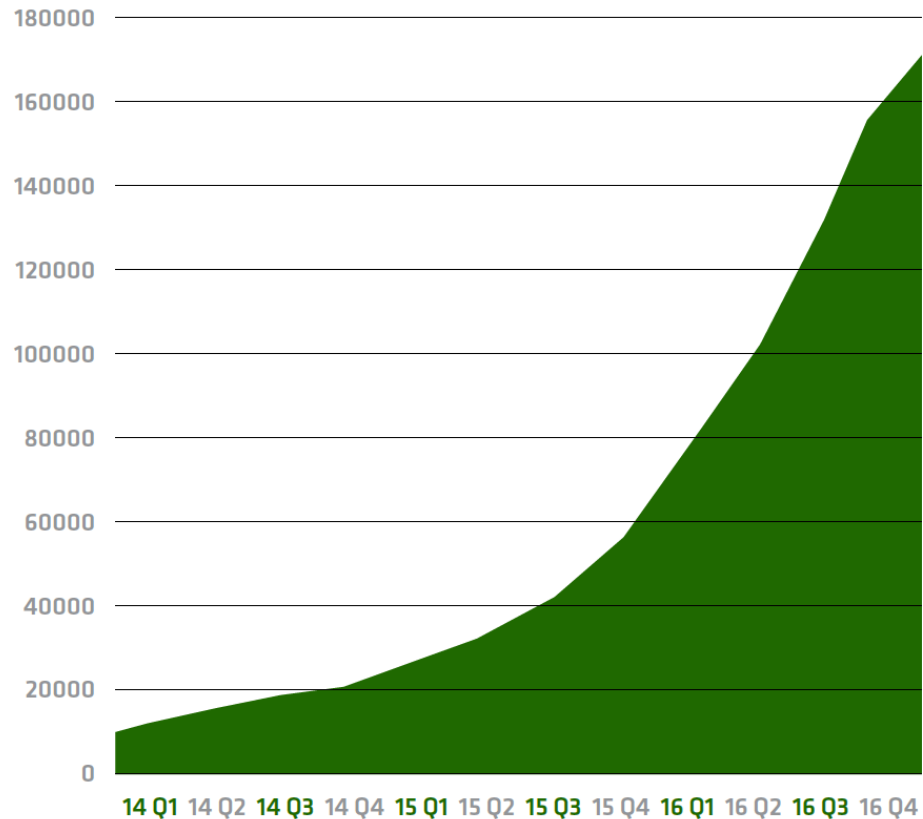


THE FULL PICTURE OF MEDICAL CANNABIS



THE FULL PICTURE OF MEDICAL CANNABIS

Total Number of Canadians Registered for Medical Cannabis Use



SOURCE: [HTTPS://WWW.CANADA.CA/EN/HEALTH-CANADA/SERVICES/DRUGS-HEALTH-PRODUCTS/MEDICAL-USE-MARIJUANA/LICENSED-PRODUCERS/MARKET-DATA.HTML](https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-use-marijuana/licensed-producers/market-data.html)

THE FULL PICTURE OF MEDICAL CANNANBIS

Effective Medical Treatment	Level of Evidence
Chronic Neuropathic Pain	Conclusive/Substantial
Multiple Sclerosis (MS) Spasticity - Patient Reported	Conclusive/Substantial
Anti-emetics (Nausea)	Conclusive/Substantial
.....	
Mental Health & Psychosocial – Statistical Association	Level of Evidence
Development of schizophrenia or other psychoses, with the highest risk among the most frequent users	Conclusive/Substantial
Impairment in the cognitive domains of learning, memory and attention (acute use)	Conclusive/Substantial
.....	



THE FULL PICTURE OF MEDICAL CANNABIS

// Is Cannabis a Prescription?



Health Canada

www.hc-sc.gc.ca

Dried marijuana is not an approved drug or medicine in Canada. The Government of Canada does not endorse the use of marijuana, but the courts have required reasonable access to a legal source of marijuana when authorized by a healthcare practitioner.

THE FULL PICTURE OF MEDICAL CANNABIS

// Is Cannabis a Prescription?

Characteristics of a Prescription Drug:

Special Alerts	Generic Equivalent Available: Product Availability	Pregnancy Risk Factor
ALERT: Boxed Warning	Controlled Substance	Pregnancy Implications
Brand Names: US	Prescribing and Access Restrictions	Lactation
Brand Names: Canada	Medication Guide and/or Vaccine Info Statement Admin	Breast-Feeding Considerations
Pharmacologic Category	Use	Dietary Considerations
Dosing: Adult	Medication Safety Issues	Pricing
Dosing: Pediatric	Adverse Reactions Significant	Monitoring Parameters
Dosing: Geriatric	Contraindications	International Brand Names
Dosing: Renal Impairment	Warnings/Precautions	Mechanism of Action
Dosing: Hepatic Impairment	Metabolism/Transport Effects	Pharmacodynamics and Pharmacokinetics
Dosage Forms	Drug Interactions	Drug Identification Number (DIN #)

CANNABIS AUTHORIZATIONS

// SAFETY SENSITIVE WORKPLACES

Step 1: Verify medical authorization

Step 2: Accommodation

- **Option 1:** Alternative Compatible Medical Treatment
- **Option 2:** Alternative Non Safety-sensitive Position
- **Option 3.** Medical Leave or Leave

Follow the “Bright spots”

- Self-Disclosure Mechanism Available
- Application to Safety-Sensitive Positions,
- Reasonable Justifications for Testing,
- Appropriate & Defensible Testing Mediums, Methods and Cut-off Levels,
- Measured Disciplinary Consequences,
- Consistent Implementation and Compliance with Third Party Policies



TURNING KNOWLEDGE INTO ACTION



Going Off Balance

1. Inconsistent Application
2. Inadequate Preventative Measures
3. Inappropriate Application
4. Complicit Practices (Criminal)



Strong Policy Design

- **Sets Clear Expectations**
- **Works within Unionized Environments**
- **Avoids Discrimination by Design**
- **Adheres to Privacy Legislation**



Effective Training Includes

- **Executive & Senior Leadership**
- **Program Administrators**
- **Managers & Supervisors**
- **Frontline Staff**



Sustainable Compliance Measures

- **Defensible**
- **Measured**
- **Communicated**
- **Executed Consistently**



Ingredients of Success

1. **Understanding and integrating the evidence that is being overlooked**
2. **Adapt a risk versus impairment mindset**
3. **Aim to remove the risk and keep the individual**
4. **Be balanced and measured in the fit for duty approach**
5. **Encourage disclosure prior to an incident**



CONTACT US

Dan Demers, BSc.

1.800.440.0023, Ext 7526

Senior Manager

dan.demers@cannamm.com

www.cannamm.com

Shana Wolch

McCarthy Tétrault LLP

Partner

403.260.3639

swolch@mccarthy.ca

Ben Ratelband

McCarthy Tétrault LLP

Partner

416.601.8016

bratelba@mccarthy.ca



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Disclaimer

- // The landscape of marijuana / cannabis is rapidly evolving. The information contained in this presentation is based on either credible scientific research, relevant case law and/or industry practices currently available and represents the current state as it exists today “as a single point in time”.**
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