Dealing with Recreational and Medical Cannabis in the Workplace – a Canadian Perspective

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AGENDA

• Impacts of cannabis on safety sensitive work
• Challenges of medical cannabis in safety sensitive workplace
• Dealing with recreational cannabis in the workplace
• Canadian Workplace Approaches
• What do the numbers say? Drug testing results before and after legalization
• Drug testing - what are our options and what are Canadians doing now?
• Cannabis Use Disorder
A Quick Timeline...

**PROHIBITION**
- Opium Act 1908
- 1923 – Cannabis added

**MEDICAL**
- 2001 MMAR
- 2013 MMPR
- 2016 ACMPR

**LEGALIZATION**
- October 17, 2018
- Cannabis Act - Medical
Cannabis Concerns

Cannabis legalization sparking concerns for Canadian organizations

71% of employers are not prepared for the legalization of marijuana, according to HRPA, Business of Cannabis and Public Services Health & Safety Association survey

Canadian workplaces unready for legal pot: report

Conference Board of Canada report highlights opportunity to educate employees on cannabis use

Employers concerned about legalization of marijuana: Survey

Almost half say their policies don't adequately address potential issues that may arise

Cannabis Becomes Legal on October 17, 2018 — Is Your Workplace Ready?

By Susan MacMillan on June 21, 2018

Following the Senate’s historic vote in favour of Bill C-45, the Cannabis Act, the federal government announced yesterday that recreational marijuana will become legal on October 17, 2018. In anticipation of Bill C-45 becoming law, the provinces have begun preparing a framework for regulating the production, distribution, sale, possession and consumption of cannabis. Ontario’s response is Bill 114, steps to help employers prepare for the new reality.

Guidance, guidelines and sample policies needed to facilitate a smooth transition.

Toronto, Jan. 23, 2018 (CNW) - Marijuana legalization has been looming large on the horizon, yet the vast majority are still not prepared for how legalization may impact the workplace.
Canadian Cannabis Survey

23% of cannabis users
Full time/Part-time workers use cannabis

39% of cannabis users
Driven within 2 hours of use of cannabis

39% of cannabis users
Passenger with driver who used cannabis within 2 hours

21.5% of cannabis users
Used cannabis to get ‘high’ before or at work (last year)

7.7% of cannabis users
Use cannabis to get ‘high’ before or at work weekly or daily

Canadian Cannabis Survey – 2017
9215 respondents – telephone and then survey through mobile phones
Cannabis 101

- Over 100+ different cannabinoids
  - Delta-9-tetrahydrocannabinol = THC
  - Cannabidiol = CBD

- Hundreds of other chemicals
  - Terpenoids

- Influences Endocannabinoid system (CB1, CB2)

- Also has impacts on neurotransmitters (serotonin)

- Regulates most systems in our body
Why do we not have all the answers about impairment?

We are at the infancy of understanding the complexities of cannabis and the endocannabinoid system.

1. Product being used
   i. Chemovar type
   ii. Concentration of cannabinoids
   iii. Type of terpenes
   iv. Ratio of THC/CBD and other euphoric/psychoactive cannabinoids
2. Quantity of product
3. Route of administration
4. History of use
5. Use with other drugs/alcohol
6. Individual differences
   i. Metabolism
   ii. Tolerance
7. and more....
How Does Cannabis Impair?

- Euphoria and relaxation
- Time distortion
- Difficulty with divided attention
- Cognitive impairments, memory & learning
Impacts on Workplace Safety

Divided Attention
• The ability for change focus
• Managing more than one important task
• In emergency situations this impacts safety

Cognitive Impairments
• Executive function
  • Working memory
  • Planning/organizing
  • Initiation
• Emotional control
• Inhibition
Acute Impairments

- Initial effects of psychoactive cannabinoids
- Euphoria
- “high”
- “numb”
- Cognitive changes
- Attention
- Reaction time
Residual Impairments

- Hang-over
- After-effects
- Comprehension issues
- Fatigue/motivation issues
- Attention
- Reaction time
- Executive Functioning
Withdrawal Impairments

- After cessation of cannabis in chronic use
- Cognitive changes
- Attention
- Reaction time
- Concentration
- Mood alterations
- Increased anxiety
Smoked Cannabis

THC LEVELS in blood serum

Average concentration of delta-9-THC and its metabolites after INHALATION of 15.8 mg (= one joint) of THC. Measured from half an hour before inhalation until 7 days after.

- Delta-9-THC
- 11-OH-THC
- 11-COOH-THC
Smoked vs. Edibles

- Edible takes 30 – 90 minutes to take effect
- Effects last considerably longer
- Effects from smoking/vaping are very quick (minutes)
- Acute effects wear off faster with smoked cannabis
Ingested Cannabis

Regardless of the lower delta-9-THC levels, ingestion can produce an intense and long lasting psychological high. Both psychoactive substances delta-9-THC and 11-OH-THC plateau for several hours in the bloodstream.

Average concentration of delta-9-THC and its metabolites after INGESTION of 20 mg (= one chocolate cookie) of THC. Measured from 45 minutes until 24 hours after consumption.
Research on Risks


Cannabis use prior to driving increases the risk of being involved in a motor vehicle accident - substantial evidence of a statistical association

Doubles car crash risk
Safety Sensitive Work and Cannabis

- Occupation and Environmental Medical Association of Canada recommends the following:

“It is recognized that the timing and duration of cannabis impairment is variable and that more research is needed in this regard. To provide practical guidance, until definitive evidence is available, it is not advisable to operate motor vehicles or equipment, or engage in other safety-sensitive tasks for 24 hours following cannabis consumption, or for longer if impairment persists”

Medical Cannabis in Canada
Medical Cannabis – The Numbers

Data as of September 2018 – Cannabis Market Data, Government of Canada
Safety vs. Personal Rights

SAFETY

HUMAN RIGHTS
Medical Cannabis Reviews

Employee safety  Impairment  Accommodation  No use
Medical Cannabis Review

Medical cannabis
- Strength
- Dose
- Purchases

Questions to physicians
- Diagnosis
- Alternatives
- Safety

Report To Company

2019 North American Cannabis Summit
What have we learned...

- Over **44 reviews** since November 2017
- Many have not seen a physician to treat their symptoms recently
- Small # using for medical condition where there is literature to support the use
- Many using very high dose THC (over 20%, more than 2 grams)
- Some using CBD only
Recreational Cannabis and the Workplace
Cannabis Policies in Canadian Companies
National Defense and Canadian Armed Forces

- Strict regulations regarding PROHIBITION OF USE
  - **8 hours**
    - any duty
  - **24 hours**
    - handling weapons
    - Emergency response (firefighting, medical first response)
    - Operation of vehicle/equipment
    - Any work with aircraft
  - **28 days**
    - Work with diving, submarine
    - Parachuting
    - Crew on military aircraft (Flight medical staff)
    - Air technician
    - Controlling/directing aerospace platform
Aviation

- Waiting until any impairing medication/substance has been eliminated
- 5 half lives
- Air Canada policy stating **no cannabis use** for
  - pilots
  - cabin crew
  - flight dispatchers
  - aircraft maintenance (Global News, Sept 29, 2018)
- Westjet announced similar policy (Oct. 9, 2018)
Police Services – Divergence

- No use for 28 days if carrying gun
  - RCMP
  - Toronto Police
- **No use** of any cannabis even in off-time
  - Calgary Police Services
  - “in the interest of officer and public safety, the service has taken an abstinence approach for marijuana use both on and off duty.”
- Show up **Fit for Work**
  - Ottawa Police
  - Vancouver Police
Other Safety Sensitive Workplace Policies

- No use for 24 hours before coming to work
- Show up fit for safety sensitive duty
- Positive Drug test is a violation
  - Oral fluid
    - Recent use
    - Confirms no use during hours in policy
  - Urine Test
- Update of policies/develop policies
- Change to oral fluid testing
Drug Testing in Canada – What Has Changed
Drug Testing

"You're fired, Jack. The lab results just came back, and you tested positive for Coke."
Oral Fluid Testing

- THC (delta-9-THC) remnants in oral cavity after use
  - Smoked/vaporized
  - Ingested
- Absorbed over time
- Oral fluid collected
- Detect THC if recent use only
  - Depends on cut-off used
  - Depends on THC concentration
  - Depends on quantity
Urine Testing

- **THC metabolite (11-nor-9-carboxy-delta-9-THC - THCCOOH)**
  - Positive in urine for days to weeks
    - Days if rare use
    - Weeks otherwise
- Cannot determine timeframe of use
  - Risk determination
Options for Testing in a Legalized World

1. POCT urine test
   - If non-negative for THC
     - Oral fluid swab to lab

2. Oral fluid POCT
   - All with oral fluid swab to lab
   - OR
   - If non-negative, oral fluid swab to lab

3. All testing changing to oral fluid testing
   - Shorter window
   - Likely impairment

4. Continue urine testing
   - Risk based test

5. No testing for THC
The Growth of Oral Fluid Testing

2015 vs. 2018

- # of oral fluid tests:
  - 2015: 1,369
  - 2018: 6,090
  - Increase: 345%

- # of urine tests:
  - 2015: 25,516
  - 2018: 29,698
  - Increase: 14.1%
Cannabis Use Disorder – will we see an increase?
Substance Use in the Workplace
How Many Are Employed?

69%
Bottom Line...

- Just because it is prescribed, authorized, legal does not mean it is safe
- Cannabis can impair ability to safely perform duties
- Medical cannabis has continued to grow – creates same risk
- Oral Fluid testing has increased substantially
  - recent use = likely impairment
- Trend towards increasing THC % rates – time will tell
- Cannabis Use Disorder exists!
Thank you!

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