



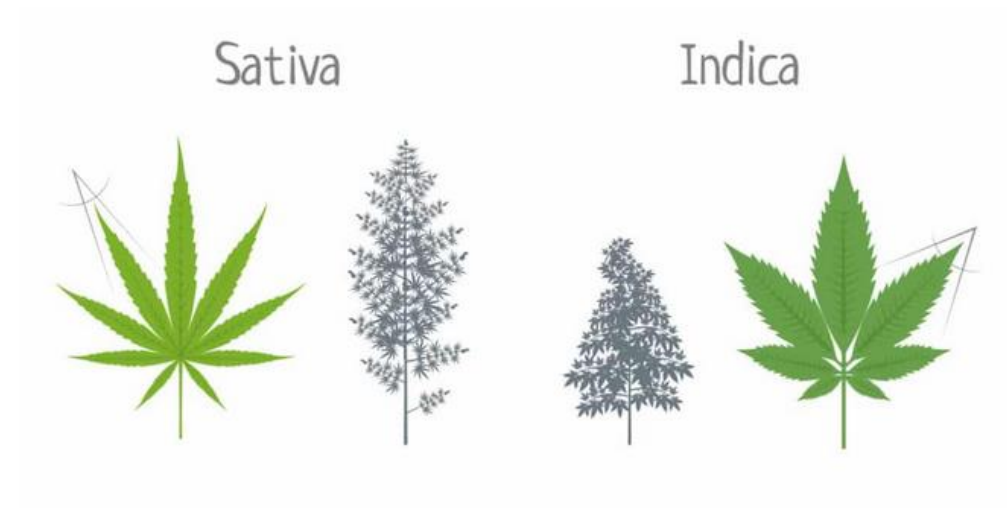
# ADDRESSING THE CHANGE IN CANNABIS LEGISLATION IN CANADA: WHAT DOES THE EVIDENCE SAY?

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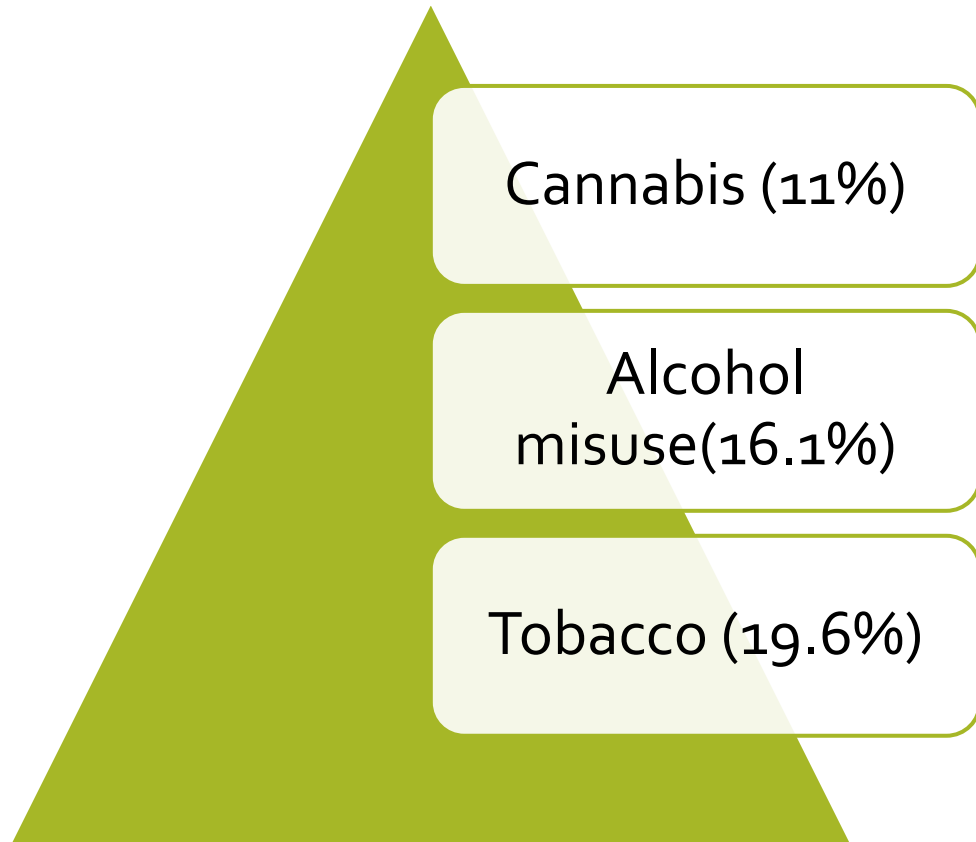
Catherine McDonald, MA in Psychology Candidate; Caroline Brunelle, PhD,  
Associate Professor, UNB Saint John

# Cannabis

- Psychoactive ingredient:
- Tetrahydrocannabinol (THC)
- Cannabidiol (CBD)
  - May block some THC effects

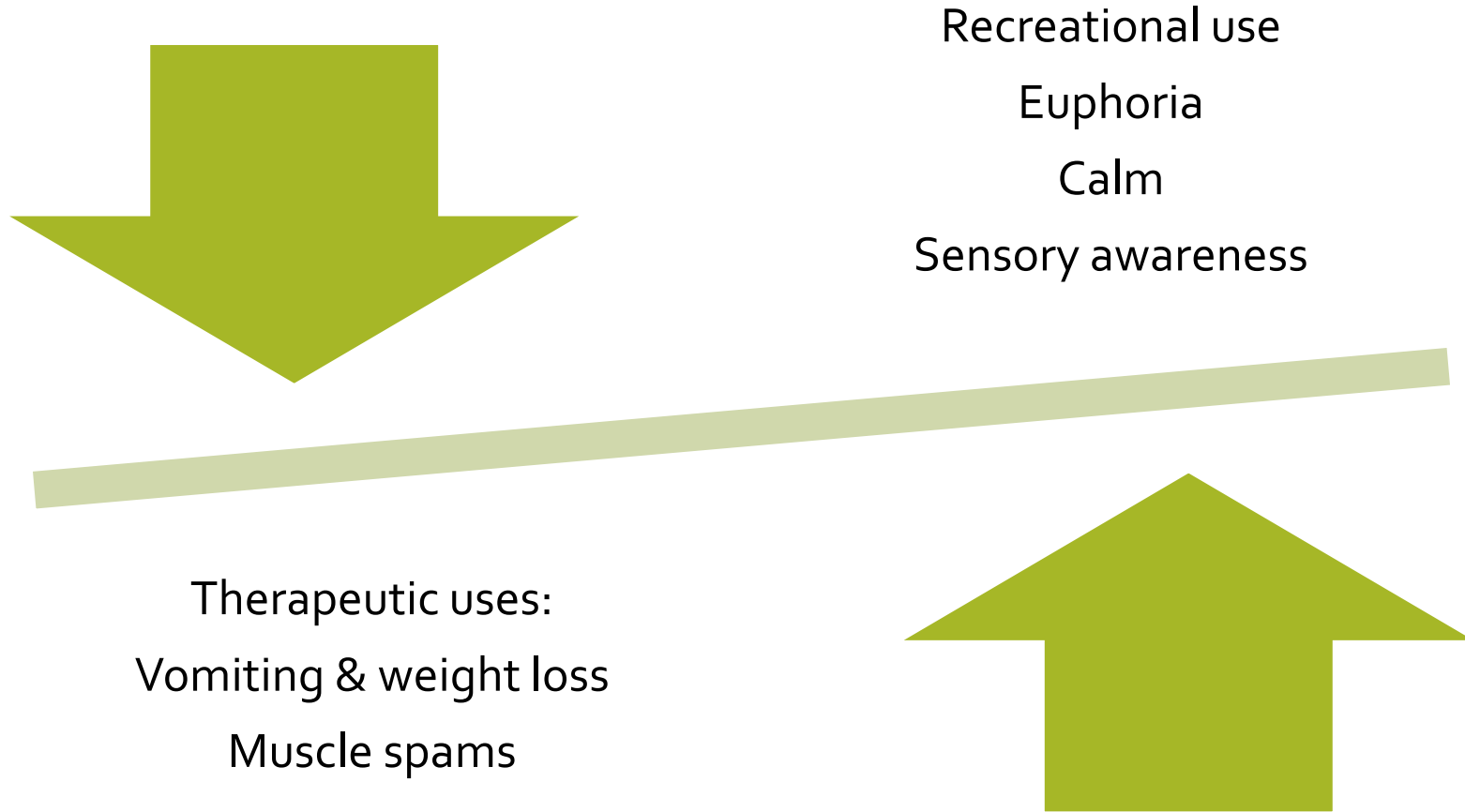


# Cannabis: How many use it?



- Canada Tobacco, Alcohol and Drugs Survey, 2013

# Reasons for using



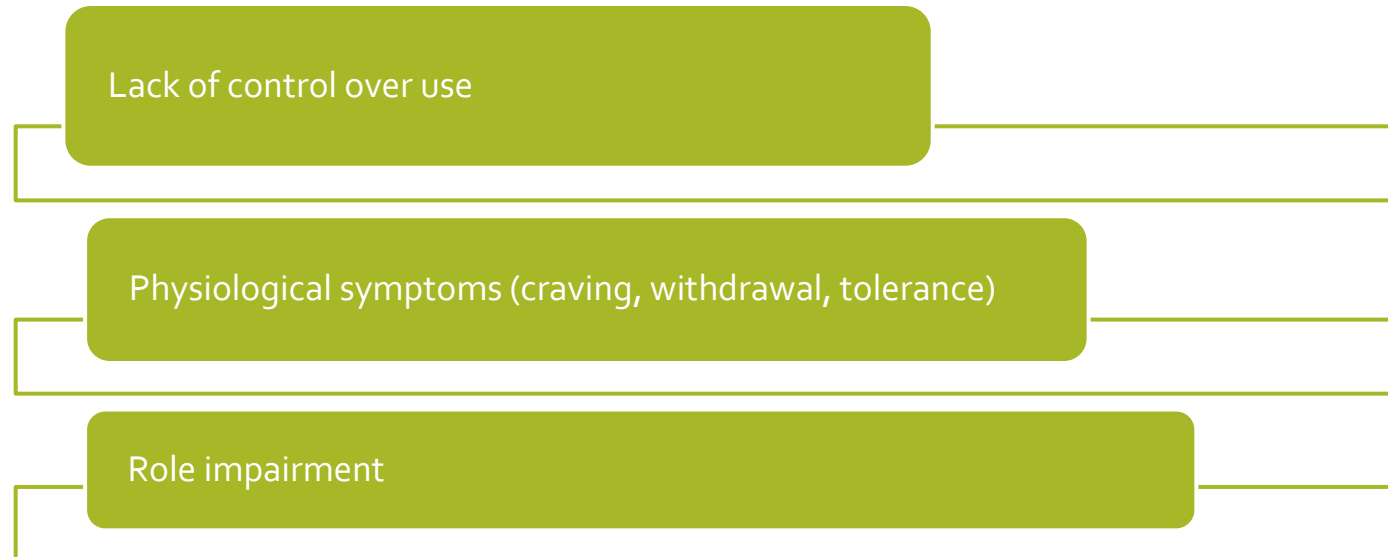
# Medical dispensaries

- ALASKAN THUNDER
- GIRL SCOUT COOKIES
- DIESEL FUEL
- CAT PISS



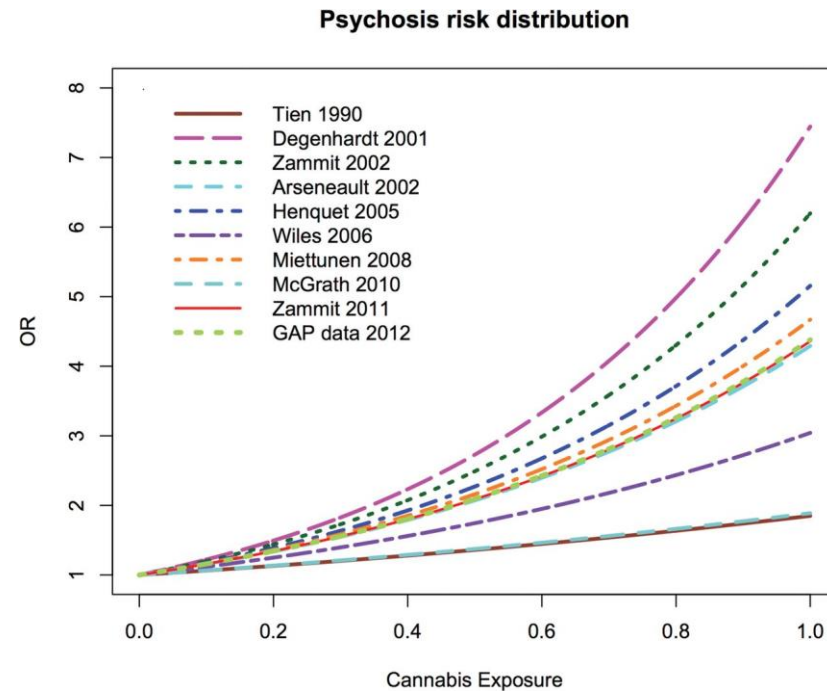
# Problematic Cannabis Use

- 5.3% of New Brunswickers



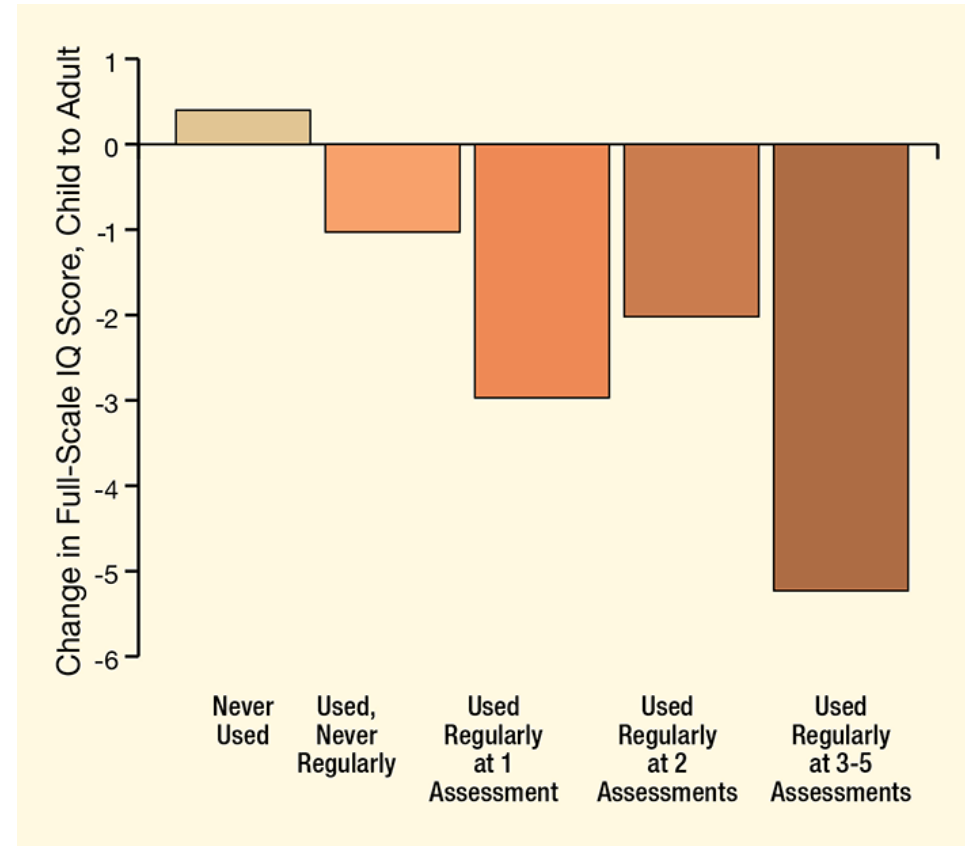
# Some Established Risks of Cannabis Use

- Psychotic disorders
- Dose-response relationship
- Use before 16 is riskiest
- Family history of psychotic disorders



# IQ (Dunedin study)

- Longitudinal study (N=1,037 participants)
- Drop of 8 IQ points in heaviest adolescent users
- IQ dropped only if adolescent onset of cannabis use
- Irreversible





# Motor Vehicle Accidents

- Cannabis affects attention, decision-making, motor functioning

Impact on driving:

reaction time

road position

One 4%THC cigarette= 0.05% breath  
alcohol concentration



# What Increases Risk of Averse Effects?



# Conclusions: Legalization in Canada

- “Legalization is not a miracle but an imperfect solution” (Fischer et al., 2016)



# Canada's Lower-Risk Cannabis Use Guidelines (LRCUG)



## Recommendations

- Cannabis use has health risks best avoided by abstaining
- Delay taking up cannabis use until later in life
- Identify and choose lower-risk cannabis products
- Don't use synthetic cannabinoids
- Avoid smoking burnt cannabis—choose safer ways of using
- If you smoke cannabis, avoid harmful smoking practices
- Limit and reduce how often you use cannabis
- Don't use and drive, or operate other machinery
- Avoid cannabis use altogether if you are at risk for mental health problems or are pregnant
- Avoid combining these risks

The LRCUG are an evidence-based intervention project by the Canadian Research Initiative in Substance Misuse (CRISM).



CANADIAN RESEARCH  
INITIATIVE IN  
SUBSTANCE MISUSE

INITIATIVE CANADIENNE  
DE RECHERCHE  
EN ABUS DE SUBSTANCE

Reference: *American Journal of Public Health*, 2017

The LRCUG have been endorsed by the following organizations:

ASSOCIATION  
MÉDICALE  
CANADIENNE



CANADIAN  
MEDICAL  
ASSOCIATION



CPHA • ACSP

CANADIAN SOCIETY OF ADDICTION MEDICINE  
SOCIÉTÉ CANADIENNE D'ADDICTION MÉDICALE

camh

CANADIAN ADDICTION MEDICINE  
HOSPITAL



Canadian Society of  
Addiction Medicine  
SOCIÉTÉ CANADIENNE D'ADDICTION  
MÉDICALE

Canadian Society of  
Addiction Medicine  
SOCIÉTÉ CANADIENNE D'ADDICTION  
MÉDICALE

Council of Chief Medical Officers of Health (in principle)



# Purpose of the Study

- Ascertain an understanding of the current patterns of cannabis use in Canada
- Help determine the current perspectives surrounding cannabis and legalization
- Assess use intentions of Canadians following legalization



# Methods

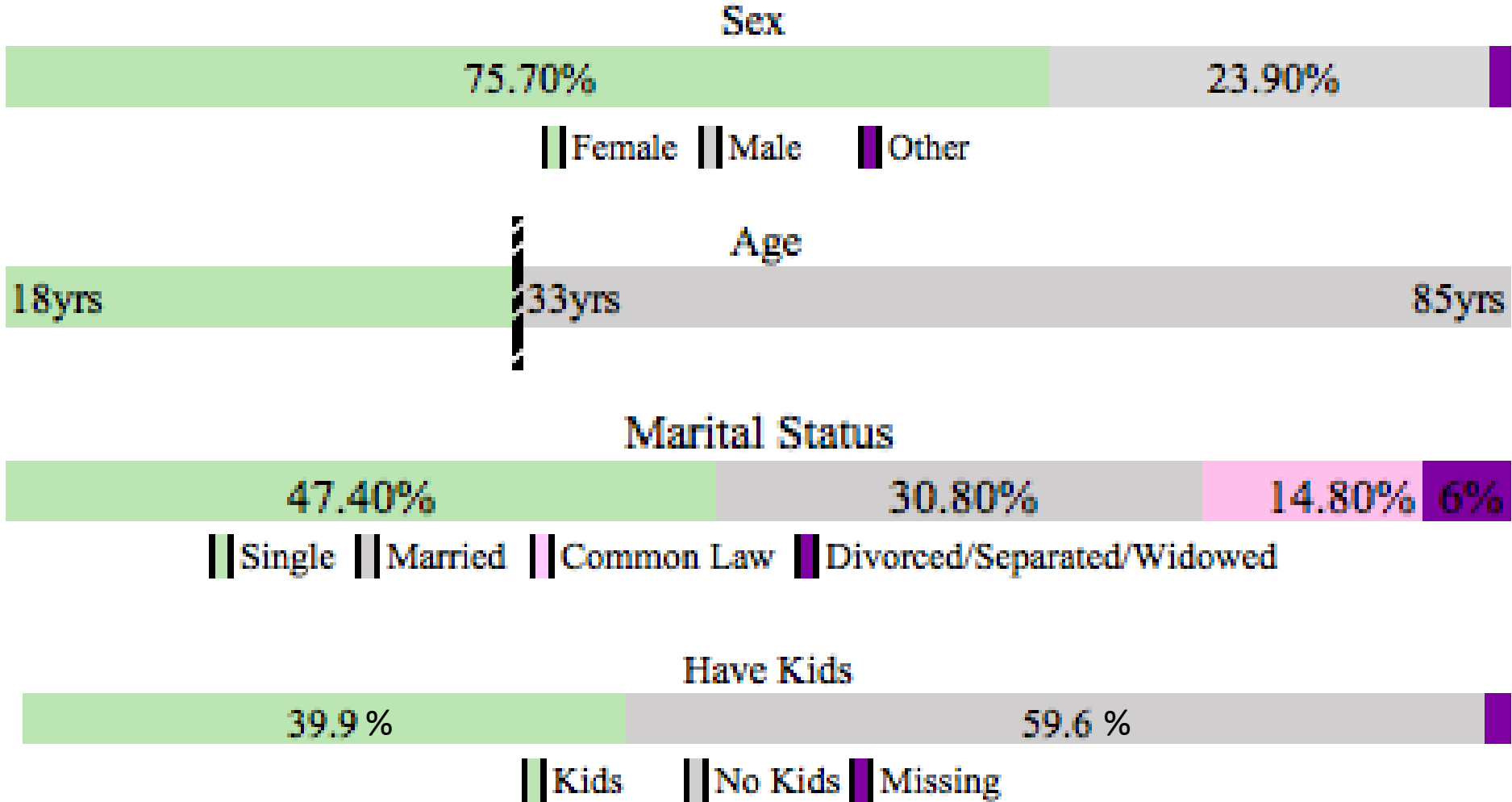
## Questionnaires in the Study

- Demographics Questionnaire
- Personality risk factors for substance misuse (SURPS)
- Cannabis Problems Questionnaire (CPQ)
- Self-Developed Cannabis Legalization Perspectives Questionnaire
- Self-Developed Current Cannabis Use Patterns and Beliefs About Cannabis Use Questionnaires



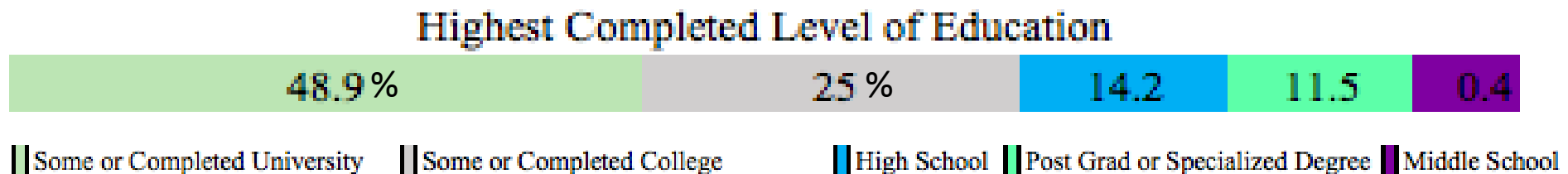
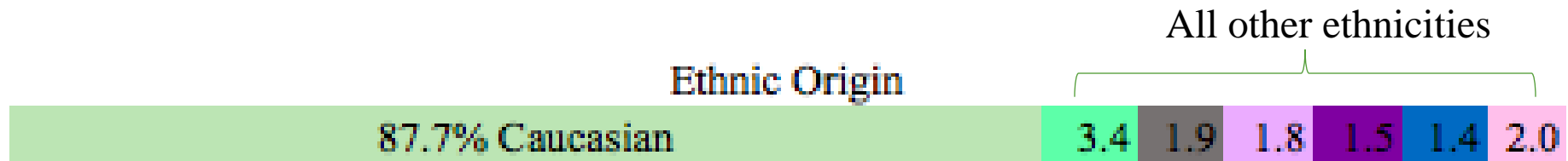
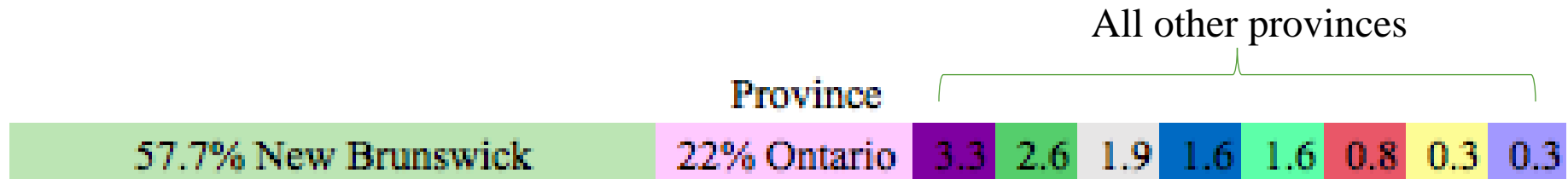


# Sample Demographics





# Sample Demographics







# Current Cannabis Use Patterns





# Current Cannabis Use Patterns

## Ever Used Cannabis:

65.5% Yes      34.5% No

## Age of First use of Cannabis:

17.48

## Currently Use Cannabis:

55.1% Yes      43.8% No

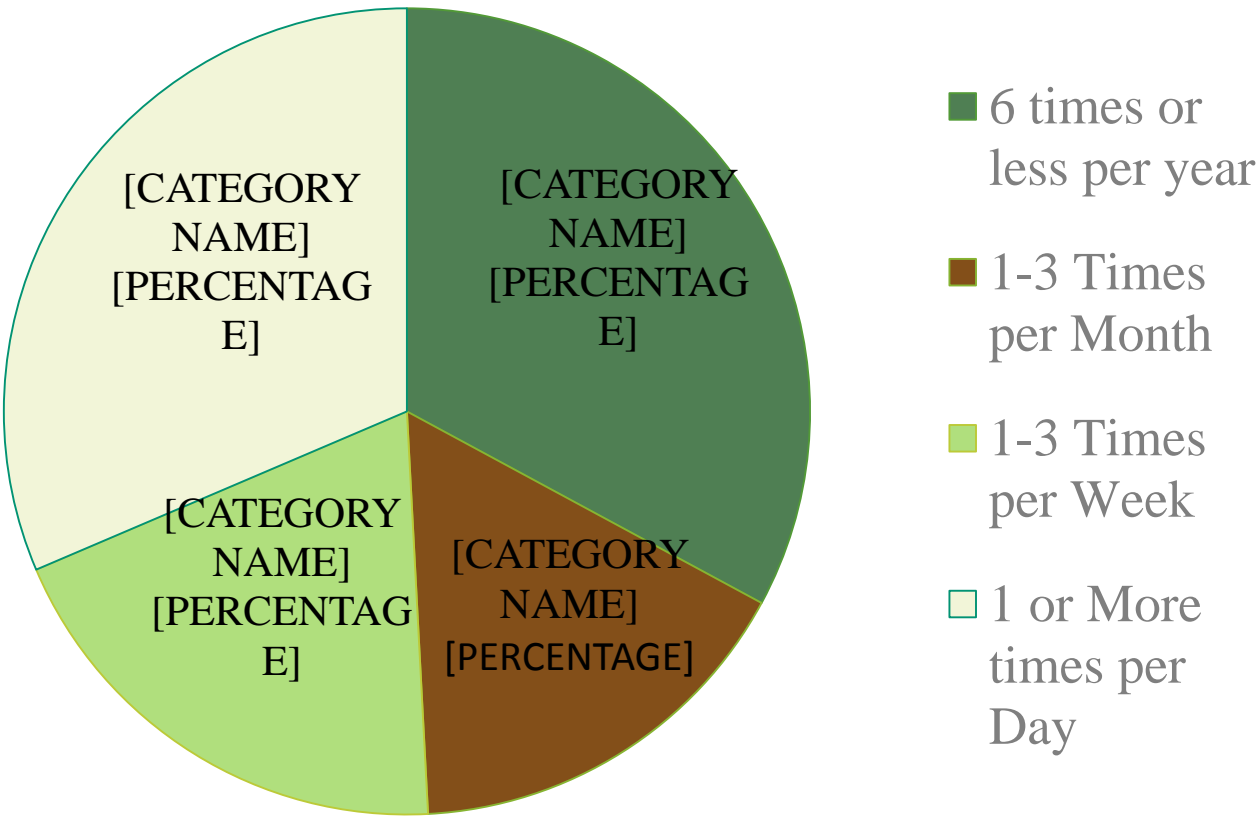
## Used in Last 30 Days:

53.2% Yes      46.4% No

## Average Change In Frequency of Use:

47.6% report Decrease to Significant  
Decrease in Use

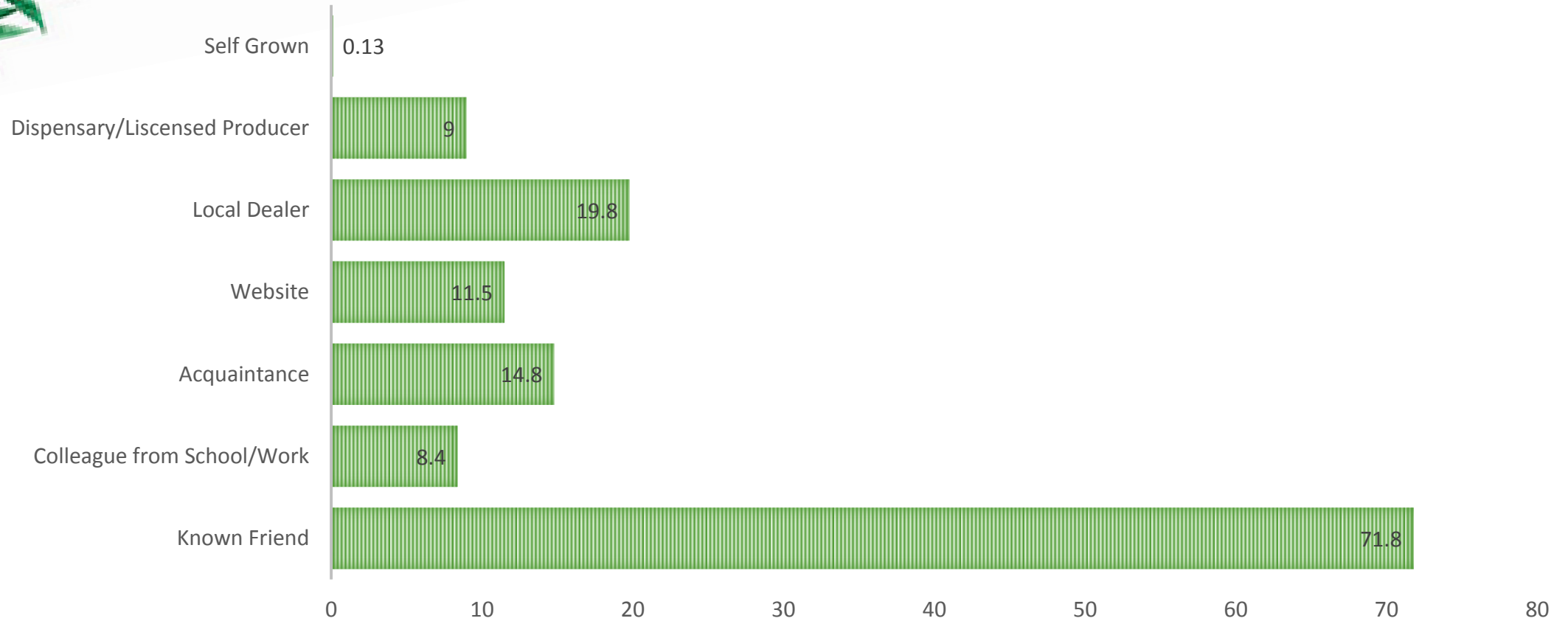
Self- Reported Frequency of Cannabis Use  
(Percent)



# Sources of Purchase

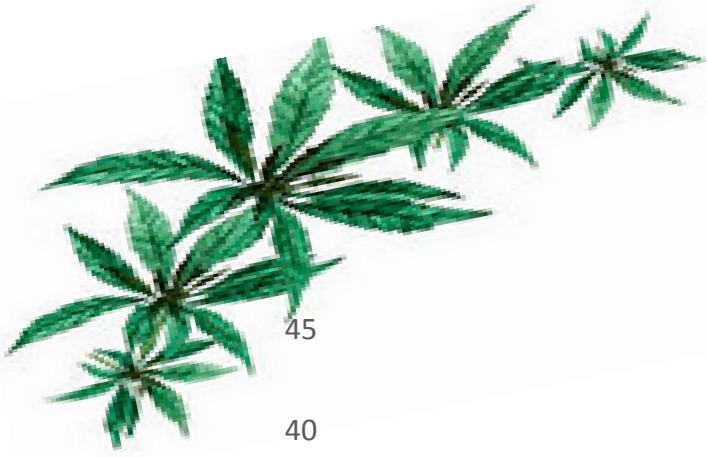
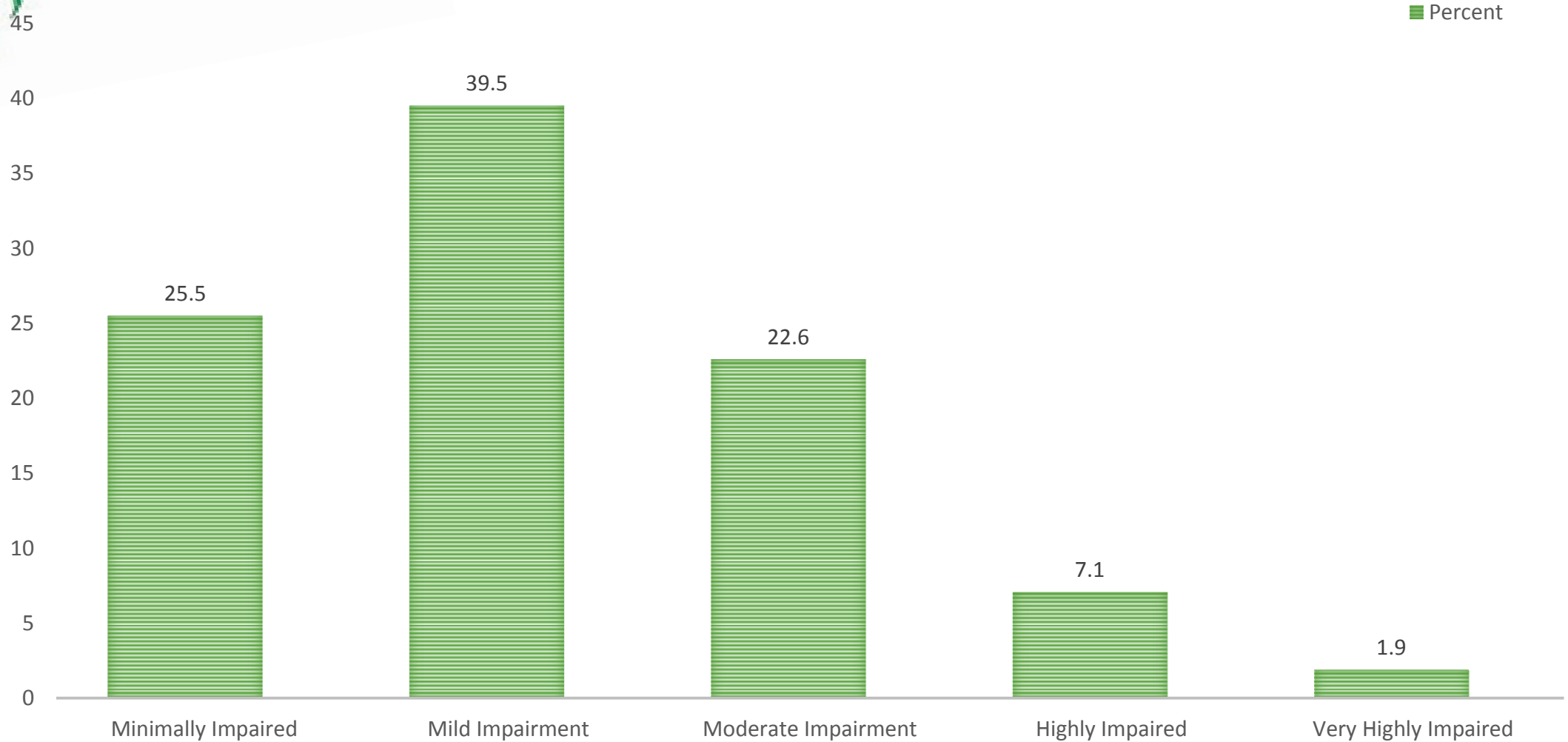


## PERCENTAGES



**\*\*Note:** Percentages do not add to 100, as many purchase from multiple sources.

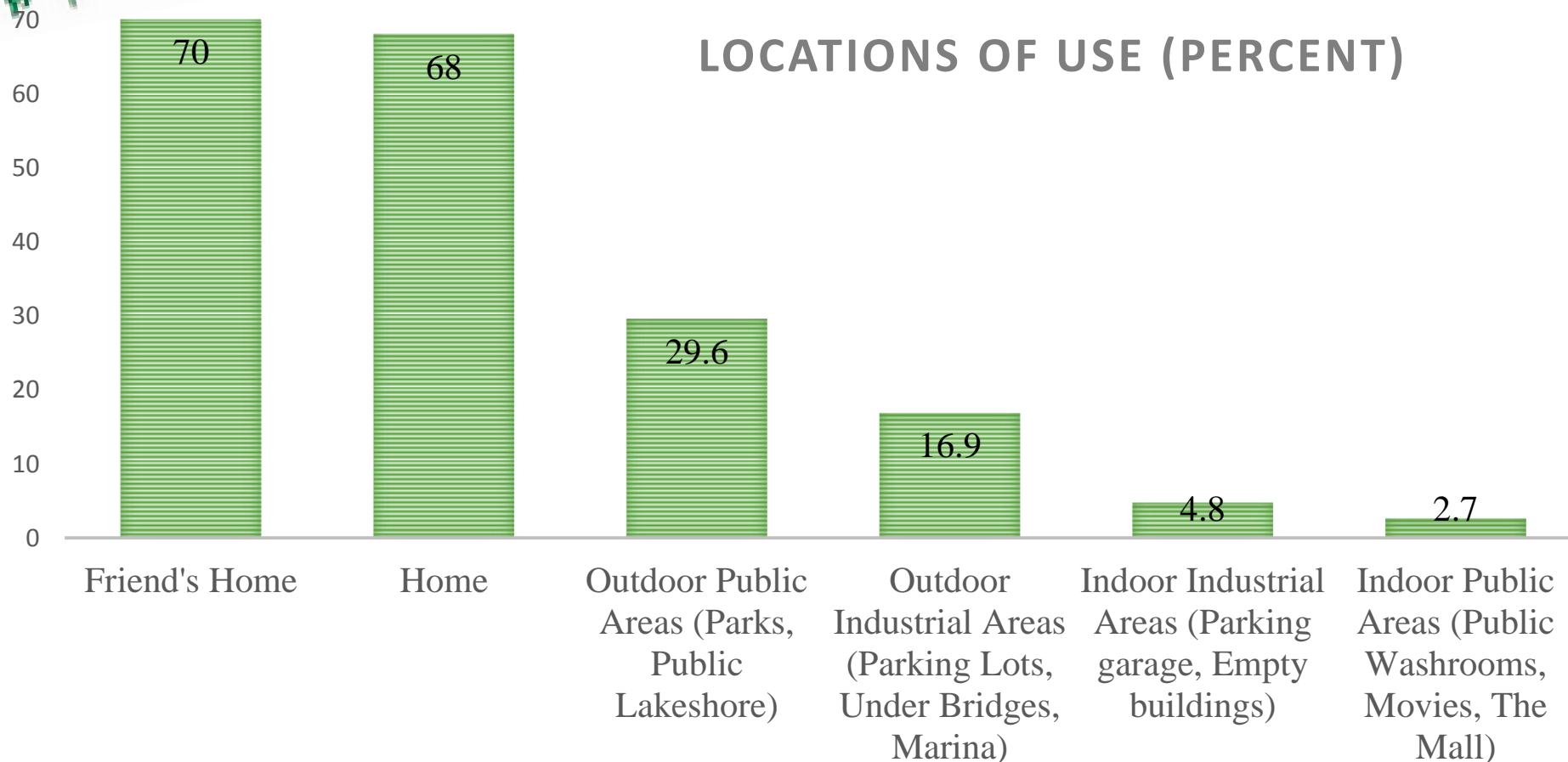
# Levels of Impairment





# Methods and Locations of Use

LOCATIONS OF USE (PERCENT)



## Preferred Method of Use

39.3% Joints

20.5% Bongs & Pipes

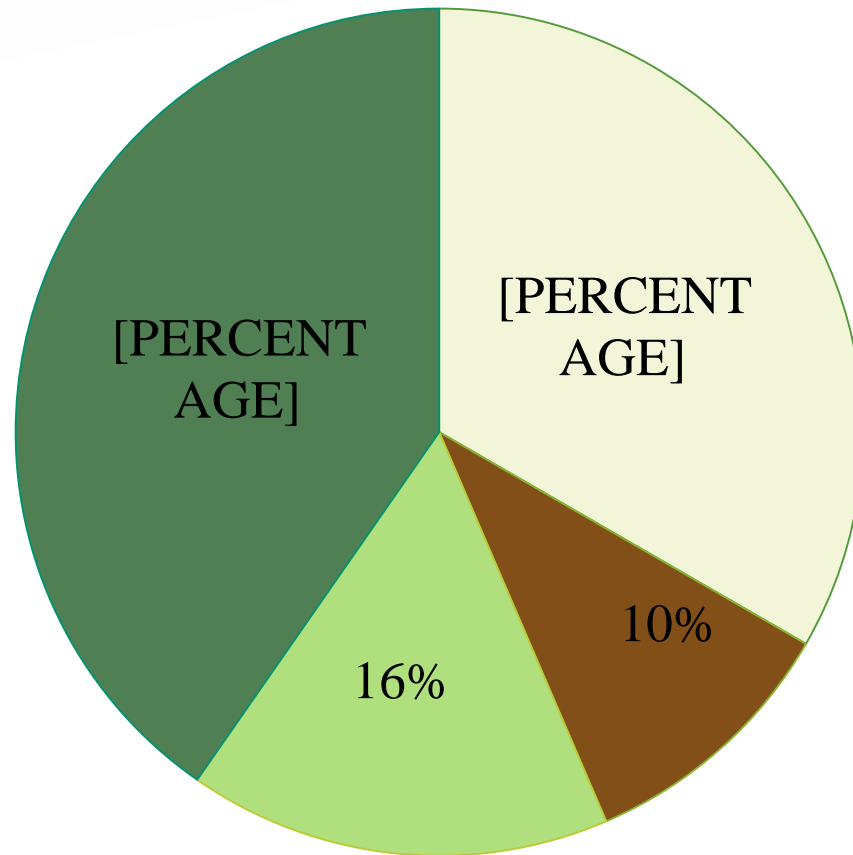
14.2% Edibles

13.1% Vaporizers

# Cannabis and Driving



Frequency of Using Cannabis and Driving



Under 5 Times   Between 5 and 10 times   10-24 times   Over 25 times

## Use Cannabis in **PARKED** car:

20% Yes

80% No

## Ever Driven Under the Influence:

38.2% Yes

57.8% No

## Average Number of Times Driven Under the Influence of Cannabis:

10-20 Times

## Cannabis Use **WHILE** driving:

6% Yes

94% No

# Cannabis and Employment



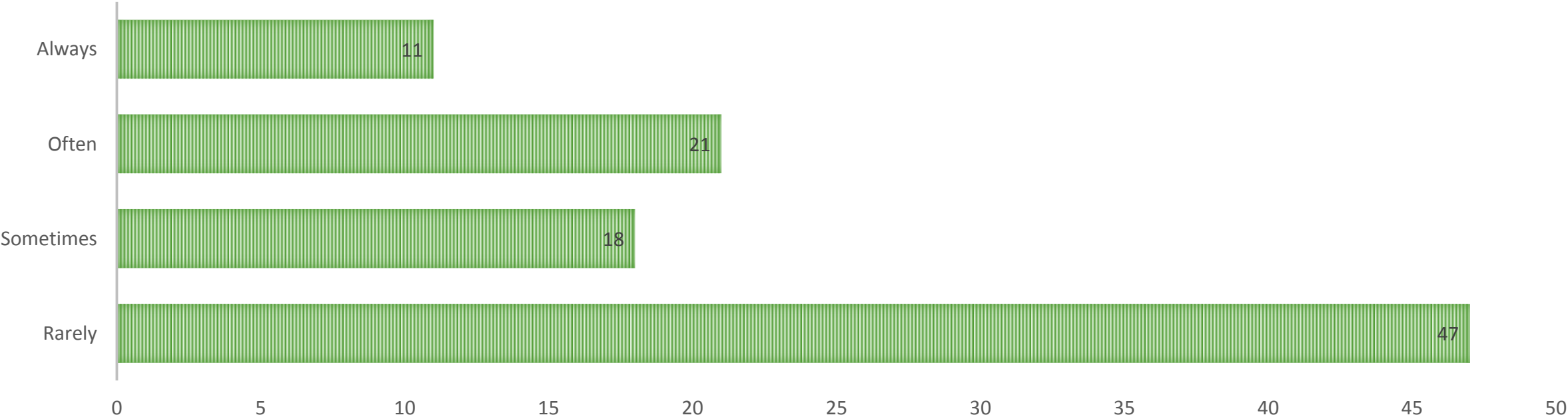
**Ever Used Cannabis During Employment Activities?**

17.5% Yes      82.5% No

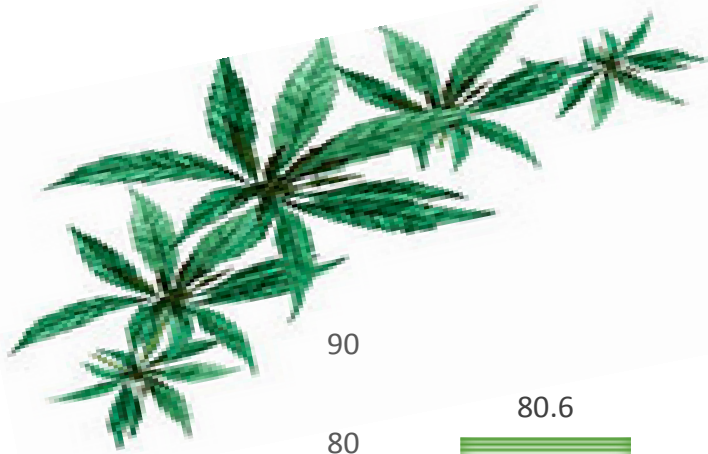
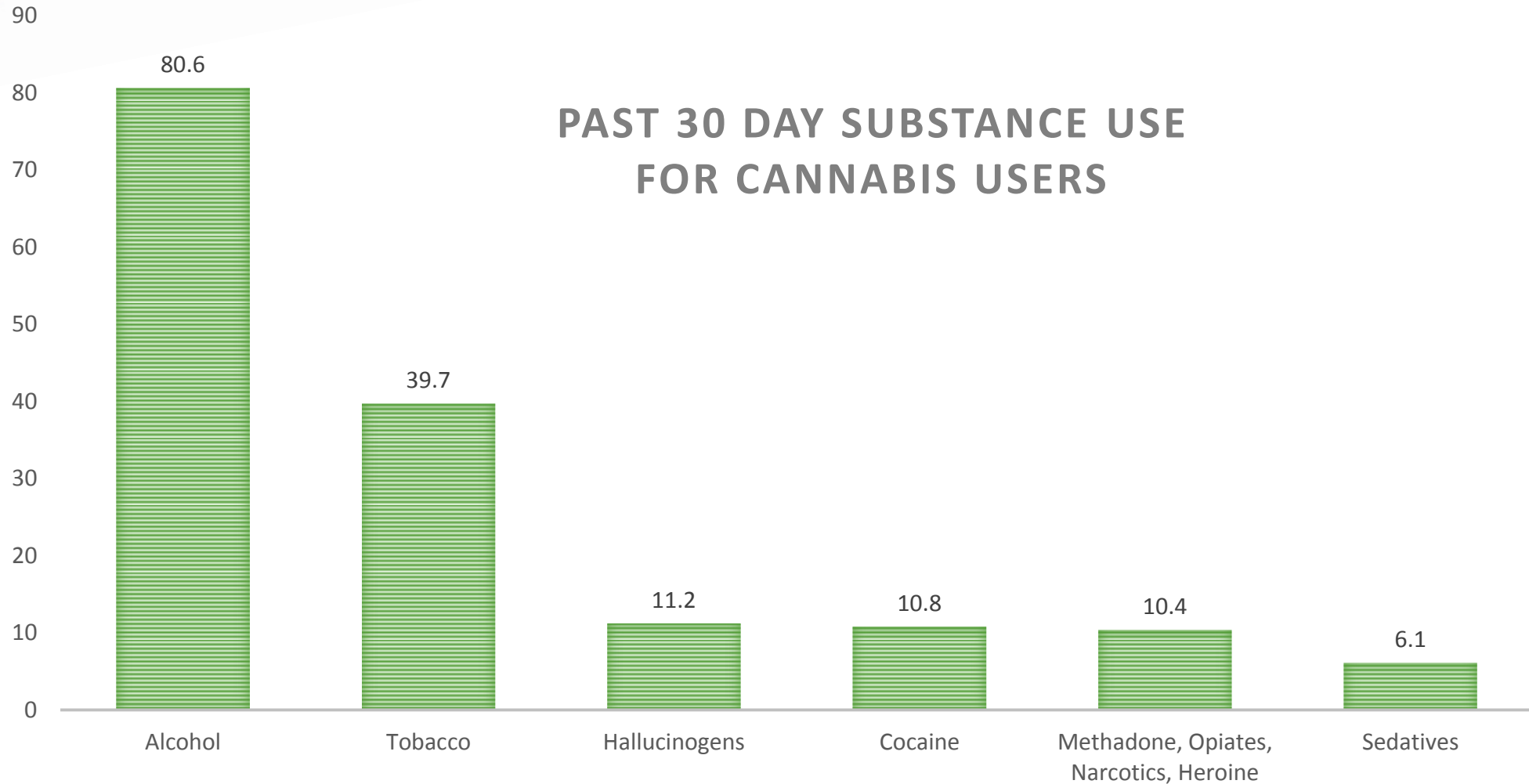
**Use Cannabis AT your Place of Employment?**

3.1% Yes      96.9% No

**FREQUENCY OF CANNABIS USE DURING EMPLOYMENT (PERCENT)**



# Combined Substance Use







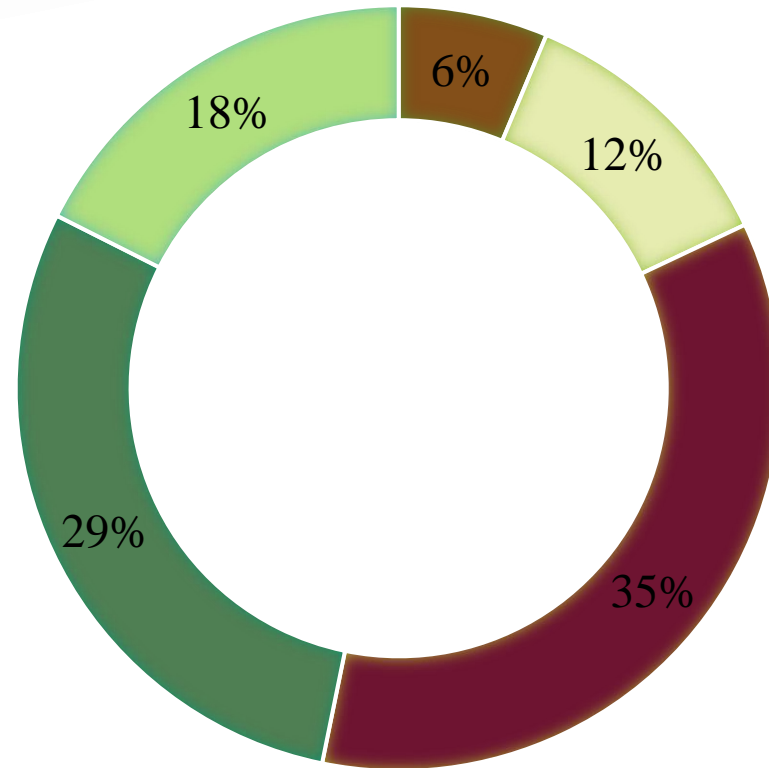
# Current Perceptions of Cannabis










# Overall Perception of Cannabis

\* Includes Users and Nonusers

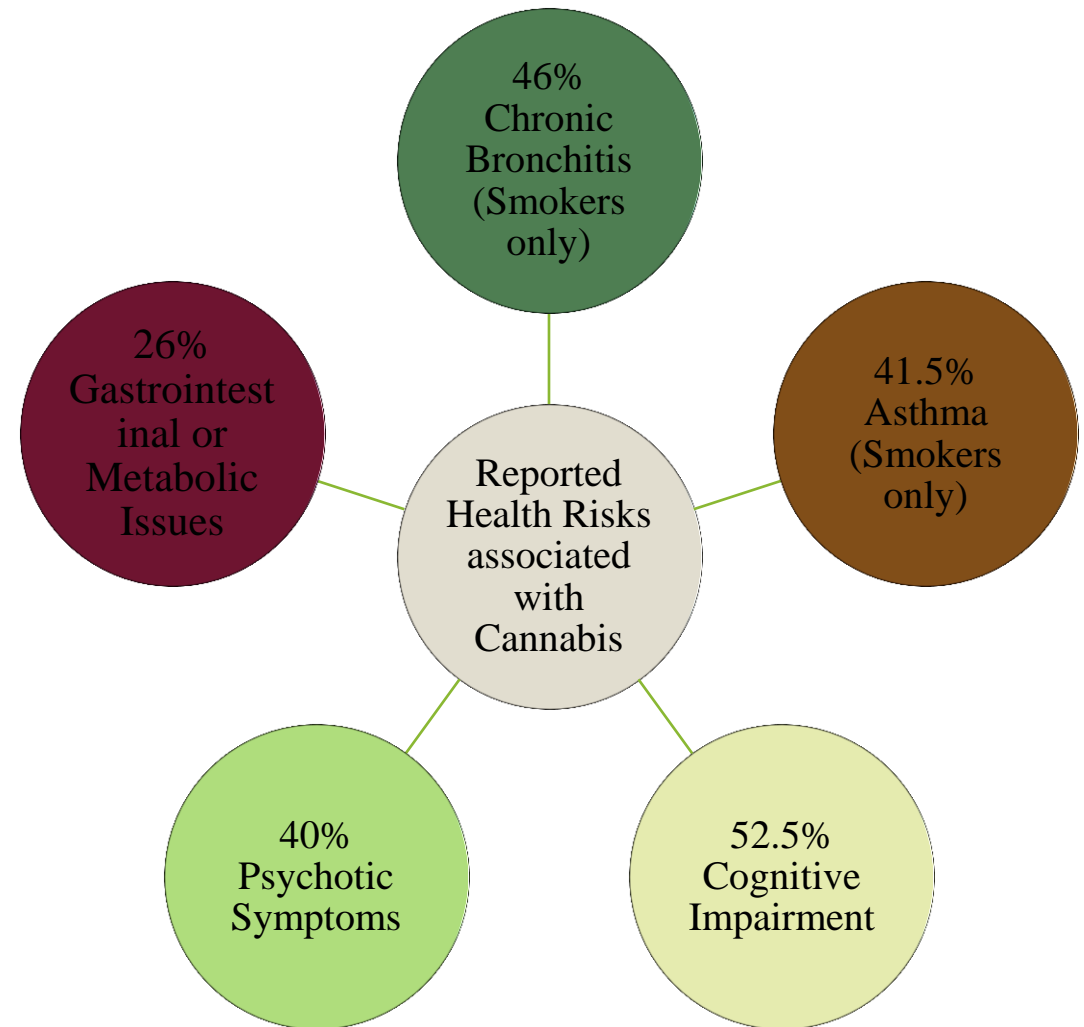
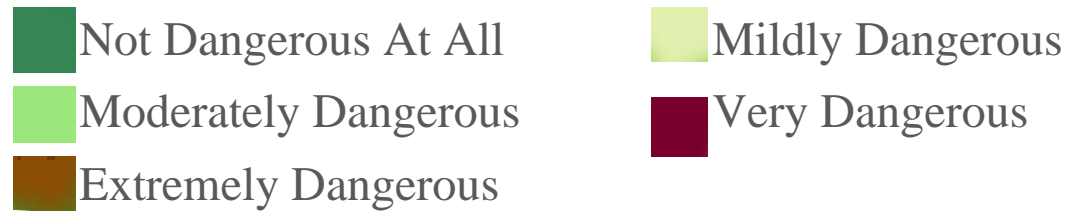
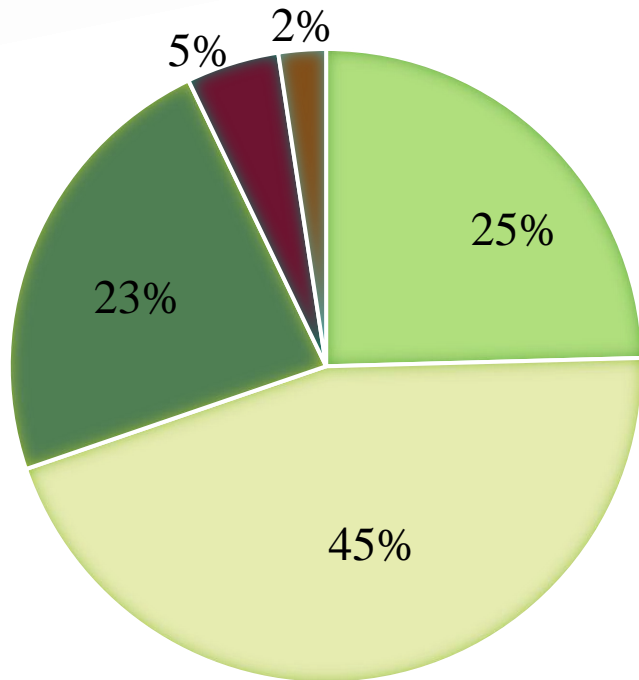


PERCENTAGES

-  It is a Very Bad Thing
-  It is a Bad Thing
-  It is Neither a Good Thing nor a Bad Thing
-  It is a Good Thing
-  It is a Very Good Thing

# Perception of Cannabis

## HOW DANGEROUS IS CANNABIS

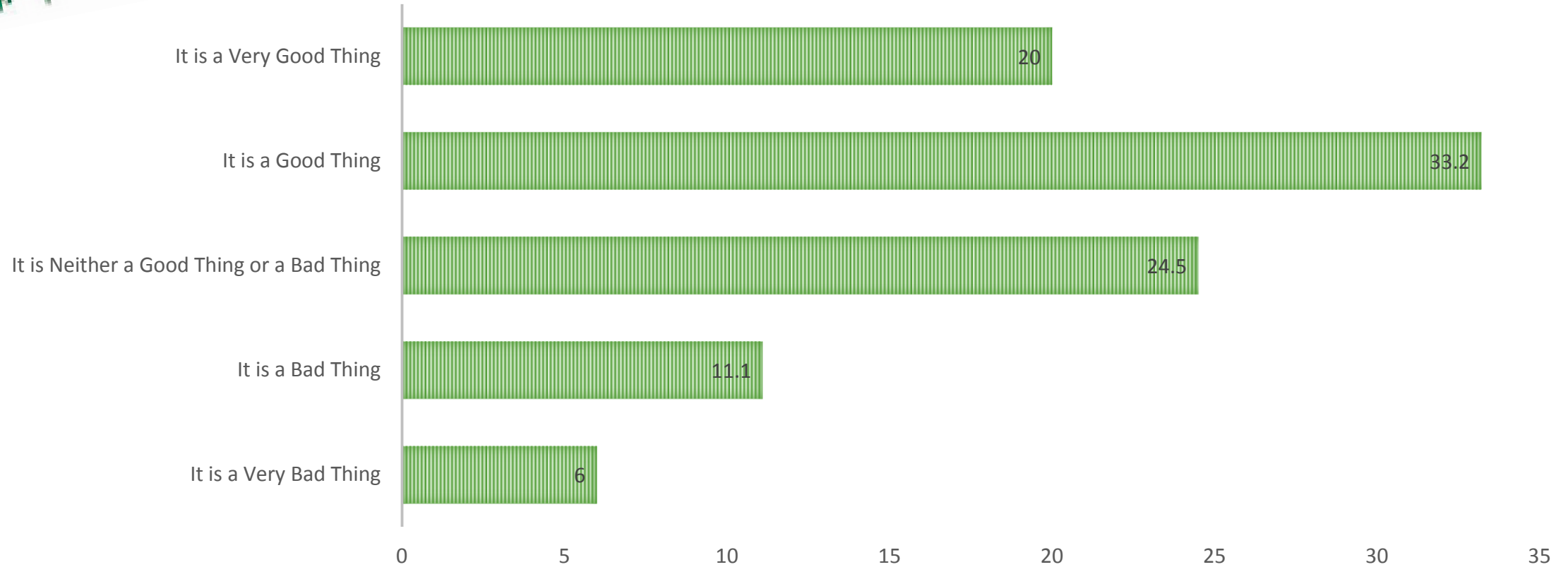




# Perspectives on the Legalization of Cannabis

IN PERCENT

■ In Percent





# Perspectives on Legalization

**How do you think legalization will impact your frequency of use? (1=Not a user, 5=Use much more frequently)**

45.4% Do not and Will not Use

44% Same frequency of use

10.6% Increase Use

**How comfortable would you be in public areas where there are individuals under the influence of cannabis? (1- Very Uncomfortable and 4 – Very Comfortable)**

Mean=2.8

Neutral – Comfortable

**Once Cannabis is legal, would you feel comfortable purchasing Cannabis from a dispensary?**

42% Will Not Purchase

41.5% Yes

11.4% Neutral

5% No



# Perspectives on Legalization

**Do you agree with setting the legal age of purchase and consumption at 19?** (same as the legal age of alcohol in most provinces)

75.2% Yes

18.2% No

**Do you think individuals under the age of 19 should be allowed to consume cannabis?** (Excluding special medical cases)

8.4% Yes

85.3% No

**Once legal, would you feel comfortable purchasing cannabis FOR youth under the legal age?**

8.2% Yes

88.7% No

**Once Cannabis is legal, would you feel comfortable using cannabis around children?**

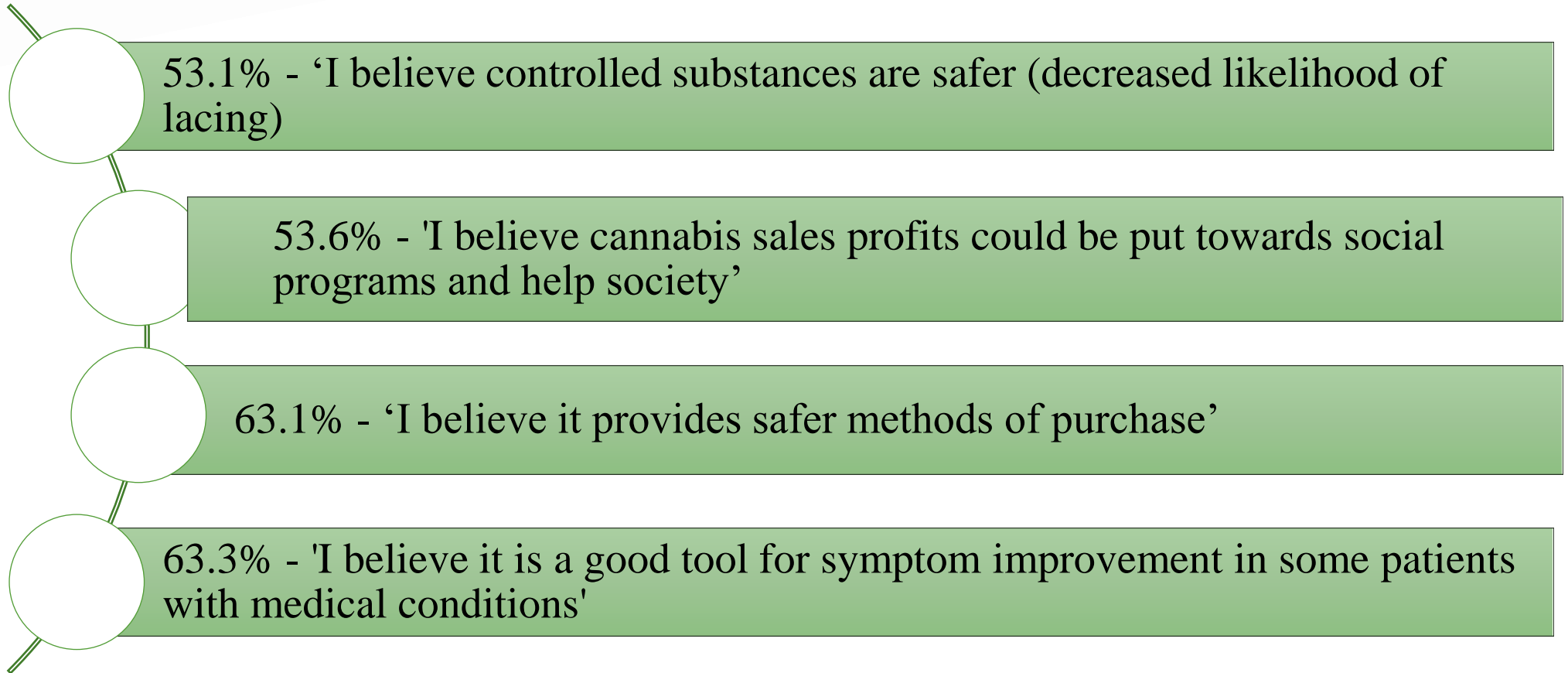
8.2% Yes

11.3% Neutral

80.5% No



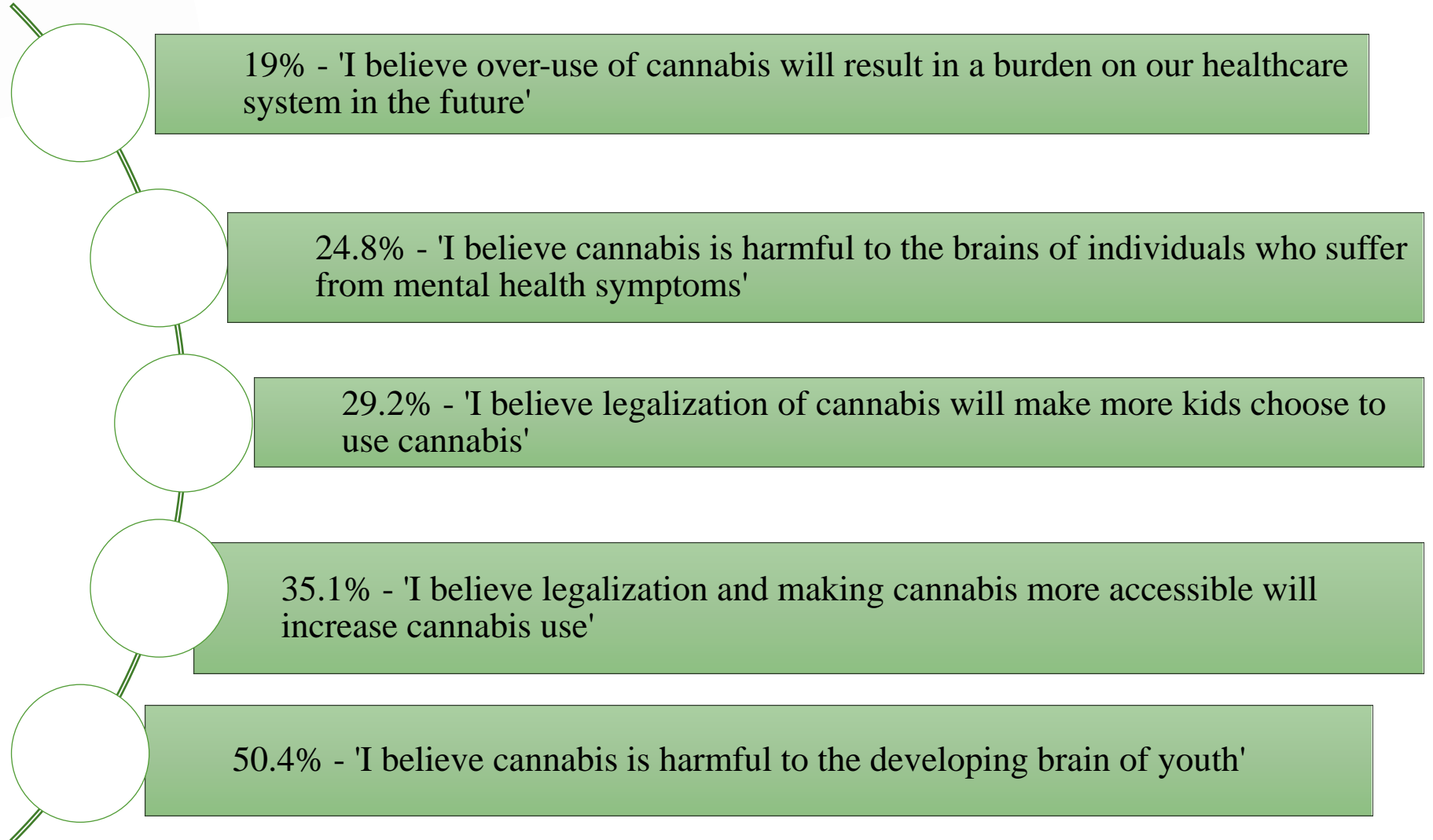
# Reasons For Legalization







# Reasons Against Legalization







Thank you for your attention!

Questions?

