



Cannabis in Washington

MARKET TRENDS AND PUBLIC HEALTH DATA

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Disclosures

 **NO INDUSTRY FUNDING OR INTERESTS TO DECLARE.**

CONSULTANT / PAID SPEAKER / ADVISORY COMMITTEES

- Regulatory agencies e.g., Canada, Australia, UK, EC, US CDC, etc.
- Non-governmental associations e.g., CCS, Heart & Stroke Foundation
- International public health authorities e.g., WHO

PAID EXPERT TESTIMONY – PUBLIC HEALTH LITIGATION

Tobacco

- Canada, Norway, Australia, UK, Ireland, Uruguay, Uganda, NB, AB, Class actions

Vaping

- Canada

Cannabis

- Canada, Quebec

Food & beverage

- San Francisco



Born gentle

PROUD mothers, please forgive us if we too feel something of the pride of a new parent. For new Philip Morris, today's Philip Morris, is delighting smokers everywhere. Enjoy the gentle pleasure, the *fresh unfiltered flavor*, of this new cigarette, born gentle, then refined to special gentleness in the making. Ask for new Philip Morris in the smart new package.



New Philip Morris...gentle for modern taste


CANNABIS POLICY

Public health impact depends on how cannabis is regulated in legal markets.

Product standards

Vermont Lawmakers At Odds Over THC Limit on Cannabis Concentrates

Some members of the Vermont state Senate are upset over a 60% cap proposed by their colleagues in the House.

 BY THOMAS EDWARD · MAY 11, 2022



SOURCE: [HTTPS://HIGHTIMES.COM/NEWS/VERMONT-LAWMAKERS-AT-ODDS-OVER-THC-LIMIT-ON-CANNABIS-CONCENTRATES/](https://hightimes.com/news/vermont-lawmakers-at-odds-over-thc-limit-on-cannabis-concentrates/)

CANADA

**Learn from different
regulatory frameworks.**





- **Detailed population-based data**
- **Policy-specific measures**
- **Same methods, multiple time points, multiple jurisdictions**



Methods

- Repeat cross-sectional surveys
- Annual data collection 2018...
- Online data collection
- Ages 16–65

2018	2019	2020	2021
27,169	48,111	45,681	52,938



USA



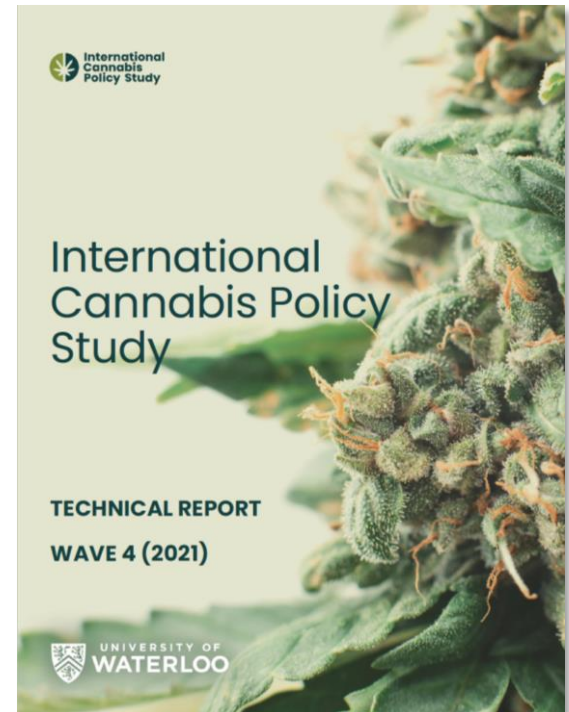
CANADA
Adult legal



AUSTRALIA
Medical



New Zealand
Medical



www.cannabisproject.ca

Washington

2021 CANNABIS REPORT

MAY 2022

Sample

N=7,291

	2018 n=1,157	2019 n=2,359	2020 n=1,976	2021 n=1,799
Sex				
Female	571	1,164	974	885
Male	586	1,195	1,003	914
Age group				
16-25	165	456	385	329
26-35	321	541	452	435
36-45	203	483	380	354
46-55	247	429	383	342
56-65	222	450	376	339
Ethnicity				
White	948	1,944	1,589	1,472
Am. Indian or Alaskan Native	10	36	19	25
Asian	92	120	124	110
Black or African American	39	74	106	78
Native Hawaiian or Pac Islander	5	12	9	12
Other/2+ races/Unstated	63	172	130	104
Education level				
<High school	82	143	129	171
High school	242	448	364	312
Some college	597	965	801	702
Bachelor's degree	235	794	659	598
Income adequacy				
Very difficult	113	256	167	161
Difficult	240	551	356	336
Neither easy nor difficult	379	736	634	578
Easy	248	471	452	392
Very easy	146	276	301	264

Detailed measure on consumption and use.

**Please choose the joint that is closest
to the size you normally smoke**

PAST 12-MONTH USERS OF DRIED HERB WHO REPORTED IN JOINTS





Problematic Use Indicators

TYPE OF USER

- Early age initiation of cannabis use
- During pregnancy
- Susceptibility to psychosis

TYPE OF USE

- Daily or near-daily use
- High THC or THC:CBD ratio
- Synthetic cannabinoids
- Smoke inhalation

SETTING

- Cannabis-impaired driving
- Workplace



Policy-specific measures

- **Advertising & promotion**
- **Price & taxation**
- **Retail & commercial environment**
- **Legal vs. illegal market indicators**
- **Product standards**
- **Public education**
- **Labelling & health warnings**

'Objective' of cannabis policies.

Restrictions on cannabis marketing in states with 'legal' cannabis laws

JUNE 2022

CHANNEL	IL	MI	AK	NV	WA	NM	OR	CA	NJ	VT	AZ	CO	ME	CT	MA	VA	MT
Regular postal mail	1	1	1	1	1	2	1	3	1	2	3	3	1	1	1	3	3
Websites	1	2	3	2	1	1	3	2	2	2	3	2	3	2	3	3	1
Email/social media	1	1	1	1	3	1	3	2	3	2	3	1	1	3	1	3	3
Bars, pubs, nightclubs	1	1	1	1	2	1	1	1	1	1	1	1	2	1	3	1	3
Inside stores	2	1	1	1	1	1	1	1	1	2	1	1	1	2	3	2	3
Outside stores	2	3	2	1	2	2	1	1	1	1	2	3	1	3	2	2	3
Events & sponsorships	1	1	2	3	1	1	1	1	2	2	3	2	2	2	2	2	3
TV or radio	1	2	1	2	1	3	2	2	3	2	1	2	2	2	2	2	3
Billboards or posters	1	1	1	2	1	1	2	2	2	2	1	3	2	2	2	3	3
Print	1	2	1	1	1	1	2	2	2	2	1	2	3	2	2	2	3
Social media	1	1	2	2	3	3	2	2	2	2	1	1	3	2	2	3	3
TOTAL SCORE	13	16	16	17	17	17	19	19	20	20	20	21	21	22	23	26	31

Outline

- 1. Product trends**
- 2. Purchase source & price**
- 3. Product labelling & warnings**
- 4. Product standards**





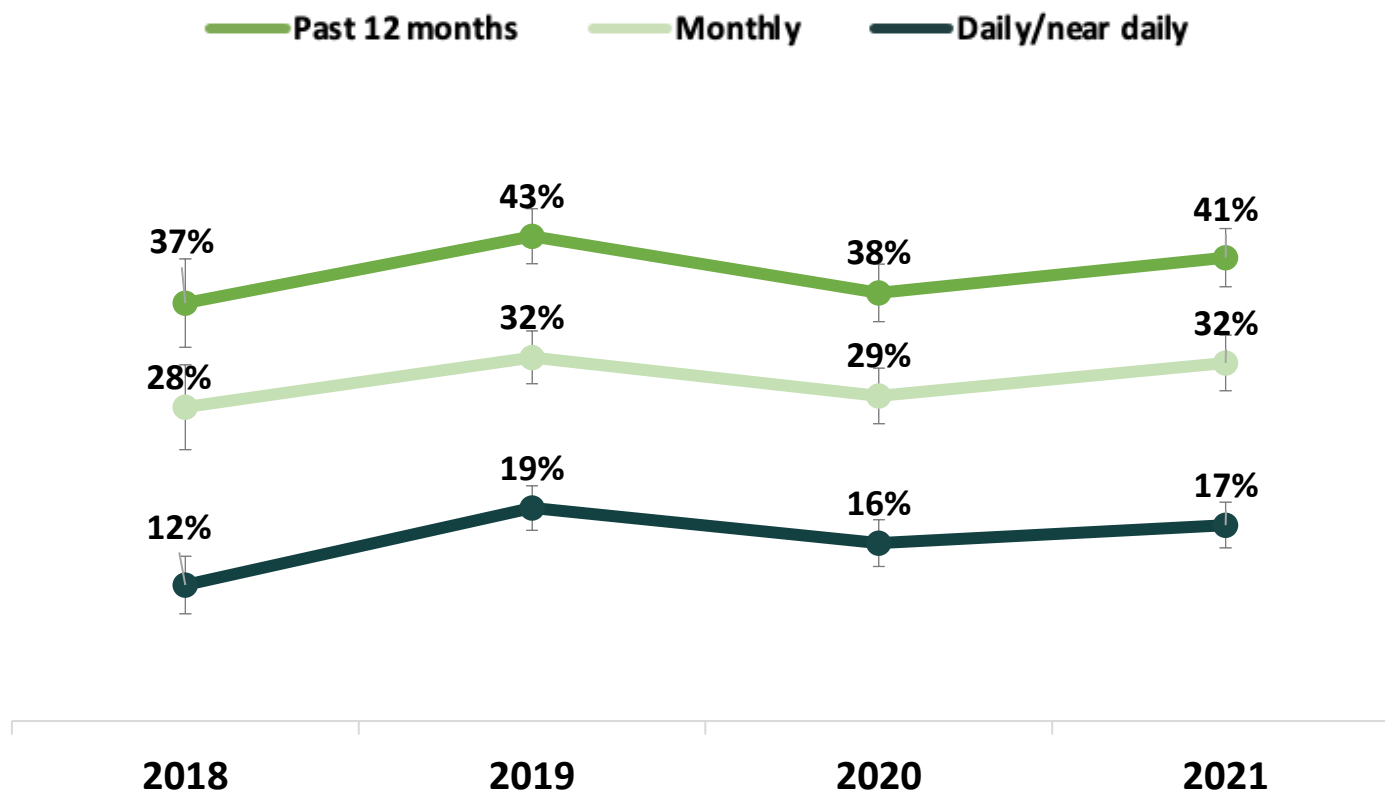
How are patterns of cannabis use changing?



ICPS sample has higher cannabis prevalence, similar trends over time.

Cannabis prevalence

ALL RESPONDENTS WASHINGTON STATE 2018-2021, N=7,291

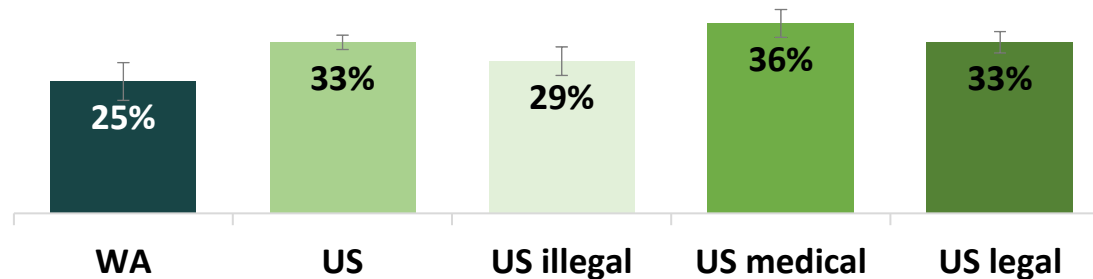


One quarter identify as 'medical user'

~10% have 'current' medical authorization

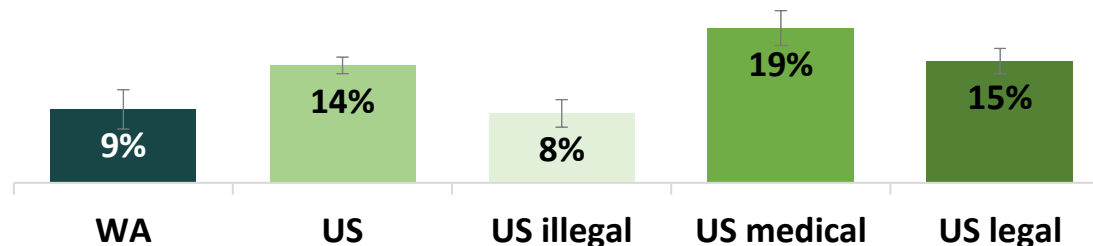
Percent of consumers who self-identify as a medical marijuana user

% 'YES', PAST 12-MONTH CONSUMERS, 2021, N= 10,361



Recommendation to use medical marijuana in the past 12 months?

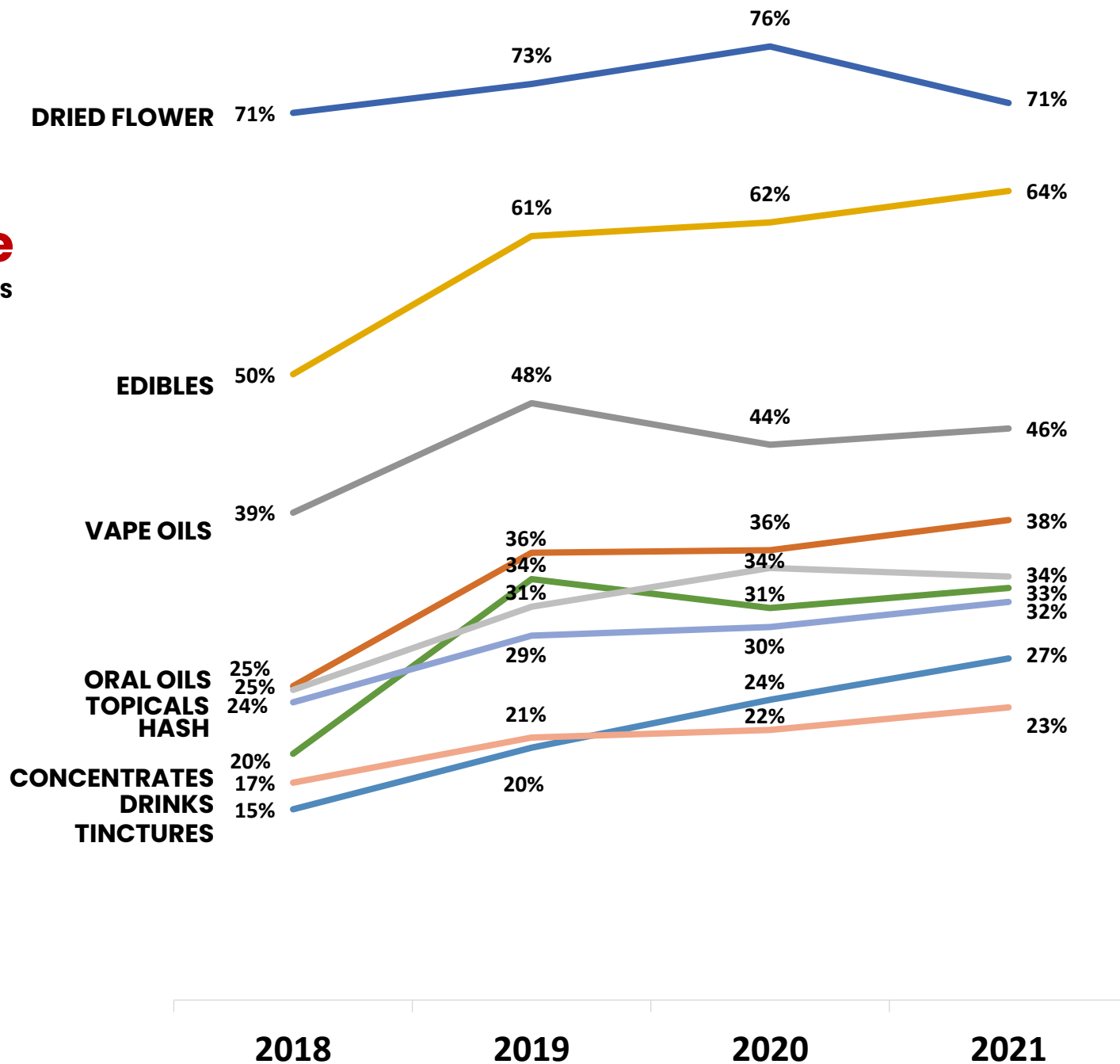
% 'YES', PAST 12-MONTH CONSUMERS 2021, N=10,468



Product use

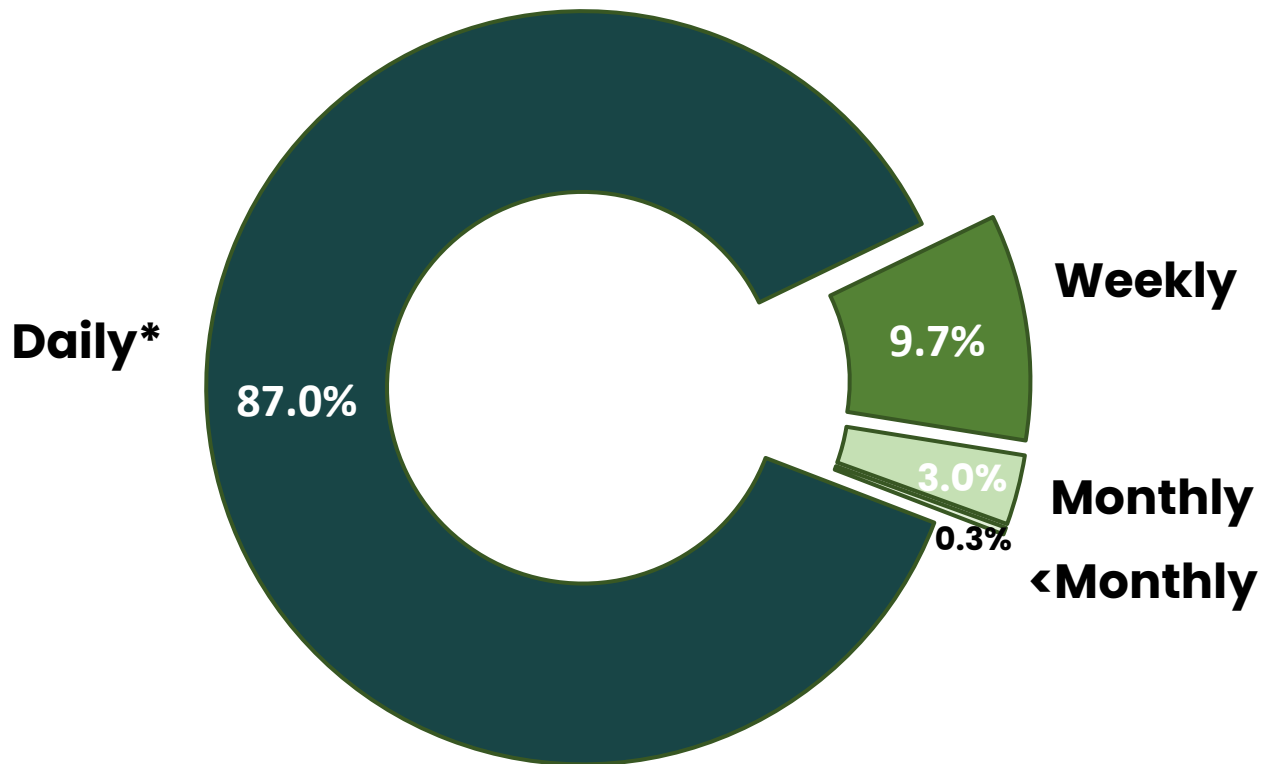
PAST 12-MONTH CONSUMERS

WASHINGTON STATE, n=2,731



Daily consumers account for vast majority of consumption.

Percentage of all dried flower consumption – By frequency of use
2020 AMONG CONSUMERS IN PAST 12 MONTHS, N=6,671

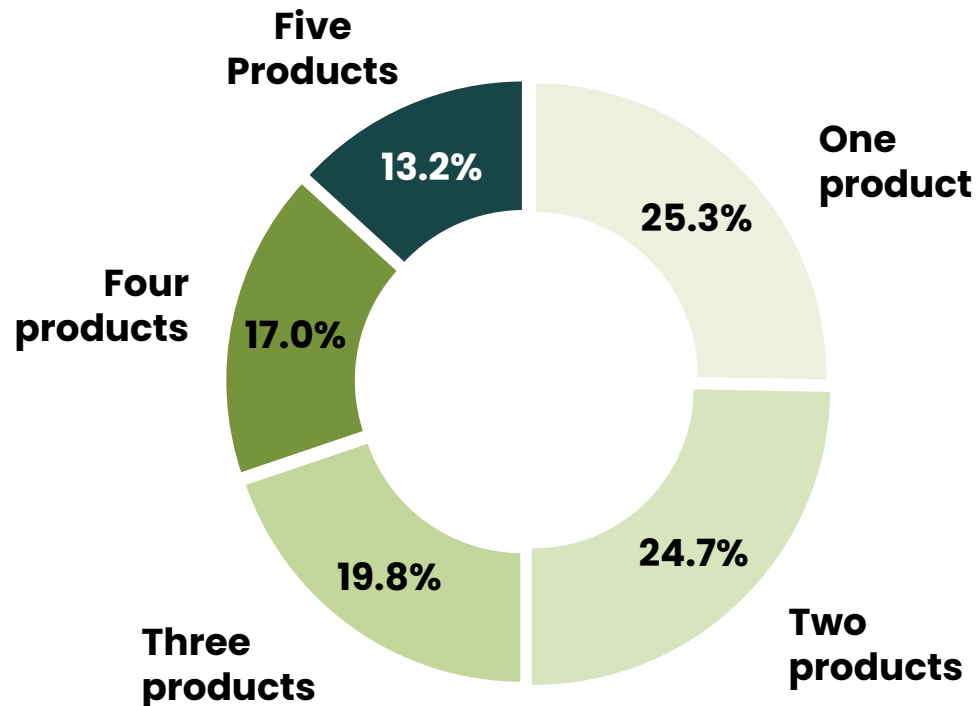


* ≥5 days / week

Most consumers use more than one type of product.

Number of products used

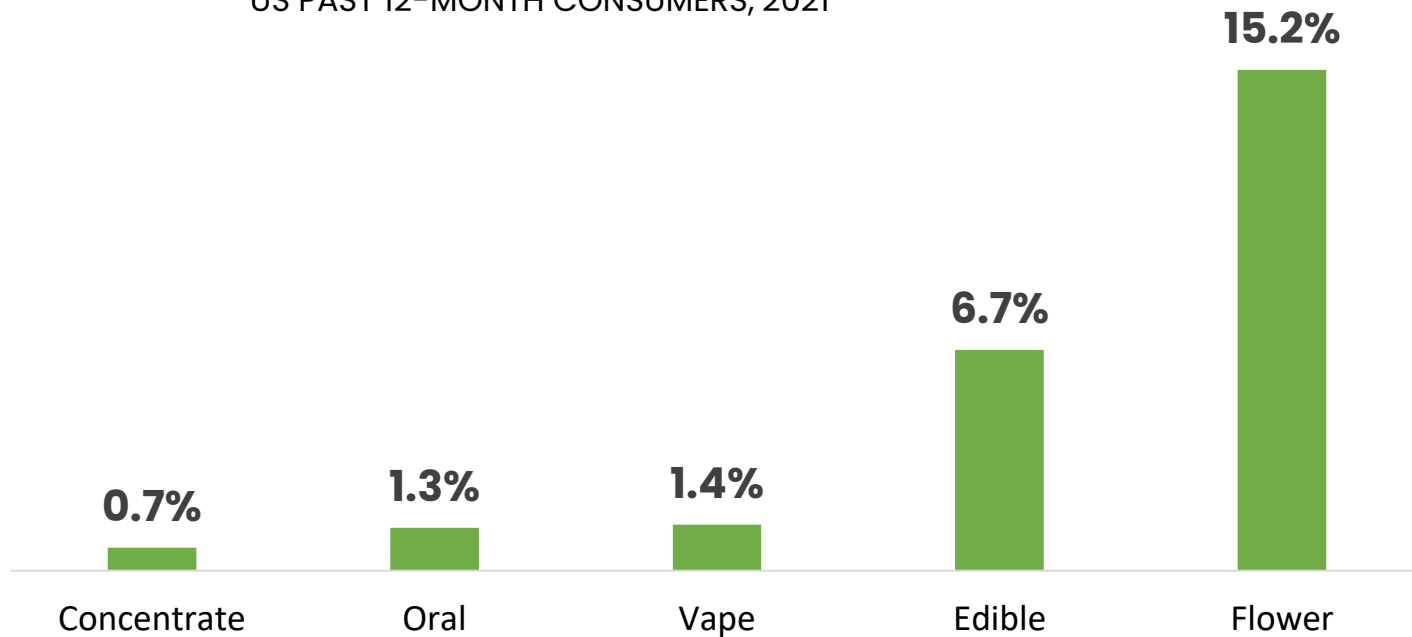
U.S. PAST 12-MONTH CONSUMERS, 2021 (N=10,154)



Exclusive use of 'extracts' is very rare.

Percentage of consumers that exclusively use each product

US PAST 12-MONTH CONSUMERS, 2021

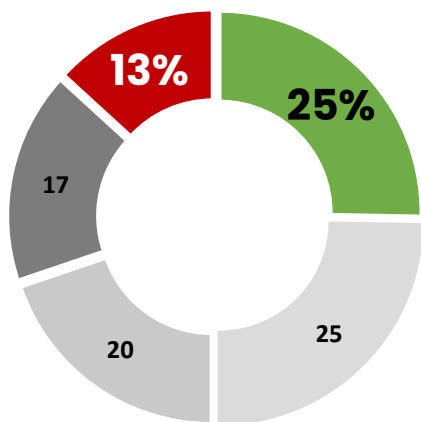


US consumers report more poly product use than in other countries.

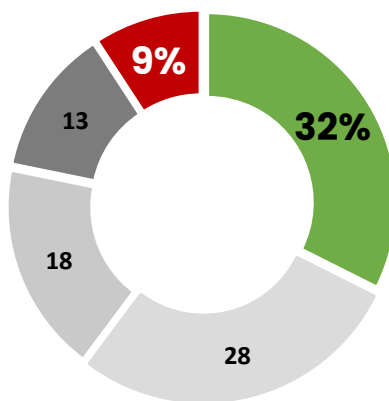
Number of products used

US PAST 12-MONTH CONSUMERS, 2021

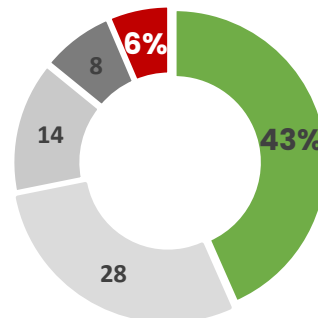
UNITED STATES



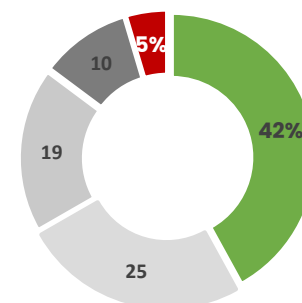
CANADA



NEW ZEALAND



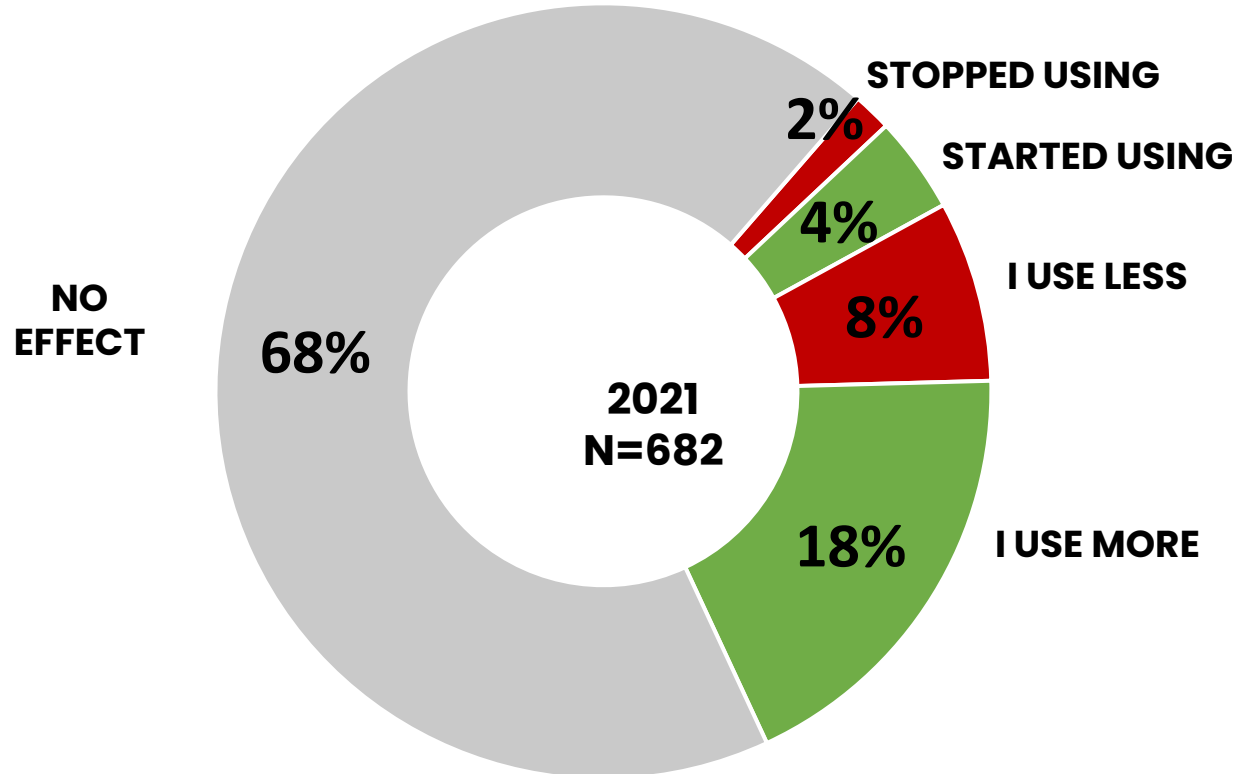
AUSTRALIA



1 product
5 Products

Impact of COVID-19 pandemic

Amount of cannabis used





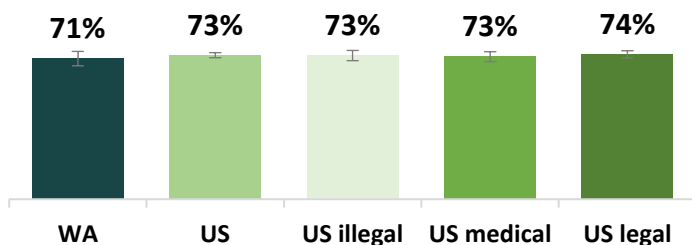
Are product trends in Washington State similar to other states?



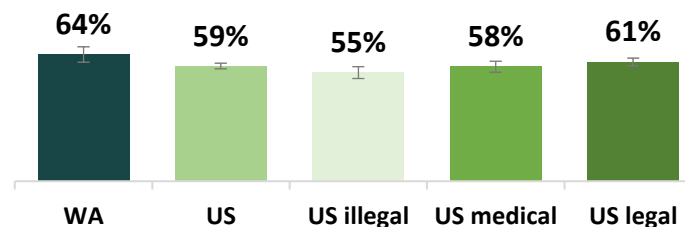
Product differences between jurisdictions narrowing.



Dried herb



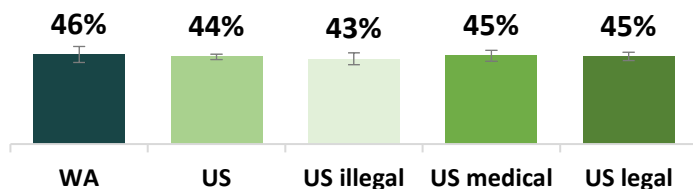
Edibles



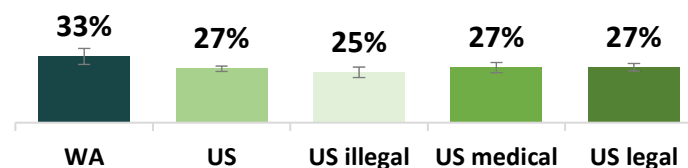
Product differences between jurisdictions narrowing.



Vape oils



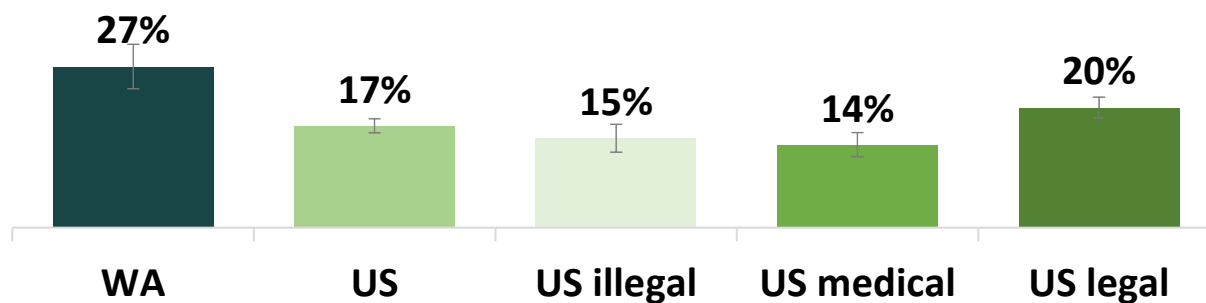
Solid concentrates



Product differences between jurisdictions narrowing.



Cannabis drinks





Recent trends in product use



Increase in 'processed' flower products.



34% flower bought as pre-roll at 'last purchase'



Illegal: 25%

Medical: 26%

Adult legal: 38%

The last time you bought dried herb, was it a pre-rolled joint (i.e., rolled into a joint before purchase)?

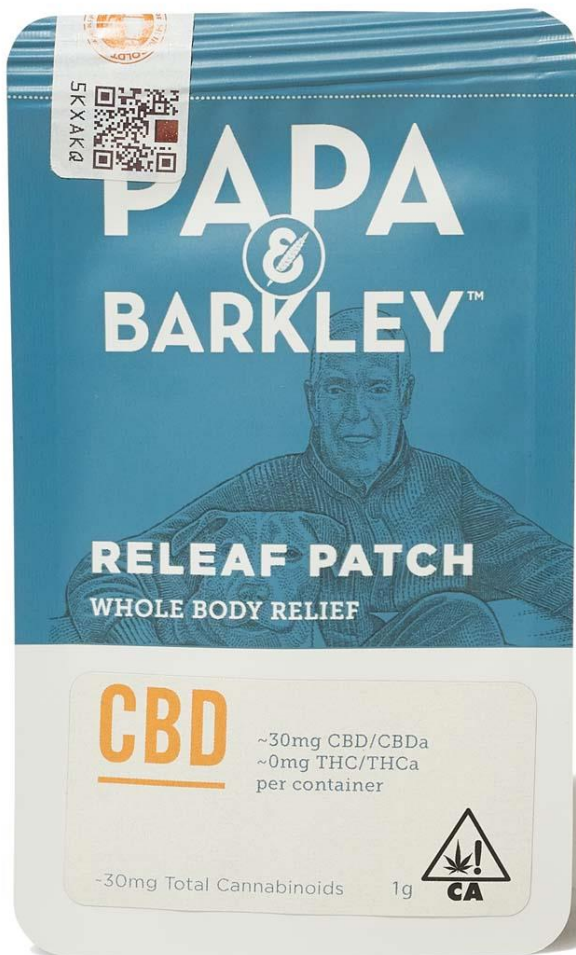
2021, CONSUMERS THAT PURCHASED FLOWER IN PAST 12-MONTHS N=5,626

25% pre-rolls at last purchase
that were 'infused' products



**Dried herb dipped in high-potency oil or
mixed with concentrate (e.g., moonrockets)**

2021, AMONG PURCHASERS OF DRIED FLOWER IN PAST 12-MONTHS N=432



**Use of 'CBD only'
products is prevalent.**

27.7%

USE IN PAST 12-MONTHS

2021, N=29,927

Delta-8 THC

TRY DELTA 8 TODAY

Best D8 & D9 in the industry



20LIFE

20% discount - Farm bill compliant



3%

**of all respondents report 'ever'
using a Delta-8 THC product**

Have you ever used a DELTA-8 THC product?

ALL RESPONDENTS, 2021, n=3,645

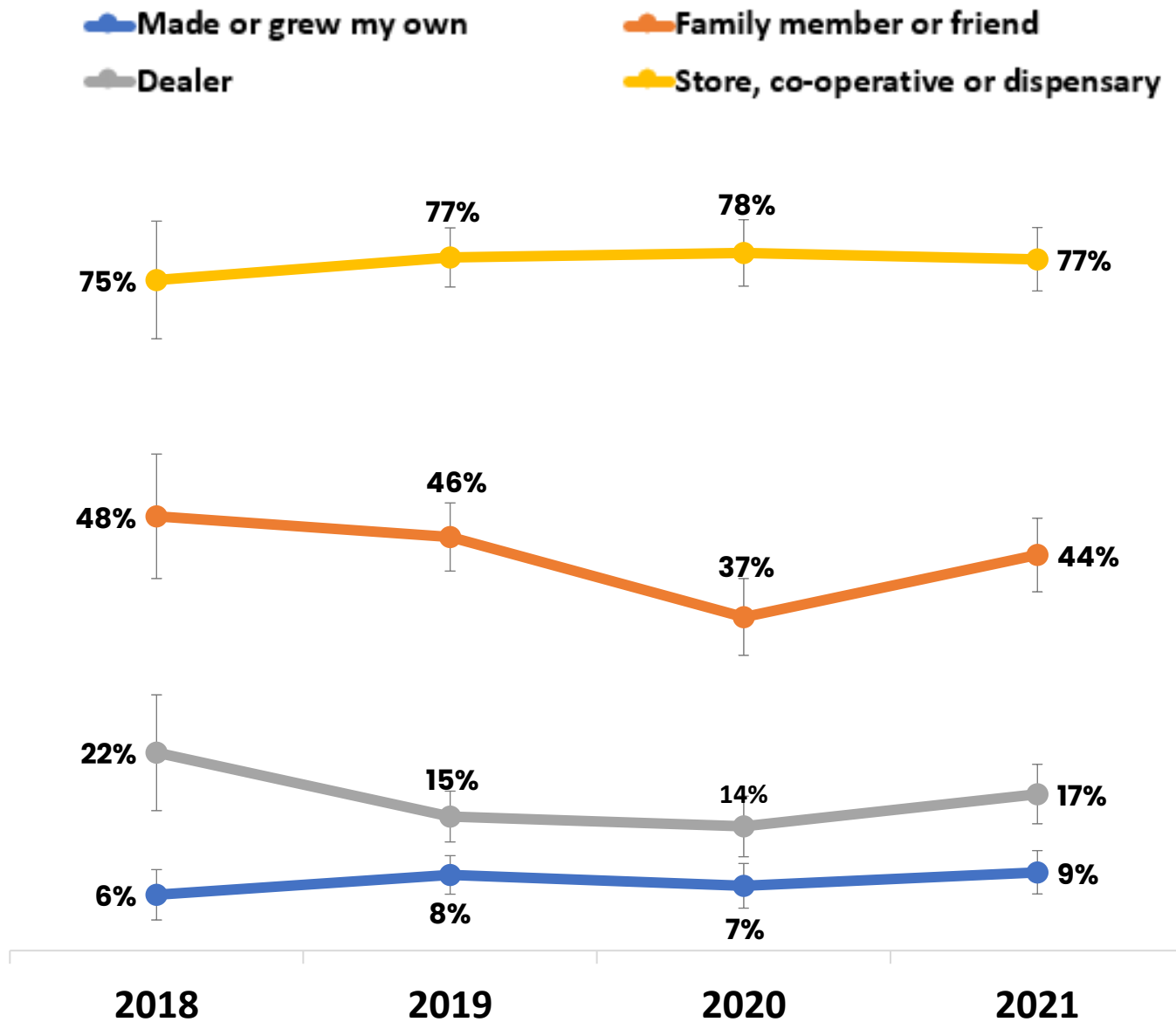


Cannabis sources and transitions to legal market



Cannabis sources

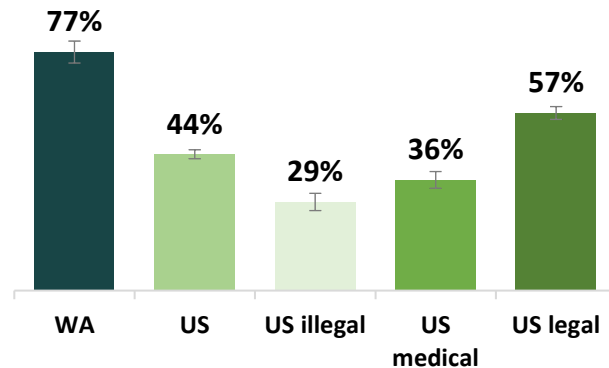
AMONG PAST 12-MONTH CONSUMERS – WASHINGTON ST



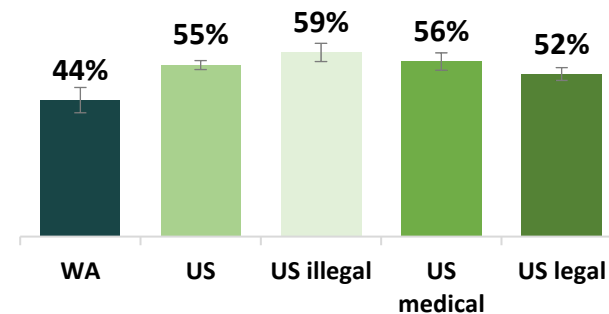
Cannabis sources

AMONG PAST 12-MONTH CONSUMERS

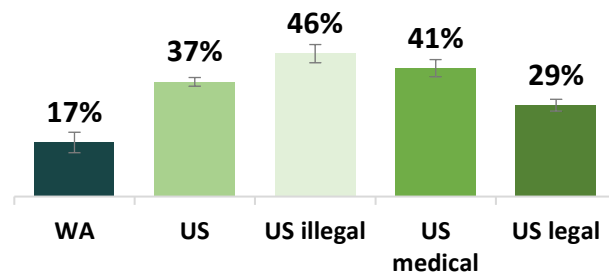
Store, co-op, or dispensary



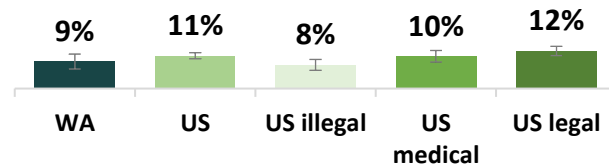
Family member or friend



Dealer



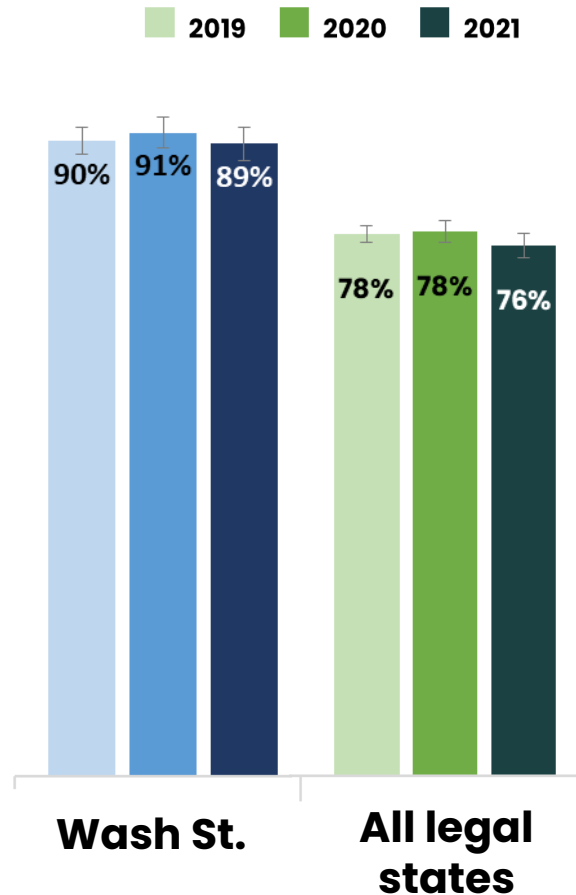
Made or grew my own



High transition to legal retail sources.

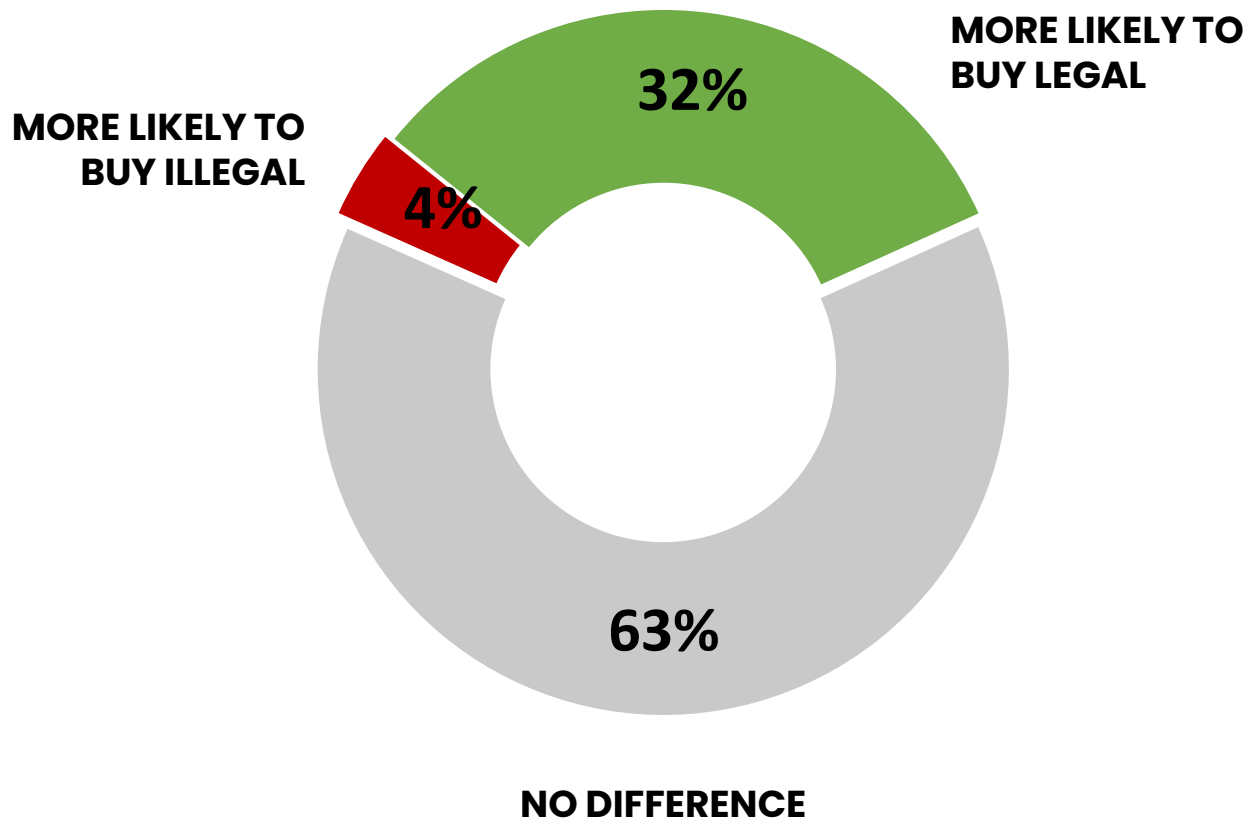
**Mean percentage of all cannabis products purchased
in last 12-months from a legal retail source**

AMONG PAST 12 MONTHS CONSUMERS, RESPONDENTS AGE: 21+



Impact of COVID-19 pandemic

Legal purchase source





How do cannabis prices differ across markets?



Price is lower in legal markets.

Price of dried flower

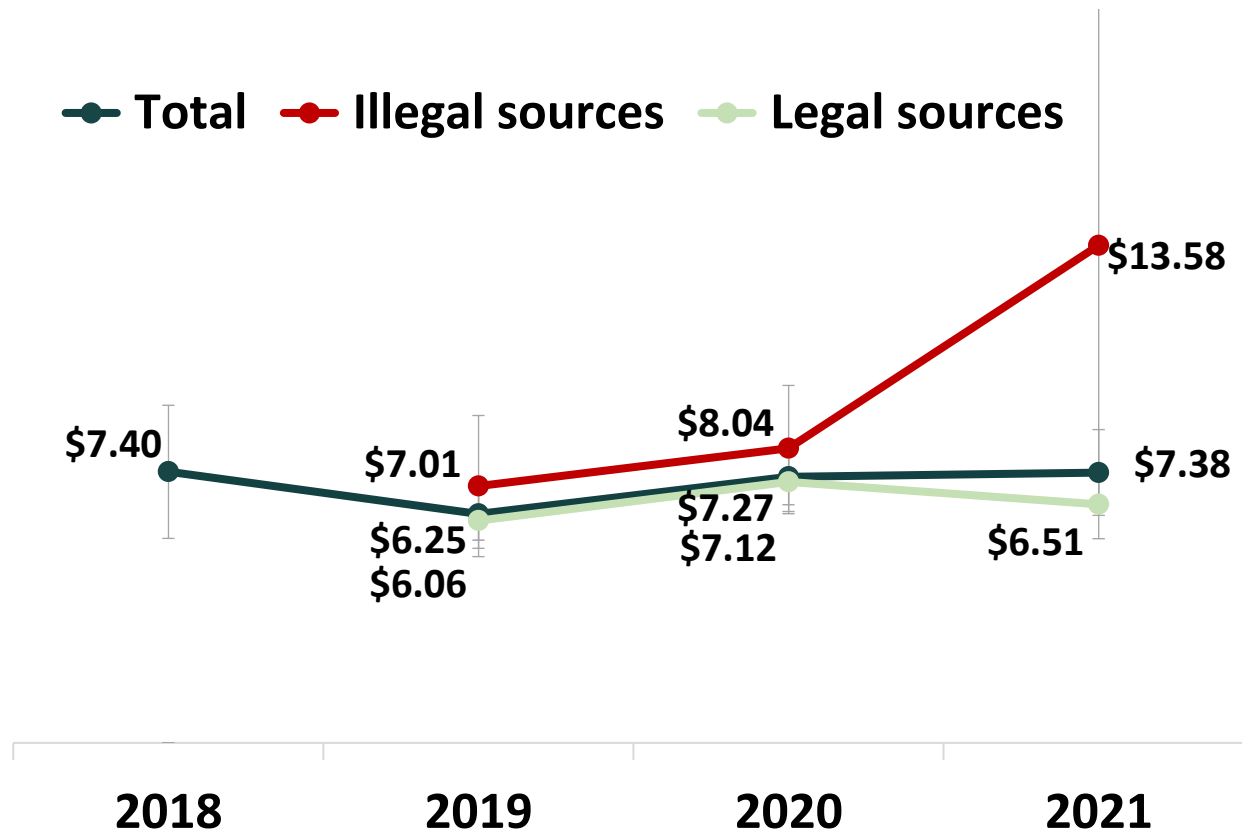
SALES WEIGHTED PRICE-PER-GRAM OF
DRIED FLOWER AT LAST PURCHASE, 2021



Legal price paid relatively stable.

Price paid for dried flower

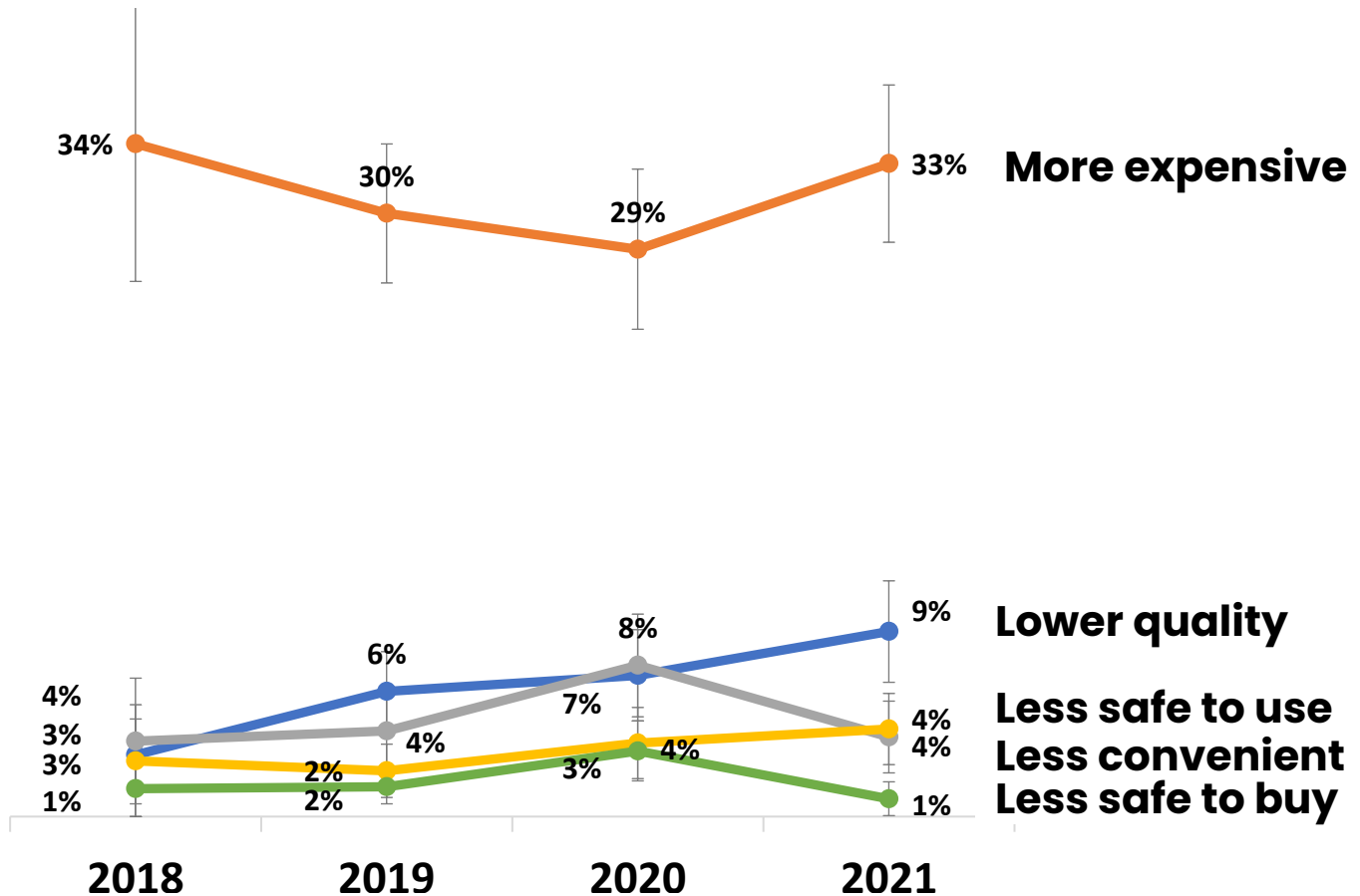
SALES WEIGHTED PRICE-PER-GRAM OF DRIED FLOWER AT
LAST PURCHASE, WASHINGTON, 2018-2021, n=1,283



Perceptions of legal cannabis generally positive.

Compared to illegal cannabis, legal cannabis is....

PAST 12-MONTH CONSUMERS, WASHINGTON STATE, 2018-2021



Reasons for purchasing from illegal sources

PAST 12-MONTH CONSUMERS WHO REPORTED PURCHASING ILLEGALLY, WA, 2021



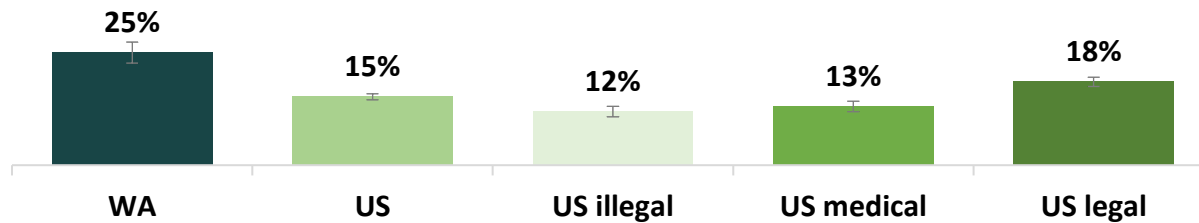
REGULATIONS

Health warnings & labelling

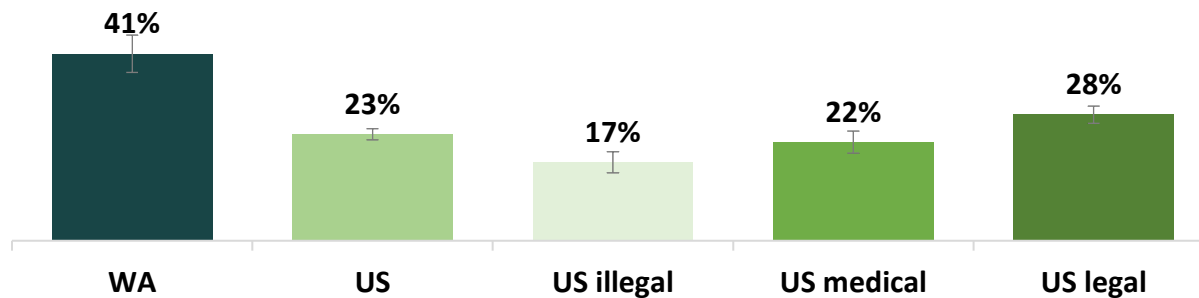


Seeing health warnings on cannabis products

ALL RESPONDENTS



PAST 12-MONTH CONSUMERS





CANADA

**More comprehensive health warnings
have greater efficacy.**

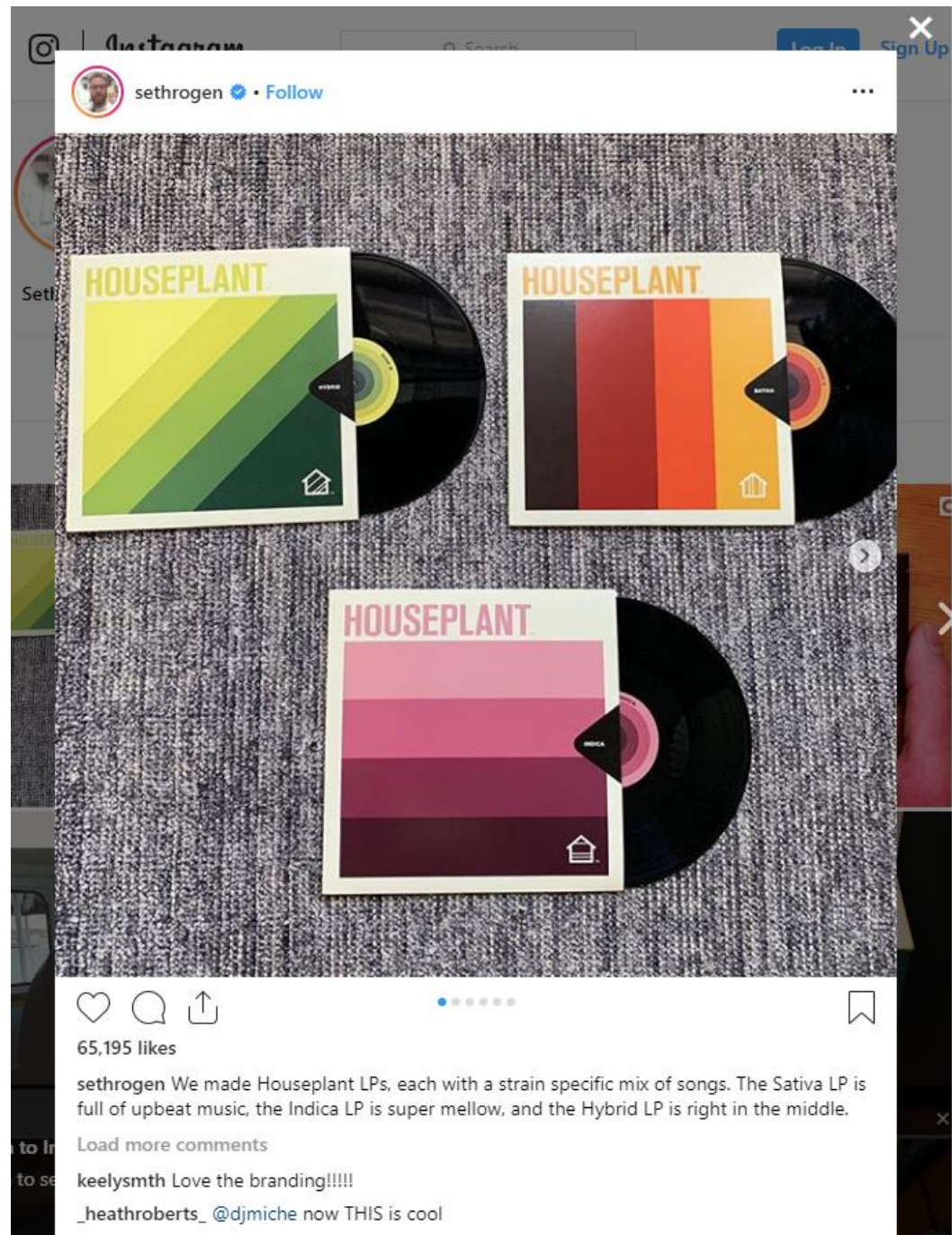


Advertising and promotion restrictions for cannabis



CANNABIS POLICY

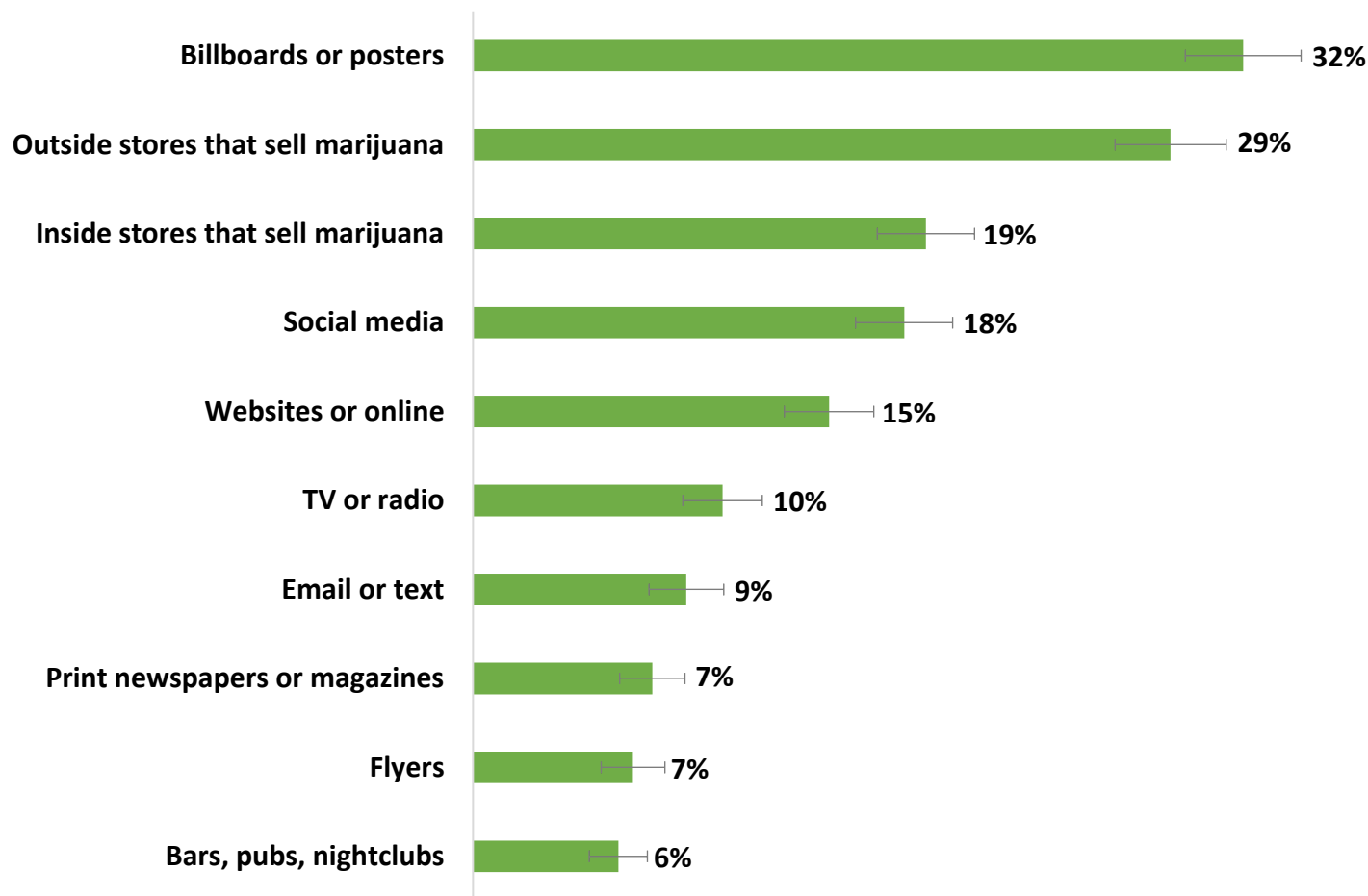
Advertising & promotion



Self-reported exposure to cannabis promotions in the past 12-months

By channel

% NOTICED CANNABIS PROMOTION FROM EACH SOURCE 2021 N= 16,952

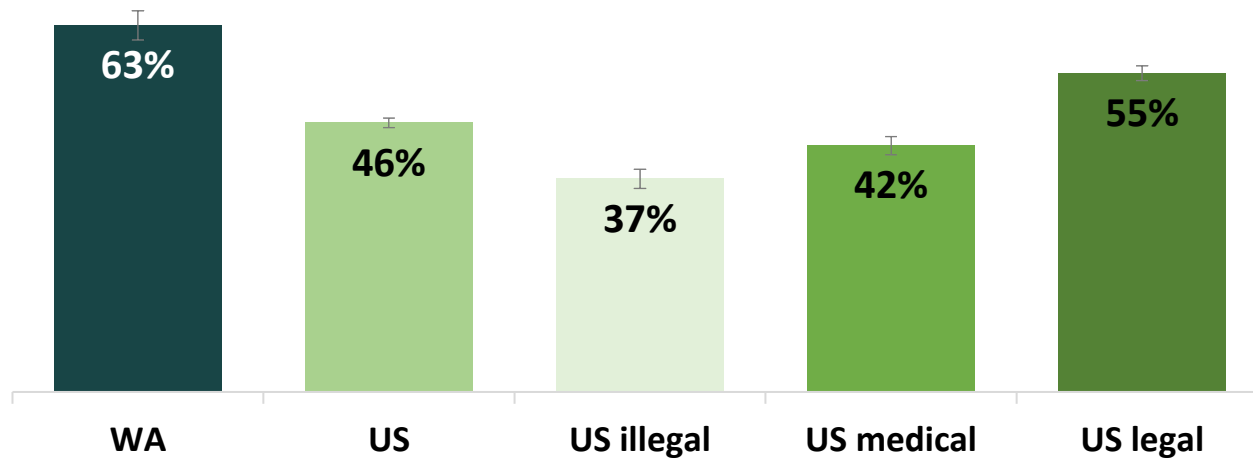


Self-reported exposure to 'any' cannabis promotions in the past 12-months – **By jurisdiction**

% NOTICED ANY CANNABIS PROMOTIONS 2021, ALL RESPONDENTS

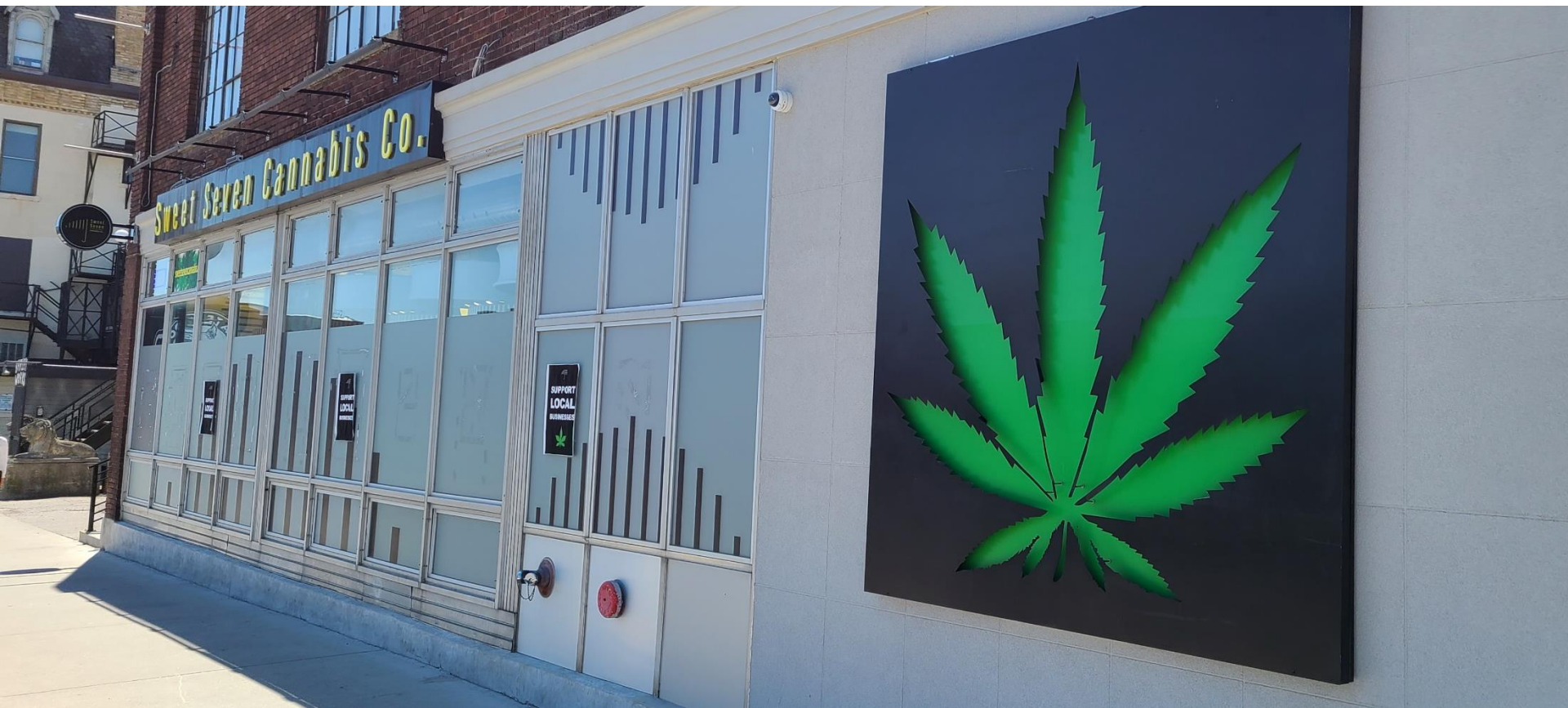
Noticing any cannabis ads and promotions – 2021

AT LEAST ONE LOCATION IN THE PAST 12 MONTHS



CANADA

Comprehensive restrictions on advertising and promotion



Are there differences in exposure between legal jurisdictions based on strength of restrictions?

Advertising and promotional promo restrictions in jurisdictions that legalized recreational cannabis, as of 2018

PROMOTIONAL CHANNEL	CAN	AK	NV	WA	OR	CA	CO	ME	MA
Regular postal mail	3	1	1	1	1	3	3	1	1
Websites	3	3	2	1	3	2	2	3	3
Email or text messages	2	1	1	3	3	2	1	1	1
Bars, pubs, nightclubs	2	1	1	2	1	1	1	2	3
Inside stores	3	1	1	1	1	1	1	1	3
Outside stores	3	2	1	2	1	1	3	1	2
Events & sponsorships	3	2	3	1	1	1	2	2	2
TV or radio	3	1	2	1	2	2	2	2	2
Billboards or posters	3	1	2	1	2	2	3	2	2
Print	3	1	1	1	2	2	2	3	2
Social media	3	2	2	3	2	2	1	3	2
Total score	31	16	17	17	19	19	21	21	23

Self-reported exposure to promotions

By strength of promotional restrictions in 'legal' jurisdictions

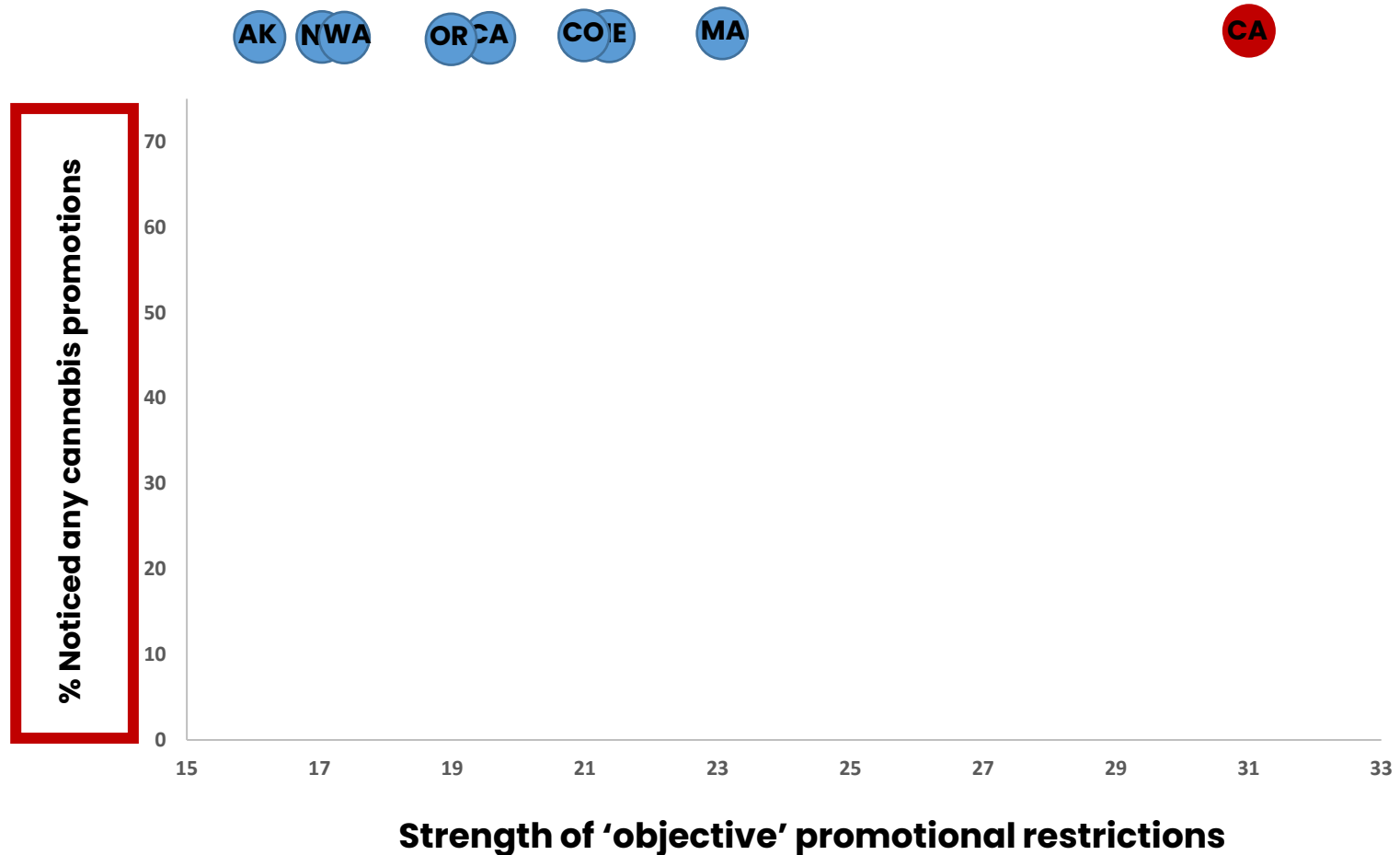
2019 / 2020 N=59,985



Self-reported exposure to promotions

By strength of promotional restrictions in 'legal' jurisdictions

2019 / 2020 N=59,985



REGULATIONS

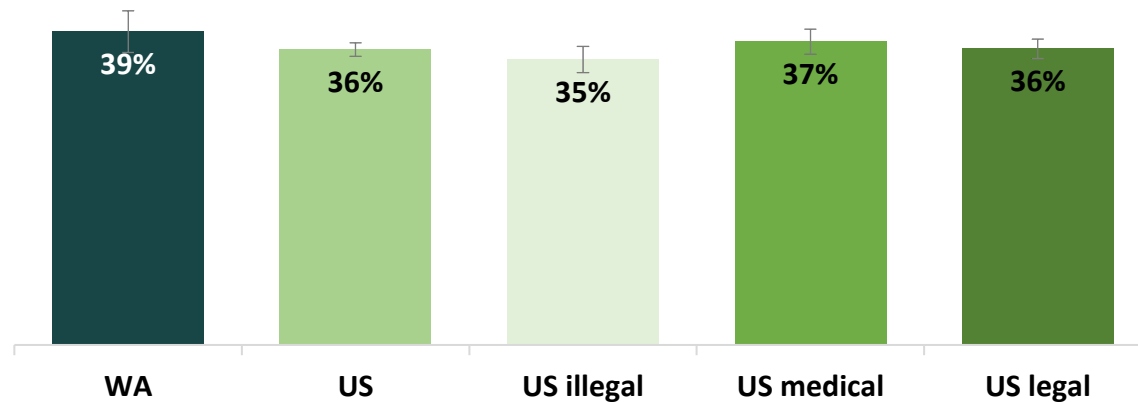
Attitudes and beliefs



Similar social norms across jurisdictions

In your opinion, do people generally approve or disapprove of marijuana?

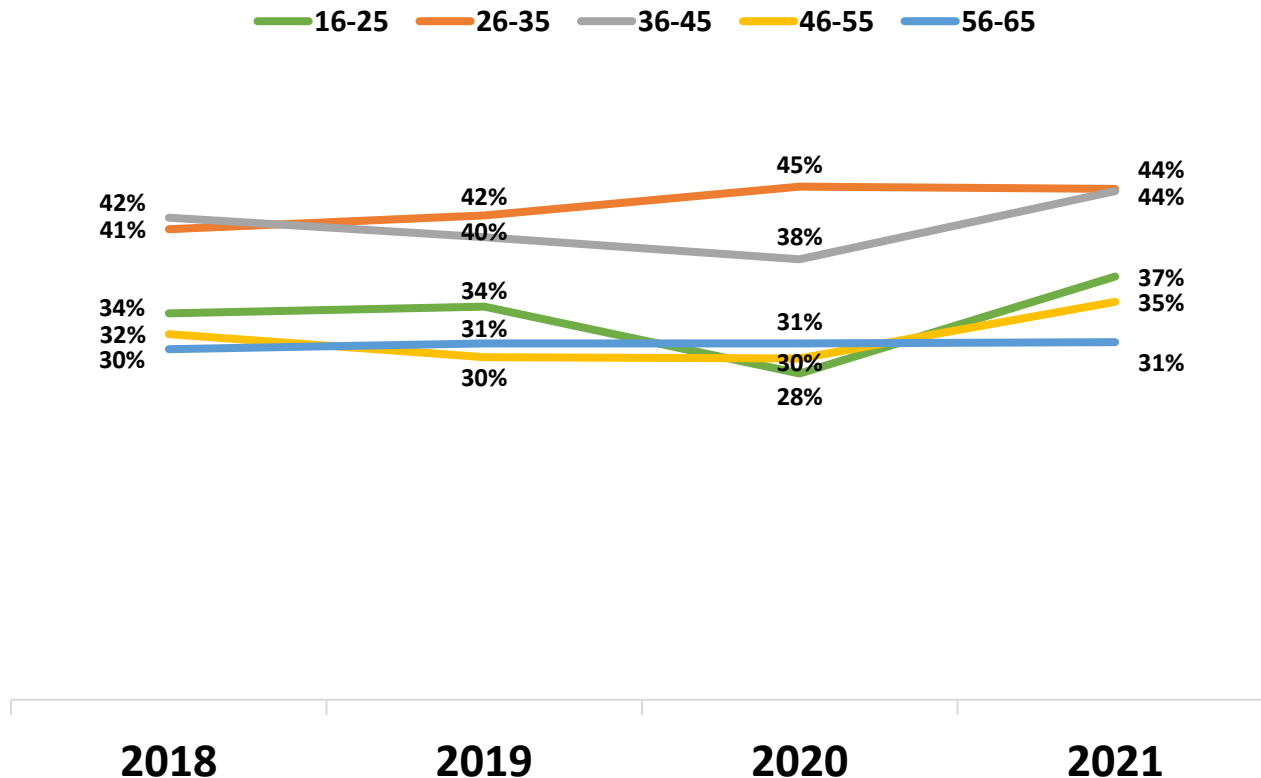
% 'APPROVE' OR 'STRONGLY APPROVE', 2021



Similar trends in social norms over time.

In your opinion, do people generally approve or disapprove of marijuana?

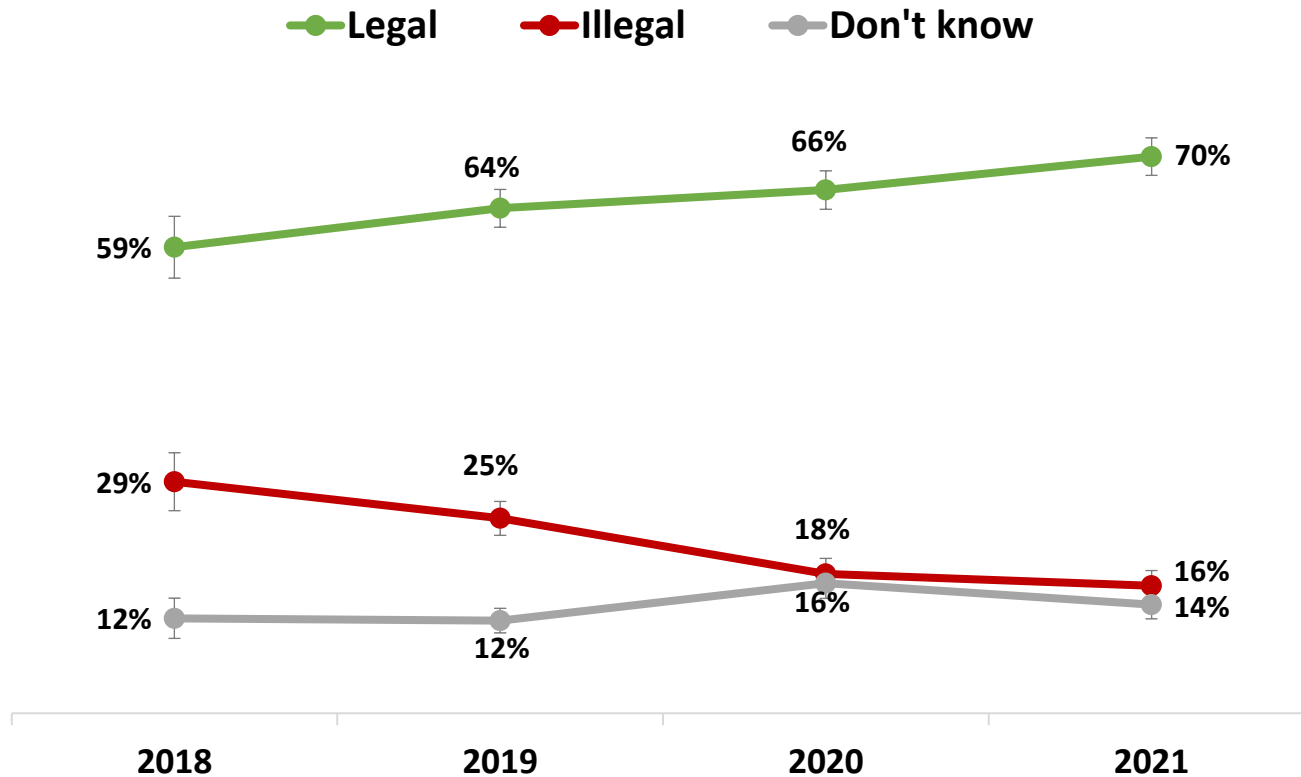
% 'APPROVE' OR 'STRONGLY APPROVE', 2021



Support for legalization has increased.

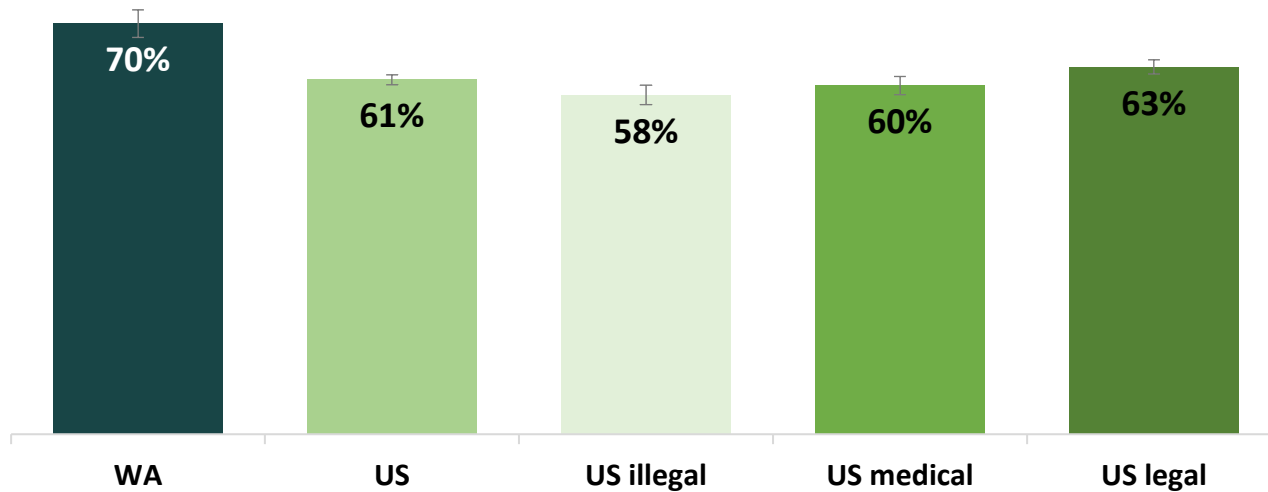
Recreational (non-medical) marijuana should be...

AMONG ALL RESPONDENTS

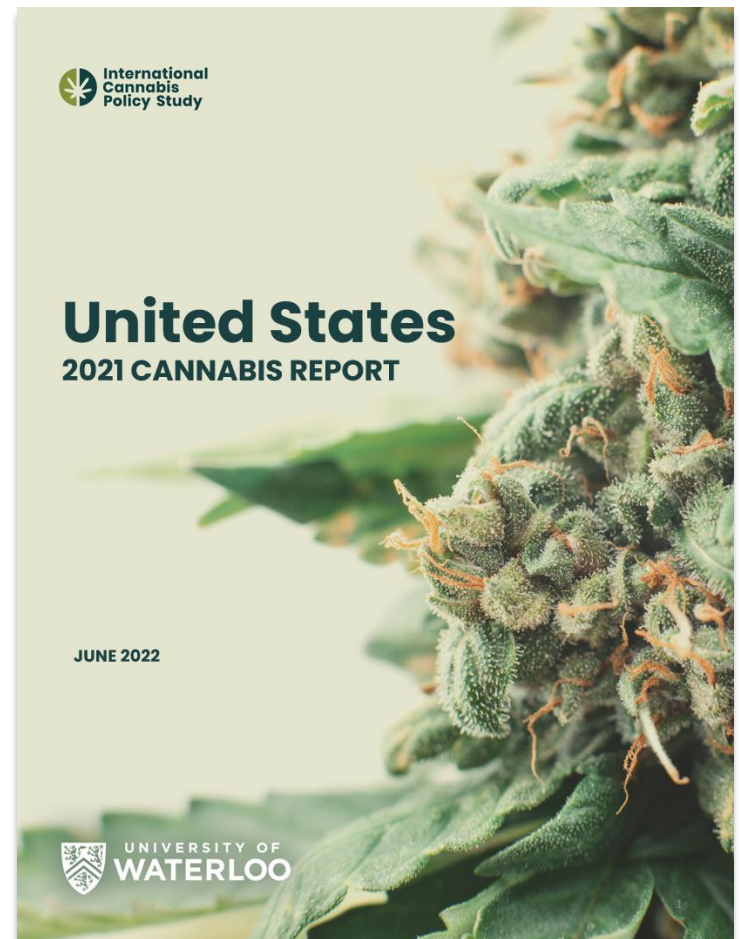
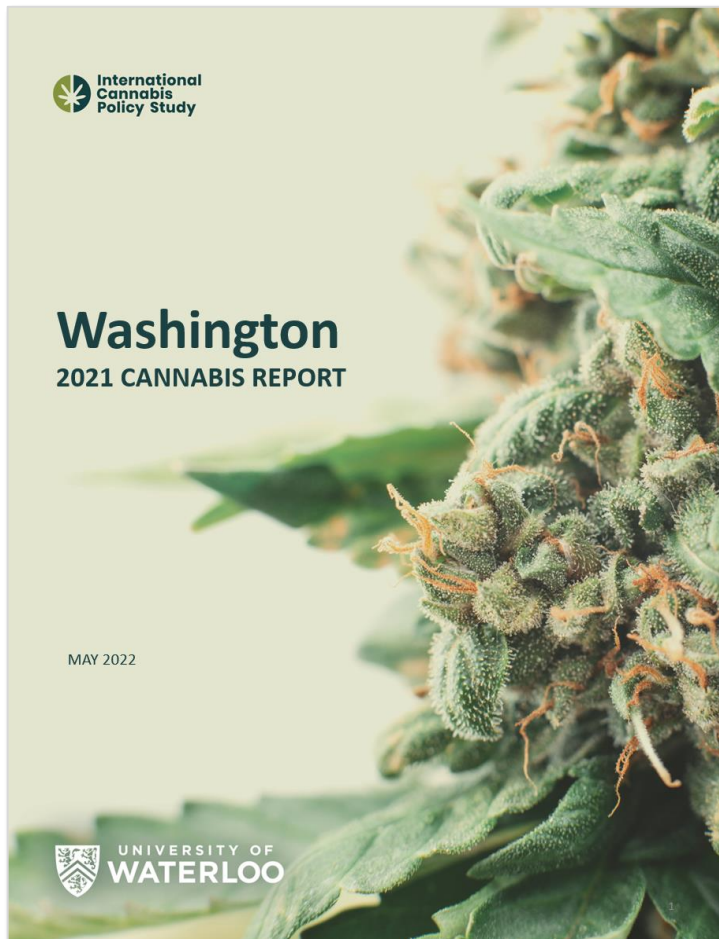


High level of support in Washington St.

Recreational (non-medical) marijuana should be...
AMONG ALL RESPONDENTS



Annual reports



www.cannabisproject.ca



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cannabis legalization and public
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Thank you.

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