

Forward

The International Cannabis Policy Study is an international research collaboration designed to examine cannabis policy and public health impact. The project started in 2018 and includes annual population-based surveys in Canada and the United States (since 2018), Australia and New Zealand (since 2021), and Germany and the United Kingdom (since 2023).

The current report summarizes findings among respondents from Washington for the 2023 survey, with comparison to previous years. Additional details are available upon request.

Visit the study website for more information: www.cannabisproject.ca.





FUNDING

FUNDING FOR THIS REPORT WAS PROVIDED BY THE WASHINGTON STATE LIQUOR AND CANNABIS BOARD. FUNDING FOR THE BROAD ICPS PROJECT WAS PROVIDED BY A CANADIAN INSTITUTES OF HEALTH (CIHR) PROJECT GRANT AND A CIHR PARTNERSHIPS FOR CANNABIS POLICY EVALUATION TEAM GRANT.

ETHICS CLEARANCE

THE PROJECT HAS BEEN REVIEWED BY AND RECEIVED ETHICS CLEARANCE THROUGH A UNIVERSITY OF WATERLOO RESEARCH ETHICS COMMITTEE (ORE#31330).

SUGGESTED CITATION

HAMMOND D, IRANIPARAST M, DANH HONG D, RYNARD V, BURKHALTER R. INTERNATIONAL CANNABIS POLICY STUDY - WASHINGTON 2023 SUMMARY. MAY 2024.

CONTACT

DAVID HAMMOND PhD
PROFESSOR
SCHOOL OF PUBLIC HEALTH SCIENCES
UNIVERSITY OF WATERLOO
DHAMMOND@UWATERLOO.CA
519 888 4567 EXT. 46462
WWW.CANNABISPROJECT.CA



Methods

OVERVIEW

The International Cannabis Policy Study is a repeat cross-sectional survey conducted annually in the United States and Canada (since 2018), Australia and New Zealand (since 2021), and Germany and the United Kingdom (since 2023) to examine trends in cannabis. This report summarizes key indicators from the 2023 ICPS survey in Washington from September 16 to November 7, 2023.

SAMPLE

Respondents were aged 16-65 years and were recruited through the Nielsen Consumer Insights Global Panel. The analytic sample for 2023 comprised 72,382 respondents, including in Canada (n=19,964), the United States (n=39,653), Australia (n=3,042) and New Zealand (n=2,676), the UK (n=3,444), and Germany (n=3,603). The results in the current report focus on the subsample of 13,797 respondents from Washington who participated in the 2018 (n=1,157), 2019 (n=2,359), 2020 (n=1,976), 2021 (n=1,799), 2022 (n=3,131), and 2023 (n=3,375) surveys.

SURVEY

The survey includes the following:

- prevalence and patterns of cannabis use;
- cannabis purchasing and price;
- cannabis consumption and modes of use;
- · commercial retail environment;
- risk behaviours;

- cannabis knowledge, perceptions of risk and social norms;
- exposure to health warnings and public educational campaigns;
- exposure to cannabis marketing and branding;
- substance use and other risk behaviours; and
- socio-demographics and socioeconomic status.

DATA ANALYSIS

Post-stratification survey weights were created using age-by-sex-by-state, ethnicity-by-census division, education-by-state, and age-by-smoking status groups. All estimates in the current report are weighted and rescaled to the original sample size within each state.

Comparisons are provided between Washington and other states. In the current report, the term 'legal' refers to states that had legalized non-medical cannabis for adult use at the time of data collection in each year. 'Medical' refers to states that had legalized medical but not non-medical adult use cannabis at the time of data collection. 'Illegal' refers to all other states.

TECHNICAL REPORT

The survey and technical report are available at:

www.cannabisproject.ca/methods.
The technical report includes
detailed information on methodology
and survey weighting.

Sample profile

Washington

	2018	2019 2020		2021	2023	
	n=1,157	n=2,359	n=1,976	n=1,799	n=3,131	n=3,375
Sex						
Female	571	1,164	974	885	1,530	1,641
Male	586	1,195	1,003	914	1,601	1,734
Age group						
16-25	165	456	385	329	562	628
26-35	321	541	452	435	750	801
36-45	203	483	380	354	659	719
46-55	247	429	383	342	572	609
56-65	222	450	376	339	588	618
Ethnicity						
White	948	1,944	1,589	1,472	2,424	2,742
Am. Indian or Alaska Native	10	36	19	25	58	56
Asian	92	120	124	110	207	173
Black or African American	39	74	106	78	109	143
Native Hawaiian or Pac Islander	5	12	9	12	32	30
Other/2+ races/Unstated	63	172	130	104	301	230
Education level						
<high school<="" td=""><td>82</td><td>143</td><td>129</td><td>171</td><td>213</td><td>238</td></high>	82	143	129	171	213	238
High school	242	448	364	312	619	617
Some college	597	965	801	702	1,140	1,243
Bachelor's degree	235	794	659	598	1,116	1,247
_						
Income adequacy						
Very difficult	113	256	167	161	353	499
Difficult	240	551	356	336	647	796
Neither easy nor difficult	379	736	634	578	980	970
Easy	248	471	452	392	659	636
Very easy	146	276	301	264	349	376



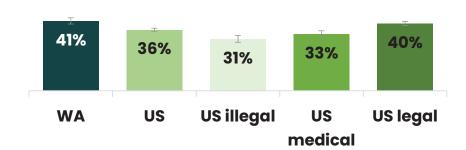
SECTION 1

COMPARISONS BETWEEN WASHINGTON AND OTHER US STATES ON KEY INDICATORS

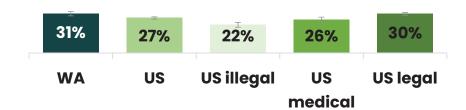


Cannabis prevalence 2023

Past 12 months Cannabis use



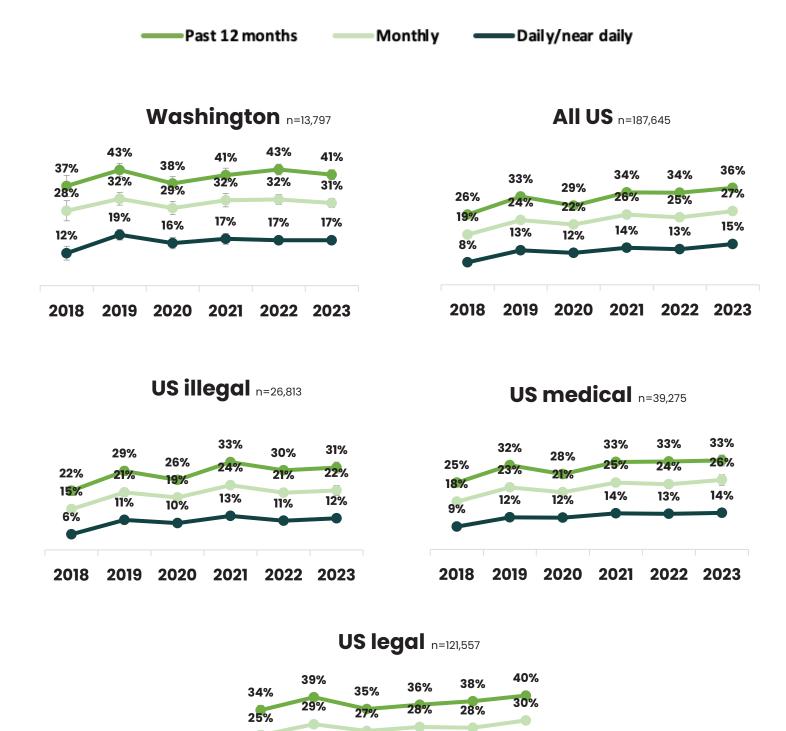
Past month Cannabis use



Daily / near daily Cannabis use



Trends in cannabis prevalence



2018 2019 2020 2021 2022 2023

14%

15%

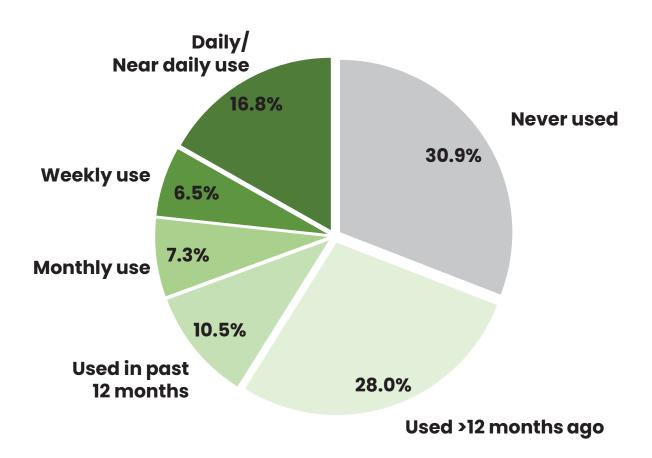
15%

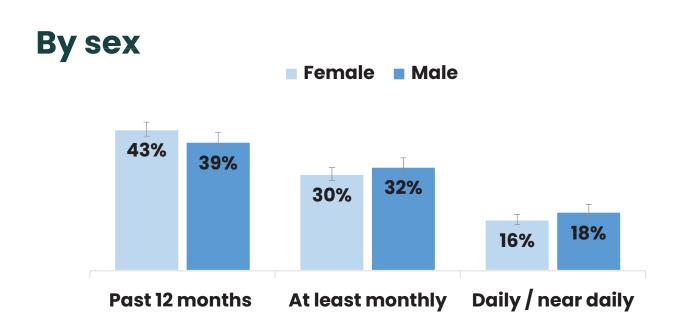
17%

11%

16%

Cannabis prevalence Washington 2023

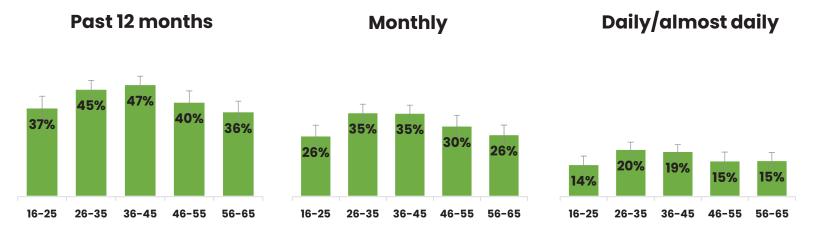






Cannabis prevalence Washington 2023

By age



By education

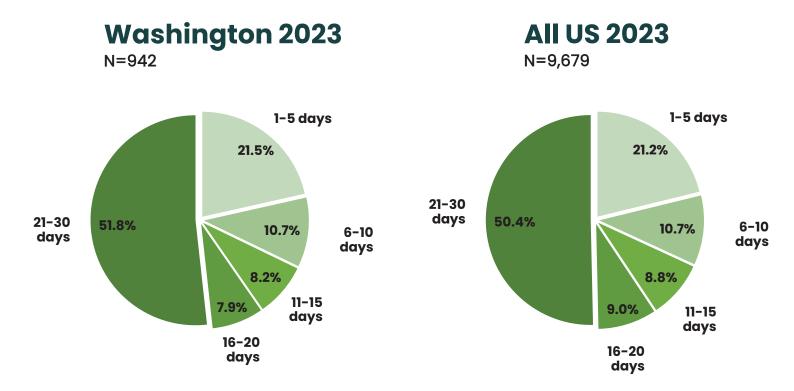




Cannabis use in past 30 days

During the past 30 days, on how many days did you use marijuana?

AMONG PAST MONTH CONSUMERS



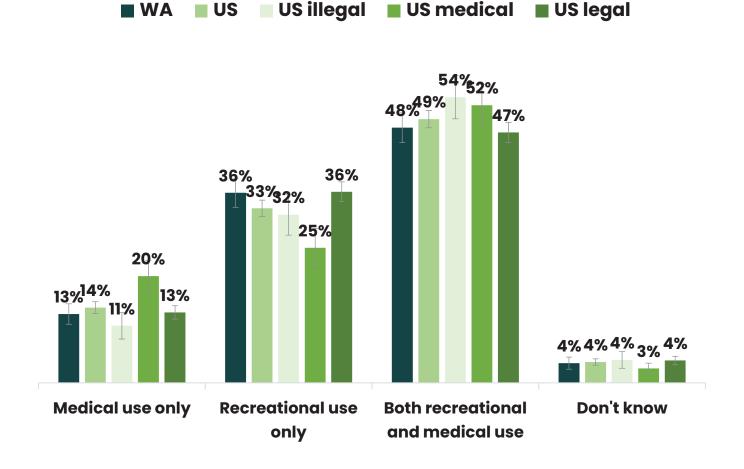


Medical authorization

Overall, 13% of past 12-month cannabis consumers in Washington reported that their cannabis consumption was only for medical purposes, approximately one third (36%) reported they use cannabis for recreational reasons only, while approximately half reported using cannabis for both recreational and medical reasons. The pattern in Washington was very similar to other 'legal' states.

Do you use marijuana for medical reasons, 'recreational' reasons, or both?

% 'YES', PAST 12-MONTH CONSUMERS, 2023, N=15,031



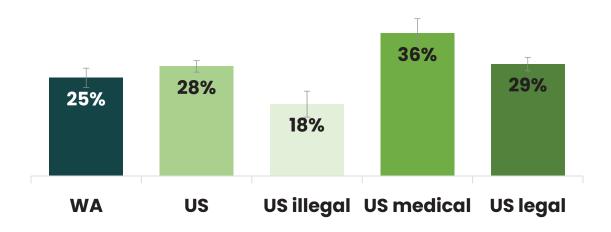


Medical authorization

1 in 4 past 12-month cannabis consumers had 'ever' asked a health professional for a recommendation for medical cannabis. Among those who had asked, about 1 in 4 had ever been refused.

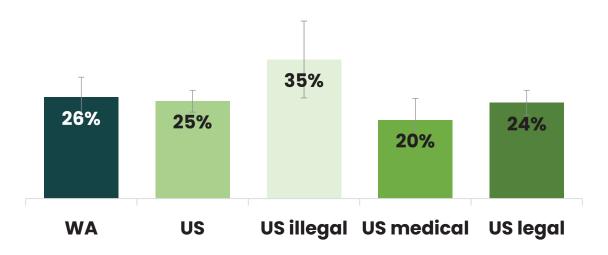
Have you ever asked a licensed health professional for a recommendation to use medical marijuana?

% 'YES', PAST 12-MONTH CONSUMERS, 2023, N=15,025



Have you ever been refused for medical marijuana?

% 'YES', PAST 12-MONTH CONSUMERS WHO HAVE SOUGHT APPROVAL, 2023, N=3,889



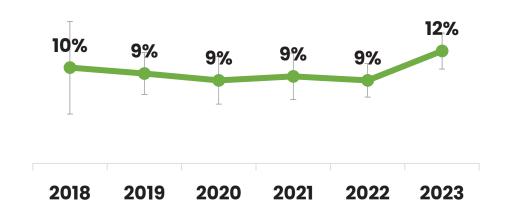


Medical authorization

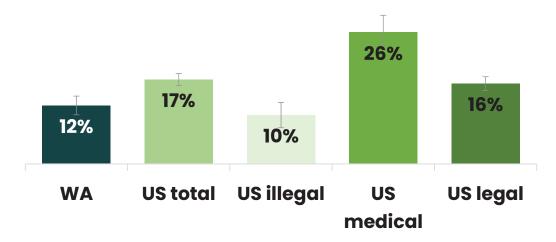
In 2023, 12% of past 12-month cannabis consumers reported having a recommendation for medical cannabis use in the past year – there were relatively few changes between 2018 and 2022 before an increase in 2023.

Did you have a recommendation to use medical marijuana at any time in the past 12 months?

% 'YES', PAST 12 MONTH CONSUMERS IN WASHINGTON, N=5,506



Did you have a recommendation to use medical marijuana at any time in the past 12 months? % 'YES', PAST 12-MONTH CONSUMERS 2023, N=15,146



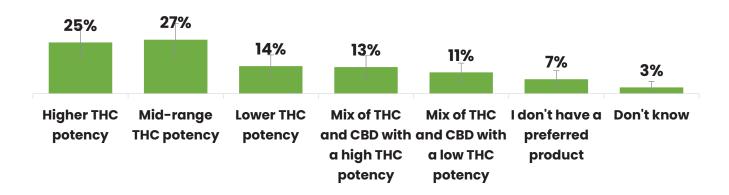


Preferred type of cannabis product for medical use

Overall, 1 in 4 medical cannabis consumers reported that they preferred a product with higher THC potency.

When you use cannabis for medical reasons, what type of product do you prefer?

%, MEDICAL CANNABIS CONSUMERS, 2023, N=158



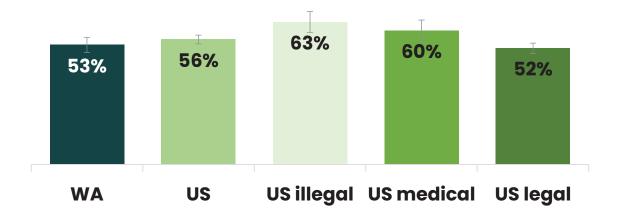


Cannabis use to manage or improve mental health

53% of past month consumers reported improving or managing mental health as one of the main reasons they use cannabis, while 58% reported improving or managing physical health as one of the main reasons.

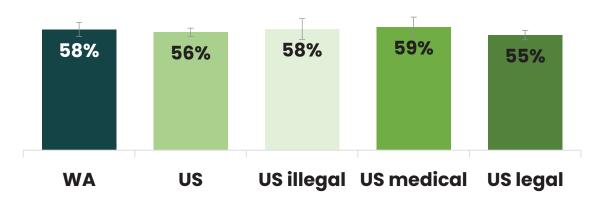
Is improving or managing mental health one of the <u>main reasons</u> you use cannabis?

% 'YES' PAST MONTH CONSUMERS, 2023 N=10,410



Is improving or managing physical health one of the main reasons you use cannabis?

% 'YES' PAST MONTH CONSUMERS, 2023, N=10,400



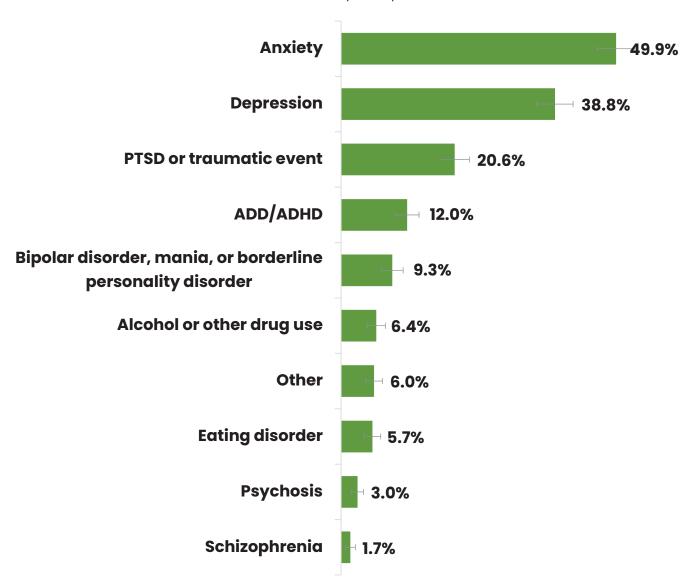


Cannabis use to manage or improve mental health

In 2023, approximately half of past month cannabis consumers reported using cannabis to improve or manage anxiety, followed by depression and PTSD.

Do you <u>currently use</u> marijuana to improve or manage symptoms for any of the following?

% 'YES' PAST MONTH CONSUMERS, 2023, N=994



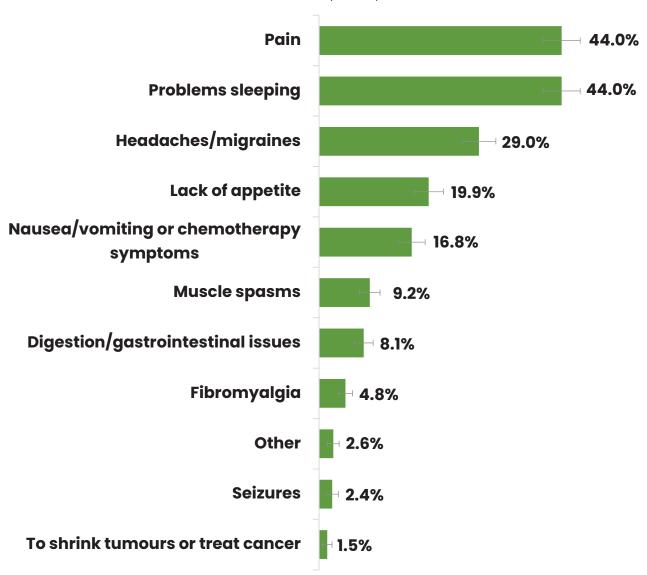


(2) Cannabis use to manage or improve physical health

Past month cannabis consumers reported using cannabis to improve or manage a range of symptoms, including pain, sleeping problems and headaches/migraines.

Do you <u>currently use</u> marijuana to improve or manage symptoms for any of the following?

% 'YES' PAST MONTH CONSUMERS, 2023, N=990

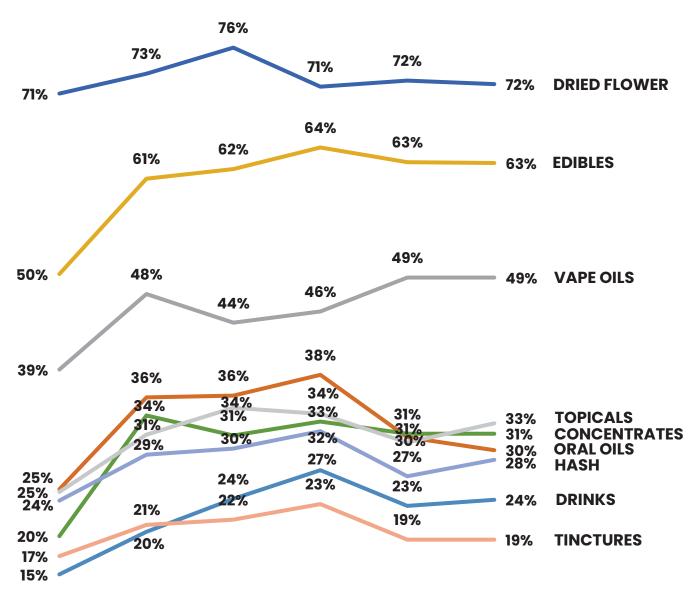




Types of cannabis products

Cannabis consumers 2018-2023

Dried flower was the most commonly used product among past 12-month consumers in all years; the prevalence of dried flower use increased between 2018-2020, decreased in 2021 and remained similar between 2022-2023.

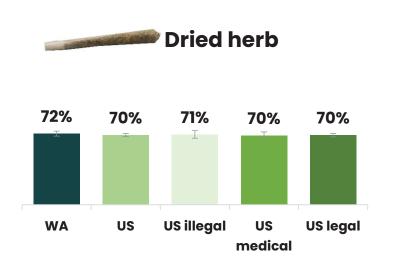


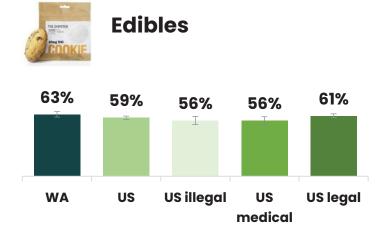
2018 2019 2020 2021 2022 2023

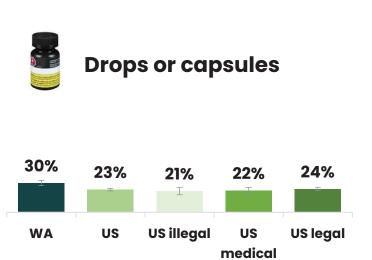


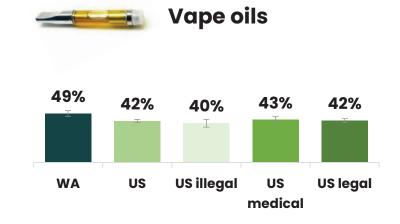
Types of cannabis products Washington 2023

Use of cannabis products among past 12-month consumers in Washington was similar to other state categories; however, use of certain products including drops or capsules, topicals, and hash were notably higher in Washington compared to the other state category averages.





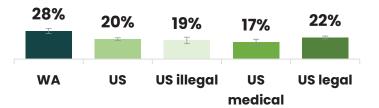




Types of cannabis products Washington 2023

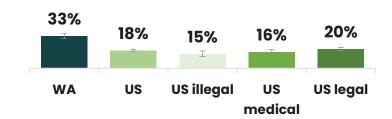


Hash or kief



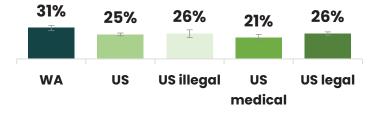


Topicals

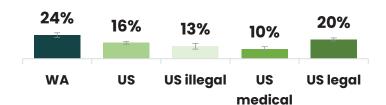




Solid concentrates

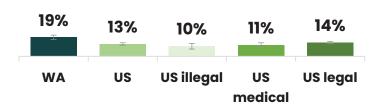








Tinctures

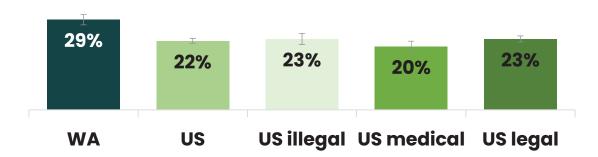


Use of 'non-THC' CBD products

In 2023, 29% of respondents from Washington reported using "CBD-only products" (with no THC) in the past 12 months, a slight decrease from 2022. The most common CBD product types were topicals, edibles, and oil/liquid drops.

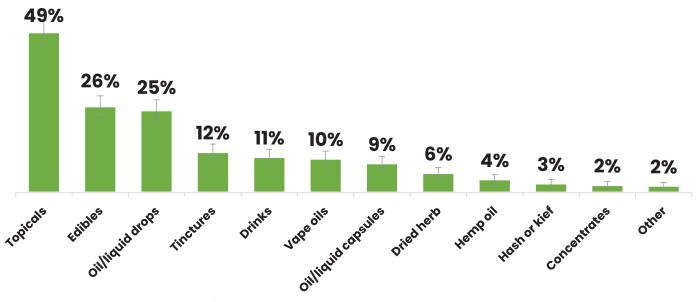
Use of CBD-only products

IN PAST 12 MONTHS, N=39,508



Type of CBD-only products used

AMONG THOSE WHO REPORTED CBD-ONLY PRODUCT USE, N=836





'Novel' products - Awareness

Have you heard of products that contain the following?

% 'YES', ALL RESPONDENTS, 2023, n=39,653

	WA	US	US ILLEGAL	US MEDICAL	US LEGAL
Delta 8	17%	29%	41%	31%	23%
THCA	19%	16%	17%	15%	15%
ННС	6%	7%	8%	6%	7%
THC-O-acetate	7%	7%	8%	7%	7%
ТНСР	9%	9%	9%	9%	8%
Delta 10	8%	15%	21%	16%	11%
Delta 4	5%	7%	9%	7%	6%



Have you ever used the following products? % 'YES', ALL RESPONDENTS, 2023, n=39,653

	WA	us	US ILLEGAL	US MEDICAL	US LEGAL
Delta 8	6%	12%	18%	13%	9%
THCA	8%	6%	5%	5%	6%
ННС	2% —–	3% —-	3%	2% —–	2%
THC-O-acetate	2%	2%	3%	3% ———	2% —-
ТНСР	2%	3%	2%	3%	2%
Delta 10	3%	5%	7%	5%	4%
Delta 4	1%	2%	2%	2%	2%

'Novel' products – Past 30-day use

Have you used these products within the last 30 days?

% 'YES', ALL RESPONDENTS, 2023, n=39,652

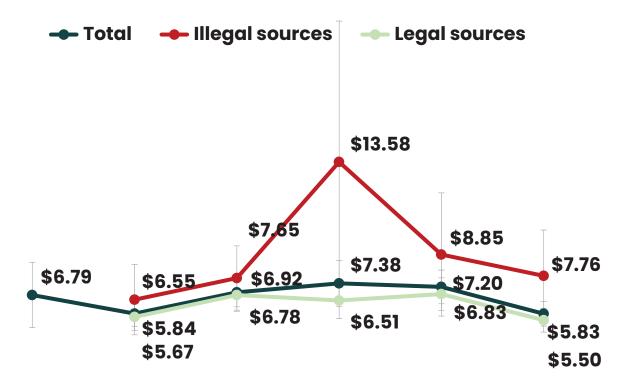
	WA	US	US ILLEGAL	US MEDICAL	US LEGAL
Delta 8	1%	3% —–	5%	3%	2%
THCA	3%	2%	1%	1%	2%
ННС	0%	1%	1%	1%	1%
THC-O-acetate	0%	1%	1%	1%	0%
ТНСР	0%	1%	1%	1%	1%
Delta 10	0%	1%	2%	1%	1%
Delta 4	0%	1%	1%	0%	1%

Price of dried flower

Consumers reported paying an average of \$5.83 per gram of dried flower in 2023, including from legal and illegal sources. The price paid for dried flower from legal retail sources decreased between 2022 and 2023, with decreases in price from illegal sources between 2021 and 2023. In 2019, the average price paid from legal sources was \$5.67 per gram, \$0.88 lower than from illegal sources, compared to \$5.50 in 2023, \$2.26 lower than illegal sources.

Price paid for dried flower

SALES WEIGHTED PRICE-PER-GRAM OF DRIED FLOWER AT LAST PURCHASE, 2018-2023, n=2,612



2018 2019 2020 2021 2022 2023

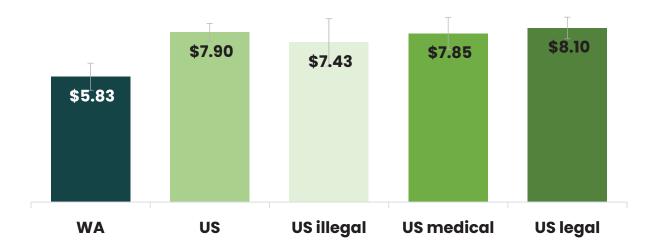


Price of dried flower Washington 2023

In 2023, the price of dried flower reported by consumers in Washington was lower than consumers in other jurisdictions.

Price of dried flower

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

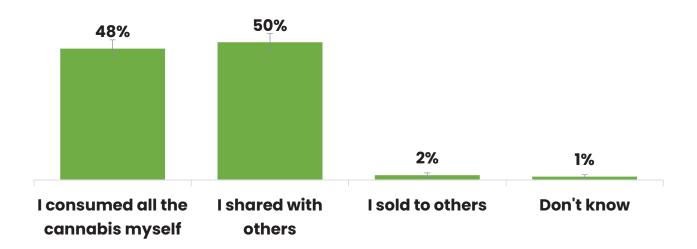


Sharing & selling cannabis Washington 2023

In 2023, approximately half of consumers reported sharing cannabis with others, while 2% reported selling cannabis to others.

Of all the marijuana you purchased in the past 12 months, did you share/give/sell any to others?

AMONG PAST 12-MONTH CONSUMERS WHO REPORTED PURCHASING CANNABIS IN PAST YEAR





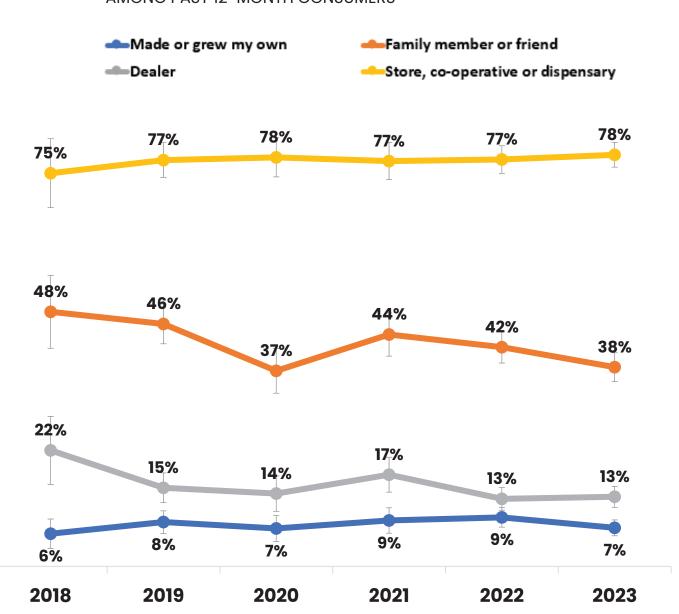
(2) Cannabis sources

Washington 2023

Stores were the most common source of cannabis among past 12-month consumers across all years. In 2023, over three quarters of consumers got their cannabis from 'stores'.

Cannabis sources in the past 12-months

AMONG PAST 12-MONTH CONSUMERS

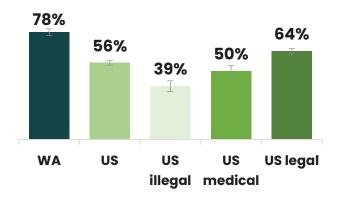




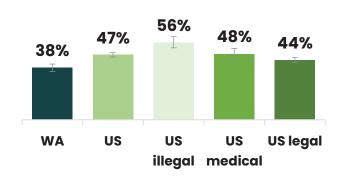
Cannabis sources

Compared to other state categories in 2023, Washington consumers were more likely to report sourcing cannabis from a store and less likely to report sourcing cannabis from family/friends or a dealer.

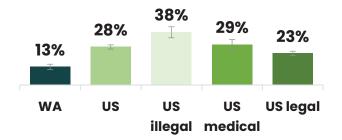
Store, co-op, or dispensary



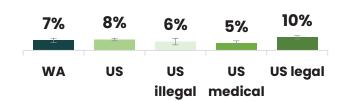
Family member or friend



Dealer



Made or grew my own



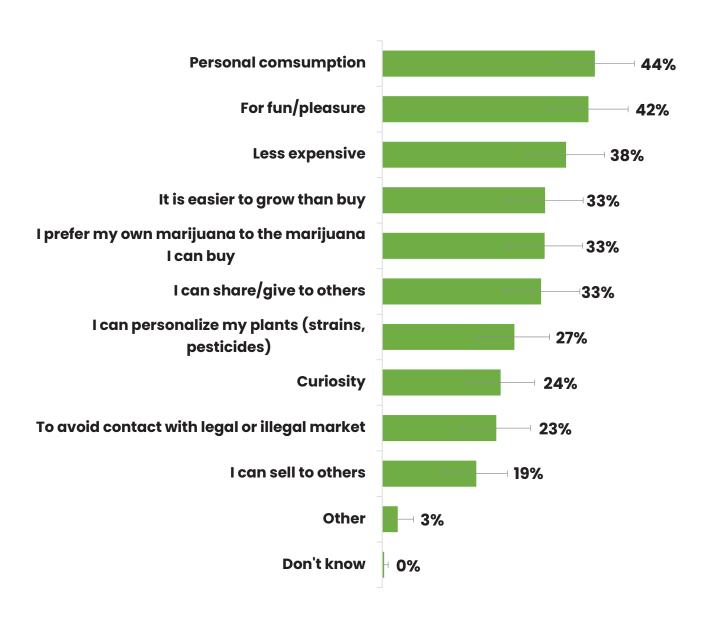


Homegrow reasons

In 2023, approximately 44% of respondents who grew their own cannabis did so for personal consumption.

What were your reasons for growing marijuana plants in the past 12 months?

AMONG RESPONDENTS WHO REPORTED GROWING CANNABIS IN PAST 12-MONTHS



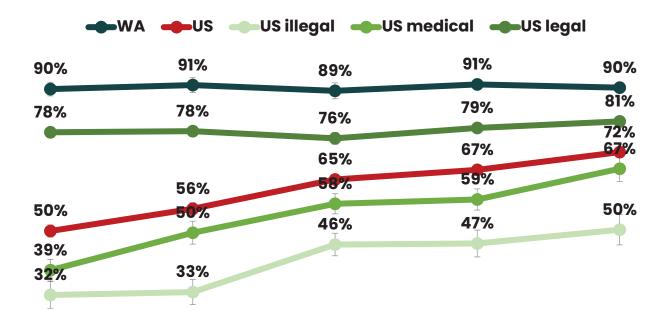


Purchasing cannabis from 'legal' sources

Washington consumers reported purchasing among the highest percentage of cannabis from legal retail sources in 2023 compared to other state categories.

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

AMONG PAST 12 MONTHS CONSUMERS, RESPONDENTS AGE: 21+



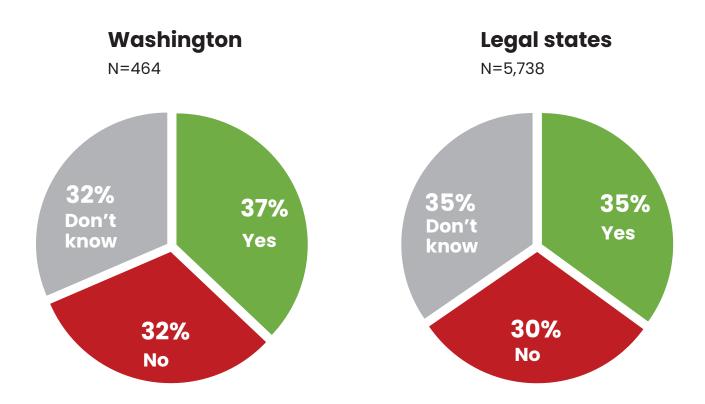


Source of illegal products

In 2023, more than one third of cannabis products purchased from an illegal/unauthorized source among Washington respondents were originally made for legal stores.

When you bought from illegal/unauthorized sources were any of the products originally made for legal stores?

% YES, AMONG CONSUMERS WHO REPORTED PURCHASING ILLEGAL PRODUCTS IN THE PAST 12-MONTHS, 2023





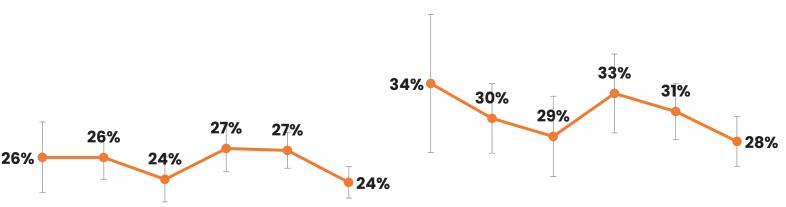
Perceptions of legal cannabis Washington 2023

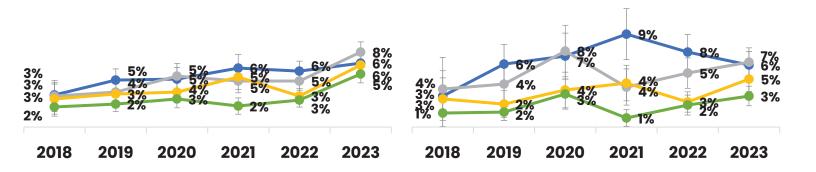
Past 12-month consumers were somewhat more likely than all respondents to perceive cannabis from 'legal' sources as more expensive as well as lower quality. Fewer respondents perceived differences in the safety of cannabis from legal versus illegal sources.

Legal marijuana is 'lower quality'
 Legal marijuana is 'less convenient to buy'
 Legal marijuana is 'less safe to use'
 Legal marijuana is 'less safe to buy'

ALL RESPONDENTS

PAST 12-MONTH CONSUMERS





Perceptions of legal cannabis

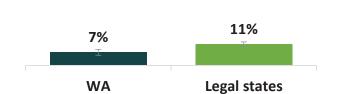
In 2023, consumers in Washington were less likely to perceive legal cannabis as more expensive or less convenient to purchase compared to the legal state average.

AMONG PAST 12-MONTH CONSUMERS, 2023

Legal marijuana is 'more expensive'

Legal marijuana 'less convenient to buy'





Legal marijuana is 'lower quality'

Legal marijuana is 'less safe to use'



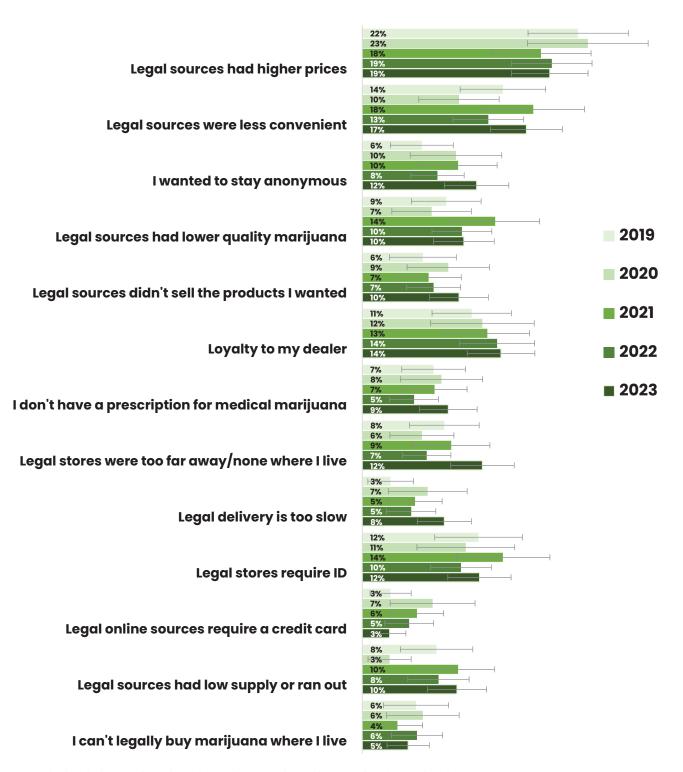


Legal marijuana is 'less safe to buy'



Reasons for purchasing from 'illegal' retail sources

In 2023, Washington consumers who purchased cannabis from an illegal retail source reported a range of reasons for doing so. Higher price, lower convenience and dealer loyalty were the most common reasons for purchasing cannabis from illegal sources in 2023.

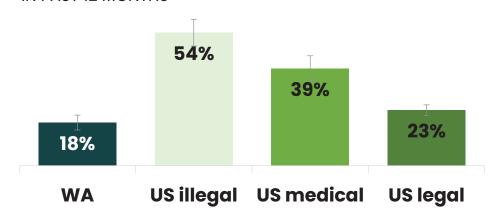




Out-of-state purchases

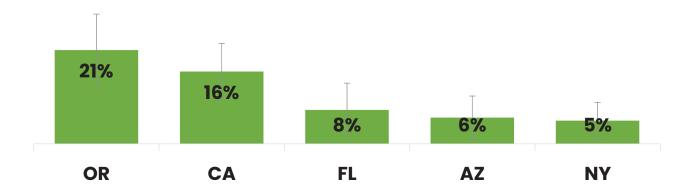
In 2023, cannabis consumers from Washington State reported purchasing about a fifth of their cannabis from out of state. 21% of past 12-month consumers reported Oregon as the usual place out of state where they purchased cannabis, followed by California and Florida.

Mean percent of all cannabis purchased out of state IN PAST 12 MONTHS



Most common 'out-of-state' purchase locations

AMONG PAST 12 MONTHS CONSUMERS WHO PURCHASED ANY CANNABIS OUT OF STATE



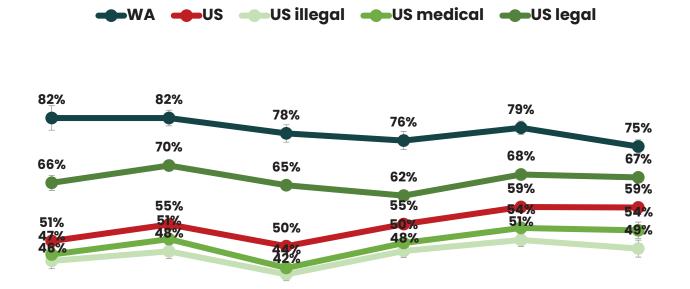


Perceptions of cannabis access

The ease of getting cannabis decreased between 2018 and 2023 for Washington respondents. Washington consumers reported higher ease of getting cannabis than consumers in other state categories.

Overall, how easy or difficult is it/would it be for you to get marijuana?

ALL RESPONDENTS





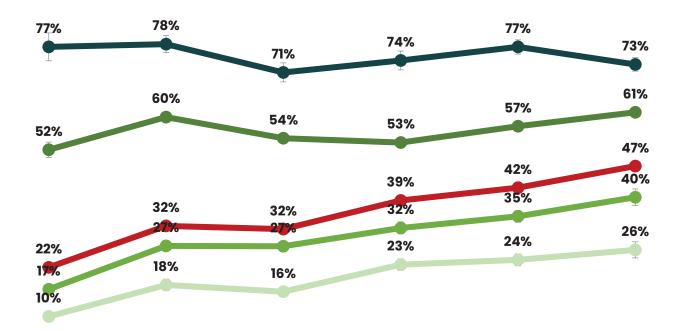
Perceptions of cannabis access

The ease of purchasing cannabis from a legal store increased slightly from 2020 to 2023 for Washington respondents. Washington consumers reported higher ease of purchasing cannabis from a legal store than consumers in other state categories.

How easy or difficult would it be for you to buy marijuana from a LEGAL store or dispensary in the city or town where you live?

ALL RESPONDENTS





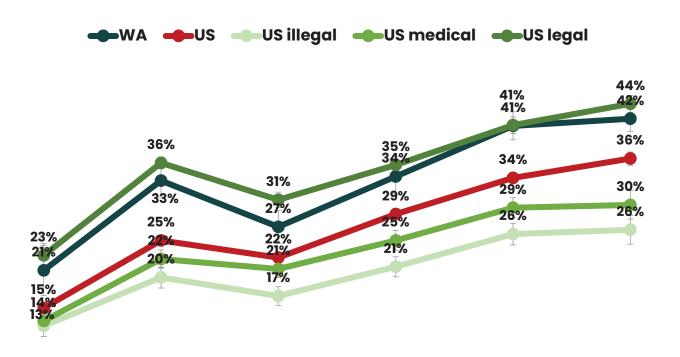




Perceptions of cannabis access

The ease of purchasing cannabis from a legal online source increased from 2020 to 2023 among Washington consumers. This is similar to ease of purchasing from legal online sources for US legal states.

How easy or difficult would it be for you to buy marijuana online from a legal online source (by internet or mail order)?





Cannabis advertising exposure

In 2023, over 60% of respondents in Washington reported noticing at least one type of cannabis advertising or promotion in the past 12 months, higher than the average across other state categories.

Noticing any cannabis ads and promotions

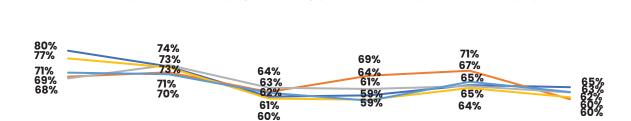
-36-45

46-55

56-65

AT LEAST ONE LOCATION IN THE PAST 12 MONTHS

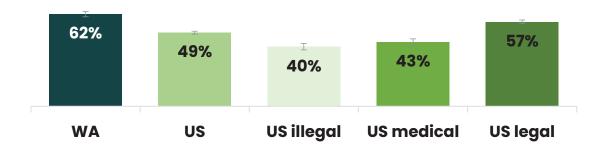
—16-25 **—**26-35 —





Noticing any cannabis ads and promotions - 2023

AT LEAST ONE LOCATION IN THE PAST 12 MONTHS

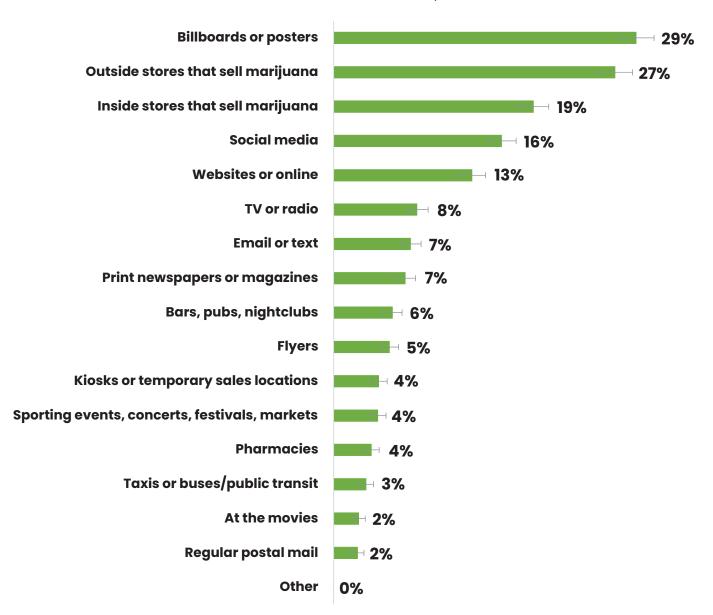


Cannabis advertising exposure Washington-2023

Among Washington respondents in 2023, billboards or posters were the most common source of advertising and promotion, followed by outside stores that sell cannabis and inside stores that sell cannabis.

Noticing cannabis ads in the past 12-months

BY MARKETING CHANNEL 2023 N=3,375



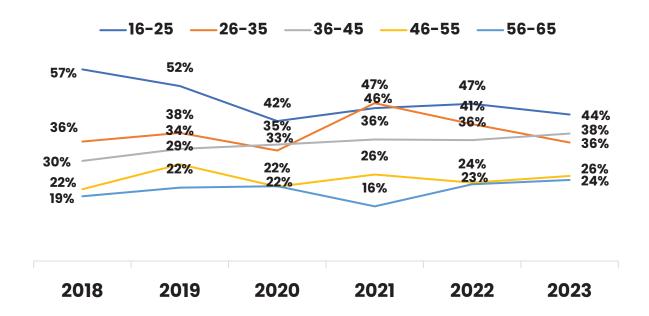


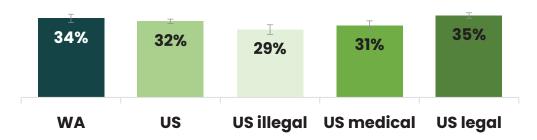
Education campaign exposure Washington-2023

In 2023, over 1 in 3 respondents in Washington recalled seeing an education campaign or public health message about cannabis in the past 12 months.

Recall of cannabis education campaigns

IN THE PAST 12 MONTHS



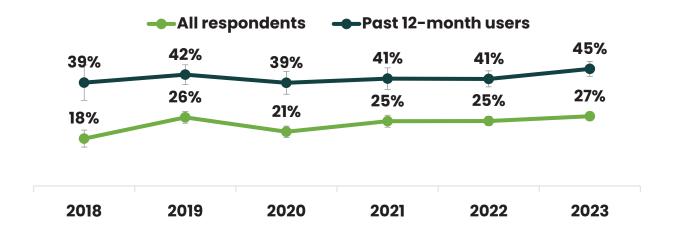




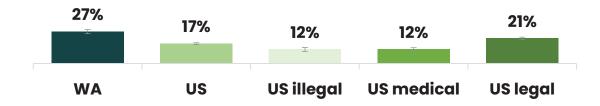
(2) Health warnings on products

Over 1 in 4 respondents in Washington—and almost half of past 12-month consumers—reported seeing health warnings on cannabis products in the past year, higher than the other state category averages.

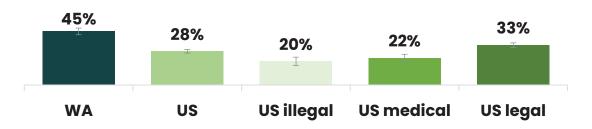
Noticing cannabis health warnings on packages



ALL RESPONDENTS



PAST 12-MONTH CONSUMERS

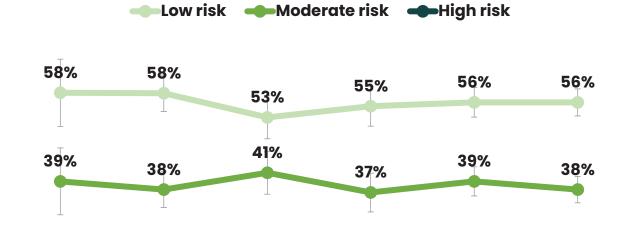


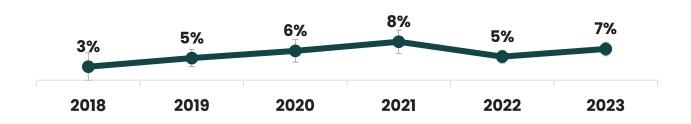
Problematic cannabis use Washington-2023

The World Health Organization's ASSIST tool assesses low, moderate or high risk of problematic cannabis use. Between 2018 and 2021, 'high risk' cannabis use has increased gradually from 3% to 8% but decreased slightly to 7% in 2023.

Risk of problematic cannabis use

WHO ASSIST SCORES, AMONG PAST 12-MONTH CONSUMERS N=5,509





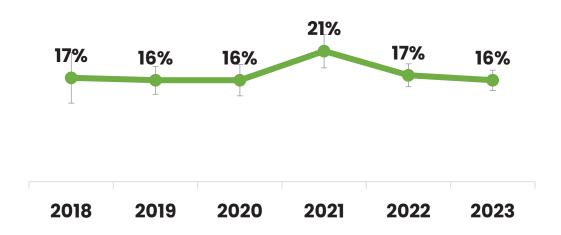


Driving after cannabis use

The self-reported prevalence of driving within 2 hours of cannabis use remained stable in Washington from 2018 to 2020 at around 16%. However, in 2021, the self-reported prevalence of driving a vehicle within 2 hours of cannabis use increased to 22%, before decreasing again in 2023 to 16%.

Driving a vehicle within 2 hours of cannabis use

IN THE PAST 12 MONTHS AMONG 'EVER' CANNABIS CONSUMERS





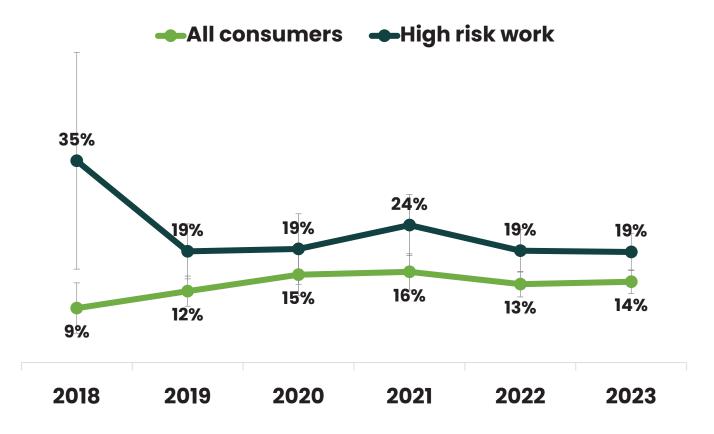


Cannabis use at work

In 2023, approximately 1 in 7 past 12-month cannabis consumers reported using cannabis within 2 hours of starting work. Prevalence of using cannabis at work was higher among consumers who reported working in hazardous jobs. Among all consumers, cannabis use at work increased gradually between 2018 and 2021 before decreasing to 14% in 2023.

Cannabis use at work (including breaks) or within 2 hours of starting work in past 30 days

% 'YES', AMONG PAST 12-MONTH CANNABIS CONSUMERS

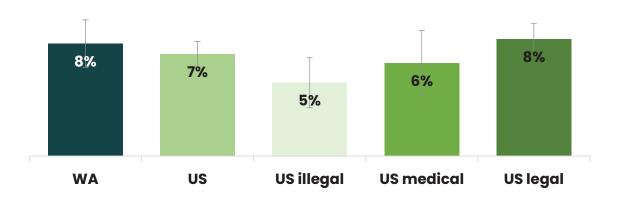


Adverse events from cannabis use

In 2023, approximately 8% of all past 12-month cannabis consumers in Washington reported seeking medical help for an adverse event from cannabis. Among those who sought medical help, emergency rooms, doctor or health professional and poison centres were the most common sources of help.

Percentage of consumers who sought medical help for adverse effects caused by cannabis use

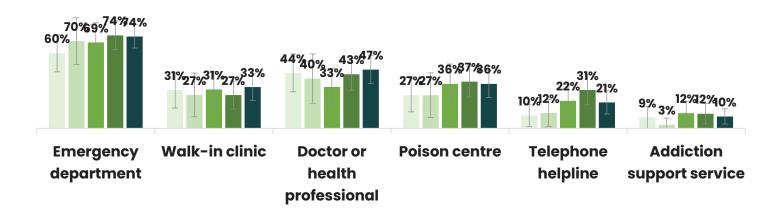
AMONG PAST 12-MONTH CONSUMERS, 2023, N=14,989



Sources of assistance among consumers who sought medical help for adverse effects

AMONG THOSE WHO SOUGHT MEDICAL HELP





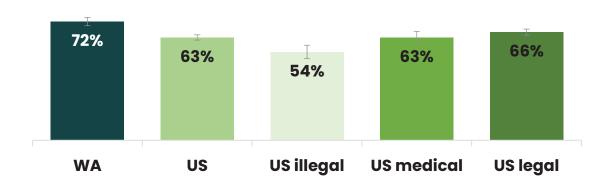


Storage of cannabis in home

Over 7 in 10 past 12-month consumers stored cannabis in the home in a variety of locations.

Do you currently keep any marijuana in or around your home?

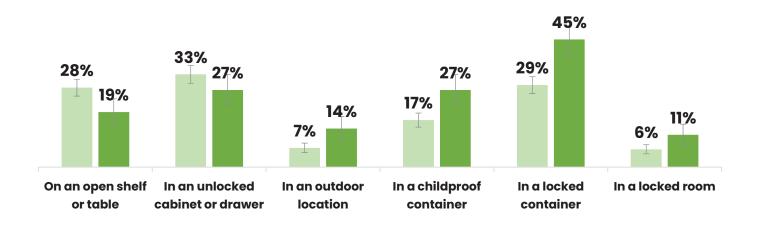
% 'YES' PAST 12-MONTH CONSUMERS, 2023, N=14,230



Where is the marijuana in your home stored?

% 'YES', AMONG CONSUMERS WHO STORED CANNABIS IN HOME, 2023, N=1,038

■ All past 12 months consumers ■ Parents of children < 18

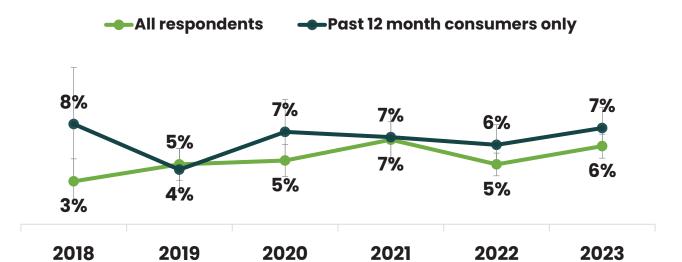




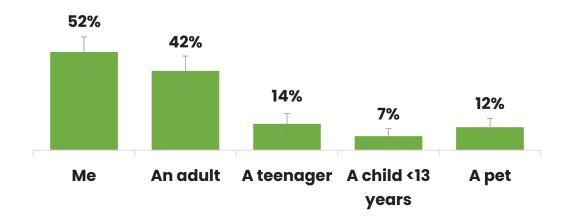
Accidental ingestion

In 2023, 7% of past 12-month consumers reported at least one case of accidental cannabis consumption in the home. Accidental consumption was most commonly reported for respondents themselves, but included youth, children, and pets.

In the past 12 months, has anyone in your household accidentally consumed marijuana? % 'YES'



Who was it that accidentally consumed marijuana? % AMONG RESPONDENTS REPORTING ACCIDENTAL INGESTION IN HOME, 2023





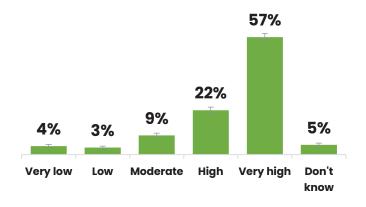
Risk perceptions

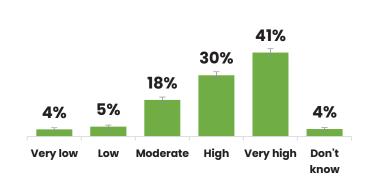
Risk perceptions of smoking tobacco cigarettes were highest, followed by alcohol, with slightly higher risk perceptions for vaping versus smoking cannabis. Lower risk perceptions were reported for using edibles.

In your opinion, what is the level of health risk from...

Smoking cigarettes daily

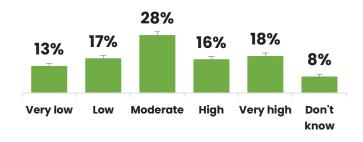
Drinking alcohol daily

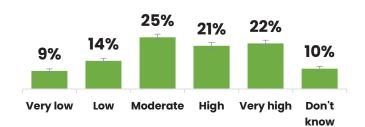




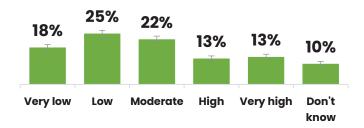
Smoking marijuana daily

Vaping marijuana daily





Consuming edibles daily



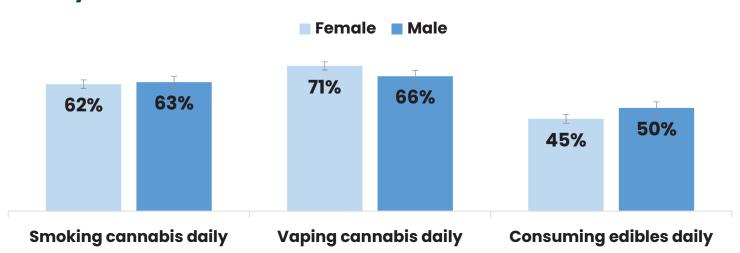


Risk perceptions

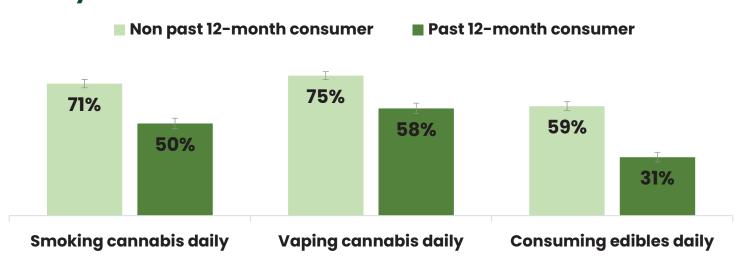
In your opinion, what is the level of health risk from...

% Moderate – High risk

By sex



By cannabis use





In your opinion, what is the level of health risk from...

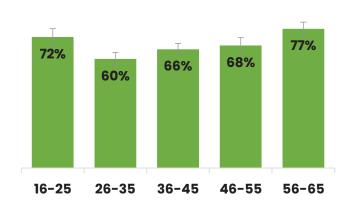
% Moderate – High risk

By age

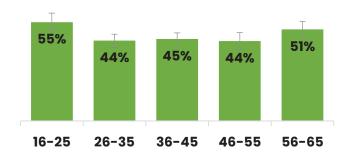
Smoking cannabis daily

68% 55% 57% 63% 70% 16-25 26-35 36-45 46-55 56-65

Vaping cannabis daily



Consuming edibles daily



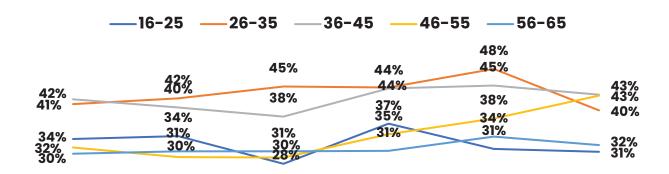


Social acceptability of cannabis

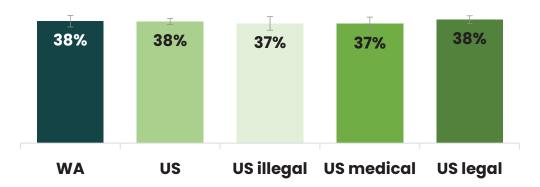
In 2023, approximately 38% of respondents perceived general 'approval' for cannabis, with few changes since 2018.

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

% APPROVE' OR 'STRONGLY APPROVE'







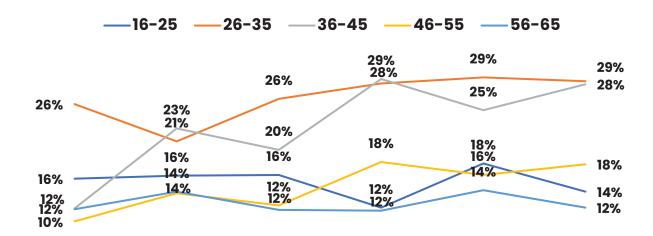


Social acceptability of cannabis

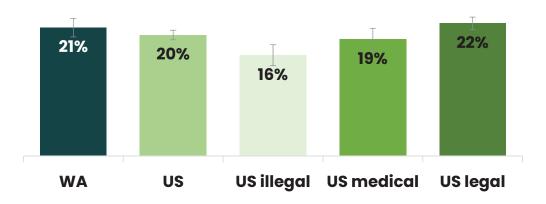
Approximately 1 in 5 respondents would feel comfortable using cannabis in public.

How comfortable or uncomfortable would you feel openly using marijuana in public?

% 'COMFORTABLE' OR 'VERY COMFORTABLE'







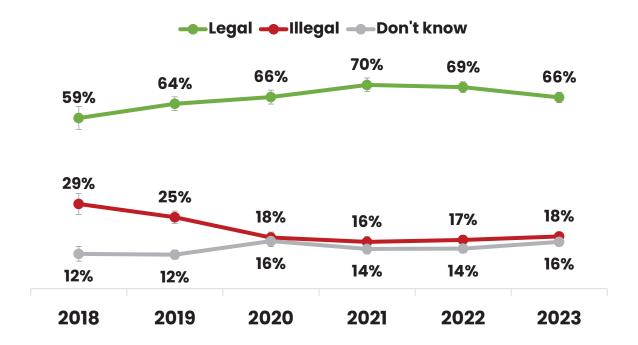


Support for cannabis legalization

In 2023, almost 7 in 10 respondents in Washington supported legalization of non-medical cannabis. Support has increased between 2018 and 2021 but has decreased modestly between 2021 and 2023.

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

AMONG ALL RESPONDENTS, WASHINGTON, 2023



Recreational (non-medical) marijuana should be legal % 'YES,'AMONG ALL RESPONDENTS, 2023

