

Uncovering the Evolving CBD Market



Presentation by

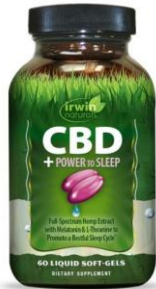
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liz@bdsanalytics.com



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CBD is Exploding across Forms & Channels



Massive Confusion Exists Today

Consumer Education is Necessary

Only

22%

of U.S. 21+ population knows
what cannabinoids are and can
articulate the definition



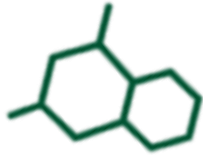
BDS Analytics Consumer Research Q1 2019: US adults 21+

What are Cannabinoids? CBD is NOT Hemp

Cannabinoids are Chemical Compounds Found in the Cannabis Plant; Hundreds Believed to Exist

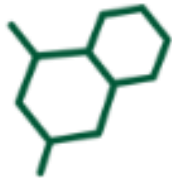
Marijuana and hemp are derived from the same botanical parent plant. Marijuana contains higher levels of THC, where hemp contains lower levels of THC. Regardless of where it is derived, CBD is the same compound.

CANNABIS



HEMP
Low THC (<0.3%)

- **Not Intoxicating**
- Used to treat a variety of health, wellness, medical conditions
- Also includes “industrial” products
- Projected \$2B in CBD products 2019



MARIJUANA
High THC¹ (>0.3%)

- **Can be Psychoactive / Intoxicating**
- Medical and recreational use
- Federally illegal
- Projected \$12.8B in 2019 legal sales

1. Tetrahydrocannabinol 2. Cannabidiol



There are no differences in the effects of CBD or THC

55%

Incorrect or Don't Know



from 63% in
October 18

Any product containing hemp will cause effects such as feeling high, relaxed, sleepy, etc.

59%

Incorrect or Don't Know



from 61% in
October 18

BDS Analytics Consumer Research Q1 2019: US adults 21+



>100 Cannabinoids



It's Important to Understand that CBD and THC are Just the Beginning

Other Applications are Coming

- Appetite suppressant (THCV)
- Pain relief (CBN)
- Slowing bacterial growth (CBG)
- Appetite loss (THCA)

These cannabinoids are already being touted in products available in Dispensaries.



1331

THE GREEN
CANNABIS
RESTAURANT

OPEN

MARIJUANA LEAF

Person walking on sidewalk, talking on a phone.

FOA



The Cannabis Specialty Retail Experience

Legal Cannabis is a Game Changer

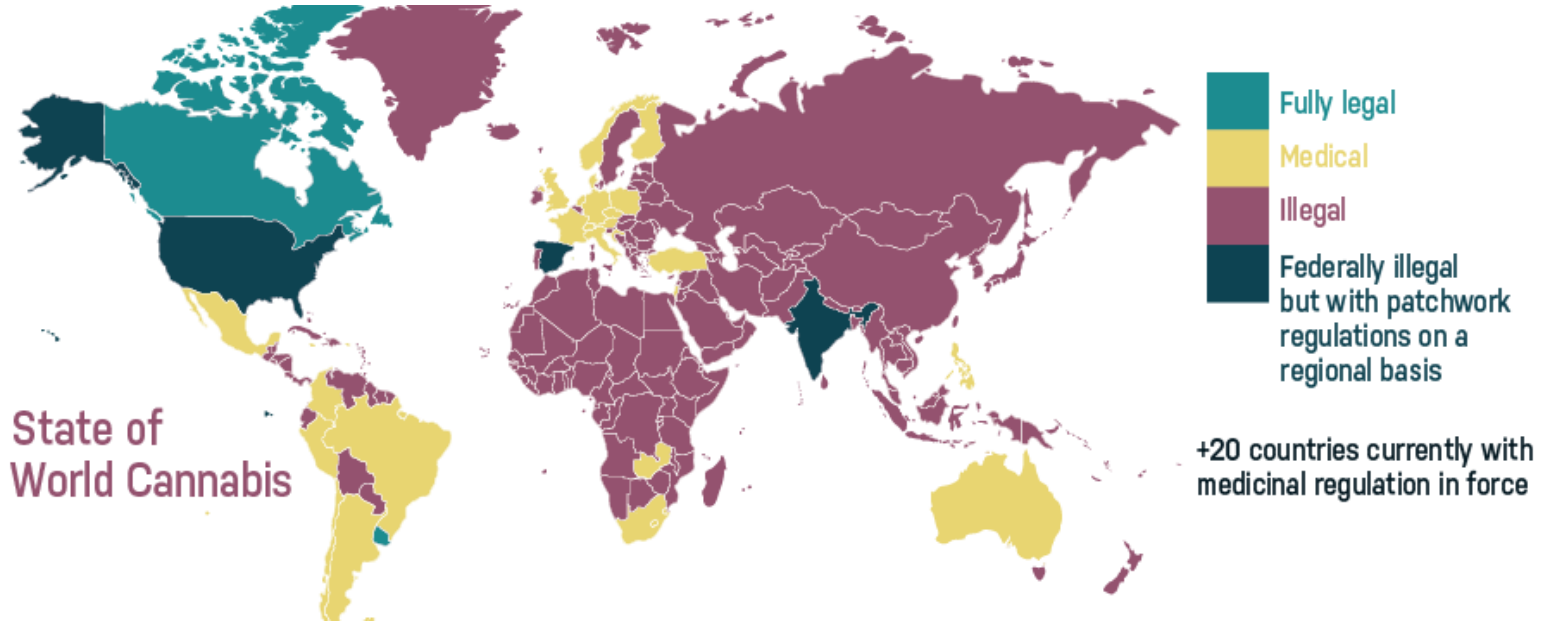
- Legal cannabis (hemp and marijuana) is new, cannabis is not
- Consumption is purposeful, multi-faceted, and complex
- Legal cannabis is and will continue to DISRUPT every consumer industry
- In the slow growth world of CPG, nothing is growing like this
- CBD in general retail presents huge growth, but the Dispensary channel (size and impact) cannot be ignored
- Constantly evolving—keep up

Legal
Cannabis is...

Growing



The State of Legal Marijuana Markets: Prohibition is ending



Source: Arcview & BDS Analytics Cannabis Intelligence Briefing

Majority Agree With Some Form of Legalization

~80% →  64%

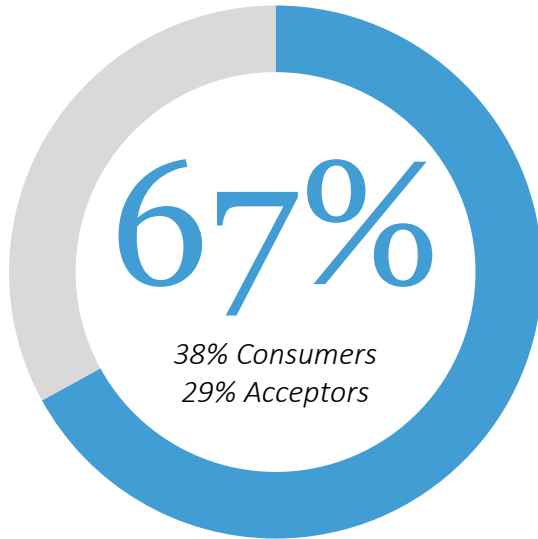
of US and CAN adults agree there should be some form of legal marijuana usage

in US agree marijuana has medical benefits



BDS Analytics Consumer Research Q1 2019: US adults 21+

Marijuana Acceptance is “Mainstream”



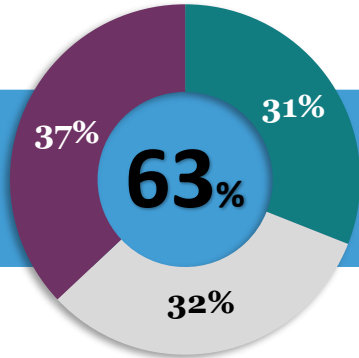
...of adults 21+ in Fully Legal U.S. States Consume Cannabis or are Open to Consuming Cannabis

~ **33%** *are Rejecters*
(would not consider in the future)

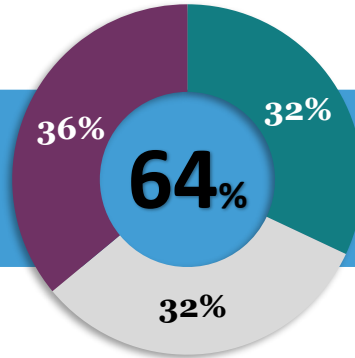
.....And Growing!

Consumers, Acceptors, and Rejecters™

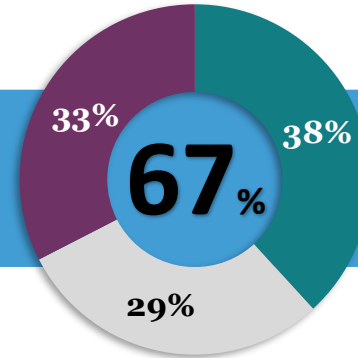
Q1 2018



Q3 2018



Q1 2019



Consumers: Have consumed cannabis or cannabis products within the past six months



Acceptors: Would consider consuming cannabis or cannabis products in the future



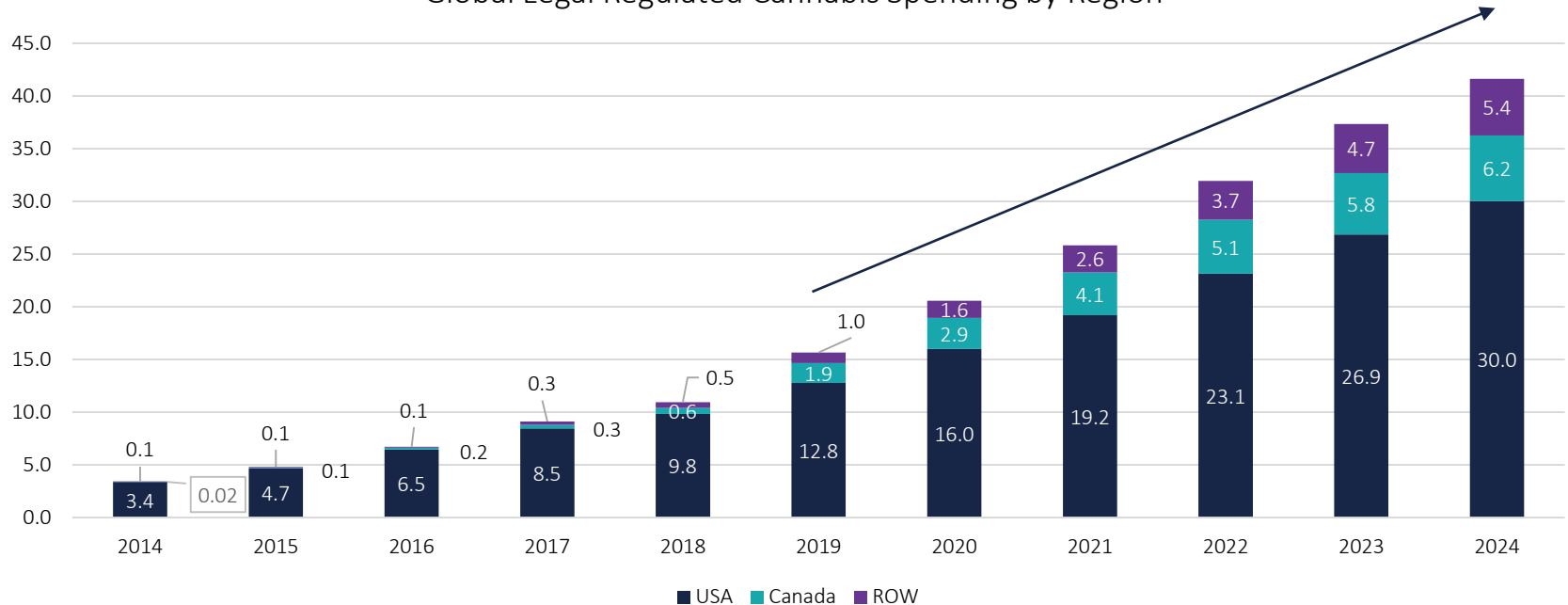
Rejecters: Would not consider consuming cannabis or cannabis products in the future

Source: BDS Analytics Consumer Research Q1 2019: U.S. adults 21+ in Legal Level 1 States

BDS Analytics Project a Global \$41B Market in 2024

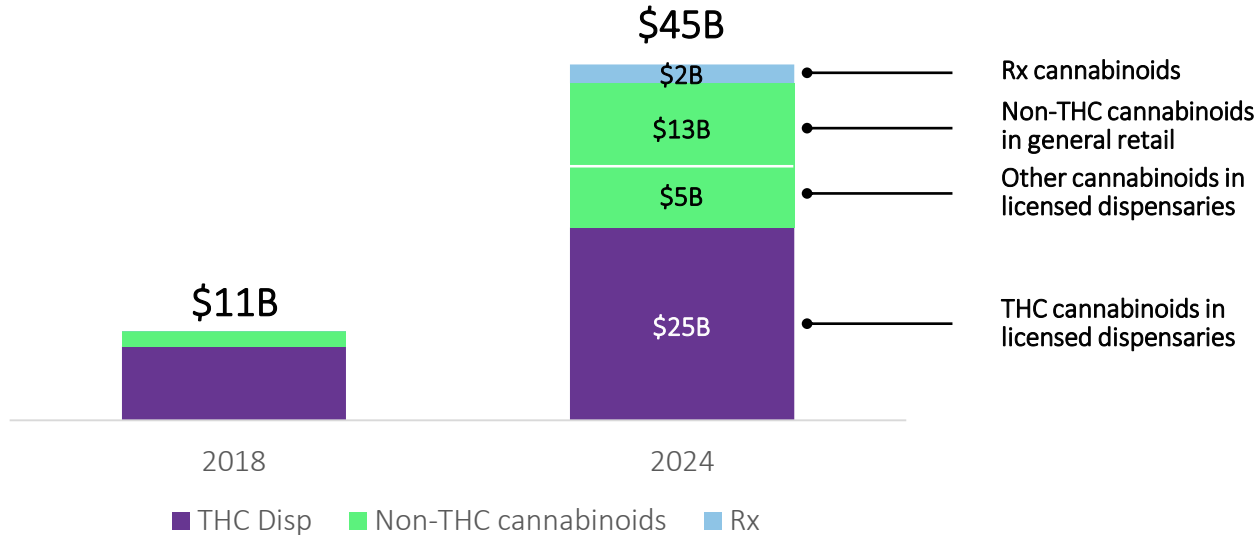
The Tip of the Iceberg

Global Legal Regulated Cannabis Spending by Region



With cannabinoids like CBD crossing into General Retail, BDSA projects a \$45B US Total Cannabinoid Market by 2024

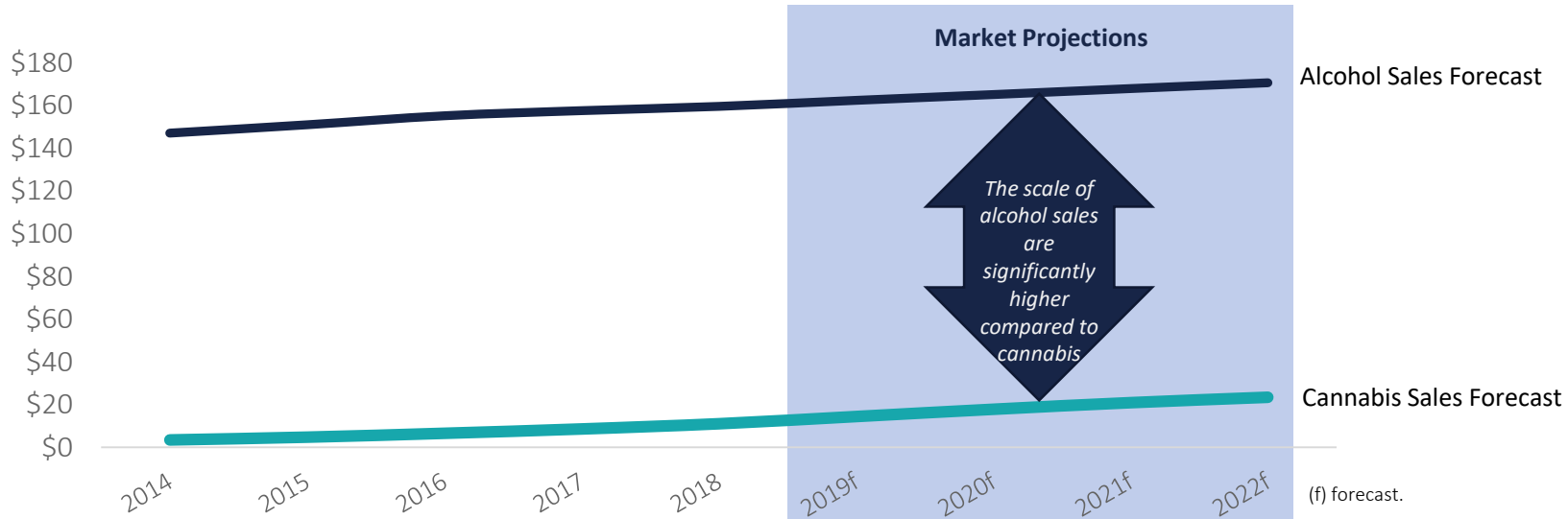
Global Projected US Total Cannabinoid Revenues (\$B)




Source: BDS Analytics CBD Market Monitor; BDS Analytics and Arcview Market Research

Legal Cannabis will remain just a fraction of the US Alcohol market

US Projected Total Alcohol & Legal Cannabis Sales and Projections
(\$USD Billions)

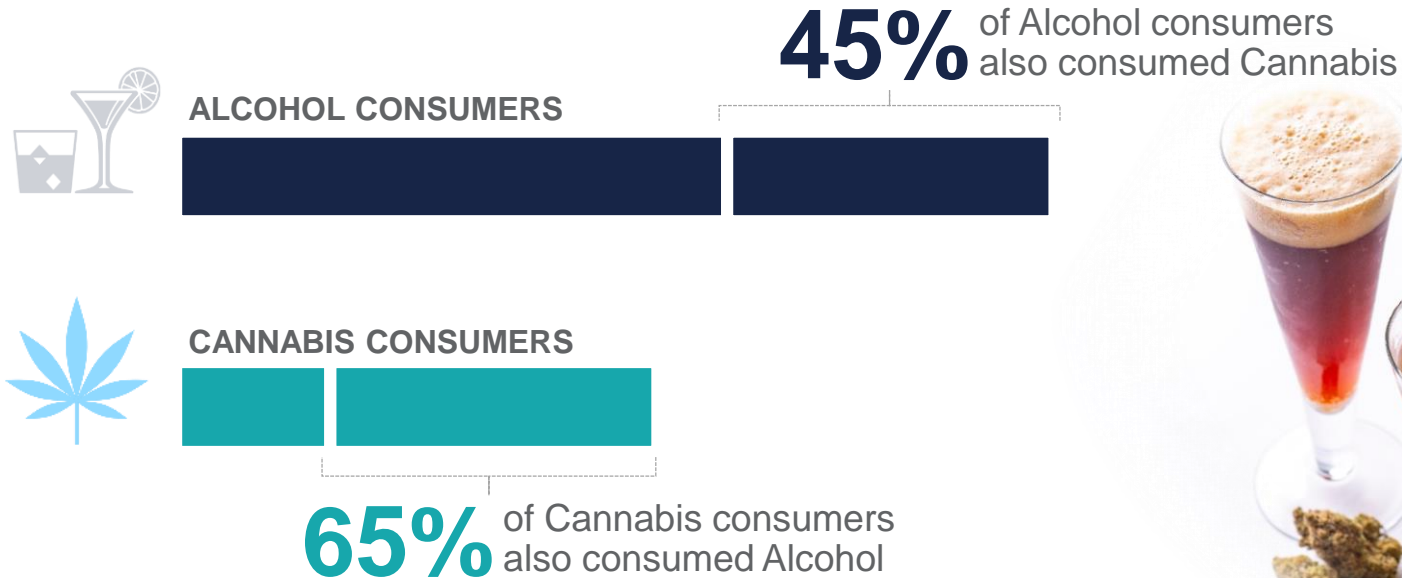


Alcohol Source: IWSR
Cannabis Source: Acrviv & BDS Analytics Cannabis Intelligence Briefing .

 **CONSIDER THIS:** Forecasted alcohol sales are roughly \$140B higher than legal cannabis projections

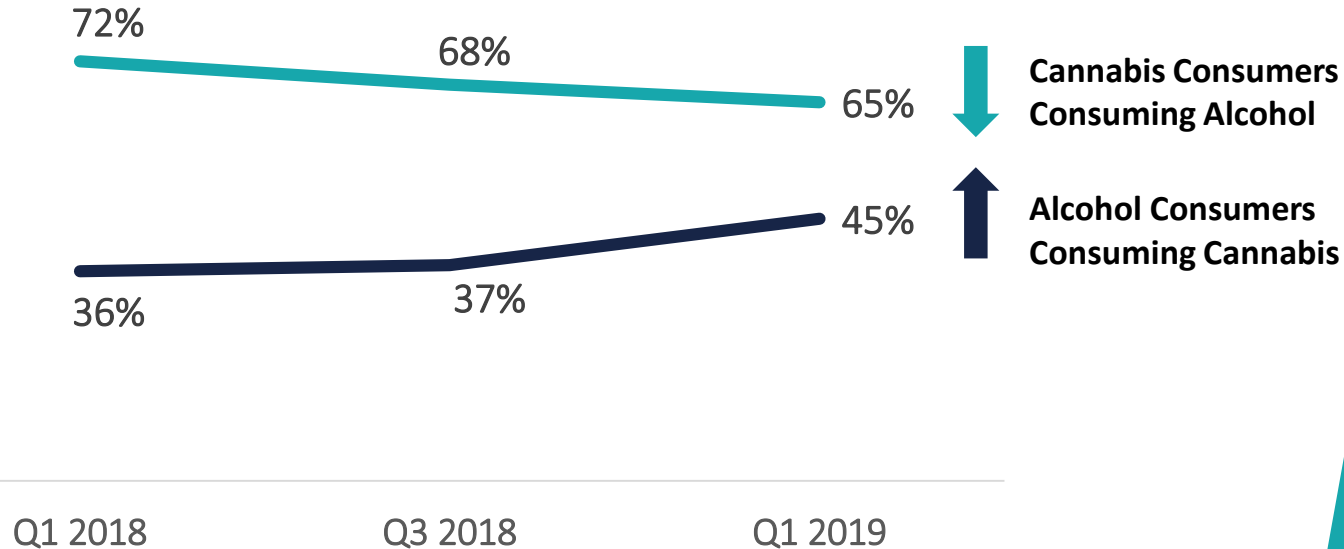
Dual consumption more common among cannabis consumers than alcohol consumers

Q1 2019 Alcohol & Cannabis Consumption Past 6 Months in Legal Adult-Use States



Source: BDS Analytics Consumer Research, Level 1 Fully Legal U.S. States, Q1 2019, US adults 21+

Cannabis consumption among alcohol consumers showing significant growth as legal markets continue to come online



Source: BDS Analytics' Public Attitudes and Actions Toward Cannabis, Level 1 Fully Legal US States Q1 2019

The Impact of the Dispensary Channel is Relevant Across ALL Consumer Industries

Rx Medications

↓ 41%



30% of U.S. adults consume cannabis to avoid Rx medications

OTC Medications

↓ 41%



24% of U.S. adults consume cannabis to avoid OTC medications

Tobacco

↓ 24%



Liquor Spirits

↓ 23%



Beer

↓ 20%



Craft Beer

↓ 19%



Wine

↓ 17%



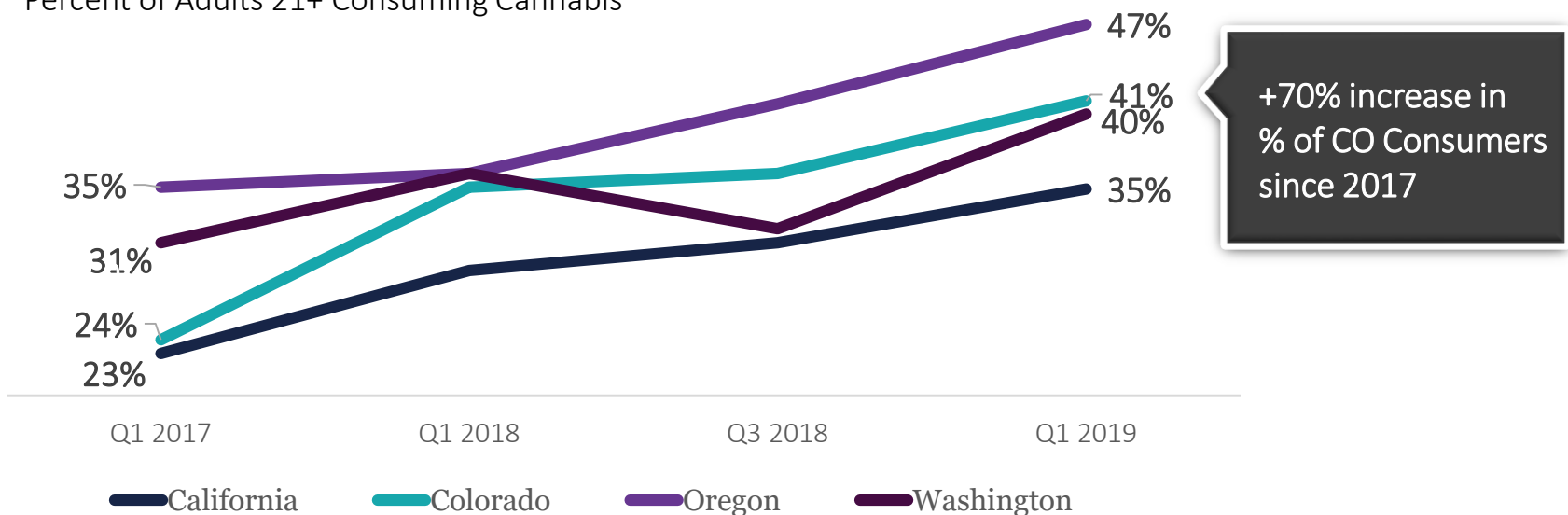
Among Cannabis Consumers and any of the Following, the % of Consumers Who 'DECREASED' Consumption of that Category Due to Their Cannabis Consumption
BDS Analytics Consumer Research across Cannabis Consumers: U.S. adults 21+ in Legal Level 1 States Q1 2019

Cannabis Consumer
is
Evolving



The size of the Cannabis Consumer market in the U.S. continues to grow

Percent of Adults 21+ Consuming Cannabis



Source: BDS Analytics Consumer Research Q1 2019: U.S. adults 21+ in Legal Level 1 States

The “Cannabis Consumer” is a familiar and multidimensional consumer

Not your traditional “stoner”...



Men & Women
Avg Age. 40



~50%
Work
Full-time



~40%
Prioritize taking
care of themselves



~30%
Are
Very Social



~50%
Are
Creative



~55%
Enjoy
Outdoors



~40%
Spend More \$
for Quality



~40%
Like to Try
New Products



~40%
More Satisfied
with Life

*Consumers skew towards these descriptors (many significant differences) compared to Acceptors and/or Rejecters
Source: BDS Analytics Consumer Research Q1 2019: U.S. adults 21+ in Legal Level 1 States

There is No ONE Cannabis Consumer

Cannabis Consumers Span:

- Generations
- Gender
- Socio & Economic Backgrounds
- Motivations
- Need States
- Benefits
- Premium / Luxury / Economy



Boomers: An important and growing segment, but they do not fit neatly in a box

67% of Boomer Consumers consume for health/medical reasons



Boomers are SIGNIFICANTLY MORE...

- Medically motivated
- Likely to consume to replace Rx/OTC
- Likely to want to ease aches/pains

59% of Boomer Consumers consume for social/rec reasons



But they also want to...

relax, unwind, and have fun

Source: BDS Analytics Consumer Research: U.S. adults 21+ in Legal Level 1 States Q1 2019

Marijuana Consumption is Multi-Purposed and Multi-Faceted

Health and Wellness Benefits of Cannabis and CBD are Not a Hemp-Derived Phenomenon



71% Recreational & Social



56% Health or Medical

32%

Consume for Recreational & Social and Health or Medical Reasons

BDS Analytics Consumer Research across Cannabis Consumers: U.S. adults 21+ in Legal Level 1 States Q1 2019

CBD Consumer is

Multifaceted



The wellness market is booming

Moving from reactive sick care to proactive self-care – inspired, in part, by rising cost of healthcare

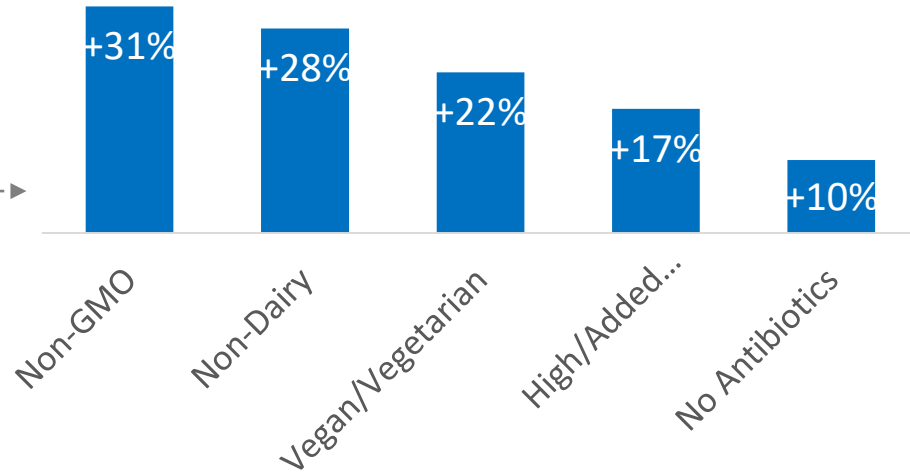
\$3.5 trillion 2017 US healthcare spend

\$450 billion self-care market

88% of US consumers practice some form of self-care

1/3 of US consumers have increased self-care practices

Food Product Attribute Growth – \$ Sales
(2018 v. 2017)



Source: CMS.gov NHE fac sheet; IRI Market Advantage — Total U.S. MULO+C; 52 Weeks-Ended 8/12/18

Self-care, better-for-you trends manifesting at general retail

And at the dispensary level, wellness plays a big role



Health HUB™

Your hub for better health.

More health services & wellness products than ever before. All in one place. All on your schedule.

CVS



Walmart + KOHL'S

Making a healthy lifestyle more rewarding.

Kohl's is partnering with Weight Watchers to make everyday wellness more accessible.



Treat Your Skin Right

4 Foods for Summer Skin Health

Kroger

Foods for Healthy Summer Skin | VIDEO | Kroger



Walmart

found.

94% NATURAL

94% NATURAL



Source: BDS Analytics; company websites

Consumption of Hemp-Derived CBD Products is Predominately Health and Wellness Related

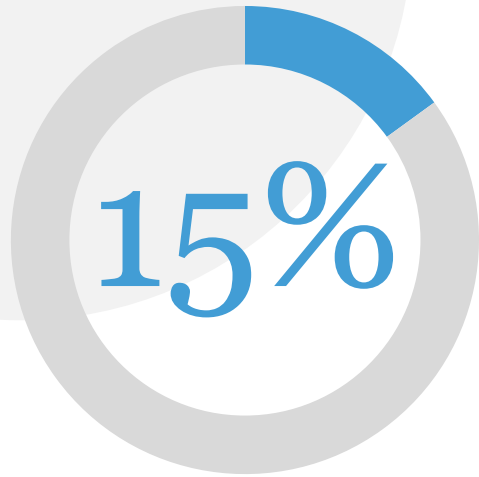


- Improve Quality of Life
- Treat or Manage a Health Problem
- Relieve Pain
- Sleep Better
- Improve Sense of Wellness
- Avoid Rx Medications

Reasons for Hemp-Derived Product Consumption

BDS Analytics Consumer Research across Cannabis Consumers: U.S. adults 21+ Q1 2019

15% of U.S. Adults Have Consumed Hemp-Derived Products



of Adults 21+ in the U.S.
Have Consumed Hemp-Derived
Products Within
the Past 6 Months



NOTE a Much Smaller Penetration than Marijuana in Fully Legal States (38% Consumers)
Source: BDS Analytics Consumer Research across Cannabis Consumers: U.S. adults 21+ Q1 2019

U.S. General Market Hemp Consumer at a Glance

43 Average Age

40% Married

55/45 Male / Female

40% College+

64% City /Suburb

51% Employed FT



BDS Analytics Consumer Research across Cannabis Consumers: U.S. adults 21+ Q1 2019

U.S. General Market Hemp Consumer at a Glance:

Health + Medical Perceptions

86% agree marijuana has medical benefits

85% agree marijuana can relieve pain

~2/3 agree marijuana is safer and healthier than drinking alcohol

Top Ailments

1. Anxiety
2. Depression
3. Back Pain
4. Stress

BDS Analytics Consumer Research across Cannabis Consumers: U.S. adults 21+ Q1 2019

U.S. General Market Hemp Consumer at a Glance:

Product Selection

44%

consumed organic
foods or beverages
in the past six
months

LOOKING FOR BRANDS THAT ARE...

- 40%** Local
- 33%** Organic
- 37%** Natural

LOOKING FOR PRODUCTS THAT ARE/HAVE...

- 37%** No preservatives
- 36%** Locally grown
- 36%** Non-GMO
- 32%** Organic

BDS Analytics Consumer Research: U.S. adults 21+ in Legal Level 1 States Q1 2019



U.S. General Market Hemp Consumer at a Glance:

Healthy Habits

Getting enough
sleep is essential

62%

Eating
Right

53%

Being Physically
Active

52%

Take Care of
Themselves

48%

37% go to a fitness center
or gym at least weekly

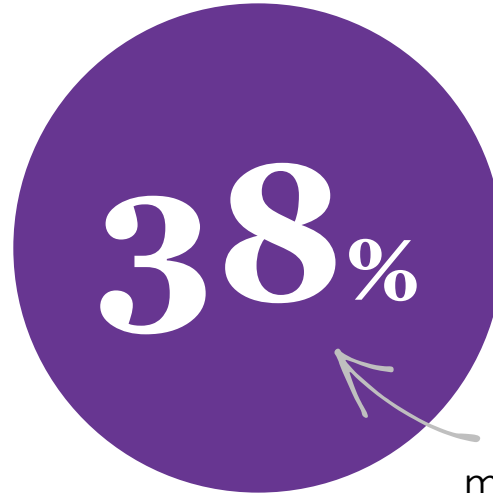
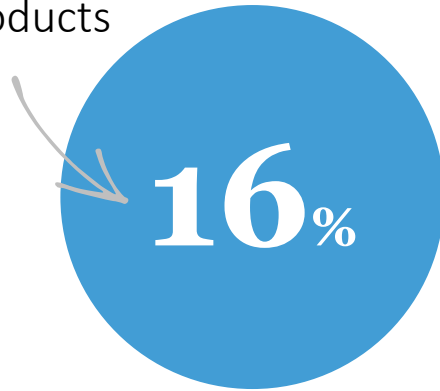
33% do yoga or Pilates
at least weekly

32% participate in outdoor
recreation at least weekly

BDS Analytics Consumer Research across Cannabis Consumers: U.S. adults 21+ Q1 2019

Of Adults 21+ in FULLY legal cannabis markets...

Consume hemp products



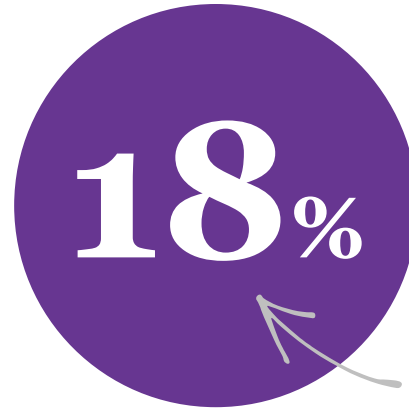
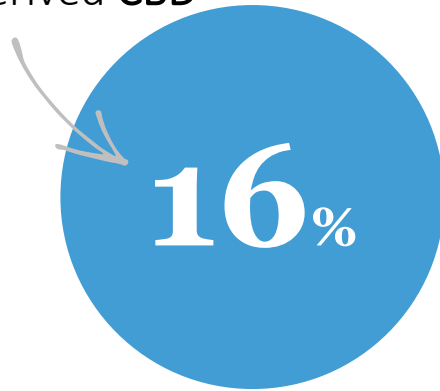
Consume marijuana

Source: BDS Analytics Consumer Research: US adults 21+ in Legal Level 1 States Q1 2019



Of Adults 21+ in FULLY legal cannabis markets...

Consume Hemp-derived CBD



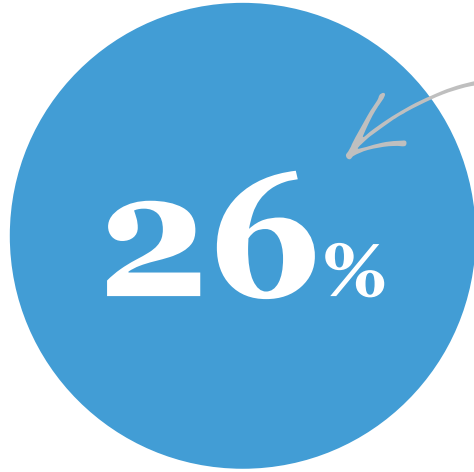
47% of Cannabis Consumers

Consume Marijuana-derived CBD

Source: BDS Analytics Consumer Research: US adults 21+ in Legal Level 1 States Q1 2019



Hemp-derived AND/OR Marijuana-derived CBD Consumers

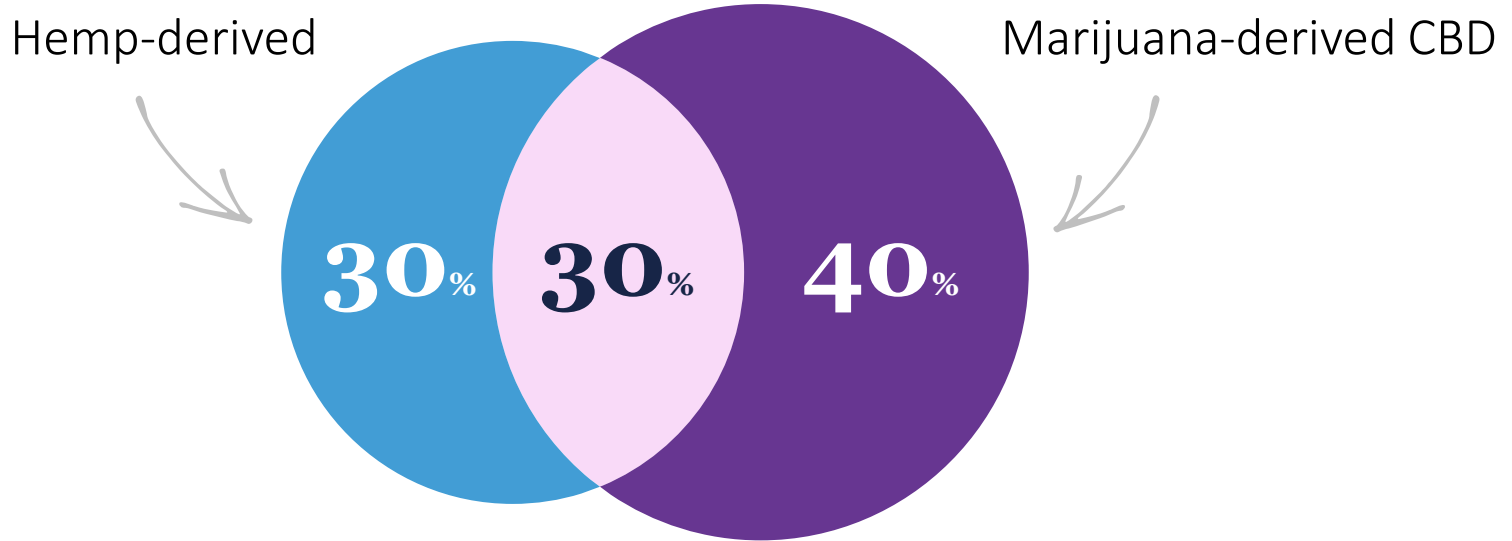


use hemp-derived
and/or MJ-derived
CBD



Source: BDS Analytics Consumer Research: US adults 21+ in Legal Level 1 States Q1 2019

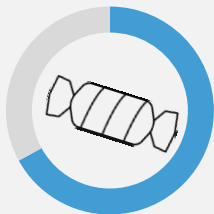
Of CBD Consumers, there is substantial overlap



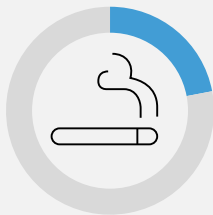
Source: BDS Analytics Consumer Research: US adults 21+ in Legal Level 1 States Q1 2019

Top Hemp Derived CBD Products

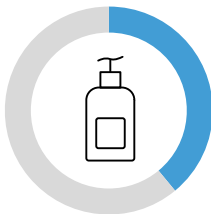
In the past six months ...



78% consumed
Ingestibles



22% consumed
Inhalables



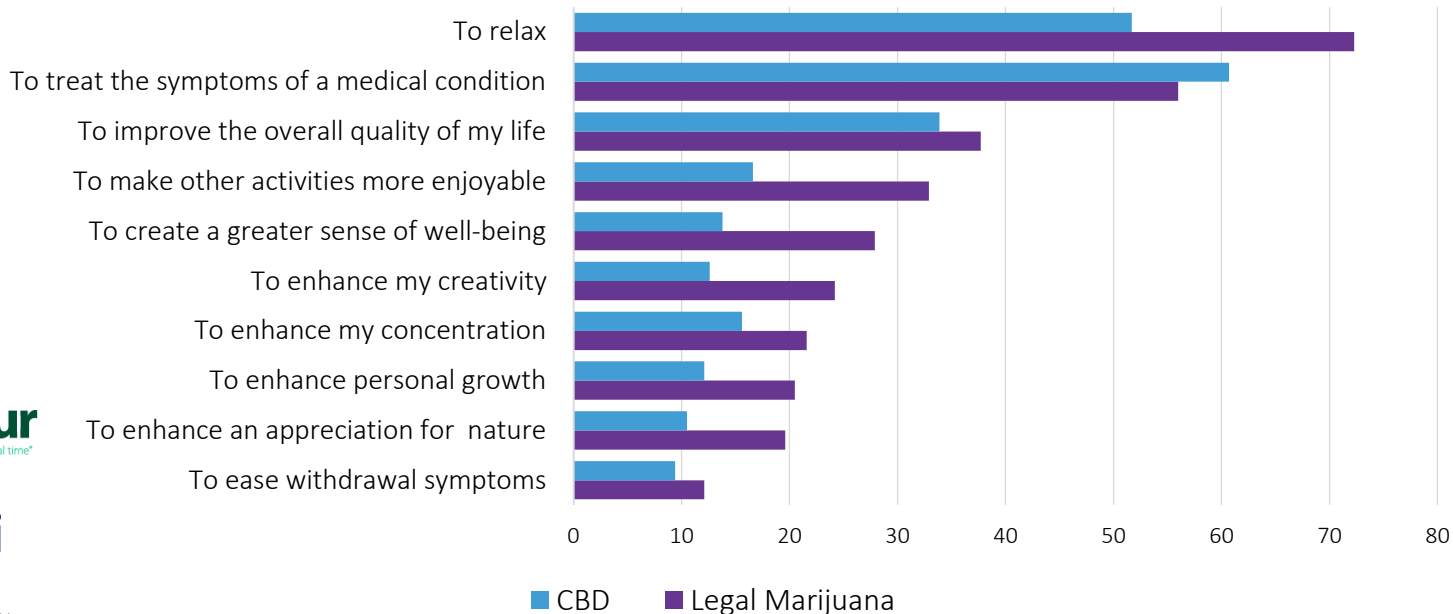
39% used Topicals

Top Product formats:

- Oils and Tinctures
- Food (baked goods, candy, etc.)
- Inhalables (vape, e-cigarettes, etc.)
- First aid/ pain management (creams, salves, balms, etc.)
- Skin care
- Pills, capsules, tablets

BDS Analytics Consumer Research across Cannabis Consumers: U.S. adults 21+ Q1 2019

Same Primary Motivations, Different Priorities

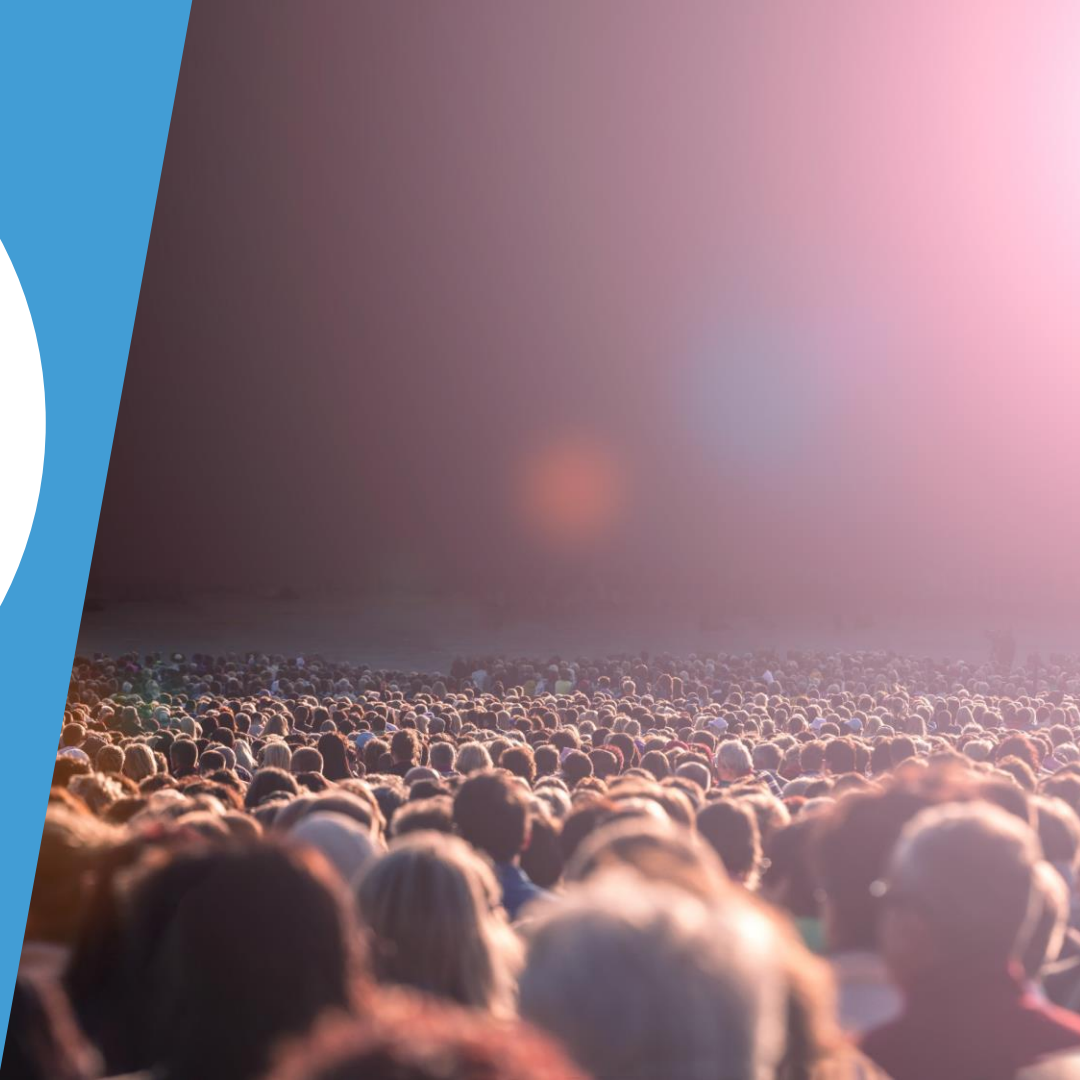


Motivations for Use

Source: IRI-MFour Cannabis Attitude and Usage Study, Feb. 2019

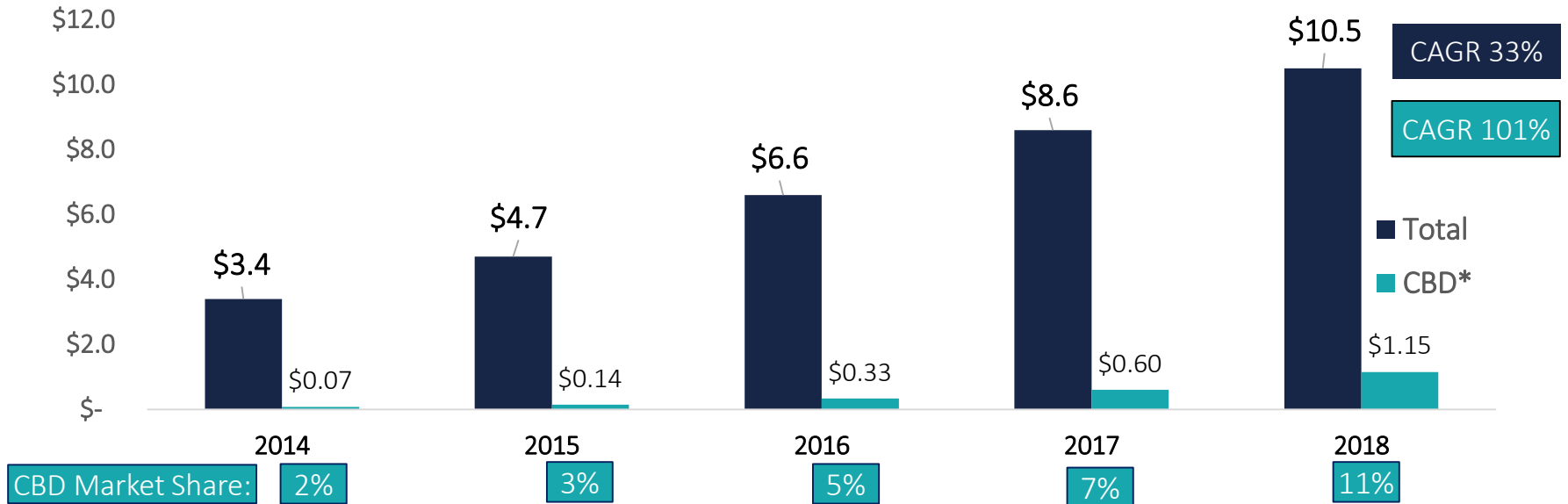


Learn From the Dispensaries



CBD: It Started in Dispensaries

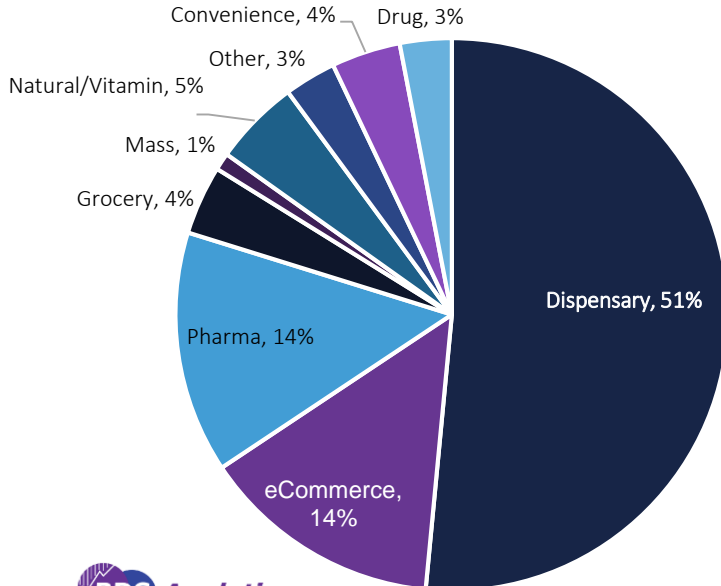
Total USA Legal Cannabis Spending and CBD share (\$USD Billions)



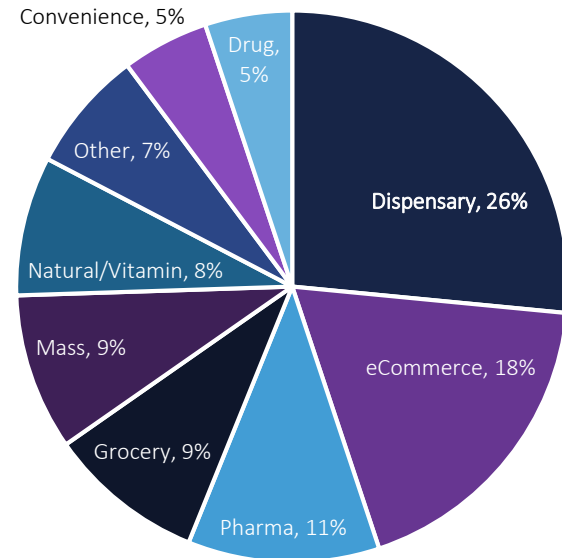
The Dispensary Channel Dominates CBD Product Sales Today

More Competition Coming!

Projected 2019: \$4.1B

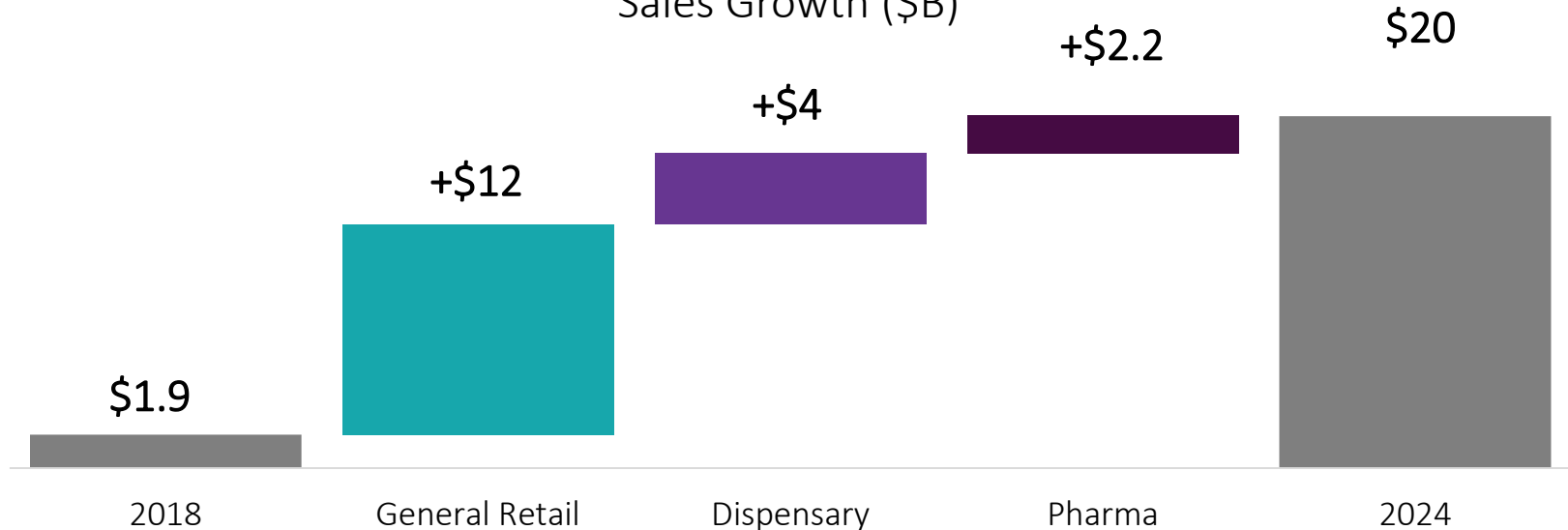


Projected 2024: \$20B



We Project Dramatic Growth Driven by General Retail

BDS Analytics' Projected U.S. Channel Drivers of Cannabinoids
Sales Growth (\$B)



CBD Is Rapidly Becoming Mainstream



CVS
pharmacy

800
stores in
8 states



W

~1,500
stores in
9 states



**RITE
AID**

200
stores in
2 states



ULTA
BEAUTY

All
stores
except 3
states



SEPHORA

All
stores
some
exceptions



Kroger

945
stores in
17
states



GNC
LIVE WELL

Locations
& online
in 23
states



DESIGNER

96
stores



**URBAN
OUTFITTERS**

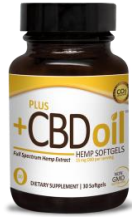
Select
states



SIMON

108 CBD
stores
opening
in malls

Hemp-Derived (and Marijuana Derived) CBD Products are Available in Many Forms to Address Multiple Consumer Needs



Supplements Soft Gels



Supplements Gummies



External Pain



Supplements Oil



Sleep



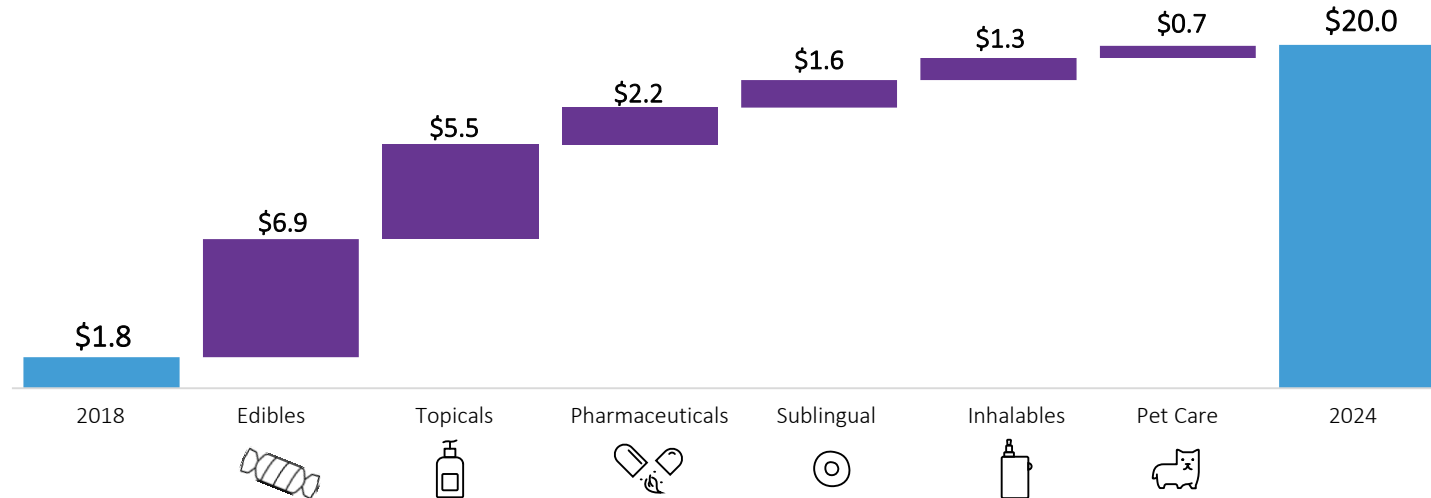
Skincare



Beverages

CBD Growth Will Largely Come From Edibles (Food, Candy, Beverages) and Topicals (Beauty, Skin, Wellness)

Projected U.S. Category Drivers of Growth (\$B)



Projected U.S. Category Drivers of Growth (\$B)

Source: BDS Analytics CBD Market Monitor and Arcview Market Research

But don't forget about the core!

Discerning consumers are influencers, early adopters, and lead indicators



Willing to
Spend MORE
for Quality

Care that
Products are
LOCALLY
Grown

Keep up with
the LATEST
Technology

Prefer LOCAL,
NATURAL,
ORGANIC,
SOCIAL
INTERESTED
Brands

More likely to be influenced by...

Processing Method, Terpenes, Additional Cannabinoids, Growing Methods, Where Grown, Natural/Organic, Packaging

BDS Analytics Consumer Research Q1 2019: U.S. adults 21+ in Legal Level 1 States

Learn from Dispensary Channel

Convenience of the Consumption Form is a Top 5 Influencer for Consumers

50%

of Consumers are Largely Influenced by the Convenience of the Consumption Form When Choosing a Product



+67%

Vape \$ Sales



+28%

Edibles \$ Sales

Cannabis Source: BDS Analytics Consumer Tracker, US Level 1 States, Q1 2019
BDS Analytics GreenEdge Retail Sales Tracking Data

In control: Growth of consistent, low-dose, dialed experiences

44% Edibles Consumers Who Prefer Low-Dose THC (<10mg)

Micro (<2.5mg THC):	+108% (\$ sales)
Low (>2.5, <10mg THC):	+71%
Edibles:	+28%

54% Edibles Consumers Who Have Chosen Products Based on CBD Content

Of these...

24% prefer 10:1 or higher
High CBD: +67%



Note: % preference = Consumers in Level 1 states; % change is sales growth 2018 v. 2017 within edibles in OR, CO AZ
Source: BDS Analytics Consumer Research: U.S. adults 21+ Q1 2019

Thus Brands Offer “Promised” Experiences – 286 Unique “Moods” Tracked Thus Far in BDS Analytics Retail Sales Tracking Data



Mood / Effect

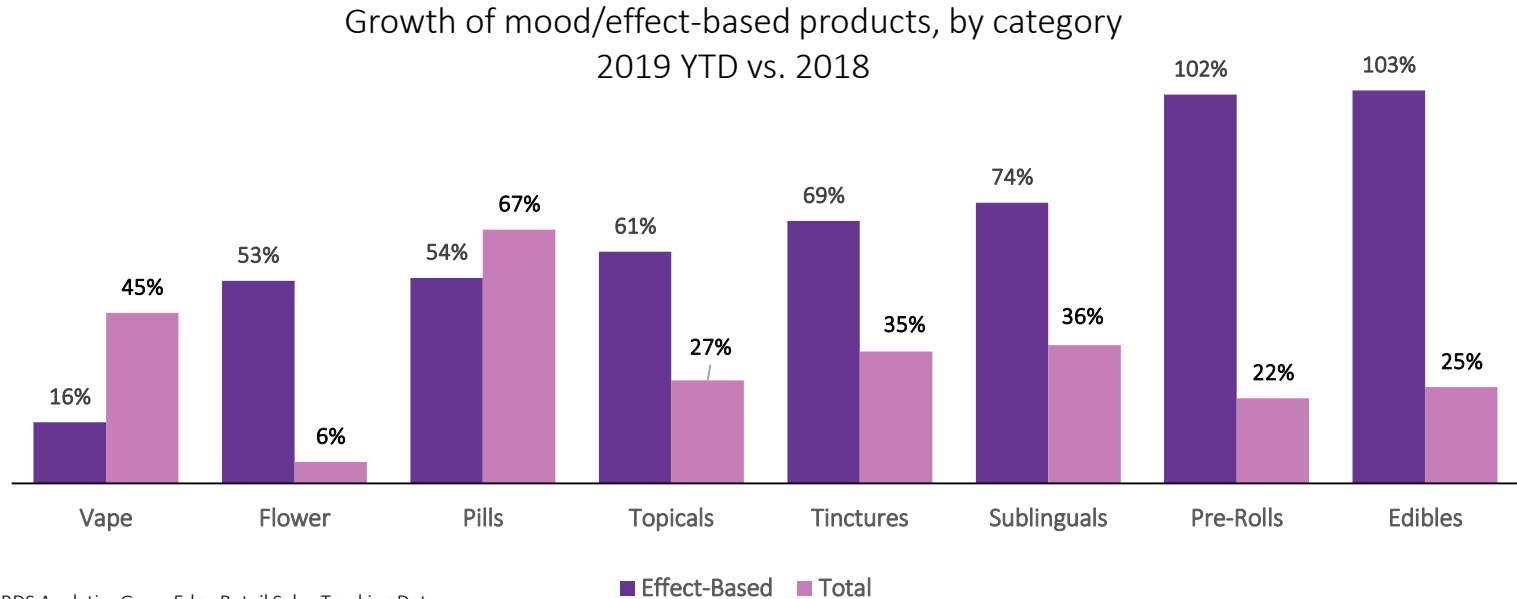
~5%

of 2018 and YTD 2019 \$ Sales

36% of Cannabis Consumers in fully legal states are strongly influenced by **Mood / Effect Labeling** when selecting a product

Substantial Growth of mood/effect-based products

Double and Triple-Digit Growth seen in recreational and wellness categories



Source: BDS Analytics GreenEdge Retail Sales Tracking Data

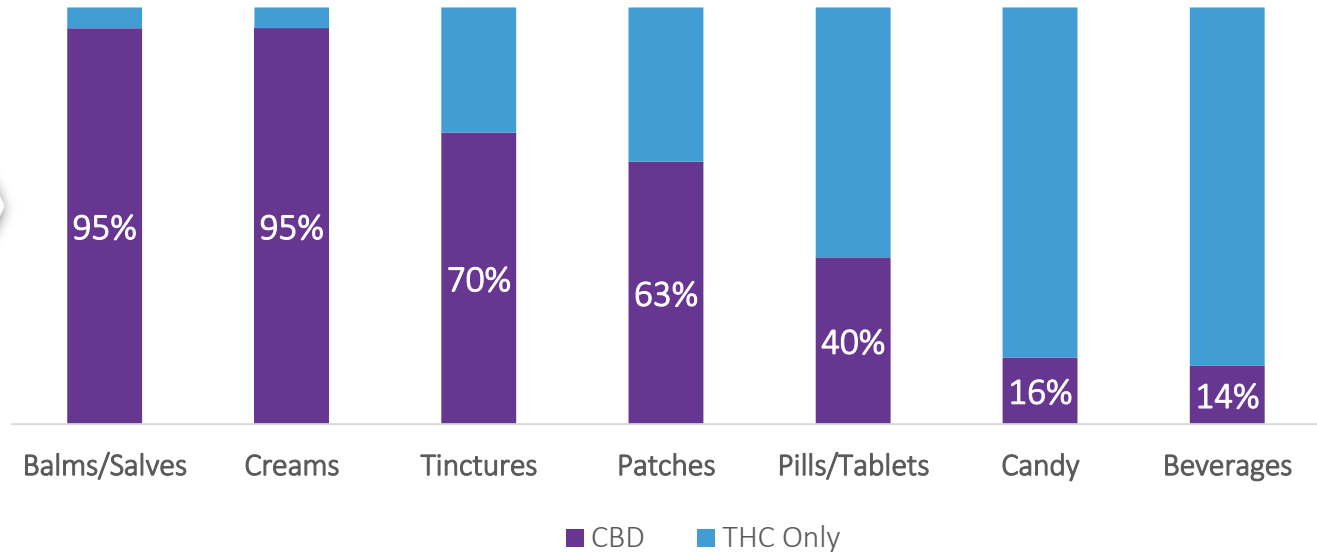
Experiences will matter at retail

- Consumption Lounges
- Wellness & Education:
 - Yoga
 - Speaker series
 - Patient/consumer services
- Health & Beauty:
 - Massages
 - Salon services
- Live Music & Entertainment
- Restaurants
- Cafes!

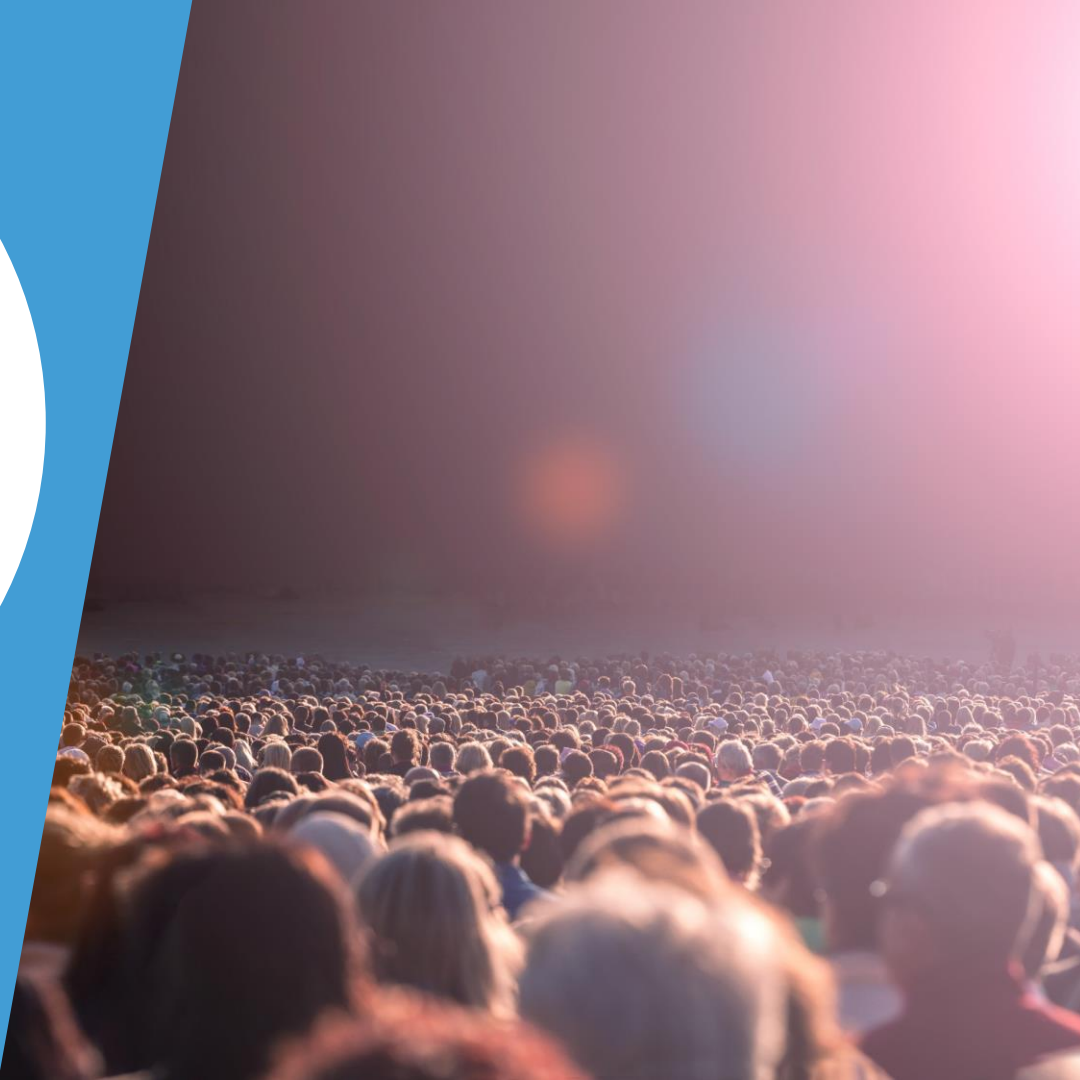


As the CBD Market Opens, the Dispensary Channel is and Will Continue to be a Leading Indicator for Success: Categories, Brands, Product, and Consumer

Topicals and Tinctures, the most prevalent CBD categories in the general market, have been dominant dispensary CBD forms for years

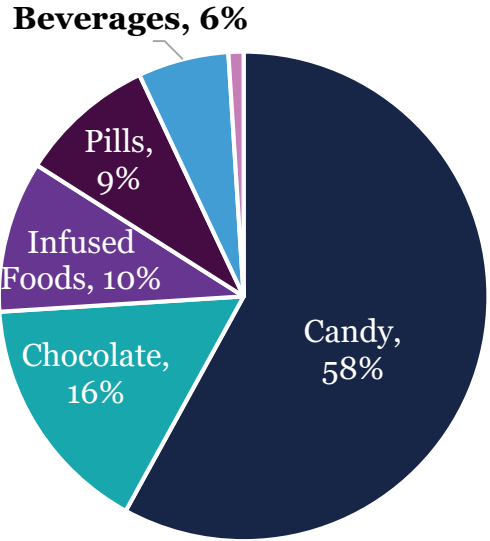


Product Trend #1 Beverages



Cannabis Beverages: a small, yet growing category

2019 Tracked Edible Sales: \$284M* (14% of total sales)



2022 TOTAL US

BDS Analytics' Projections

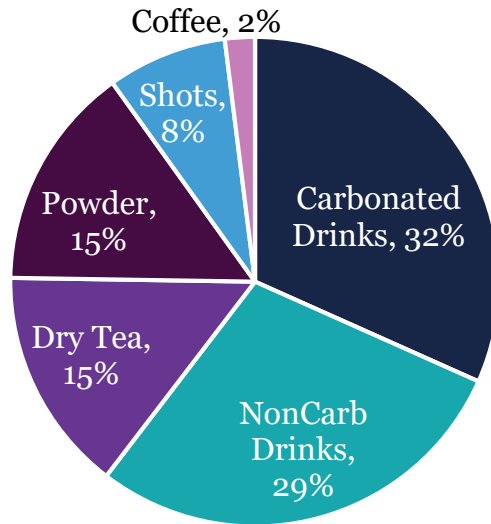
Edibles: \$3.4B
Beverages: \$374M**

*BDS Analytics Retail Sales Tracking Data: AZ, CA, CO, OR, NV

**Beverage projection is preliminary and may change in the coming months with additional research and modeling

And a Shifting Product Landscape

2019 Tracked Beverage Sales: \$18M* (6% of Edible sales)



**BDS Analytics Retail Sales Tracking Data: AZ, CA, CO, OR, NV*

Rapidly Evolving Cannabis Beverages



OUR BEERS



Dispensary Beverage Growth Trends

\$ Sales

+15%

CBD \$ Sales

+76%

Low THC Dose \$ Sales

+69%

Powder \$ Sales

+62%

*BDS Analytics Retail Sales Tracking Data CO, OR, AZ Q1+Q2 2019 vs. Q1+Q2 2018

CBD Beverages—just getting started



AND general market Hemp/CBD Beverages are *just getting started*



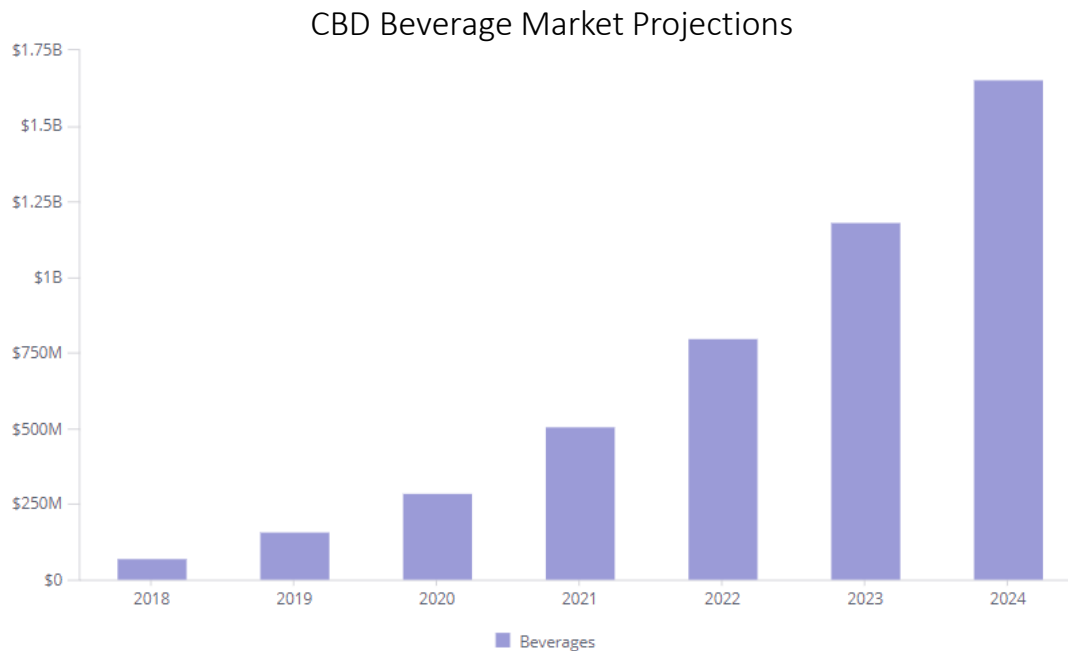
IRi
Growth delivered.

Hemp+CBD Beverage \$ Sales*

+134%

- *IRI ILD 52 weeks ending 6/16/2019

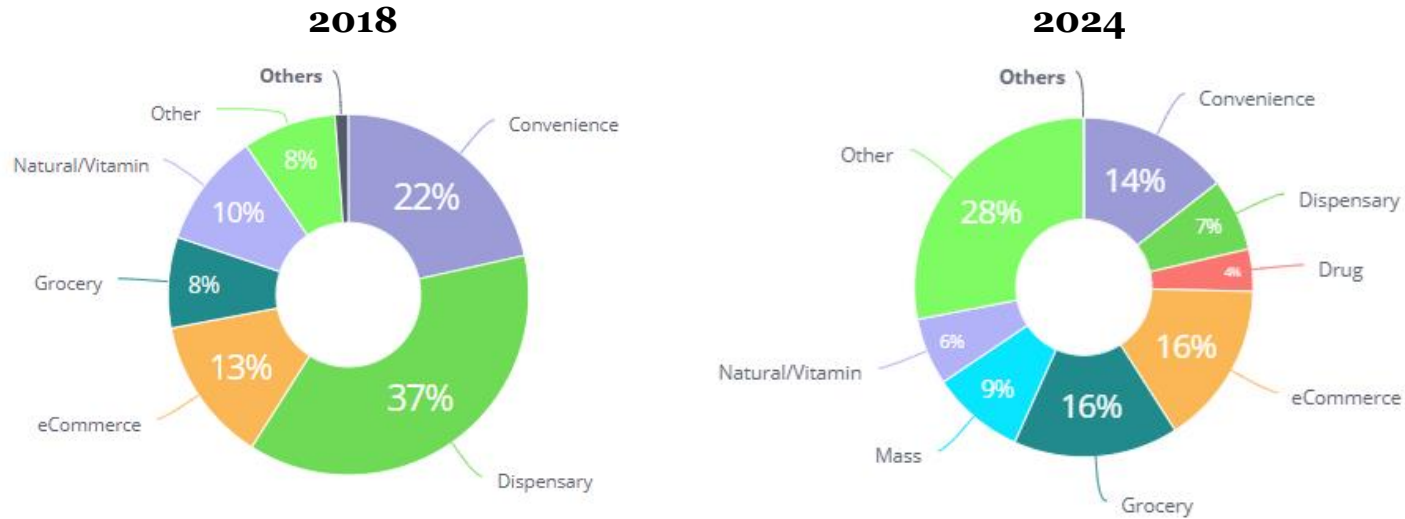
We project dramatic growth for CBD beverages, driven particularly by general market retail availability



Source: BDS Analytics CBD Market Monitor and Arcview Market Research

The channel mix for cannabinoid beverages will evolve radically over the next five years

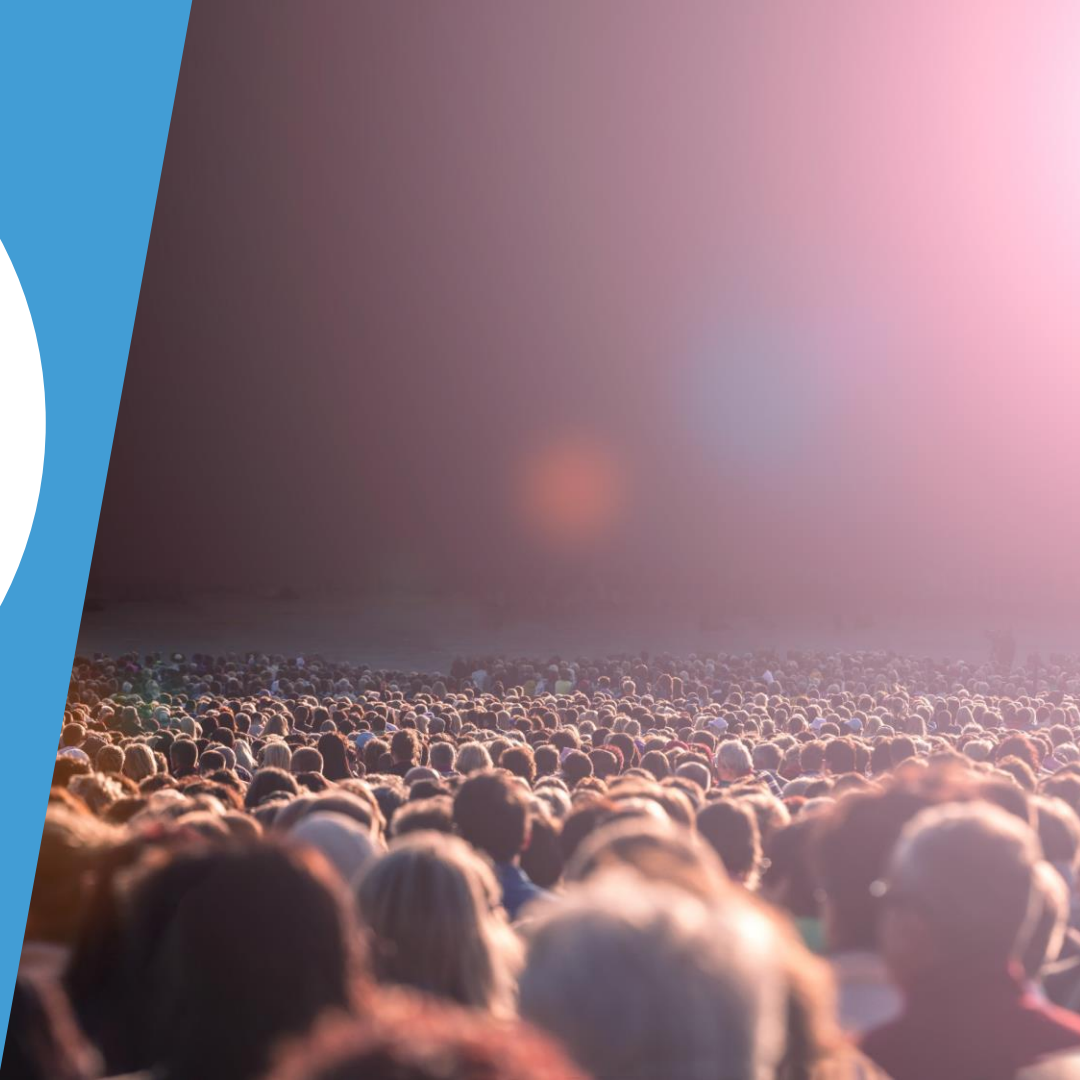
CBD Beverage Channel Mix



Source: BDS Analytics CBD Market Monitor and Arcview Market Research

Product Trend #2

Pet



The pet market is booming, too

85 million households

62% younger generations

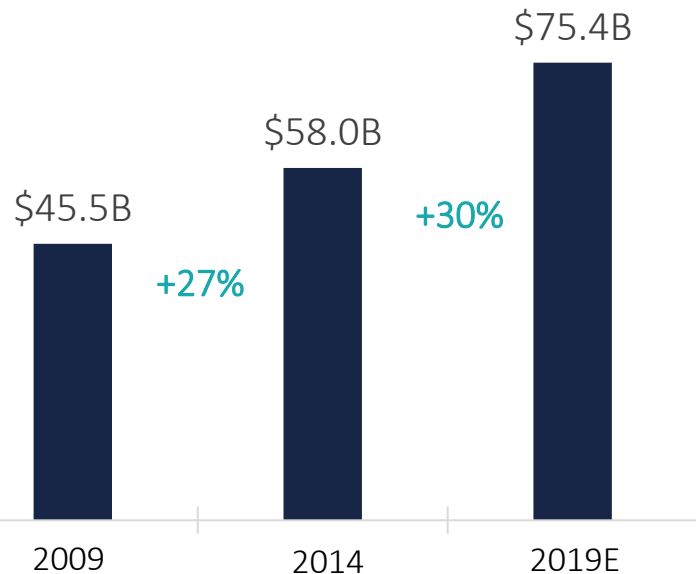
\$75.4 billion 2019 projected spending

Source: American Pet Products Association



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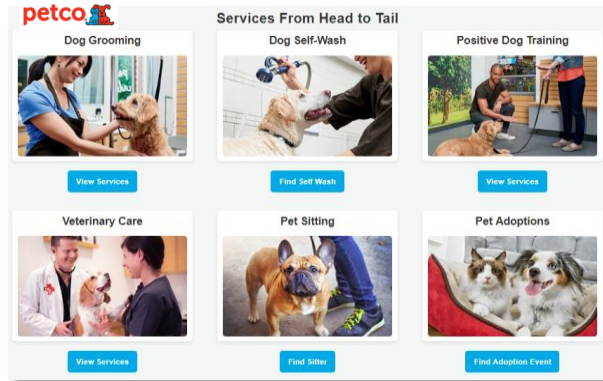
Total U.S. Pet Industry Expenditures



(Human) consumer trends → pet trends

Mirroring trends in general retail

- Natural/organic
- Premium products
- Seasonal
- Wellness
- Subscription plans
- Services



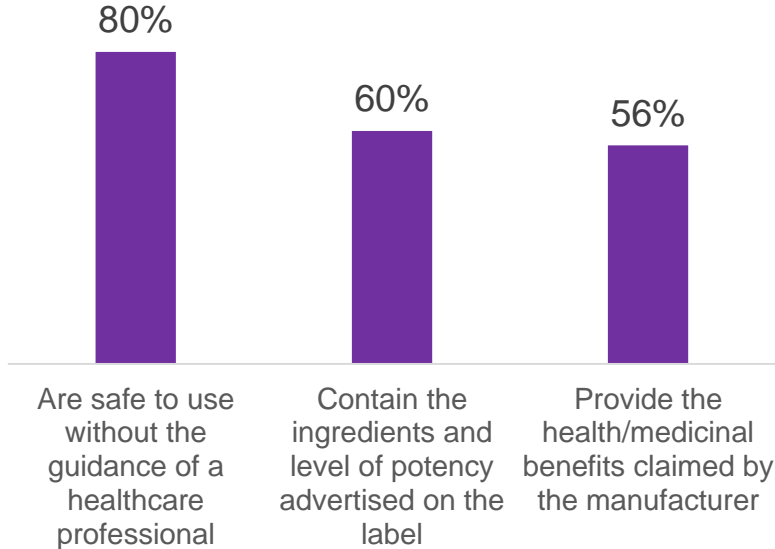
Source: Company websites

CBD: Not just for humans

Consumers confident about safety, expected benefits of CBD pet products

Confidence in CBD Pet Products

(among Cannabis Consumers AND Non-Consumers who have purchased hemp-derived CBD pet products in the past six months)



Source: BDS Analytics Consumer Insights, Q1 2019

Top Reasons for Purchasing CBD Pet Products

1. Treat/manage a health problem
2. Avoid Rx medications
3. Improve quality of life
4. Relieve pain
5. Manage stress



Beyond CBD, cannabinoid pet products a growing part of total dispensary channel

\$ sales to date

\$20.4M

Category growth, Q2 2019 vs. 2018

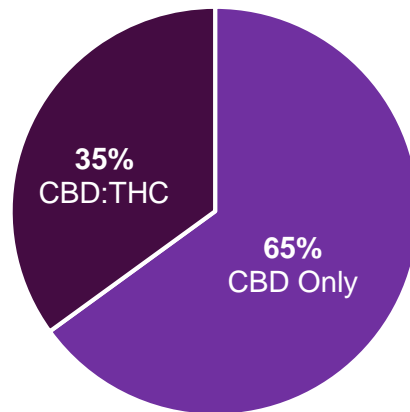
+17%

of brands (2019 YTD)

38



Attributes of Top 20 Pet Products, Q2 2019
(dispensary channel dollar sales)

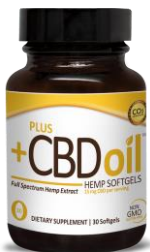


Source: BDS Analytics Retail Sales Tracking ; manufacturer websites

More specialized delivery systems, product innovations mean greater access

Wider product assortments, and wider availability across retail outlets

Supplements
Soft Gels



Supplements
Gummies



External
Pain



Supplements
Oil



Sleep



Skincare



Beverages



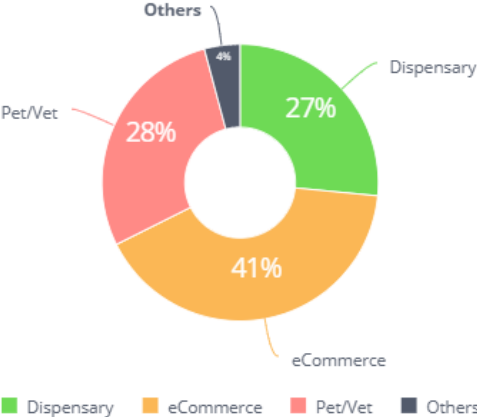
Pet products
mostly in the
form of
tinctures,
treats



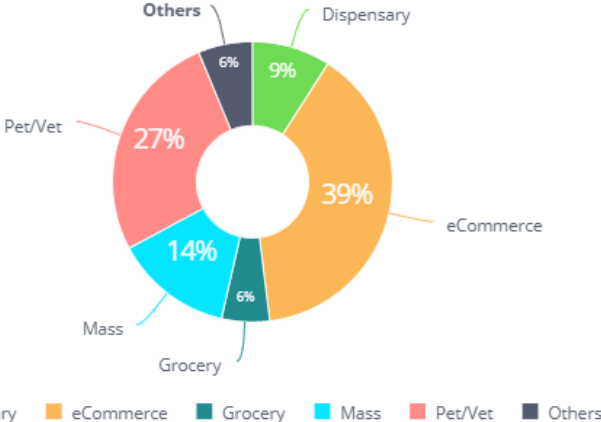
Source: BDS Analytics; company websites

Pet/Vet and eCommerce Remain Important, other channels also gain steam

Channel Breakdown (2018)



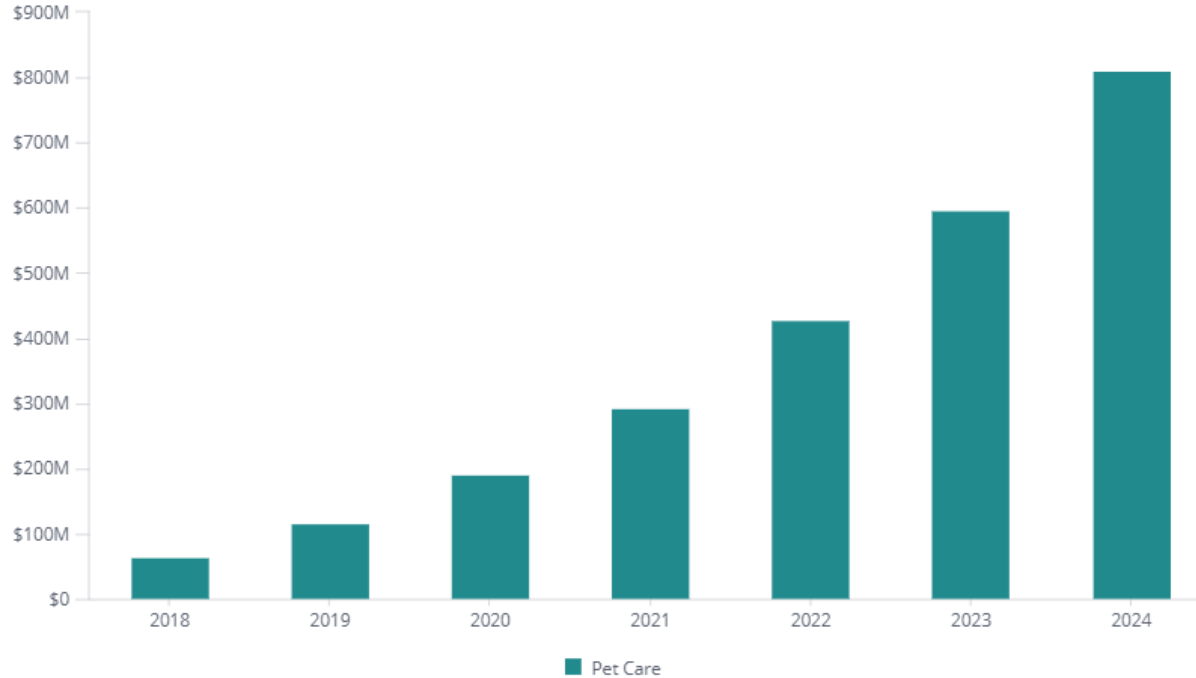
Channel Breakdown (2024)



Source: BDS Analytics CBD Market Monitor and Arcview Market Research

CBD Pet Care to Reach \$800MM by 2024

Total Spending by Category



Source: BDS Analytics CBD Market Monitor and Arcview Market Research

Legal Cannabis is a Game Changer

- Legal cannabis (hemp and marijuana) is new, cannabis is not
- Consumption is purposeful, multi-faceted, and complex
- Legal cannabis is and will continue to DISRUPT every consumer industry
- In the slow growth world of CPG, nothing is growing like this
- CBD in general retail presents huge growth, but the Dispensary channel (size and impact) cannot be ignored
- Constantly evolving—keep up

IT'S A NEW GAME.
What does that mean for
your business?

Presentation by

Liz Stahura, President, Co-Founder

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