

Evaluating the Impact of Changing Community Norms on Youth Marijuana Use Following Legalization in the District of Columbia

Conference of the National Prevention Network

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Who We Are



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Prevention for Success grantee*



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Who's joining us today?



Researchers
Practitioners
Government Staff





Agenda

- Reason for this presentation + objectives
- Our analysis
- What does this mean
- Conversations with DBH
- Conversations with the audience



Wards of Washington D.C.





Change in Marijuana Policy



November 2014: Voters approved the Legalization of Possession of Minimal Amounts of Marijuana for Personal Use Initiative (Initiative 71)

- Effective as of February 26, 2015

Permits individuals 21 years of age or older will be able to lawfully:

- Possess two ounces or less of MJ
- Use MJ on private property
- **Transfer one ounce or less of MJ to another person, as long as:**
 - no money, goods or services are exchanged; and
 - the recipient is 21 years of age or older



What Initiative 71 Does Not Do



- Permit the selling of any MJ
- Allow the possession of more than 2 oz of MJ for adults 21 or over
- Permit the public use of MJ (including on federal land)
- Permit the operation of a vehicle under the influence of MJ

Permit use or possession for persons under 21 years of age

- If found with up to 2 oz of MJ, officers will seize drug but will not arrest or issue a ticket
- Will be arrested if possess more than 2 oz of MJ





District's Challenge



- To prevent the use of MJ among young people despite more normalizing attitudes in the District
 - Through evidence-based prevention efforts
 - Through data-driven evaluations
 - Through conversations with people living in these communities
- The purpose of this presentation is to provide a snapshot of these tasks



Evaluating Changes in the District



- At implementation of Initiative 71, most substance use prevalence data limited to
 - National surveillance survey data
 - Or non-survey administrative data from District agencies
- Need for data that is specific to the District's needs
 - Customizable
 - Readily available
 - Provide community-level estimates (e.g., Ward)



District of Columbia Prevention Survey



- Funded using PFS grant award
- Collected in Winter of 2016 and Winter of 2017
- By telephone
 - Adult Survey:
 - Representative of Districts Adults (18 and older)
 - Surveys adults attitudes and beliefs related to youth marijuana use
 - 2016 = 616 responses; 2017 = 602 responses
 - Youth Survey:
 - Representative of District Youth and of each ward (12-17 years)
 - Surveys youths' perceived beliefs, norms, attitudes, and substance use history



Evaluating Changes in the District



- A mixed methods analysis using telephone survey data from District adults and youth as well as data from community conversations post-implementation
 - Trends and relationships of norms and attitudes on youth past month marijuana use
 - Community conversations
- Followed with a conversation with the Eric Chapman, Director of Prevention Services (DBH)



Analysis of Prevention Survey Data



Objective 1: *Describe how the District is monitoring changing community attitudes and perceived beliefs about marijuana*

- District-representative estimates of survey items
- Chi-square and t-test comparing of 2016 vs 2017

Objective 2: *Analyze to what extent are these community attitudes and perceived beliefs associated with youth past month marijuana use*

- Logistic regression to calculate odds ratios
- Structural equation modeling to determine if the type of variables are associated with PM MJ use



Variables Included: Youth Survey



Lifetime Marijuana Use



yes



no

Past Month Marijuana Use



yes



no

Norms Regarding Youth MJ Use:

- Ease of Access
- Likelihood of Being Caught by Police
- Perceived Wrongness from Community Adults
- Family has clear rules about alcohol and drug use
- Perceived Parental/Guardian Approval about Regular MJ Use
- Perceived Close Friends Approval about Regular MJ Use
- Perceived Risk of Harm from Regular MJ Use
- Talked with Parent/Guardian about Dangers of ATOD Use in Past 12 Months



What do we know about MJ's affect on youth outcomes



- Regular MJ in adolescence been shown to impact academic achievement, may cause cognitive impairment, and increases risk of future substance disorders.^{1,2}
- Programs and interventions that address multiple domains of influence may be most effective at reducing risk behaviors in adolescents.³
- Results have been mixed to determine how changing MJ policies impact adolescent use.^{4,5}



Significant Changes from Youth: 2016 to 2017

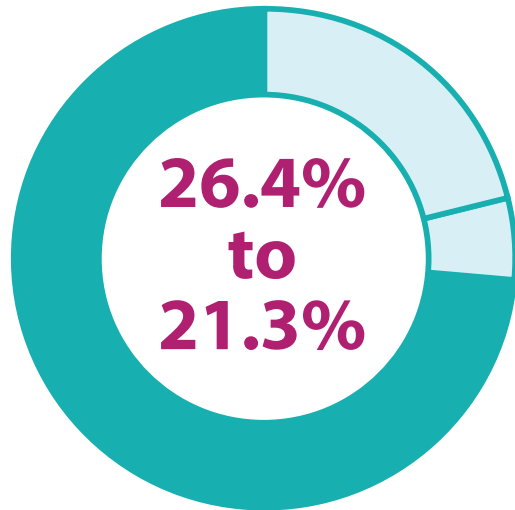


Ease of Getting
Marijuana if Wanted
Some

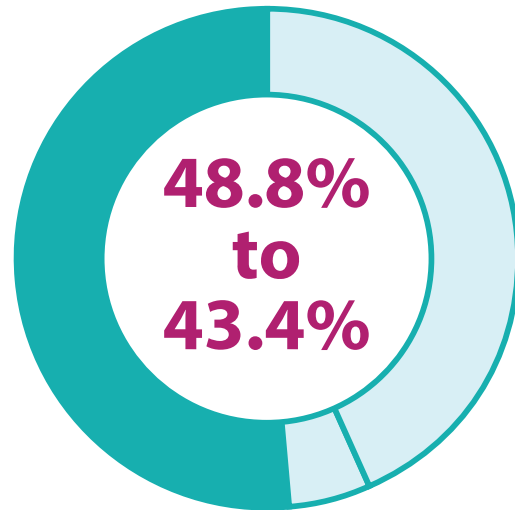
Likelihood of Bring
Caught by Police if
Smoking Marijuana

Lifetime Marijuana
Use

Past Month Marijuana
Use



Said "Very Easy"



Said "Little or No Chance"

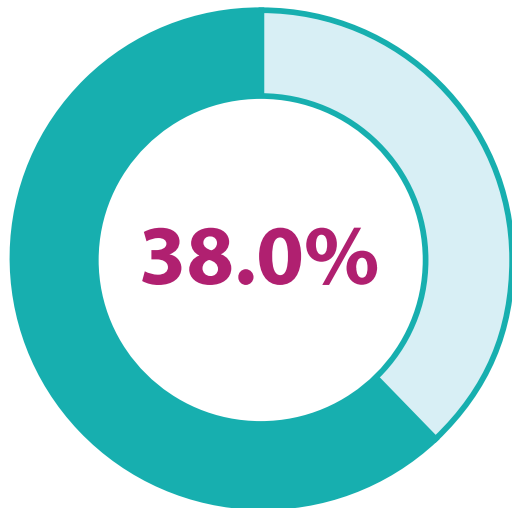




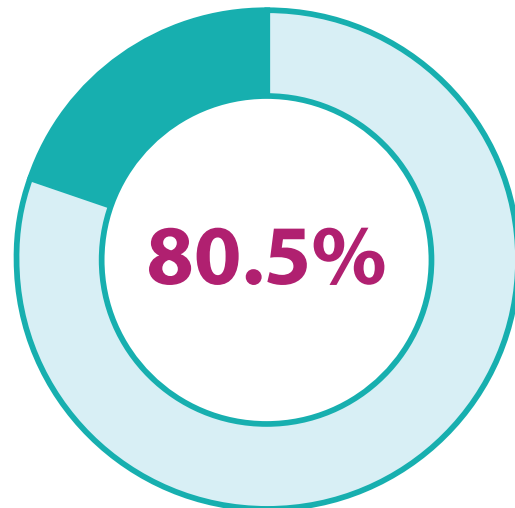
Non-Significant Changes from Youth: 2016 to 2017



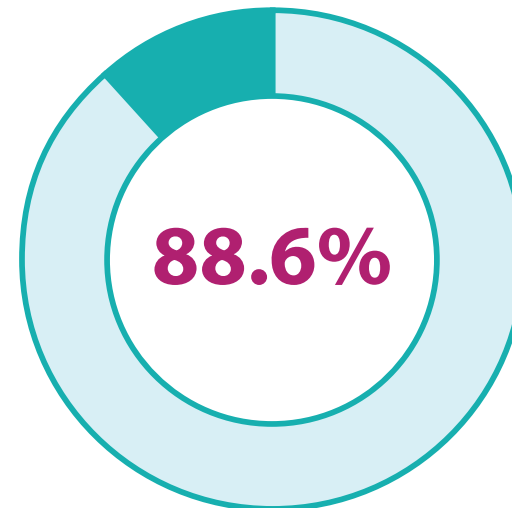
Perceived
Community Adults
Would Think Youth
MJ Use is Very
Wrong



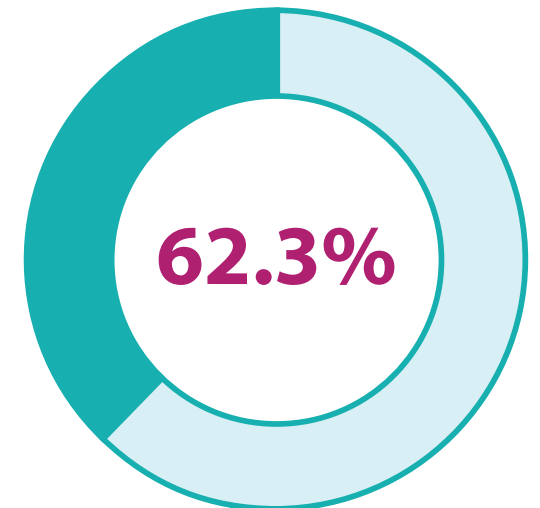
Perceived
Parental/Guardian
Strong Disapproval
about Youth's
Regular MJ Use



Family has Clear
Rules about Alcohol
and Drug use



Talked with
Parent/Guardian
about Dangers of
ATOD Use in Past 12
Months





Non-Significant Changes from Youth: 2016 to 2017

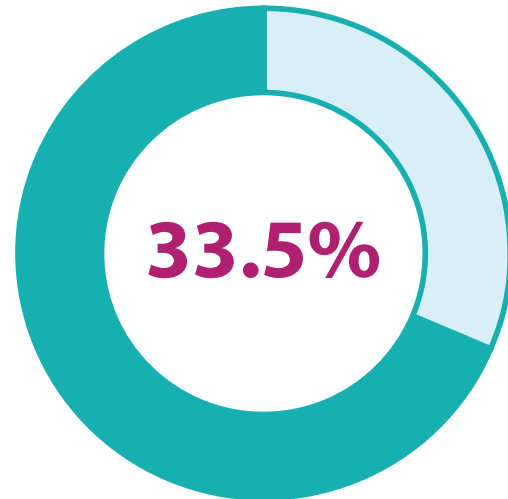
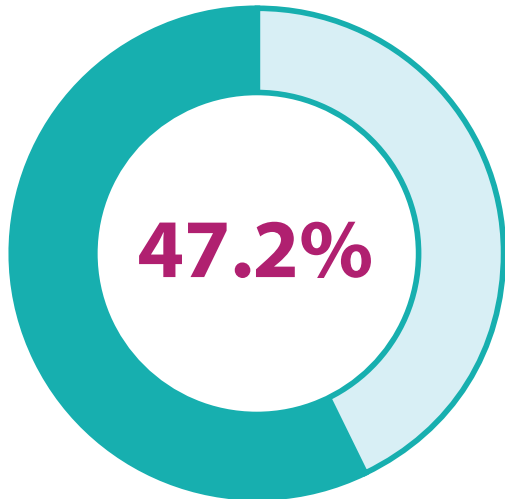


Perceived Close
Friends Strong
Disapproval about
Youth's Regular MJ Use

Perceived Great Risk
of Harm from
Regular MJ Use

Age at first
marijuana use

Number of days using
marijuana in past
month





Variables Included: Adult Survey



If Have MJ in Home,
Monitors/Secures MJ

Perceived Acceptability of
Sharing MJ with Young
People

Perceived Ease for Young
People to Get MJ

Perceived Likelihood of
Getting in Trouble for
Providing MJ to Young
People

Knowledge of Initiative 71

Perceived Community
Disapproval of Youth
Marijuana Use

- In General
- At Family and Community Events



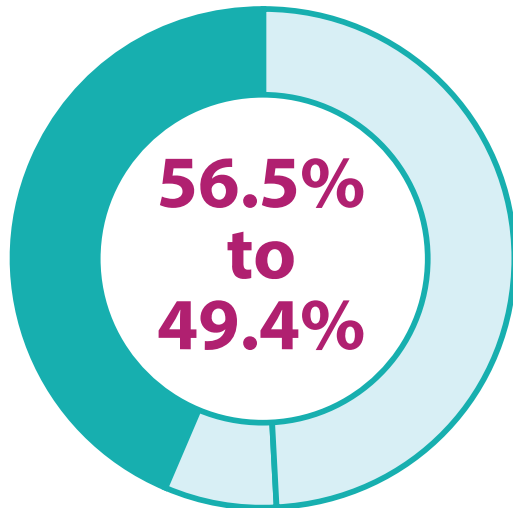
Significant Changes from Adults: 2016 to 2017



Perceive Adults in Community Would Strongly Disapprove of Youth Marijuana Use:

In General

If at block parties, community
festivals, or other community events





Non-Significant Changes from Adults: 2016 to 2017

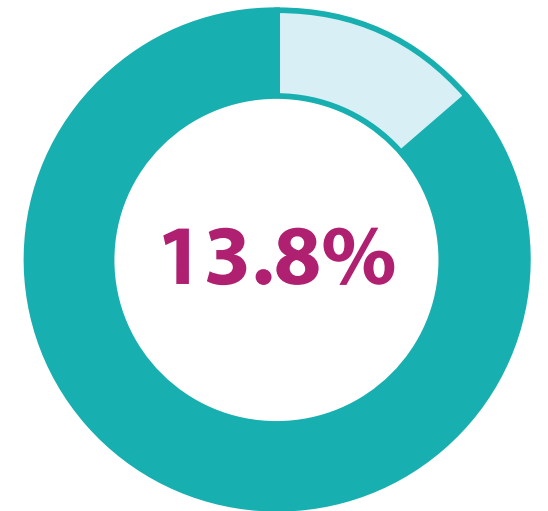
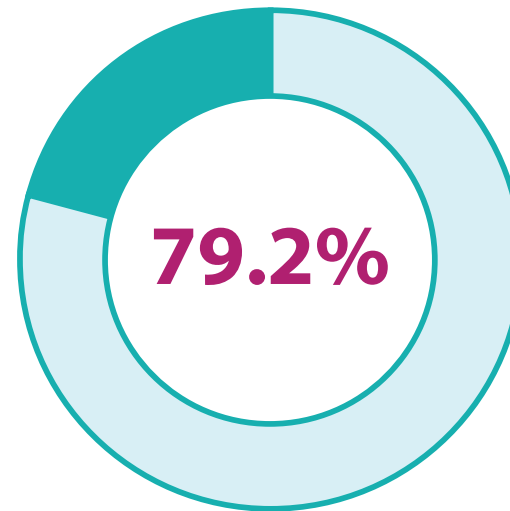
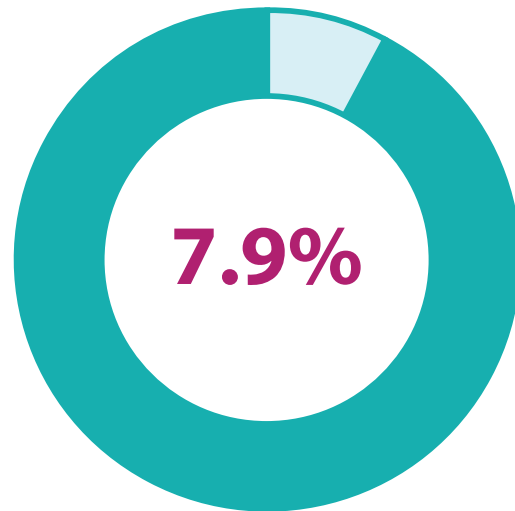
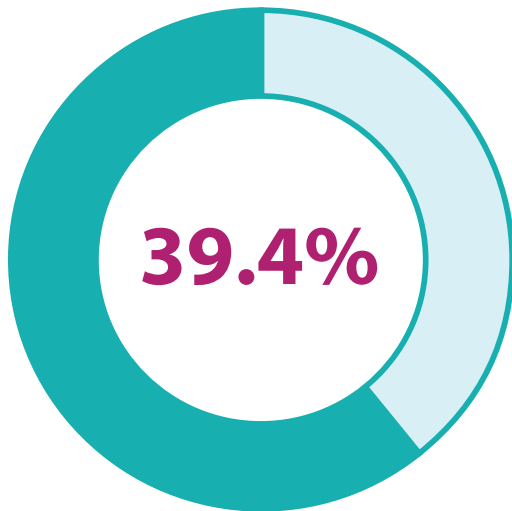


If Have MJ in Home,
Monitors/Secures
MJ

Perceive It is Totally or
Somewhat Acceptable
to Sharing MJ with
Underage Youth

Perceive It is Very or
Somewhat Easy for
Young People to Get
MJ

Know Initiative 71

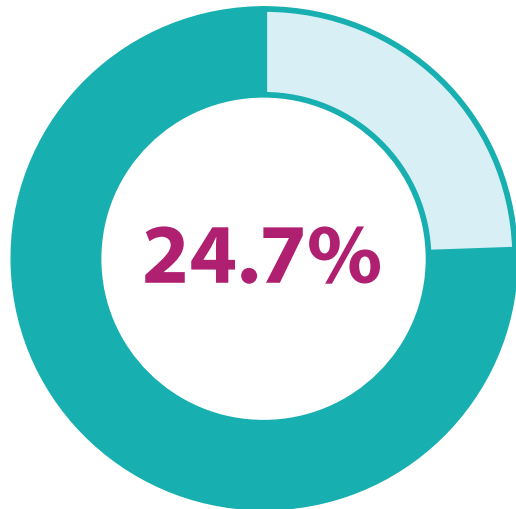




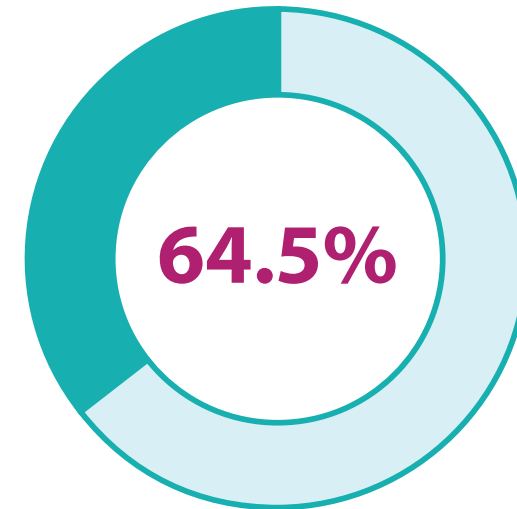
Non-Significant Changes from Adults: 2016 to 2017



Perceived Very Unlikely of Getting in Trouble for Providing MJ to Young People



Perceive Adults in Community Would Strongly Disapprove of Youth Marijuana Use at Family Events





Objective 2: Relationship of Youth Risk Factors to Past Month Use



All of the risk factors were positively associated with past month use

- Likelihood of use increases as move up response options

For nearly every indicator, males were more likely to report past month use than females

Those interviewed in 2016 were more likely to report past month use than those interviewed in 2017



Objective 2: Relationship of Youth Risk Factors to Past Month Use



Those with strongest association of past month use

- Believe it is **“very easy”** to access marijuana if wanted some (**OR = 16.9**)
- Believe parents or guardians would **“neither approve or disapprove”** of youth using marijuana at least once a week (**OR=12.8**)
- Believe close friends would **“neither approve or disapprove”** of youth using marijuana at least once a week (**OR=10.0**)
- Perceive **“no risk”** of using marijuana regularly (**OR=8.7**)
- Perceive adults in neighborhood think it is **“not wrong at all”** for young people to use marijuana (**OR=6.6**)



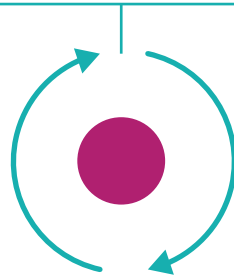
Underlying Type of Influence?



- 1) Ease of Access
- 2) Likelihood of Being Caught by Police
- 3) Perceived Wrongness from Community Adults
- 4) Family has clear rules about alcohol and drug use
- 5) Perceived Parental/Guardian Approval about Regular MJ Use
- 6) Perceived Close Friends Approval about Regular MJ Use
- 7) Perceived Risk of Harm from Regular MJ Use
- 8) Talked with Parent/Guardian about Dangers of ATOD Use in Past 12 Months



Structural Equation Modeling



Risks



Approvals



Parental Communication

DOES TYPE OF NORMS IMPACT PM MJ USE



Risks

- Ease of access
- Chance of getting caught by police
- Perceived risk of regular use



Approvals

- Perceived parental approval
- Perceived close friends approval
- Perceived community adult approval

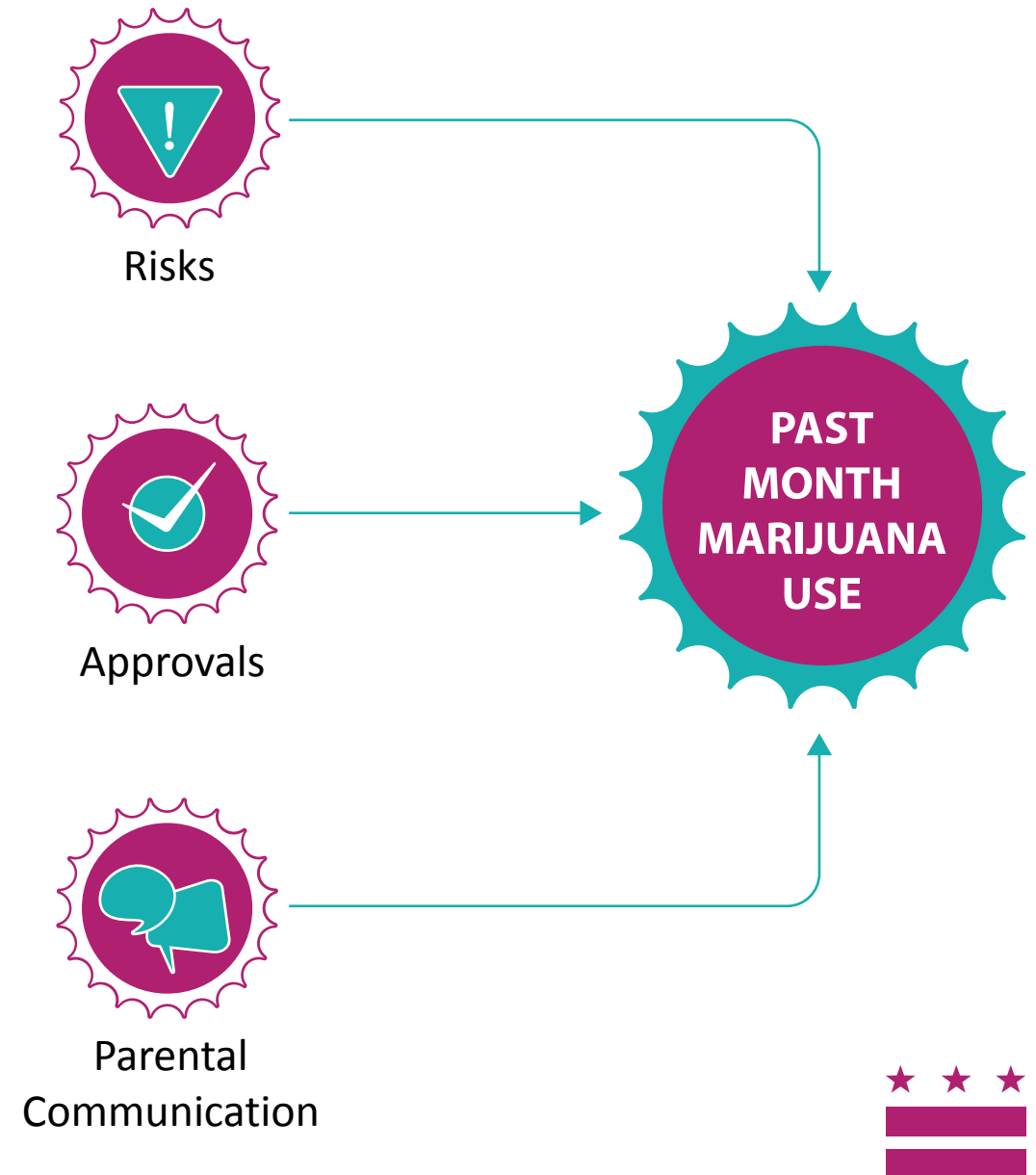


Parental
Communication

- Parents have clear rules about alcohol/drugs
- Talked to parents within 12 months about ATOD use



- There was no relationship between perceived low risks and past month marijuana use ($p=0.703$)
- There was no relationship between perceived community approval of use and past month marijuana use ($p=0.167$)
- Lack of parental communication about substance use is associated with higher the odds of reporting past month marijuana use ($p<0.0001$)





Summary of Findings from Survey Analyses



Mix findings between the impact of risks/ease, approvals from others, and parental communication on youth past month marijuana use.

- **Having clear rules in the house and talking with parents about ATOD use together reduce odds of reported recent use.**
 - Suggest interventions that promote parents being explicit with children about expectations with alcohol and drugs.
- **Each of the risks/opportunities items together are not associated with recent use; same for all three approval items.**
 - Youth may be differently influenced by type of risks and by adults in their community, by parents, and by their close friends.



Community Conversations



Community Conversations



- **Purpose:** Community Conversations engage youth and adults in semi-structured group conversations held throughout DC
 - **Conversations aim to:**
 - identify local conditions contributing to substance use,
 - discuss community readiness, and
 - identify resources needed to address substance use issues.
-
- DC PFS grantees conducted 43 Community Conversations in 2016 & 2017
 - 2016 (N=25 conversations)
 - 2017 (N=18 conversations)



Community Conversations



- DC PFS grantees shared notes from the conversations that present the
 - key feedback from the community,
 - points of consensus of disagreement and
 - key quotes from conversation participants.
- Notes are organized based on major themes using a qualitative software, **Nvivo 11**.



Ease of Access: How do Youth Obtain Marijuana?

- From dealers or “plugs,” older relatives, and parents
- Marijuana is sometimes grown by dealers and other community members.



“If you want to smoke you go to your “plug” to get the weed and sell it to you cheap.”

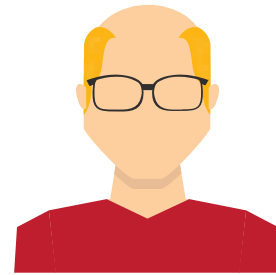


“[Marijuana] is actually everywhere, not just in DC.”



Ease of Access: How do Youth Obtain Marijuana? *(cont)*

- Community members also shared feedback about marijuana-infused foods

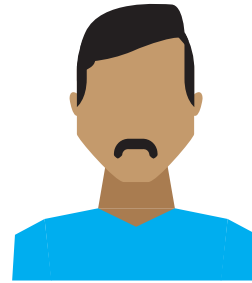


“I had a friend that for his birthday had this edible chocolate cookies and he ate one and said this is not bad. So he ate 7 and he was literally collapsed and we had to drag him out.”



Places Where Youth Use Marijuana

- Youth and adults described youth using marijuana in public venues.
- Youth and adults described youth smoking marijuana on the metro, the bus, and even in front of cops without any recourse.

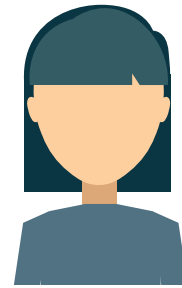


“Before, we had more drugs used privately and they were not displayed on the streets and this was more of the norm...[Now], many youth think that smoking marijuana on the street is legal.”



Community Norms around Marijuana Use

- Both youth and adult community members indicated that some youth use marijuana.
- Most youth
 - believed the legal age of use was 18 years old and not 21 years old.
 - perceived 14-18 years old as an acceptable age range for using marijuana

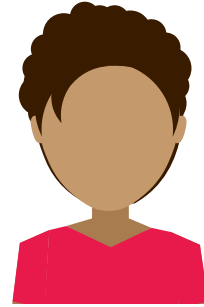


“I was told by [the DC Metropolitan Police Department] that they don’t enforce marijuana because they get frustrated with writing so many nuisance citations.”



Community Norms around Marijuana Use

- Some youth perceived that kids as young as 6 years old were using marijuana.

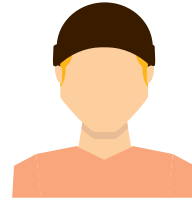


“[I think my peers started smoking marijuana] at 11 because I started when I was 11 years old.”



Perceived Impacts of Youth Marijuana Use – Youth and Adult Perceptions

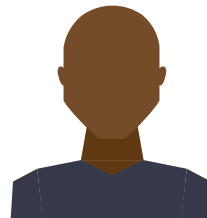
- Adults and youth shared positive and negative impacts of youth marijuana use



“Early on I had problems and the weed helped me to calm down.”



“[Marijuana] is natural and from the earth.”



“Some [youth] can’t concentrate and learn [when they use marijuana].”





Summary of Findings



Summary of Findings from Community Conversation Analyses



- Perception that it is easy for youth to get marijuana “it’s everywhere”
- Use of different types of Marijuana, including edibles
- No real consequences for using in public
 - Reports of youth using in public, in front of police, and at school





Summary of Findings from Community Conversation Analyses



- Adults and youth believe youth are using
 - Some youth believe it is even legal for 18 year olds to use and that is acceptable for younger teens to use
- Low perceived risk
 - Not as bad as hard drugs
 - Can be a healthy way to relieve stress
 - Some recognize can negatively impact youth concentration and learning ability



Summary of Findings from Survey Analyses



For youth,

- Reductions in recent youth substance use
- Many attitudes and perceptions did not change year-to-year
- Endorsing MJ supportive attitudes strongly related to youth recent MJ use
- Overall risks and approvals are not associated with youth use; need to be specific.

For adults,

- Reductions in perceived community disapproval of youth MJ use.
- Nearly 8 in 10 believe that is “very or somewhat” easy for young people to get MJ



Summary of Findings from Survey Analyses



For youth, there are many factors associated with past month use

- Past month marijuana use is higher in those who endorse beliefs and norms that are more supportive of youth marijuana use (i.e., no consequences to use)
- Limited year to year changes
 - Reduced past month marijuana use + Lifetime marijuana use
 - More believe it is more difficult to get marijuana if wanted some



Discussion with DBH



Questions from Audience?



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References

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3. Jackson, C., Geddes, R., Haw, S., & Frank, J. (2012). Interventions to prevent substance use and risky sexual behaviour in young people: a systematic review. *Addiction*, *107*(4), 733-747.
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[https://www.ijdp.org/article/S0955-3959\(15\)00012-2/pdf](https://www.ijdp.org/article/S0955-3959(15)00012-2/pdf)
5. Brooks-Russell, A., Ma, M., Levinson, A. H., Kattari, L., Kirchner, T., Goodell, E. M. A., & Johnson, R. M. (2018). Adolescent Marijuana Use, Marijuana-Related Perceptions, and Use of Other Substances Before and After Initiation of Retail Marijuana Sales in Colorado (2013–2015). *Prevention science*, 1-9.



Additional Resources

DCEOW Dashboard (recommend to use Google Chrome or Firefox):

<https://dcspfsig.rti.org/dashboard/>

Data Reports: <https://dcspfsig.rti.org/Data-and-Reports>

