

OREGON YOUTH MARIJUANA PREVENTION PILOT CAMPAIGN

12-MONTH PILOT CAMPAIGN EVALUATION RESULTS



Still from sample campaign video describing a social norm among Oregon youth.
(video: *You're Not Alone if You Don't Smoke Weed*)

Stay True to You

CAMPAIGN ACCOMPLISHMENTS

More youth and young adults in campaign pilot areas:

Correctly identified social norms around youth marijuana use compared to those in non-pilot areas

Understood the legal consequences of underage marijuana use compared to those in non-pilot areas

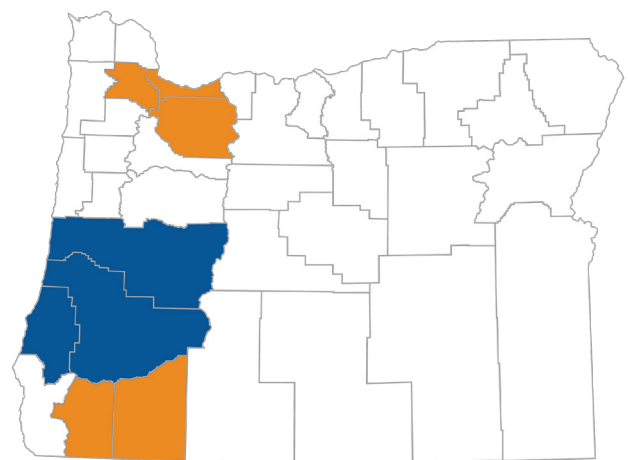
EXECUTIVE SUMMARY

In 2016 the Oregon Legislature invested \$3.9 million for the Oregon Health Authority Public Health Division (OHA-PHD) to design, implement, and evaluate a youth marijuana use prevention media campaign in Clackamas, Jackson, Josephine, Multnomah, and Washington Counties. To assess the effects of the pilot campaign, OHA-PHD contracted RMC Research to conduct an independent third-party evaluation. Evaluation findings showed that by nine months the campaign had fully reached its target youth and young adult audiences with a high level of exposure. Though there was no significant change in youth and young adult intent to use marijuana, evidence indicates that the campaign had a positive effect on youth and young adults' perceptions of the social norms around youth marijuana use and knowledge of the legal consequences of marijuana use before age 21. OHA-PHD recommends providing support throughout the state to youth, young adults, and parents to prevent underage use of marijuana. In addition, OHA-PHD recommends adopting policies to track marijuana advertising, limit marijuana marketing and promotion, prohibit the sale of flavored products, and maintain local control to protect Oregon's youth and young adults from the potential negative health effects of marijuana use. This report presents campaign evaluation results at nine months and serves as the final evaluation report for the pilot campaign which began June 30, 2016, and ended June 30, 2017.

BACKGROUND

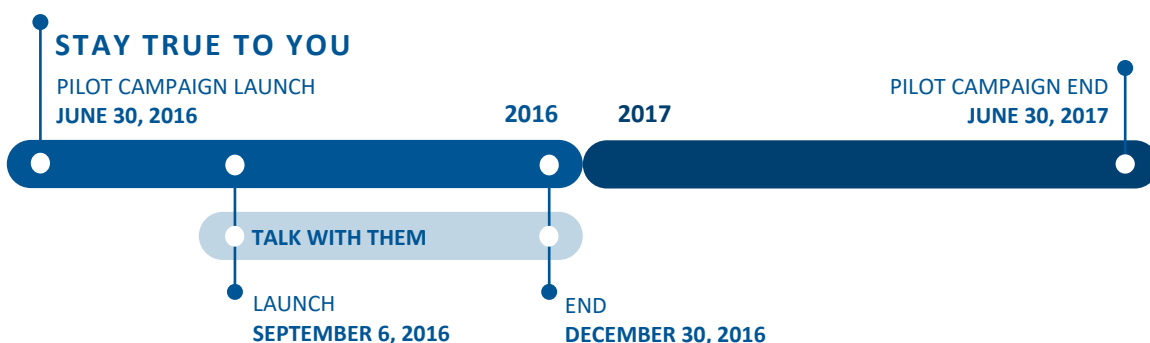
As of July 2015, Measure 91 permitted Oregonians aged 21 and over to legally use marijuana recreationally. In March 2016 the Oregon Legislature passed House Bill 4014, tasking OHA-PHD with the design, implementation, and evaluation of a pilot health education campaign to increase awareness of the possible negative health effects of marijuana use by youth and young adults. Oregon's youth marijuana prevention campaign aims to protect the public's health by providing motivating, factual, and believable information to help prevent or delay underage marijuana use.

In response OHA-PHD created **Stay True to You**, a mass media health education campaign directed at youth and young adults that included **Talk With Them**, a component directed at parents and youth-serving adults. Legislative intent guided OHA-PHD in choosing the Portland metropolitan area (Clackamas, Multnomah, and Washington Counties) and southern Oregon (Jackson and Josephine Counties) as the locations for this pilot campaign. OHA-PHD and RMC Research selected three demographically similar counties to serve as comparison areas for the evaluation.



PILOT AREA COUNTIES
Clackamas • Jackson • Josephine
Multnomah • Washington

COMPARISON COUNTIES
Coos • Douglas • Lane



SOCIAL NORMS CHANGE. The pilot campaign occurred in the context of increased marijuana advertising and access to retail marijuana—recent changes that may promote underage marijuana use. There are no systems or laws that enable the tracking of the magnitude of marijuana advertising in Oregon. However, marijuana retail locations are almost twice as common as Starbucks or McDonald’s.¹

“NO MATTER WHERE I’M GOING I PASS AT LEAST THREE DISPENSARIES.”

PORTLAND 18–20-YEAR-OLD

Attitudes toward substance use (including risk perceptions), misperceptions of social norms,² and perceived control or consequences are known predictors of substance use behavior.^{3,4,5} The **Stay True to You** campaign sought to change these predictors among Oregon youth and young adults. In addition, the campaign sought to prevent or delay the initiation of marijuana use by those under 21 years of age.

The campaign was primarily expected to influence attitudes toward and perceptions around youth marijuana use.



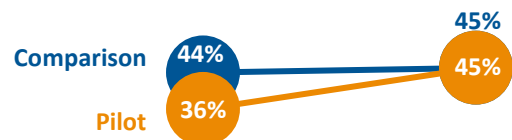
CAMPAIGN ACCOMPLISHMENTS

LIMITS TO THE CAMPAIGN’S EFFECTS. The **Stay True to You** campaign was active for 12 months; at evaluation end OHA-PHD had implemented **Stay True to You** for nine months (June 30, 2016–March 31, 2017). Typically such campaigns run longer before being evaluated.^{6,7} Also, because media campaigns are most effective when implemented in the context of communitywide support for youth, parents, and families,⁸ the effects of **Stay True to You** on youth marijuana use are limited in the absence of coordinated education, support, and services implemented in collaboration with counties, tribes, Coordinated Care Organizations, and schools in Oregon.

Evidence indicates **no significant change in youth and young adult intent to use marijuana.**

Both the pilot and comparison areas experienced slight (not statistically significant) increases in the percentage of youth and young adults who intend to use marijuana in the next 12 months or before age 21. The proportions did not change significantly from baseline to evaluation end.

Similar proportions of youth and young adults reported an **intent to use marijuana in the next 12 months** at baseline and evaluation end.



¹<http://www.businessinsider.com/there-are-more-marijuana-shops-in-oregon-than-starbucks-and-mcdonalds-2015-6>

²Schulz, P.W., Nolan, J.M., Cialdini, R.B., Goldstein, N.J., & Griskevicius, V. (2007). The constructive, destructive, and reconstructive power of social norms. *Psychological Science, 18*(5), 429.

³Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin, 132*(2), 249.

⁴Hawkins, J. D., Catalano, R.F., & Miller, J.Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: implications for substance abuse prevention. *Psychological Bulletin, 112*(1), 64.

⁵Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*, 179–211.

⁶Palmgreen, P., Donohew, L., Lorch, E.P., Hoyle, R.H., & Stephenson, M.T. (2001). Television campaigns and adolescent marijuana use: Tests of sensation seeking targeting. *American Journal of Public Health, 91*, 292–296.

⁷Sly, D.F., Trapido, E., & Ray, S. (2002). Evidence of the dose effects of an antitobacco counteradvertising campaign. *Preventive Medicine, 35*, 511–518.

⁸For example: Centers for Disease Control and Prevention. (2014). *Best Practices for Comprehensive Tobacco Control Programs 2014*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.

⁹Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*, 179–211.

Evidence strongly supports a positive campaign effect on youth and young adults' knowledge of social norms around youth marijuana use and the legal consequences of underage use.

At evaluation end, a statistically significantly higher proportion of youth and young adults in the pilot areas correctly identified that only 1 in 5 Oregon high school juniors uses marijuana. Though both the pilot and comparison areas experienced increases, the increase in the pilot areas was significantly greater.

“I HAD IT IN MY HEAD THAT THE MAJORITY OF PEOPLE SMOKED WEED IN SCHOOL BECAUSE IT'S A VERY LOUD CULTURE. AT THIS POINT, I KNOW THE STATISTICS.”

PORTLAND 18–20-YEAR-OLD

- ▶ At baseline youth and young adults in pilot and comparison areas did not differ in correctly identifying social norms: only 1 in 5 Oregon high school juniors uses marijuana.
- ▶ At evaluation end more youth and young adults in both areas correctly identified social norms.
- ▶ At evaluation end significantly more youth and young adults in the pilot areas than in comparison areas correctly identified social norms.

In 8 of the 12 youth and young adult and parent focus groups conducted in pilot campaign areas, participants reported an increase in the visibility of dispensaries, marijuana advertising, and marijuana-related products in the past year. In 10 of the 12 youth and young adult and parent focus groups, participants reported observing in the past year an increase in marijuana use by people of all ages in parks and other public areas and while driving.

“YOU SEE PEOPLE WALKING DOWN THE STREET SMOKING CANNABIS. EVERYBODY IS DOING IT AND I FEEL LIKE IT'S EVERYWHERE.”

MEDFORD PARENT

At evaluation end a significantly higher proportion of youth and young adults in the pilot areas correctly identified that being caught with marijuana under age 21 can result in a steep fine, community service, or court-ordered drug treatment.

“THE ADS TAUGHT ME THE BIGGER CONSEQUENCES; IF YOU GET CAUGHT DOING MARIJUANA UNDERAGE YOU CAN GET ARRESTED.”

PORTLAND 13–14-YEAR-OLD

Some support for a campaign effect on youth and young adult attitudes.

At evaluation end significant differences between the pilot and comparison areas emerged for some attitudes. Significantly more pilot than comparison youth and young adult survey respondents perceived moderate to great risk of harm from regular marijuana use and agreed with the statement “using marijuana limits a person's ability to have memorable experiences” (39% vs. 33%, respectively, for both attitudes). In addition, significantly more pilot than comparison respondents believed that using marijuana might encourage those who look up to them to use marijuana (44% and 38%, respectively). These results suggest a favorable campaign effect but should be interpreted with caution because change between baseline and evaluation end was not statistically significant for the pilot group.

Some support for a campaign effect on adult knowledge toward youth marijuana use.

Significantly more adults who saw **Stay True to You** or **Talk With Them** had accurate knowledge that only 1 in 5 Oregon high school juniors uses marijuana. About half of adults with children aged 12–20 said **Talk With Them** made them think about talking to their children about marijuana use.

Most adults rated the campaign favorably. Nearly two thirds agreed that **Talk With Them** was attention-getting and believable and conveyed an important message. At baseline and evaluation end, a majority of adults reported concern about the negative impact of underage marijuana use on Oregon’s youth and young adults. At evaluation end 20% of adults said the campaign had changed their attitudes toward youth marijuana use. In general, current marijuana users rated **Talk With Them** significantly less favorably than adults who were not current users.

“ [TALK WITH THEM] ADS ARE . . . GIVING US RESOURCES ABOUT HOW TO TALK TO OUR CHILDREN. ”

SPANISH-SPEAKING PARENT

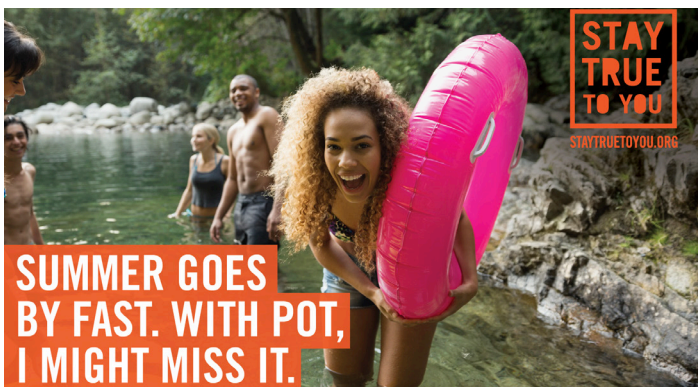
CAMPAIGN MESSAGES

With guidance from the Retail Marijuana Scientific Advisory Committee OHA-PHD identified four messages sufficiently grounded in science to use in the **Stay True to You** campaign:

- When you get high you may have difficulty with learning and memory
- Being high may interfere with your ability to drive, play sports, or ride a bike
- Brain development is not complete until your twenties and for the best chance to reach your full potential, you should not use marijuana to get high while you are young
- It may be harder to stop using marijuana if you start at a young age

The **Stay True to You** campaign delivered these science-based messages to youth and young adults by evoking values and emotions identified as meaningful during audience research. **Stay True to You:**

- Answered frequently asked questions about marijuana’s effect on the developing brain and the potential legal consequences of underage use
- Depicted the impact of role models related to marijuana use
- Highlighted aspirations toward long-term goals (job, driver’s license)
- Empathized with the struggles of youth and young adults



video *Be a Role Model for Your Copycat*
www.youtube.com/watch?v=zmdRdcGP4b8

CAMPAIGN AUDIENCE AND REACH

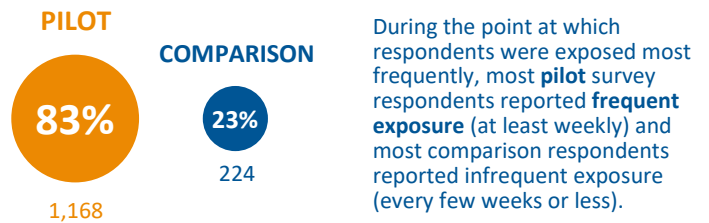
The primary audience for **Stay True to You** (www.staytruetoyou.org) was Oregon youth and young adults aged 12–20. The campaign’s messages targeted the so-called “movable middle” of this population, which includes occasional marijuana users and those considering use—not youth and young adults who are already heavy users or have no intention of using marijuana.

Media data show that the campaign successfully reached more than 90% of youth and young adults in the pilot areas with a high level of exposure, consistent with standards for a fully implemented media campaign.

| STAY TRUE TO YOU CAMPAIGN DELIVERY CHANNELS | DIGITAL | MOBILE VIDEO DISPLAY YOUTUBE |
|---|--------------|---------------------------------------|
| | TV | HULU CABLE LOCAL STATIONS |
| | RADIO | PANDORA SPOTIFY LOCAL STATIONS |
| | SOCIAL MEDIA | FACEBOOK INSTAGRAM |
| | OUT OF HOME | BILLBOARDS MALLS MOVIE THEATERS |

Select channels targeted youth and young adults and rural and minority populations

Survey data show that a high percentage of youth and young adults in the pilot areas were exposed to the campaign and campaign spillover into comparison areas was limited.



The **Talk With Them** campaign component targeted parents and youth-serving adults such as teachers, coaches, and school officials and included Spanish-language television and radio ads distributed in collaboration with Multnomah County. Audiences were directed to www.talkwiththem.info and www.hablaconellos.info where they can download a guide developed by OHA-PHD. At evaluation end 26% of adult survey respondents in the pilot areas and 13% of respondents in the comparison areas reported exposure to **Talk With Them** in the past nine months.

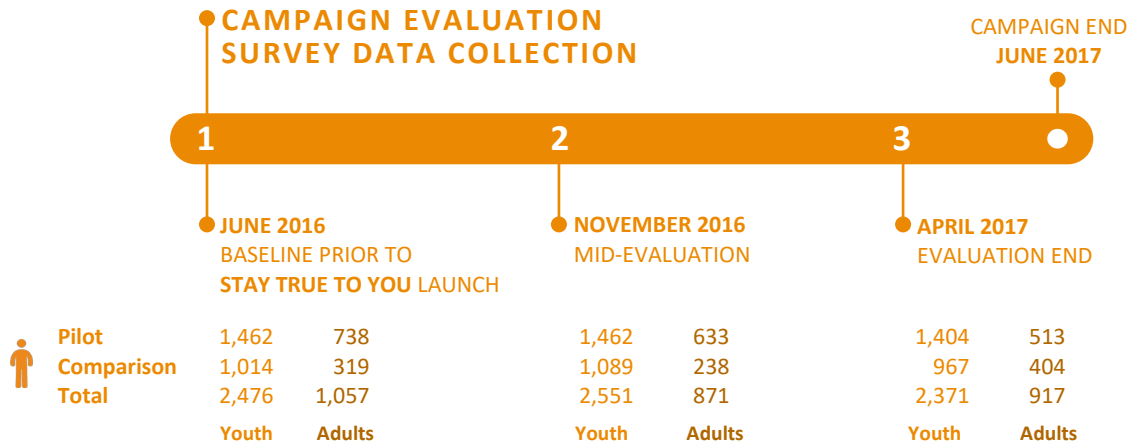
Through cable television **Talk With Them** reached 52% of Portland Metro adults and 42% of southern Oregon adults.

The Spanish-speaking radio audience in the pilot regions had a high level of exposure.

EVALUATION METHODS

MEASURES. The evaluation assessed the campaign effects on (a) awareness of the possible negative impacts of youth marijuana use, perceptions of the health risks, and intent to delay marijuana use among youth and young adults—the primary audience—and (b) attitudes toward and knowledge about youth marijuana use among parents and youth-serving adults—the campaign’s secondary audience.

The campaign evaluation collected survey data from the target audiences at 3 time points: June 2016, November 2016, and April 2017.



Qualitative data was collected through focus groups with six youth groups, four English-speaking parent groups, and two Spanish-speaking parent groups to supplement the survey data.

STRENGTHS. The evaluation was conducted by an independent third-party firm. Data were collected from the target audiences and comparison respondents living outside the campaign regions over three time points: at baseline (prior to campaign launch), at five months after the campaign launched, and at nine months (toward the end of the campaign).

LIMITATIONS. The analyses controlled for demographic and marijuana use differences between the different groups of respondents surveyed at each time point. A stronger approach would have measured responses from the same individuals before and at the end of the campaign. In addition, the ability to measure long-term effects was limited given the short duration between campaign launch and evaluation end data collection.



Sample ad from *talkwiththem.info*, OHA-PHD’s parent and adult campaign to complement and support **Stay True to You**. This ad was placed online and in transit and was accompanied by radio and television ads.

POLICY RECOMMENDATIONS

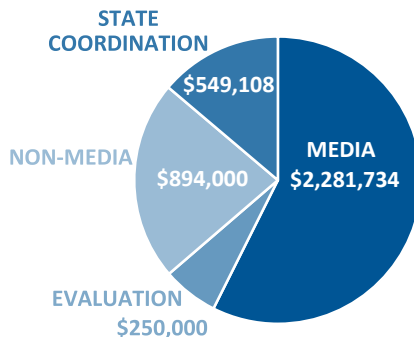
To more fully address youth marijuana prevention, OHA-PHD recommends the following policies:

- ▶ **Provide support in every community in Oregon to youth, young adults, and parents.**
Preventing youth from using marijuana requires a comprehensive public health response that includes support in every community for all families and for youth, whether or not they already use marijuana. The **Stay True to You** campaign is having a positive effect among youth and young adults in the pilot areas, and is ready to be implemented statewide. Oregon’s investment in the campaign will be enhanced by strategic collaboration across Oregon’s public health and health care systems to reach every community in Oregon.
- ▶ **Require marijuana businesses to disclose their expenditure on marketing and promotion.**
Marijuana legalization has increased the visibility of cannabis throughout our state. Understanding the amount spent to advertise and promote marijuana products and the types of advertising will allow better enforcement of existing advertising regulations and help determine additional advertising regulations needed to protect youth from marijuana use.
- ▶ **Establish a maximum size and number for signs at retail marijuana stores.**
Multiple forms of storefront advertising including signs, sandwich boards, and sign wavers are ubiquitous at marijuana businesses. To protect youth from exposure to marijuana marketing and promotion, Washington State has adopted a common sense law that allows one sign per retail marijuana establishment and limits its size to 1,600 square inches.
- ▶ **Prohibit the sale of flavored cannabis products.**
The FDA recognizes that tobacco products “containing flavors like vanilla, orange, chocolate, cherry and coffee are especially attractive to youth” and “are widely considered to be ‘starter’ products, establishing smoking habits that can lead to a lifetime of addiction” (see <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm183211.htm>). Flavored marijuana products could have a similar appeal to youth and increase youth marijuana use.
- ▶ **Protect local control.**
One of the best protections for youth from the harm of marijuana use is robust local engagement across sectors. By protecting the ability of local authorities to make decisions about marijuana businesses, youth, families, and communities can have the local support and services they need to prevent youth marijuana use.

CAMPAIGN BUDGET

OHA-PHD was within budget on campaign implementation and evaluation expenditures.

CAMPAIGN BUDGET: \$3,974,842



State coordination. Costs related to state coordination of the contractors and the strategy for the campaign design, implementation, and evaluation.

Non-media costs. OHA-PHD contracted with Coates Kokes, a Portland-based communications firm, to design and implement the **Stay True to You** and **Talk With Them** campaigns.

Media costs: OHA-PHD’s media contractor purchased media for campaign implementation on behalf of OHA-PHD.

Evaluation: OHA-PHD contracted RMC Research as the external evaluator for this campaign.



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**STAY
TRUE
TO YOU**

STAYTRUETOYOU.ORG



**GIVE THIS UP? NO WAY.
DRIVING HIGH COULD
MEAN LOSING MY LICENSE.**

Prepared for



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