

December 2018

EVALUATING THE 24/7 SOBRIETY PROGRAM

A report for the Montana Highway Patrol

Descriptive analysis of twice daily testing participants
in Montana's 24/7 Sobriety Program from 2014-2017

TABLE OF CONTENTS

ALCOHOL USE IN MONTANA	3
DRIVING UNDER THE INFLUENCE	4
ADDRESSING THE PROBLEM OF ALCOHOL MISUSE THROUGH THE 24/7 SOBRIETY PROGRAM	5
EVIDENCE FOR EFFECTIVENESS	7
EVALUATION DATA FROM MONTANA'S 24/7 SOBRIETY PROGRAM 2014-2017	9
INSIGHTS FROM LOCAL STAFF	12
CONCLUSION	15
REFERENCES	16

ACKNOWLEDGEMENTS

Prepared for the Montana Highway Patrol by Emily Bell, MPH and Katie Loveland MPH, MSW of Loveland Consulting LLC.
For questions about the content of this report email lovelandk@gmail.com or call 406-431-9260.

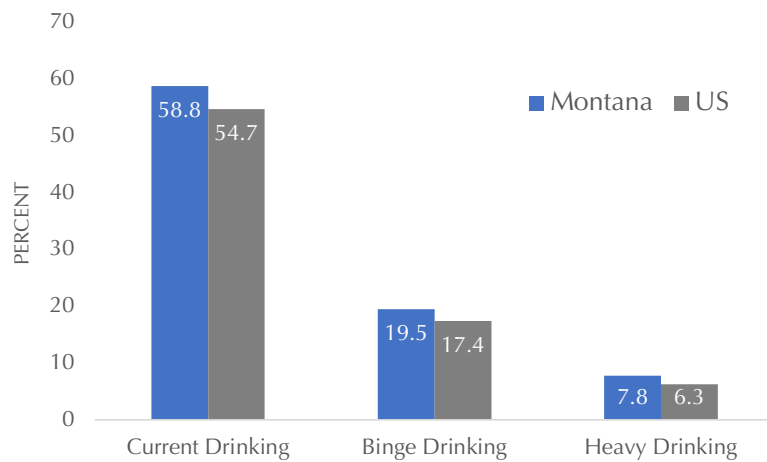


For more information about the Montana's 24/7 Sobriety Program visit:
<https://dojmt.gov/247-sobriety-program>

— — Alcohol use in Montana

Substance misuse and abuse is a serious concern in Montana and alcohol is the most commonly abused substance statewide. Almost 60% of Montana adults currently drink, with one in five reporting binge drinking in the last month (20%). Eight percent of adults in Montana are classified as “heavy drinkers,” significantly higher than the US rate of 6%.¹

Alcohol consumption in Montana and the US, 2017



Montana’s high rates of alcohol consumption begin in adolescence. Seven out of ten high school students (68%) report having ever used alcohol, significantly higher than the rate among high school students in the US. Thirty-three percent of Montana high school students report alcohol use in the past month and 18% report binge drinking during the same time period.²

With the high rates of alcohol use in Montana, it is not surprising that DUI offenses and alcohol related traffic fatalities are also common. There were 7,635 DUI offense incidents known to Montana law enforcement agencies in Montana in 2016, a slight increase in the number in 2015.³

Alcohol is the most commonly used substance in Montana.

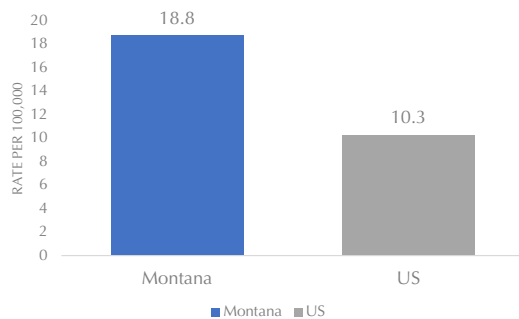
— — Driving under the influence

Driving under the influence contributes to Montana's high rates of traffic fatalities, which are almost double the rates in the US as a whole.⁴ In 2016, there were 190 traffic fatalities in the state, with alcohol present in 39% and drugs present in 37% of all fatal crashes. Between 2013-2016 in Montana, 835 people were killed in crashes involving a drunk driver.⁵

DUI offenses in Montana, 2011-2016

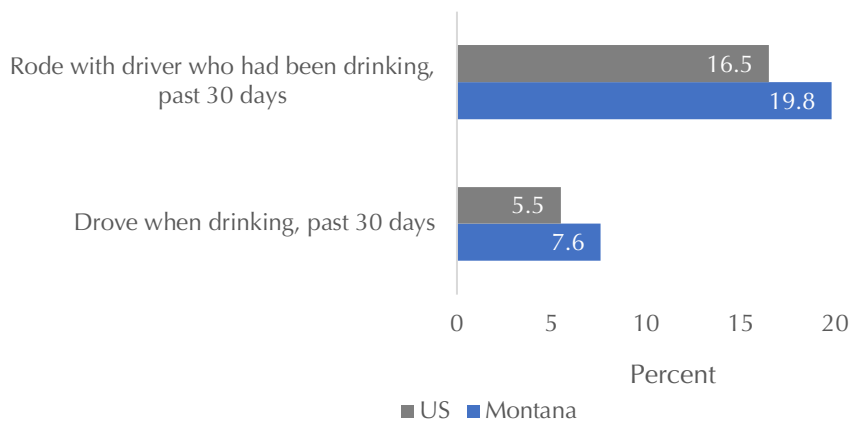


Traffic fatality rate in Montana and the US, 2014



Despite the devastating effects of impaired driving, driving while under the influence is commonly reported behavior in our state. More than one in ten high school students in Montana reports driving after drinking in the last month and almost one quarter report riding with a driver who had been drinking alcohol in the past thirty days, significantly higher than the rates reported by teens in the US.⁶

Alcohol use and driving behavior among high school students, Montana and the US, 2017



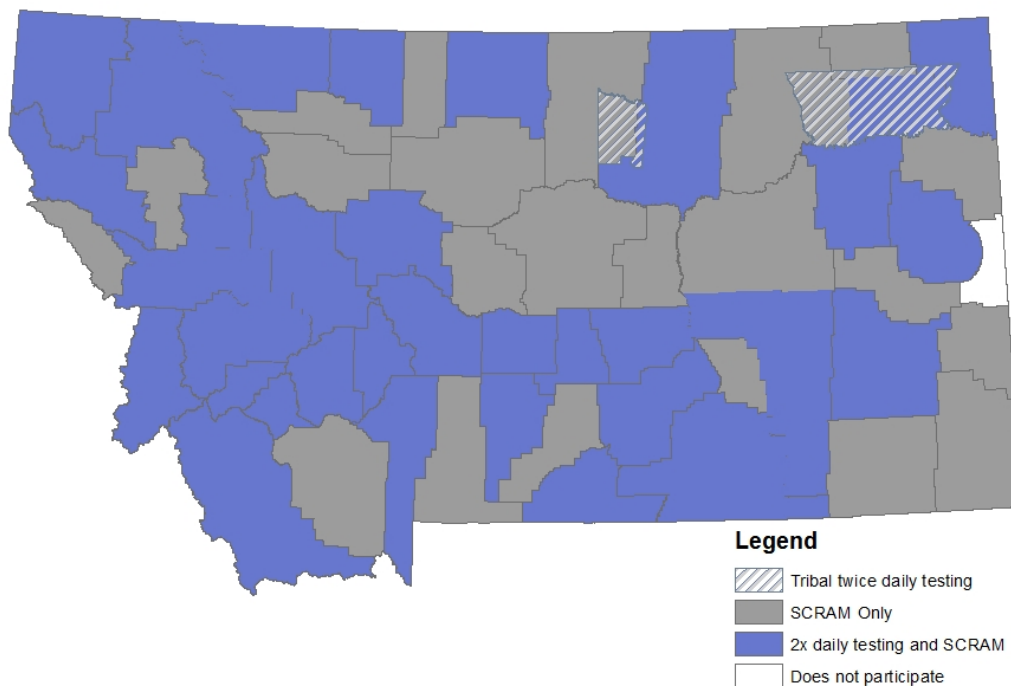
In all, hundreds of lives in Montana are lost each year between alcohol related traffic fatalities, injuries and disease caused by the misuse and abuse of alcohol. The Centers for Disease Control estimates that there were 390 alcohol attributable deaths in Montana from 2006 to 2010, for an overall alcohol attributable death rate of 37.7 per 100,000, the highest rate in the country.⁷ Annually, more than 11,000 years of potential life are lost in Montana due to alcohol.⁸

— — Addressing the problem of alcohol misuse through the 24/7 Sobriety Program

To meaningfully address the issue of driving while under the influence, the Montana Highway Patrol has worked with county sheriff's offices statewide to implement the evidence-based 24/7 Sobriety Program. The 24/7 Sobriety Program is based on a national model for monitoring substance use-involved offenders. It encourages total abstinence from alcohol, primarily supported by twice-daily in-person Preliminary Breath Testing (PBT) for alcohol use or, in hardship cases, the use of a transdermal alcohol monitoring bracelet

called a Secure Continuous Remote Alcohol Monitoring (SCRAM) unit. Originally started in South Dakota in 2005, the 24/7 Sobriety Program in Montana began with a pilot in Lewis and Clark County in 2010. In 2011, the Montana Legislature passed House Bill 106, which expanded the 24/7 Program statewide. The voluntary program, which is usually operated by a county sheriff's office, rapidly expanded to 22 counties, reaching 80% of the state's population. Today, the program operates in 55 of Montana's 56 counties.

24/7 Sobriety Programs in Montana, November, 2018



Each 24/7 Sobriety Program is administered by a county sheriff's department or other local law enforcement agency. Judges can sentence offenders to the program as part of their terms of probation. Participants at in-person 24/7 Sobriety Program sites must present in the morning and evening for PBT testing. If a participant fails an initial test, he or she waits 20 minutes to take another PBT test. If the second test also indicates the presence of alcohol, the participant faces an immediate, measured sanction (usually 1-2 nights in jail). Participants on the twice-daily testing regimen are required to pay \$2 per test (\$4 per day). The fee is used to cover test supplies as well as any costs incurred for administering the testing process, entering test results and managing participants.

For participants monitored through transdermal testing, counties most often contract with a third-party provider to install, remove and bill for the use of the SCRAM unit. Providers charge a standard fee of around \$10 per day for 24/7 Participants utilizing this monitoring method. With third party SCRAM testing, none of the fees go to the Sheriff's office, which is still responsible for enforcing sanctions for non-compliant participants. For counties that want to operate their own SCRAM program, the units cost around \$2,000 each. Currently, 25 counties operate SCRAM-only 24/7 Sobriety Programs. The remaining 33 counties operate twice-daily testing with SCRAM bracelets available for hardship cases where presenting for in-person testing is unduly burdensome, although the term is not defined in Montana rule or statute or applied with consistency from jurisdiction to jurisdiction. In 2018, two tribes started their own 24/7 Sobriety Programs: the Chippewa Cree Tribe on the Rocky Boy Reservation and the Assiniboine and Sioux Tribes on Fort Peck Reservation.

During the 2013 session, the Montana legislature passed House Bill 233, which more clearly defined core components of the 24/7 Sobriety Program, including testing methods that allow for the swift and certain imposition of moderate sanctions and requirements for program fidelity. The bill allowed for the use of the 24/7 Sobriety Program for offenses "in which the abuse of alcohol or drugs was a contributing factor in the commission of the crime," including domestic violence and child abuse and included provisions for the use of the program in cases related to drug use, in addition to alcohol.⁹ Subsequent to the passage of House Bill 233, illegal drug users sentenced to the 24/7 Sobriety Program may now be subject to additional monitoring using drug patches or urinalysis. The program is used for both misdemeanor and felony offenders in Montana.

To support the work of local law enforcement agencies operating 24/7 Programs, the Montana Highway Patrol hired a full-time 24/7 Sobriety Program coordinator, Sergeant Lacie Wickum, in February 2015. Her position, which has historically been funded through a grant from the federal National Highway Traffic Safety Administration, is responsible for supporting all of the 24/7 Programs statewide with ongoing communication, technical assistance and implementation support. Sergeant Wickum supports local sites to ensure that they follow Montana law related to the program and that they implement the program to fidelity to ensure meaningful results. She also meets with judges, prosecutors, County Attorneys and other stakeholders to educate them on the program and encourage them to utilize it as much as possible.

The 24/7 Sobriety Program operates
in 55 of Montana's 56 counties.

— — Evidence for effectiveness

The 24/7 Program was selected for implementation in Montana based on research showing its positive impacts on recidivism and health outcomes in South Dakota. An analysis conducted by the RAND corporation of South Dakota's 24/7 Sobriety Program from 2005-2010, which involved twice-daily testing for 85% of participants and SCRAM monitoring for the remaining 15%, found "strong evidence that the 24/7 program reduced the incidence of repeat DUI and domestic violence arrests," including a 12% reduction in repeat DUI arrests and a 9% reduction in domestic violence arrests at the county level following the adoption of the program.¹⁰ Longitudinal analysis of South Dakota's programmatic data indicates that the reductions in criminal behavior among program participants last beyond the intervention period. Among the more than 30,000 participants in South Dakota's 24/7 Sobriety Program from 2005 to 2012, the probability of re-arrest or probation revocation 12 months after DUI arrest was 49 percent lower than for individuals who did not participate in the 24/7 Sobriety Program ($p = 0.002$). When researchers followed 24/7 Participants for 24 and 36 months after arrest, the decreased likelihood of re-arrest and probation revocation remained at 35 percent and 26 percent, respectively. The researchers conclude that these results provide evidence that criminality associated with problem drinking behavior can be addressed effectively through the 24/7 Sobriety Program without intensive, high-cost interventions like in-patient substance use treatment or through harsh, punitive sentences like extended prison stays. Instead, they conclude that their study provides "evidence that it is possible to create a credible and effective deterrent threat on a large scale by prioritizing both certainty and celerity of

sanction."¹¹ Importantly, evaluations of South Dakota's program indicate that the program not only reduced criminal behavior but also improved health at the population level. The RAND Corporation found that the health benefits of 24/7 included a 4.2% reduction in all-cause adult mortality in South Dakota's population after introduction of the program.¹²


The 24/7 Sobriety Program also aligns with the most current neuroscience research on addiction. According to researchers like Keith Humphreys at the Stanford Neuroscience Institute, substance use alters individuals' brain chemistry, warping their decision-making mechanisms so that long term consequences cannot be understood or processed. Contrary to this established science, the justice system has typically relied heavily on prison sentences as the primary lever for trying to influence substance use and substance use-related crime, but such sanction enhancements are psychologically remote and premised on an unrealistic model of rational planning with a long-time horizon, which isn't consistent with how addicts behave. Dr. Humphreys asserts, "What works better is smaller, more immediate incentives and punishments...including daily monitoring."¹³



Outcome data from the 24/7 Sobriety Program indicates that the criminality associated with problem drinking behavior can be addressed effectively without intensive, high-cost interventions or punitive prison and jail sentences.

To track outcomes of Montana's 24/7 Program, the Montana Department of Justice provides all participating local law enforcement agencies access to the IntoxiTrack data system originally created by Intoximeters, Inc. IntoxiTrack is a web-based application that offers comprehensive drug and alcohol test data management specifically for 24/7 Sobriety Programs nationwide. The data system allows local sites to track all program participants, including demographic data, no-shows for testing appointments and twice-daily testing results as well as manually entering SCRAM and drug testing outcomes.¹⁴ As a web-based application, data can be tracked across sites even if participants move, or need testing at an alternate location. IntoxiTrack and Sergeant Wickum provide either onsite or web-based training on the use of the system to new 24/7 Sobriety Program sites as they come on board and offer ongoing technical assistance to support high quality data entry at each site. All IntoxiTrack data is encrypted and is available for analysis by the credentialed IntoxiTrack staff or directly by the Montana Department of Justice users with proper access authority.

Utilizing IntoxiTrack data, in 2015, the Montana Highway Patrol worked with the Rand Corporation to assess the impact of Montana's 24/7 Sobriety Program on DUI re-arrests in the state. The analysis compared DUI re-arrest data from individuals convicted of their second DUI charge from January 2008 to August 2014 in Montana who were sentenced to the 24/7 Sobriety Program to those who were not sentenced to the program. The evaluation concluded that "24/7 participation reduced the probability of DUI re-arrest in Montana (perhaps on the order of 45% to 70%)."¹⁵ This report provides additional data outlining the reach and impact of the 24/7 Program in Montana.



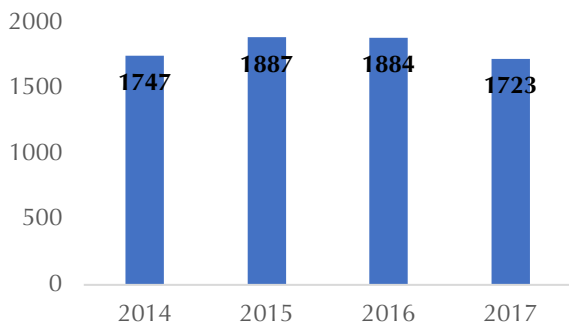
Participation in Montana's 24/7 Sobriety Program reduced the probability of DUI re-arrest on the order of 45-70%.

— Evaluation data from Montana's 24/7 Sobriety Program 2014-2017

The following pages contain an analysis of Montana's 24/7 Sobriety Program utilizing IntoxiTrack data from twice-daily testing sites from 2014-2017. The analysis gives an overview of the age, race, gender, and offense of participants and looks at the tests' fail-rate and no-show rate by year and county. SCRAM data from Montana's 24/7 sites is not currently available for analysis.

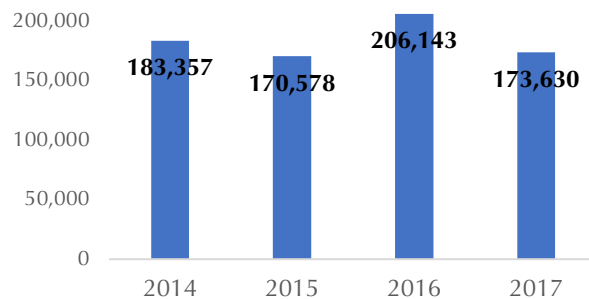
Across all Montana counties, between 2014-2017 there was a total of 5,402 participants in the 24/7 Sobriety Program at twice-daily testing sites, for an average of 1,350 per year. From 2014-2017, Montana 24/7 Sobriety Program sites conducted 733,708 PBT tests.

Total 24/7 Sobriety Program participants, Montana 2014-2017*



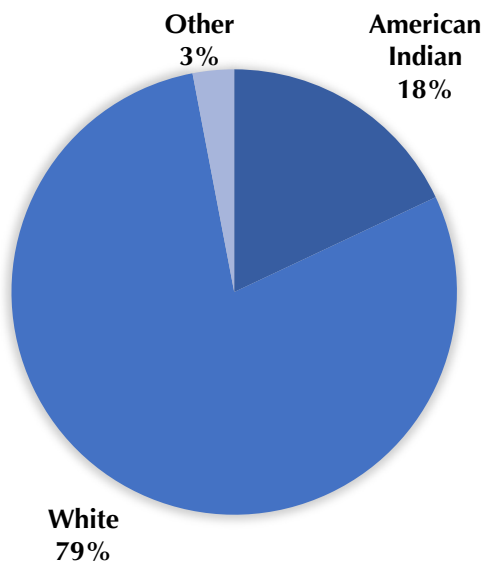
*Some participants are counted in more than one year

Total 24/7 Sobriety Program tests, Montana 2014-2017

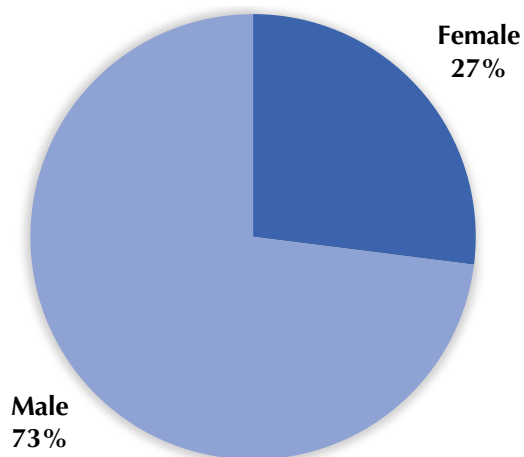


The average length of stay on the program in 2017 was 128 days, with a range from 49 days to 322 days. From 2014-2017, participants averaged 101 conducted tests in the program for an overall cost per participant of \$202. The average age of participants was 39 years old, with 78 participants under the age of 21. The majority of participants were male (73%) and white (71%).

Race, 24/7 Sobriety Program participants, Montana, 2017 (n=1,547)



Gender, 24/7 Sobriety Program participants, Montana, 2017 (n=1,723)



Out of the 173,630 total tests in 2017, only 741 were failed, for a 99.5% success rate. Of the more than 733,000 tests taken during this time period, only 1,906 were failed (99.7% success rate). On average 87% of program participants never have a failed breath test during their time on the program. Between 2014-2017 the percent failure rate for breath tests has remained consistently low (below 1%) with slight increase in 2017 (Table 1). Similarly, the no-show rate remained consistently below 3% with slight increase between 2015 and 2016 (Table 1). In 2017, the 1,723 program participants logged 91,272 days (or 250 person-years) without a detected drinking event.

Table 1. Outcome of Breath Tests for 24/7 Sobriety Program, 2014-2017

Year	Number of Individuals in the Program	Total Tests	Percent Failure Rate for Breath Tests	Percent No-Show Rate
2014	1,747	183,357	0.20%	1.25%
2015	1,887	170,578	0.25%	1.82%
2016	1,884	206,143	0.17%	2.62%
2017	1,723	173,630	0.43%	2.47%
Total	7,241	733,708	0.26%	2.06%

Table 2 shows how the failure and no-show rate varied by county. Deer Lodge and Gallatin County had the lowest percent failure rates in 2017, at 0.04% and 0.09% respectively, while Lewis and Clark and Missoula County had the highest at 0.34% and 0.36% respectively. Butte County had a significantly lower percent no-show rate than all other counties (0.25%), with the highest in Cascade County at 5.63%.

Table 2. Outcome of Breath Tests by County in 2017

County	Number of Participants	Total Number of Tests	Percent Failure Rate	Percent No-Show
Big Horn	63	8,581	0.22%	2.74%
Silver Bow	102	16,728	0.14%	0.25%
Cascade	188	17,740	0.28%	5.63%
Deer Lodge	51	8,025	0.04%	2.17%
Gallatin	130	12,096	0.09%	2.73%
Lewis and Clark	289	22,170	0.34%	1.34%
Missoula	78	10,860	0.36%	3.45%
Ravalli	127	22,022	0.17%	1.37%
Yellowstone	373	25,950	0.19%	1.64%
Low-Participation Counties*	322	29,458	0.19%	5.09%
Total	1,723	173,630	0.20%	2.64%

*Note: We define low-participation counties as those administering fewer than 5,788 tests, the average number of tests across counties.

As previously mentioned, 24/7 Sobriety began as a program for DUI offenses, but has expanded to other alcohol and drug-related offenses. Table 3 shows the breakdown of offenses for participants in 2017. Over 70% of participants were in the program for a DUI-related offense. Among those, a misdemeanor DUI (1st, 2nd or 3rd DUI) was the most common offense, with 2nd DUI offenses being the most common. Among non-DUI offenses, participants were also sentenced to the program for assault (5.6%), domestic violence (2.3%), and probation or parole-related offenses (6.7%) (Table 3).

Number of Participants by DUI Offense, 24/7 Sobriety Program, Montana, 2017

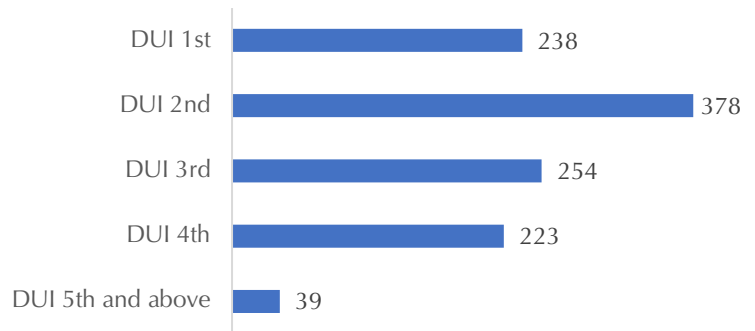


Table 3. Type of Offense of 24/7 Sobriety Program Participants in 2017

Offense	Number of participants	Percent
Misdemeanor DUI*	870	47.5%
Felony DUI**	262	14.3%
Aggravated DUI ▲	170	9.3%
Probation or parole	123	6.7%
Assault ▲ ▲	102	5.6%
Criminal Endangerment	68	3.7%
Domestic Violence	43	2.3%
Drug Possession	41	2.2%
Vehicular Battery, Homicide, or Reckless Driving	7	0.4%
Child Abuse or Neglect	2	0.1%
Other	143	7.8%
Total	1,831	100.0%

*1st to 3rd DUI offense.

**4th+ DUI offense.

▲ Aggravated DUI as defined in 61-8-465, MCA 2017

▲ ▲ Assault offenses include the following: aggravated, aggravated/domestic, felony, sexual, simple, and simple/domestic assault.

— — Insights from local 24/7 staff

In addition to analyzing the IntoxiTrack data from 24/7 Sobriety Participants, we conducted semi-structured interviews with a number of local 24/7 Sobriety Program staff to gain insight into how the program is being operationalized in local communities. Below is a summary of key findings from these interviews.

Successes of the program

Interviewees generally held favorable views of the 24/7 Sobriety Program and described a number of key elements of the program that make it effective for participants. Several interviewees reported that the face-to-face accountability and the personal nature of twice-daily testing program is critical for success. Sergeant Jason Valdez, the 24/7 Sobriety Program Coordinator in Yellowstone County notes, “Me and my staff truly get to know the participants in the 24/7 Program as we interact with them twice every day.”

As staff get to know participants, they may have the opportunity to provide additional support and referrals to help participants maintain a sober lifestyle. Sergeant Bryan Merritt, the former 24/7 Program Supervisor for the Lewis and Clark County Sheriff’s Office notes, “A lot of times, we as the 24/7 staff act as social support for participants, encouraging participants to reach out for help and encouraging them not to drink. We do a lot of listening with our clients. They sometimes share with us their needs and say, ‘I don’t know where to go’. We direct them to job service and other non-profits. We talk to them about the spouses and significant others who are still drinking and what a struggle that can be. I am a big proponent of the twice-daily testing program because of this personal connection we build with clients.”

Local 24/7 Program Coordinators and staff also report that the program is successful in part because of the use of immediate sanctions to help deter drinking behavior. Christina Ellsworth, the 24/7 Program Coordinator in Ravalli County notes, “I like the immediate arrest component of the program. The arrest gets participants’ attention and is a strong deterrent.” Sergeant Jason Valdez of Yellowstone County frames it this way, “With this program, participants know if they blow hot, they are going to jail. On other programs, participants can have 10-12 violations with no consequences.” Swift and certain sanctions are a key pillar of evidence-based monitoring programs in the criminal justice system and the twice-daily testing sites in Montana’s 24/7 Sobriety Program are operating according to this framework.¹⁶



We as 24/7 staff act as social support for participants...we do a lot of listening with our clients.

-Sergeant Bryan Merritt, Lewis and Clark County Sheriff’s Office

Successes of the program continued

The twice daily testing component is also an effective deterrent for program participants, according to interviewees, because it provides a daily reminder of the cost of alcohol misuse. Sergeant Bryan Merritt of Lewis and Clark County notes, “The twice-daily tests make it a pain for you-there is a cost in time and freedom to have to come in and do the test. Participants are constantly reminded how much of a pain it is to do it, and it is effective in helping curb behavior.”

The 24/7 Program also helps counties reduce jail overcrowding, which is a concern in almost all county jail systems in the state. Sergeant Jason Valdez in Yellowstone County describes the benefits of reducing jail populations in the Billings area this way, “We had 56 active testers in the 24/7 program this morning. That is 56 jail beds that I am not tying up.”

Using in-person twice-a-day testing is also cost effective for counties. The \$2 cost for each PBT test is paid for by the participant. This fee covers the cost of testing and generates revenue that can be used to cover the sheriff's department's administrative costs. In contrast, private contractors who are selling monitoring solutions in Montana often charge high daily or per-client rates for monitoring that do not help cover the administrative costs of the county. These companies often offer programs that claim to be like the 24/7 program but have not been proven to be effective.

Challenges and barriers to implementing the program locally

Despite these successes, counties face a number of barriers implementing the program. One barrier interviewees report is the need to educate judges about the 24/7 Sobriety Program. Use of the program is voluntary and there is wide judicial discretion in sentencing. Private companies that run alternative monitoring programs often heavily market their services to local judges. Some judges prefer to sentence individuals to other monitoring methods, such as the use of remote testing using breathalyzers like Soberlink or ignition interlock devices that only restrict drinking and driving behavior. In addition, individuals often ask to be sentenced to alternatives to the 24/7 Sobriety Program because they don't want ongoing accountability and immediate sanctions required by 24/7. Several interviewees noted that they would like to see more individuals on the program, but that judicial outreach is critical.

Local sites also talked about finding the balance between twice-daily testing and using SCRAM for hardship cases. SCRAM is a good option when participants do not have transportation, live far from the testing site, or need to travel. But SCRAM costs significantly more and removes the “personal” aspect of the twice-daily testing. In addition, SCRAM results received by the SCRAM company are not immediately reported to the local sites (the delay can be up to a week), so sheriff's offices cannot provide immediate sanctions. The ongoing collection of data, especially manually entering SCRAM participants' results into IntoxiTrack, was an area that several sites noted that they are working to improve. Finally, studies assessing SCRAMs' performance on long-term recidivism indicate a limited impact on participant behavior once the SCRAM device is removed.¹⁷

Benefits of a statewide 24/7 Sobriety Program Coordinator

The statewide coordinator, Sergeant Lacie Wickum, plays a critical role in working with local sites to address the key barriers that they face to successfully implementing the 24/7 Sobriety Program. Interviewees noted that Sergeant Wickum has traveled to their county to meet with local judges in order to raise their awareness of the 24/7 Program and educate them on their sentencing options under Montana law. Having a statewide coordinator who can speak to the benefits of the program and who has time to meet individually with local judges for education helps increase use of and support for the program.

Local sites also noted that the state coordinator has been readily available to help troubleshoot with programmatic and administrative issues as they arise. Sergeant Jason Valdez of Yellowstone County notes, "If there are ever any issues, if I have a question, I call Lacie or send her an email

and she has been tremendously helpful. It is nice to know that we have someone to rely on. I know I can get ahold of Lacie anytime and she will either find the answer for me or find someone who can answer it. Lacie has been a huge help to us. She knows her stuff and if there is an issue, she resolves it for us."

Sergeant Wickum has been especially helpful to several sites in navigating issues related to the interpretation of the Montana laws that govern the 24/7 Sobriety Program. When sites have legal questions or concerns, they call her and she helps them ensure that they are implementing the program within the bounds of state law. The statewide coordinator also conducts compliance checks at local sites, helping them monitor their fidelity to the program and ensuring that they are entering programmatic data correctly.



— — Conclusion

Thousands of individuals each year participate in the 24/7 Sobriety Program in Montana and are successfully abstaining from alcohol with the help of monitoring and accountability. Participants at twice-daily testing sites have low no-show and test failure rates (less than 1 and 3% respectively) indicating that the program is largely successful in holding participants accountable and curbing drinking behavior. In fact, twice-daily testing participants logged over 90,000 days without a drinking event in 2017. With the high rates of alcohol abuse in Montana contributing to traffic fatalities, DUI offenses, child abuse, domestic violence and other crimes, reducing alcohol use among this population is critical to lowering crime rates and helping individuals live successful, productive lives.

The no-show and test failure rates from the 2014-2017 analysis included in this report are similar to the rates reported in the analysis conducted by the RAND Corporation using data from Montana's sites from 2008-2014, suggesting that the program is continuing to reduce the probability of DUI re-arrests in Montana for program participants, though directly linking these DUI offense rate trends to the Montana 24/7 Sobriety Program is outside the scope of this current analysis.

The quantitative findings in this analysis align with the conclusions drawn by local 24/7 staff interviewed for this report who underscore the impact of the program in the lives of their participants every day. Sergeant Bryan Merritt of Lewis and Clark County notes, "I still see former 24/7 Clients who were resistant at first and challenged the legitimacy of the program. But now they send cards or hug me when they see me because once they get through the program

they see the change and they are excited about it." He goes on, "In the letters I get from former clients, they tell me how they are doing and that their life has changed because they no longer drink. A lot of those clients were the ones who didn't initially believe in the program and now their life is changed for the better. It's amazing when the light comes on."

The 24/7 Sobriety Program interviewees believe that the program should be expanded and implemented in more counties. Sergeant Bryan Merritt notes, "This program should be implemented for any alcohol-related offense in Montana. In Montana, drinking and isolation are part of our heritage. It's going to take generations to change and that's why I love the 24/7 Sobriety Program-because it creates connection and addresses the root cause of these crimes, which is the use of alcohol. It can make a huge difference in people's lives and it should be expanded."



In 2017,
Montana's 24/7
Sobriety Program
participants went
90,000 days without
a drinking event.

— — References

1. Behavioral Risk Factor Surveillance System (BRFSS) 2017. Heavy drinkers are classified as males who consume more than 14 drinks a week and females who consume more than 7.
2. Youth Risk Behavior Survey (YRBS), 2017.
3. MTIBRS, 2011-2016. Includes DUI, Aggravated DUI, DUI refused to test, DUI, determined level of intoxication liquor 0.08 or greater, DUI under 21 BAC of 0.02-liquor, vehicular homicide while under the influence, THC, determined level of intoxication 5 mg/ml or greater
4. National Highway Traffic Safety Administration, National Center for Statistics and Analysis. Traffic Safety Facts, 2015 Data. "State Alcohol-Impaired-Driving Estimates."
5. Montana Highway Patrol Annual Report, 2016 <https://media.dojmt.gov/wp-content/uploads/mhp-report-2016-comp.pdf>
6. YRBS, 2017
7. https://www.cdc.gov/pcd/issues/2014/13_0293.htm
8. IBID
9. <https://leg.mt.gov/bills/2013/billpdf/HB0233.pdf>
10. Kilmer et al. (2012) "Efficacy of frequent monitoring with swift, certain and modest sanctions for violations: Insights for South Dakota's 24/7 Sobriety Program." American Journal of Public Health.
11. Kilmer B and Midgette G. (November 2018) "Using Certainty and Celerity to Deter Crime: Insights from an Individual-Level Analysis of 24/7 Sobriety." Rand Social and Economic Well Bing. Working Paper.
12. Nicosia et al. (2016) "Can a criminal justice alcohol abstention programme with swift, certain and modest sanctions (24/7 Sobriety) reduce population mortality? A retrospective observational study."
13. <https://news.stanford.edu/press-releases/2017/06/22/u-s-drug-policy-ose-neuroscience/>
14. <https://247sober.com/>
15. "The Effect of Montana's 24/7 Sobriety Program on DUI Re-Arrest" Insights from a natural experiment with limited administrative data". Gregory Midgette and Beau Kilmer, Rand Justice, Infrastructure and Environment, March 2014.
16. <https://www.nij.gov/topics/corrections/community/drug-offenders/pages/hawaii-hope.aspx>
17. Loudenburg, R. Et al. (2013). Analysis of 24/7 Sobriety Program SCRAM participant DUI Offense Recidivism. Mountain Plains Evaluation LLC.