MYTHS & MISCONCEPTIONS

SoberSmartDriving.tirf.ca

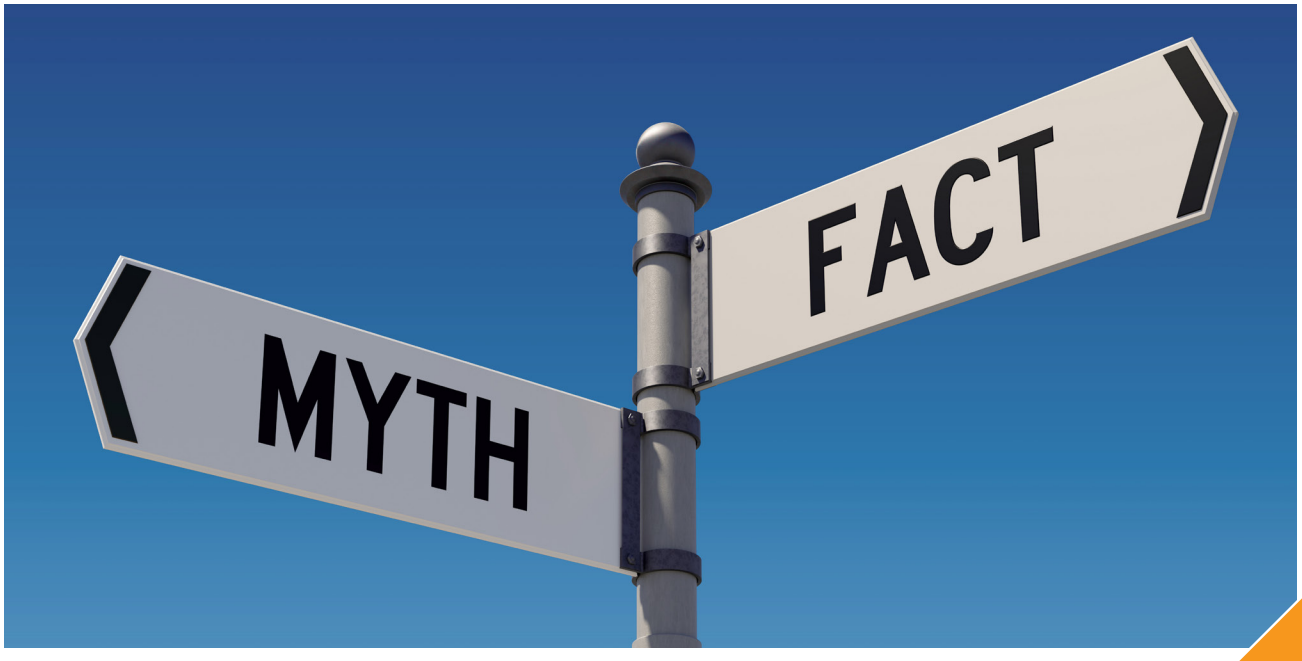
The Sober Smart Driving education program is produced by the **Traffic Injury Research Foundation** with funding from **Beer Canada**. It shares knowledge and science to answer common questions about alcohol, its effects on driving skills, and impaired driving.

"One-size-fits-all" is an effective strategy.

There is no single solution to the impaired driving problem that will address the many types of offenders in need of intervention. Impaired drivers are a heterogeneous group with different levels of risk and need. Some offenders are low risk and may only require a fine and/or driver's licence suspension to change their behaviour. Other offenders may pose a much higher risk and require probation supervision, alcohol treatment and an alcohol ignition interlock device. This means a variety of programs and policies are needed to effectively address the many different types of offenders.

A comprehensive approach involving a range of solutions (e.g., sanctions or interventions) is essential to reduce the relapse of criminal behaviour and achieve long-term risk reduction. Of paramount importance, agencies should apply low-level interventions (e.g., education programs, licence suspensions, fines) for low-risk offenders. Sanctions for high-risk offenders should balance punishment, deterrence, and rehabilitation. It is also important to note research shows putting low-risk offenders in programs for high-risk offenders can do more harm than good and result in poorer outcomes (Viglione & Taxman 2018; Skeen & Polaschek 2019).

To further demonstrate the ineffectiveness of a "one size fits all approach", the impairing effects of alcohol on judgment and memory are significant, and important to consider. Alcohol can disrupt the processing of recent events and experiences into long-term memories (Westrick et al. 1988; Mintzer



and Griffiths, 2002). Large quantities of alcohol can produce blackouts which are periods when individuals do not remember what happened (White, 2003). These lapses in memory are especially common during episodes of binge drinking. During these intervals of time, individuals may participate in risky or dangerous behaviours such as driving while impaired or having unprotected sex without being aware of their actions. They are unlikely to recall these actions when sober.

Prolonged and excessive drinking can also affect cognition by physically shrinking the brain.

Studies of repeat impaired driving offenders reveal neurocognitive impairments, particularly of memory capacity and executive functioning, are more common in this population (Ouimet et al. 2007). In other words, these offenders are less able to learn and retain information, inhibit behaviour, make and follow through with plans, or successfully engage in treatment interventions. They have few behavioural inhibitions and seek immediate gratification (Brown et al., 2009). Prolonged and excessive drinking can also affect cognition by physically shrinking the brain, which MRI scans show is especially striking in women, who have less of a stomach enzyme needed to digest alcohol (Wuethrich, 2001).

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) identifies several factors influencing the effects of alcohol consumption on the brain, including:

- quantity of alcohol consumed;
- frequency of alcohol consumption;
- age of onset drinking;
- personal characteristics (e.g., age, sex, ethnicity, level of education, predisposition to alcohol abuse);
- prenatal alcohol exposure; and,
- overall health.

As previously mentioned, long-term alcohol consumption can lead to strokes, dementia, alcohol-related psychoses, and developmental issues in unborn children. It can also contribute to depression and exacerbate other mental health disorders such as schizophrenia. A common brain disorder among persons with alcohol abuse is Wernicke-Korsakoff Syndrome. The disorder is a combination of two syndromes (Wernicke's encephalopathy and Korsakoff's psychosis) affecting several areas of the brain, particularly the cerebellum. Some of the symptoms associated with the disorder include mental confusion, paralysis of the ocular nerves, loss of muscle coordination, difficulty learning and retaining information, and loss of memory (National Institute of Neurological Disorders and Stroke, 2007).

Much of the brain damage linked to alcohol consumption is irreversible and can result in the need for full-time custodial care.

Impaired drivers will not change their behaviour

There is an assumption many impaired drivers are addicts who are incapable of change and who will continually succumb to their disease. This myth can be further reinforced by observing the uneven and sometimes frustrating progress of treating impaired driving offenders. Attempts to learn to control drinking behaviour can be eroded by setbacks in which offenders return to the drinking behaviour after periods of sobriety. Research shows relapse is to be expected when dealing with alcohol dependency

issues, but as long as offenders remain in treatment and the addiction continues to be addressed, progress is usually achieved.

In order for treatment to be effective, programs must be tailored to the needs of individual offenders; this is called treatment matching (Long et al. 2019; Latessa, Johnson, & Koetzle 2020). By matching offenders with the most appropriate interventions (accounting for factors such as sex, cultural background, drinking history) the chance for a successful outcome is increased. It is equally important to ensure the programs selected for offenders are matched to their stage of change. There are five stages of change: pre-contemplation contemplation, preparation, action and maintenance (Yong 2017; Casey 2019). There is also research showing programs that match an offender's stage of change produce better outcomes, and offenders must be ready for change in order to benefit from treatment.

Ultimately, the goal is to identify the individual needs of offenders and match them with the most appropriate interventions, as this case-by-case approach offers the greatest potential for successful outcomes (i.e., reductions in the drinking driving behaviour in the long-term).

Increasing penalties increases deterrence.

It is a common misconception getting "tough on crime" increases the deterrent effect of penalties or sanctions among high-risk offenders. This may hold true for law-abiding citizens, but as a long-term solution for persistent offenders, this strategy is limited. The justice system is based on the belief that offenders are rational (i.e., they think like law-abiding citizens and will be deterred by harsh penalties). The choice to drive after consuming alcohol is often thought to be a rational one and as a result, there is a belief that offenders should be punished for these irresponsible decisions. In some cases, offenders are aware their behaviour is unacceptable, but they also suffer from addiction and/or may possess anti-social beliefs. As a consequence, they may try to justify or excuse their actions because they are unable to control their drinking or believe they are unlikely to be caught or they are above the law.

Offenders do need to be held accountable for their actions, but the role alcohol addiction may play in the behaviour should also be considered. Offenders who suffer from addiction are often unable to plan ahead, they seek immediate gratification, and are unlikely to weigh the potential costs and benefits of their actions (Brown et al. 2016). As a result, punishment alone is unlikely to deter them in the future.

Punishment is not a complete solution. It often fails to address the source of the problem.

Moreover, since offenders are frequently sentenced and sanctions are imposed months after the crime has been committed, it becomes less likely they will associate the punishment with the behaviour. Of even greater concern, excessively harsh penalties induce offenders to "opt-out" of the licensing system altogether (i.e., their driver's licence remains suspended or revoked and they continue to drive anyway) so they cannot be tracked. Research shows 88% of impaired drivers continue to drive anyway (McCartt, Shabanova, Berning 2002). The bottom line is that punishment is not a complete solution. It often fails to address the source of the problem (i.e., alcohol misuse or dependency).

Treatment is "soft on crime."

It is a commonly held belief that treatment is a "weak" alternative to punishment and offenders are "getting off easy" by being ordered to attend treatment as opposed to receiving jail time. However, if treatment were easy, offenders would be lining up to participate. The reality is many offenders would

rather spend time in jail than enroll in treatment because treatment requires continued and ongoing effort and a willingness to confront, often significant, personal issues. Treatment is an effective tool to address one of the root causes of the offending behaviour (i.e., alcohol abuse or alcohol dependency) and the source of the drinking problem (Brazil et al. 2018). It can also provide offenders with alternative strategies to address the problem.

More importantly, research shows that treatment is a cost-effective solution. It costs less than incarceration and provides a return of $7 for every dollar invested (National Opinion Research Center 1994). Research also shows interventions that combine a balance between punishment, surveillance, and rehabilitation have the best outcomes (Dill and Wells-Parker 2006). A focus on punishment alone is likely to have little effect on underlying issues such as alcohol misuse and dependency which is why a more comprehensive approach is needed.

Coercive or mandated (court-ordered)treatment is not effective.

Offenders may enter treatment on a voluntary basis or as mandated by law. However, even those offenders who freely choose to enter into treatment typically do so as a result of external pressures (e.g., from family, friends, and/or employers). In this regard, Wild et al. (1998) found 37% of so-called self-referred clients felt coerced into attending treatment. For those offenders who are mandated, they may be referred to treatment by the courts, probation officials, other recognized legal entities (such as law enforcement or corrections), and/or diversionary programs. The successful completion of substance abuse treatment is typically a condition of probation or re-licensing for impaired driving offenders.

Treatment can have a positive effect on a person's substance use behaviour regardless of the circumstances of their entry into the program.

There has been ongoing debate as to whether those patients who voluntarily enter treatment are likely to have better outcomes (e.g., long-term behaviour change, fewer relapses) than those offenders who are forced to participate. The rationale is that offenders who are forced to take part in treatment against their will are unlikely to derive anything from it and therefore, will not change their behaviour. These offenders may be unwilling to admit that they have a substance abuse problem or may resent the fact they are required to attend treatment sessions which may make behaviour change more challenging.

This, however, is not true. Evidence suggests treatment can have a positive effect on a person's substance use behaviour regardless of the circumstances of their entry into the program (Anglin 1988). Research also shows coerced treatment can achieve significant reductions in substance use and related behaviours. Many published studies of prison-based treatment programs clearly show positive outcomes, including substance treatment programs delivered in Canadian federal prisons where offenders receive treatment in custody and then follow-up post-release as a condition of parole (Porporino et al. 2002; Lightfoot 1999). Findings from a long-term study co-funded by the National Institute on Drug Abuse (NIDA) and Veterans Affairs (VA) has affirmed the results of shorter-term studies which have shown similar therapeutic outcomes for voluntary and legally mandated patients (Whitten 2006). Therefore, the debate regarding voluntary versus mandated treatment protocols may be a moot point.

References

Brazil, I. A., van Dongen, J. D., Maes, J. H., Mars, R. B., & Baskin-Sommers, A. R. (2018). Classification and treatment of antisocial individuals: From behavior to biocognition. Neuroscience & Biobehavioral Reviews, 91, 259-277.

Brown, T. G., Ouimet, M. C., Eldeb, M., Tremblay, J., Vingilis, E., Nadeau, L., . . . Bechara, A. (2016). Personality, Executive Control, and Neurobiological Characteristics Associated with Different Forms of Risky Driving. PLoS One, 11(2), e0150227. doi:10.1371/journal.pone.0150227

Casey, S. (2019). Offender Rehabilitation and Theories of Behavior Change. The Wiley International Handbook of Correctional Psychology, 354-373.

Dill PL, Wells-Parker E. Court-mandated treatment for convicted drinking drivers. Alcohol Res Health. 2006;29(1):41–8.

Latessa, E. J., Johnson, S. L., & Koetzle, D. (2020). What works (and doesn't) in reducing recidivism. Routledge.

Long, J. S., Sullivan, C., Wooldredge, J., Pompoco, A., & Lugo, M. (2019). Matching needs to services: Prison treatment program allocations. Criminal Justice and Behavior, 46(5), 674-696.

McCartt, A. T.; Shabanova, V.; and Berning, A. Effects of enhanced sanctions for higher BACs. In D. R. Mahew and C. Dussault (Eds.), Proceedings of the 16th International Conference on Alcohol, Drugs and Traffic Safety (Vol. 2, pp. 617-622). Montréal, Canada: Société de l'assurance automobile du Québec, 2002b.

National Opinion Research Center. General Social Survey, 1994. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2016-06-30. **https://doi.org/10.3886/ICPSR35323.v3**

Skeem, J. L., & Polaschek, D. L. (2019). High risk, not hopeless: Correctional intervention for people at risk for violence.

Viglione, J., & Taxman, F. S. (2018). Low risk offenders under probation supervision: Risk management and the risk-needs-responsivity framework. Criminal Justice and Behavior, 45(12), 1809-1831.

Yong, A. D. (2017). Stages of change profiles of offenders: exploring offenders' motivation to work on their offending problems: a thesis presented in partial fulfilment of the requirements for the degree of Doctor of Clinical Psychology at Massey University, Albany, New Zealand (Doctoral dissertation, Massey University).

What does the Sober Smart Driving Education Program (SSD) contain?

The Sober Smart Driving Education Program contains facts to help Canadians learn about the risks associated with drinking and driving and encourages everyone to speak up and talk about why they choose not to drink and drive.

Key topics discussed on this site include:

- Drinking and its effects on driving
- Magnitude & characteristics of drinking & driving
- Basics of the impaired driving system
- Impaired driver programs & penalties
- Myths & misconceptions about drinking and driving

Each of these topics contains a series of fact sheets structured in a question and answer format which are available for free download and sharing (with attribution). These resources are designed to support the education and prevention efforts of communities, schools, health and road safety professionals and advocacy organizations.

To view more fact sheets, or to get more information about alcohol, its effects on driving skills, and impaired driving, visit **SoberSmartDriving.tirf.ca**.

Traffic Injury Research Foundation

The mission of the Traffic Injury Research Foundation (TIRF) is to reduce traffic-related deaths and injuries. TIRF is a national, independent, charitable road safety research institute. Since its inception in 1964, TIRF has become internationally recognized for its accomplishments in a wide range of subject areas related to identifying the causes of road crashes and developing programs and policies to address them effectively.

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