



# UNDERSTANDING DRUNK DRIVING



The knowledge source for safe driving

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## Background and purpose

There are many competing, often conflicting, and sometimes inaccurate messages in the public domain about different aspects of the drunk driving problem and how to solve it. These diverse messages detract from a common understanding of the issue and can unintentionally fragment the focus on it. This can result in confusion among policy-makers, administrators, and the general public regarding needed action and ultimately detract from a uniform, comprehensive approach that addresses the many types of offenders that are part of the impaired driving problem. Of greater concern, it can lead to unintended negative consequences due to agencies working at cross-purposes.

Consistent understanding about the drunk driving issue and the system that addresses it are essential to ensure that impaired driving remains a priority and that needed improvements to the drunk driving system are achieved. Clear, compelling statements that articulate the scope of the issue and how it can be addressed can generate support for critical system changes, and stimulate public awareness to drive action.

- > This brochure from the Working Group on DWI System Improvements contains information to increase understanding of the drunk driving problem and the criminal justice system in which it is managed.
- > It also contains important information to dispel common myths and misconceptions about the problem.
- > The purpose is to clarify the facts about impaired driving and different facets of the issue to support informed decisions about effective solutions.

The Working Group on DWI System Improvements is a coalition of influential organizations representing front-line professionals in all segments of the criminal DWI system. This coalition was formed in 2003 to advance the recommendations stemming from a comprehensive review of the DWI system (available at [www.tirf.org](http://www.tirf.org)). During its six year tenure, this consortium has shaped the focus on and development of drunk driving initiatives with its unique perspective on the translation of legislation, policies and programs into operational practices. The Working Group is a recognized source of institutional knowledge and expertise that has become a resource to practitioners, agency administrators and policymakers.

## Understanding drunk driving offenders

A common misconception is that all drunk drivers are alike, so they should all be treated similarly. On the contrary, drinking drivers represent a truly heterogeneous group of offenders that share some common characteristics. This can make it challenging to understand the many segments of this problem and differentiate among proposed solutions. It is important to recognize the diversity of the group since it speaks to the need for a range of programs and policies to address the problem. Some of the key facts about the different types of drinking or impaired drivers and measures to address them are described briefly below.

- > **Legal drinking drivers.** The majority of people who drive after drinking do so rarely and when they do, they usually have low blood alcohol concentrations (BACs). As one indication of this, roadside surveys show that about 80% of drinking drivers have BACs under the legal limit. For drivers with low BACs, the risk of being involved in a serious crash is relatively low, compared to the average non-drinking driver. Such risk also varies as a function of age and gender (see for example, Zador et al. 2000) but BACs of .03% are associated with about a two- to three-fold increase in risk; BACs of .05% with between a 6 and 17 times increase in risk. This group, although less at risk of causing a serious crash than drivers with high-BACs, comprise a large group of drinking drivers, so collectively they need to be deterred. Fortunately, there is evidence that such individuals are more amenable to traditional interventions such as conducting high visibility enforcement, which creates general deterrence and increases the perceived risk of arrest.
- > **First offenders.** First offenders represent a large majority of the drunk driving problem. Once a drunk driver is arrested, research shows that about two-thirds of them will be deterred by their experience with the criminal justice system and will not be apprehended again (Voas and Fisher 2001). However, approximately

one-third will re-offend. A portion of them likely possess a drinking problem which puts them at a greater risk of recidivism. Accordingly, there is a need to consider screening and/or assessment even for first offenders, especially those with a high-BAC, in order to identify those at high-risk. Studies suggest that a significant percentage of first offenders meet the criteria for a clinical diagnosis of alcohol dependence or having an alcohol abuse disorder (Rauch 2005). These issues place them at risk for re-offense. However, for those who show no signs of alcohol-related problems, the arrest experience itself along with an educational effort is likely most effective. Screening and assessment of this group can help practitioners determine which first offenders will benefit from enhanced supervision and/or treatment protocols.

- > **High-risk offenders.** An estimated 30% of offenders will become repeat offenders. These offenders drink and drive frequently, often at high-BACs, can develop a history of prior convictions and often have some degree of a drinking problem. Their tendency to drink excessively puts them at very high risk of causing a serious crash. Research shows that drivers with a BAC at .15% are about 150 times more likely to have a fatal crash than the average non-drinking driver. At BACs of .20% or higher this risk increases to some 460 times (Simpson et al. 1996). Although such drivers account for only a small proportion of all nighttime drivers on the road (less than 1%) their high risk makes them a significant threat (Simpson and Mayhew, 1991). A particularly challenging group of offenders, these highest risk offenders need a strategy that is anchored in a combination of punishment, surveillance, and treatment. Strategies to reinforce positive behavior should also be implemented to encourage behavior change.
- > **Young drinking drivers.** This group of drivers account for a high-risk percentage of the problem. Their high risk is attributable to two factors. First, they are inexperienced drivers – for example, even when sober, 16-19 year olds have a fatal crash rate more than four times as high as that of drivers aged 25-34, and nine times as high as drivers aged 45-54 (Mayhew et al. 2005). Second, as inexperienced drinkers they are more impaired at even low levels of alcohol. Of equal concern, they may also engage in binge drinking (frequently defined as occasions of heavy drinking measured by the consumption of 4-5 drinks in one sitting) or excessive consumption of alcohol. BACs over .08 (the legal limit for adults) are not uncommon among young drivers in the United States, even though it is unlawful for drivers under the age of 21 to operate a vehicle with any detectable amount of alcohol in every state in the U.S. In 2008, almost 26% of all fatally injured legally impaired drivers were between the ages of 16-24 (NHTSA 2009).

The good news is that roadside surveys consistently show that young people are the least likely of any age group to drink and drive. The bad news is that for the reasons outlined above, the young drivers who do drink and drive are at much greater risk of collision, even at very low BACs, than any other age group. Moreover, it is illegal for young people under the age of 21 to drink in the first place.

Nevertheless, in the United States, Uniform Crime Reports for 2006 from the Federal Bureau of Investigation (FBI) reveal that a total of 14,292 charges were laid against youth under age 18 for impaired driving and a total of 311,164 youth aged 16-24 were charged with impaired driving in 2006 (FBI 2007). Youth who were most frequently charged were age 21. Common sanctions that are imposed with this population include fines, probation supervision, and limited treatment. To date, not much is known about effective strategies to manage this group. The bottom line is that young impaired drivers demand attention for two reasons – not only are they at risk of becoming the high-risk repeat drunk drivers of tomorrow, but they are also more amenable to behavior change.

- > **Female drunk drivers.** This population is a growing concern. The drunk driving problem is no longer the sole province of men. Although men still account for nearly 80% of the arrests for impaired driving, there was a 28.8% increase in the number of impaired driving arrests of women in the decade between 1997 and 2007 (McKay 2010). The 2008 report on *Crime In The United States* revealed an even greater difference in 1999: a 35% increase in impaired driving arrests of women. By contrast, in the same period, total impaired driving arrests involving men actually decreased by 6.6%.

Comparing fatal traffic crashes, women accounted for 15% of drunken drivers in fatal crashes (>0.08 BAC) in 2007, up from 13.5% in 1998. Again, by contrast, the number of legally intoxicated men involved in fatal crashes in 2007 declined.

These trends are worrisome, especially given the fact that if both genders consume the same amount of alcohol, women's initial BAC will be higher due to physiological differences between genders.

Of some concern, most drunk driving countermeasures have been developed to target male offenders. Some research suggests that women have better outcomes with gender sensitive interventions, particular with regard to treatment (White and Hennessey 2007). For this reason, there is a need to review the extent to which these are appropriate for females and to develop measures specifically for women.

## Understanding the drunk driving system

The justice system involved in the control of drunk driving encompasses enforcement, prosecution, adjudication and monitoring. It is a complex and often poorly understood system. Decision-makers need better insight into how the system can, or should, function. At the same time, it is evident that the various components within the system often work independently and occasionally at cross-purposes. Better communication, coordination and cooperation are needed to help set consistent priorities both in terms of targets and interventions. To make the system more effective and efficient, a number of key issues need to be considered.

- **Strategies to reduce impaired driving require adequate staffing, training, tools, and resources.**

Drunk driving is one of the most often committed crimes in the United States and is only surpassed by drug and property crimes, yet the implementation of some effective strategies to address the problem has often been an “unfunded mandate”. For example, alcohol interlock and DWI court programs have been implemented in a majority of states but the necessary resources, training, and staffing required to support the programs at the operational level have not been consistently allocated. At the same time, the impact that these programs can have on initial workloads vs. long-term workloads may not be anticipated when they are being developed. Hence staffing, training, and resources to deliver programs and policies may not be sufficient to achieve goals and objectives at the front-end. A clear mandate is needed to provide adequate numbers of frontline staff with appropriate tools and skill sets to facilitate the implementation and delivery of effective strategies and ensure that laws are efficiently enforced.

- **Getting drunk drivers off the road and keeping them off the road makes communities safer.**

A key goal of the justice system is to prevent the occurrence of impaired driving which subsequently, saves lives. In order to achieve this, there must be recognition that both short-term and long-term goals are important. It is first and foremost critical to get impaired drivers off the road using consistent, effective enforcement strategies. This can be accomplished by training law enforcement officials to recognize the indicators of impaired driving and providing them with appropriate tools and training to remove these drivers from the roads.

After an impaired driver enters the system however, the focus must shift to risk reduction in both the short and long-term. Effective and appropriate strategies are needed to identify the risk posed by individual offenders and sanctions must be imposed accordingly. To prevent re-offense, a

comprehensive strategy that includes education efforts, administrative license suspension, screening/assessment, adequate monitoring and supervision, and possibly treatment combined with other sanctions such as the use of an alcohol interlock, continuous alcohol monitoring, vehicle impoundment or short periods of incarceration should be utilized. Extended incarceration should be reserved for the most serious, high-risk offenders. A balance between assessment, rehabilitation and supervision can ensure the strategic use of resources and encourage behavior change to prevent offenders from returning to the road as impaired drivers in the future.

**> Meaningful and appropriate supervision is needed to ensure offenders do not slip through the cracks.**

Once impaired drivers have been convicted, it is important to have proper monitoring mechanisms in place that provide adequate levels of supervision according to the risk posed by the offender. Gaps must be closed to keep offenders in the system. A lack of follow-up and failed enforcement of suspensions and conditions results in unlicensed driving and potentially continued impaired driving. Money invested in enforcement, prosecution, and conviction is wasted if offenders are not supervised and are able to evade sanctions designed to protect the public and change behavior. It has also been well established that repeat offenders in particular are savvy about loopholes in the system, and know how to exploit them and avoid penalties.

For example, offenders may not comply with license restrictions, treatment requirements, or participate in programs as required due to gaps in information-sharing and a lack of coordination. Improved supervision and good communication among all involved parties – probation, the courts, law enforcement, treatment and licensing agencies – is necessary to streamline the process of monitoring impaired driving offenders. DWI courts are a good example of how practitioners from each area of the system can come together and work collaboratively in supervising offenders and holding them accountable. These principles are applicable to traditional courts as well.

**> Assessment and treatment are efficient tools for targeting high-risk offenders.**

An assessment is a process used to “confirm the presence and severity of alcohol dependency issues and identify the appropriate level of care needed to address them” (SAMHSA 2005). Through the use of assessment, offenders who are most likely to benefit from and/or need treatment can be identified and targeted. Given the limited resources that are available and the costs associated with treatment, offenders who do not need or will not benefit from treatment can be screened out. Through the use of these

tools, practitioners can determine which offenders may need increased supervision as well as those who are most likely to recidivate. Identification and referral of these higher risk offenders in a timely fashion will maximize their potential for behavior change.

In addition, recovery management studies reveal that timely stage-appropriate interventions based on client characteristics (identified during assessments) can lead to improved outcomes. Of some interest, the neuroscience of addiction reveals cognitive impairment that impedes high-risk offenders' ability to abstain without intervention, supervision, and treatment. Therefore, assessments that consider cognitive impairments are also important.

More awareness is also needed among decision-makers and judges in particular, about the long-term and cost-saving benefits of assessments. The importance of assessment prior to sentencing should be emphasized as this can provide the judge with an indication of the most appropriate conditions/sanctions to impose.

Once offenders are identified as presenting a high risk for re-offense, referrals can be made for appropriate treatment interventions. Detoxification is the first step towards overcoming physical and psychological dependence on alcohol. After detoxification, other levels and intensity of care (determined through ongoing assessments) can be assigned. Many interventions have proven to be successful in treating DWI offenders including:

- > motivational interviewing;
- > cognitive behavioral therapy;
- > screening and assessments;
- > counseling/therapy (both individual and group); and,
- > pharmacological interventions (drug therapy).

Treatment can be provided on an inpatient or outpatient basis. Those offenders who have severe dependency issues are more likely to be referred to inpatient programs either in hospitals or in non-hospital residential care. The majority of offenders however, are likely to benefit from outpatient services. These services can be intensive and rigidly structured for those who require it (9-20 hours per week which can include evenings or weekends) or on a more regular basis (a couple of hours per week) for those who do not have the same level of need. While inpatient treatment can be expensive due to the costs associated with 24 hour care and accommodations, outpatient services are a more affordable and easily accessible option.

### > **Intensive interventions can harm low-risk offenders.**

An offender's risk level can be defined as their probability of reoffending. Impaired driving offenders should be provided with supervision and treatment levels that are commensurate with identified risk levels; high-risk offenders should receive more intensive supervision and/or treatment.

Intense interventions are more effective when delivered to higher-risk offenders; research has found that these initiatives can actually increase the failure rates among low-risk offenders (Lowenkamp and Latessa, 2004). The placement of low-risk offenders in intensive interventions or programs exposes them to high-risk offenders who can be a potentially negative influence and manipulative.

Low-risk offenders are classified as being fairly pro-social. Hence, when they are placed in restrictive, intensive, and highly structured programs they may begin to adopt more anti-social characteristics as they attempt to adapt to their environment and peers. This can result in interventions having the opposite effect of what was desired - increasing recidivism as opposed to reducing it.

For this reason, it is important to identify low-risk offenders (through the use of assessment tools) and exclude them from intensive interventions that are better suited for high-risk offenders.

### > **Positive reinforcement is beneficial.**

When dealing with offenders, it is important to not only hold them accountable for non-compliance but to also respond to and reinforce compliant behavior. Research suggests this can be effective. The danger in focusing solely on punishment is that over time, sanctions tend to pile up. The more punitive controls placed upon an offender, the greater the likelihood that they will violate those conditions and be returned to the criminal justice system.

When too many sanctions and conditions are placed upon offenders they may feel as though they are being set up for failure. Instead of successfully completing their probation and/or programming they will continually incur violations and be recycled through the system for non-compliance (Lucken 1997). This can become frustrating for practitioners and offenders alike and is likely to result in offenders dropping out of programs before completing them.

Accordingly, interventions should balance punitive and rehabilitative approaches, as appropriate, to create accountability as well as recognition of progress, along with strategies that ensure public safety. Positive

reinforcement can be as simple as giving verbal praise or it could be a reduction in the level of supervision or relaxing of some conditions. It has been suggested that four positive reinforcements should be applied for every negative reinforcement action in order to achieve optimal behavior change (Crime and Justice Institute 2004). By recognizing offenders for the progress they achieve, they may be motivated to continue demonstrating compliance and not feel as though they are facing insurmountable expectations.

**> Information-sharing among agencies is critical.**

To share information, policies that permit this must be in place. Agencies require good channels of communication to transfer knowledge and information, develop initiatives, and engage in dialogue about their common goals and objectives. Agencies that share information about both their successes and failures and provide feedback to one another can benefit from each other's experiences by knowing what does and does not work without having to repeat mistakes. The sharing of information and increased communication also facilitates collaboration and allows partnerships to form.

There are many benefits associated with sharing information and working cooperatively as it ensures that a single agency does not have to absorb all costs. Collaboration also lends more weight to what is being produced through the unification of the voices of multiple agencies. Agency administrators can view information-sharing practices as a way to lighten their load and improve upon what has already been done by learning from others in the system.

**> Change takes time and gains are incremental.**

Progress may not be immediately evident. However, this does not mean that gains are not being achieved. Impact takes time to show as the effects of policies developed four to five years ago are only beginning to be felt. Frustration should not occur if measurable change does not occur within a short timeframe. The focus should always remain on preventing and reducing impaired driving and keeping this long-term focus is necessary when seeking to implement new programs and policies. Any progress that is made, no matter how small, should be considered a victory as it moves agencies one step closer to reducing the magnitude of the problem.

**> Revenue generation is not the purpose of impaired driving enforcement.**

Funding to support the consistent enforcement of impaired driving and other traffic laws may incorrectly be perceived as a strategy to generate revenue for states and/or communities. However, the main goal of these

enforcement strategies is to protect the public. Research shows that almost 11,000 people were killed and 275,000 were injured in drunk driving crashes in 2008. It further shows that limited enforcement of these laws means that offenders can drive drunk between 200 and 2,000 times before being apprehended (Jones and Joscelyn 1978). However, during periods of high enforcement, this drops to as low as 1 in 80. As such, strong enforcement is imperative to keep the public safe on the road.

## Understanding myths and misconceptions about drunk driving

It is perhaps not surprising that a number of myths and misconceptions about the problem have arisen over the past several decades. This is problematic because it can cloud priorities and detract from the ability of agencies to appropriately define the issues and direct action where it is most needed. It can also make it challenging for the public to understand the importance of having a variety of programs and policies available to manage the different types of offenders. Some of the more common myths and misconceptions about drunk driving are discussed below.

- > **All drunk drivers are the same.** As discussed earlier, the only thing that drunk drivers have in common is a propensity to drink and drive – some do it infrequently, others do it often; some are at relatively low risk of causing a collision, others are at very high risk. Drunk drivers are one of the most heterogeneous offender populations in the justice system. Drunk drivers come from all walks of life. While many drunk drivers are men, the number of female drunk drivers is rising and a growing concern. They represent different ages, levels of education, and professional achievement. The socio-economic status and criminal activity of these offenders varies greatly. It must be underscored that the problem is diverse and includes many different segments of the population, so it is essential to have a broad range of countermeasures available to create a comprehensive approach to address the problem.
- > **“There but for the grace of God go I”.** Some people may be inclined to sympathize with the drunk driver because they may have personally had occasion to drink and drive themselves. However, the average person rarely consumes enough alcohol to exceed the legal limit, much less by two or three times. And research shows that most offenders drink and drive several times before they are caught. Sympathy should be reserved for the victims or potential victims who escaped a tragic encounter with a drunk driver, rather than for the drunk driver. The public and politicians need to be more cognizant of the seriousness of the offense and the threat that these drivers pose on the roadways.

- > **“One-size-fits-all” is an effective strategy.** There is no single solution to the drunk driving problem that will address the many types of offenders in need of intervention. Drunk drivers are a heterogeneous group with different levels of risk and need. As such, a variety of programs and policies are needed to effectively address them. A comprehensive approach involving a range of solutions is essential to reduce recidivism and achieve long-term risk reduction. Of paramount importance, agencies need to emphasize that low level interventions are more appropriate for low-risk offenders as research shows that intervening too severely can do more harm than good. For high-risk offenders, sanctions should balance punishment, surveillance, and rehabilitation.
- > **Drunk drivers will not change their behavior.** This myth can arise from observing the uneven and sometimes frustrating progress of treating impaired driving offenders. Gains can be offset by setbacks. Relapse is expected when dealing with alcohol dependency issues but so long as the addiction continues to be addressed, progress is usually made. In order for treatment to be effective, interventions must be tailored to the needs of individual offenders – this is called treatment matching. By matching an offender with the most appropriate interventions (that take into account factors such as gender or cultural background) the chance for a successful outcome is increased. It is equally important to ensure that the programs selected for offenders are matched to their stage of change. Ultimately, the goal is to identify an offender’s individual needs and match them with the most appropriate interventions, as this case-by-case approach offers the greatest potential for successful outcomes – i.e., changed behavior in the long-term.
- > **Treatment is “soft on crime”.** It is a commonly held belief that treatment is a “weak” alternative to punishment. However, if treatment were easy, offenders would be lining up to participate. The reality is that many offenders would rather spend time in jail than enroll in treatment because treatment requires sustained effort and a willingness to confront personal issues. Treatment is an effective tool to address one of the root causes of the offending behavior (i.e., abusive drinking or an addiction/dependence on alcohol) and the source of the drinking problem. 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 that interventions that combine a balance between punishment, surveillance, and rehabilitation have the best outcomes (Dill and Wells-Parker 2006).

- > **Increasing penalties increases deterrence.** It is a common misconception that getting “tough on crime” increases the deterrent effect of 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., that offenders 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 that their behavior 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 that they are unlikely to get caught or that they are above the law.

Offenders do need to be held accountable for their actions but the role that alcohol addiction may play in the behavior should also be considered. Offenders who suffer from addiction are unlikely to weigh the potential costs and benefits of their actions. As a result, punishment alone is unlikely to deter them in the future.

Deficits among drunk drivers may include impairment of memory and of executive functioning (which helps one plan ahead, regulate behavior, and inhibit negative behavior). This makes it challenging for offenders to learn and retain information. For example, a study of 134 voluntarily recruited offenders participating in a second offense court-mandated residential alcohol education program in Massachusetts revealed that 73% of the sample was identified as having one or more clinically significant cognitive deficits (Glass and Chan 2000). In addition, a majority of subjects scored below the 50th percentile on tests of word frequency, vocabulary, sustaining attention, memory, executive functioning, and impulse control.

Moreover, since sanctions frequently are imposed months after the commission of the criminal act, it becomes less likely that the offender will associate the punishment with the behavior. Of greater concern, excessively harsh penalties induce offenders to “opt-out” of the licensing system altogether so that they cannot be tracked. The bottom line is that punishment is not a complete solution. It often fails to address the source of the problem.

Of equal concern, the typical structure of programs and interventions designed for high-risk offenders requires the completion of paperwork, extensive reporting protocols and meeting schedules, and delayed gratification, meaning that offenders must wait months or even years before regaining driving privileges. This structure

contradicts the thinking patterns of offenders, so it is not surprising that some offenders fail to complete such programs. It is important that efforts be undertaken to reconcile this contradiction in order to ensure that offenders are appropriately and effectively managed to reduce risk in the long-term. At the same time, positive reinforcement enables offenders to feel a sense of accomplishment and provides them with the motivation to continue working toward behavior change and refraining from driving while impaired.

## Conclusions

An impediment to progress in dealing effectively with the drunk driving problem is a lack of understanding of the nature of the problem itself and the characteristics of the justice system responsible for dealing with it. A better understanding of the problem, particularly the diverse characteristics of offenders, can ensure that appropriate measures are applied to the different types of offenders. A better understanding of the functions, goals and objectives of the justice system – both within the system and outside it -- can help identify where improvements are needed and how these can be fostered. A better understanding of the myths and misconceptions surrounding the problem and its solutions can help ensure that the system is more effective and efficient.

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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 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 affectively.

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