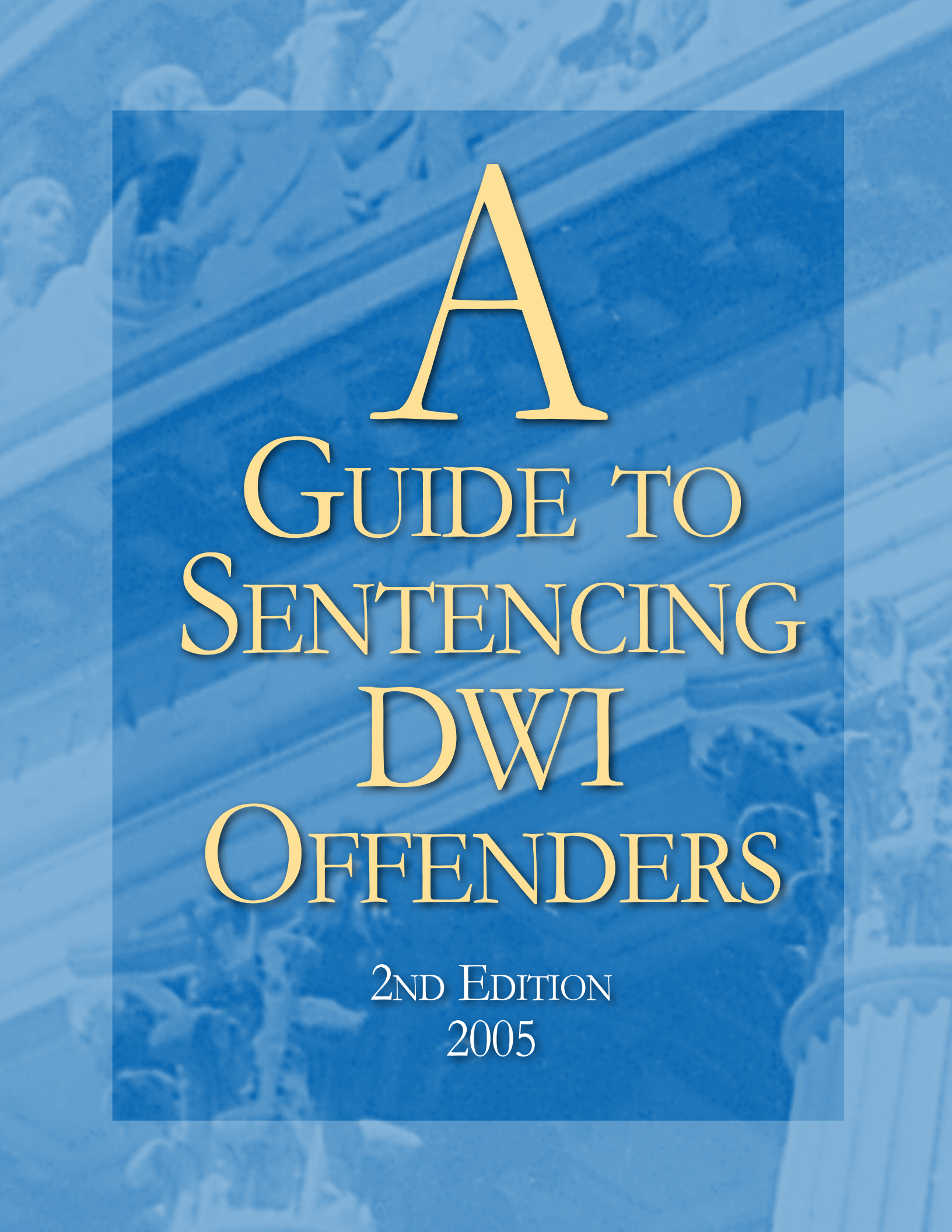
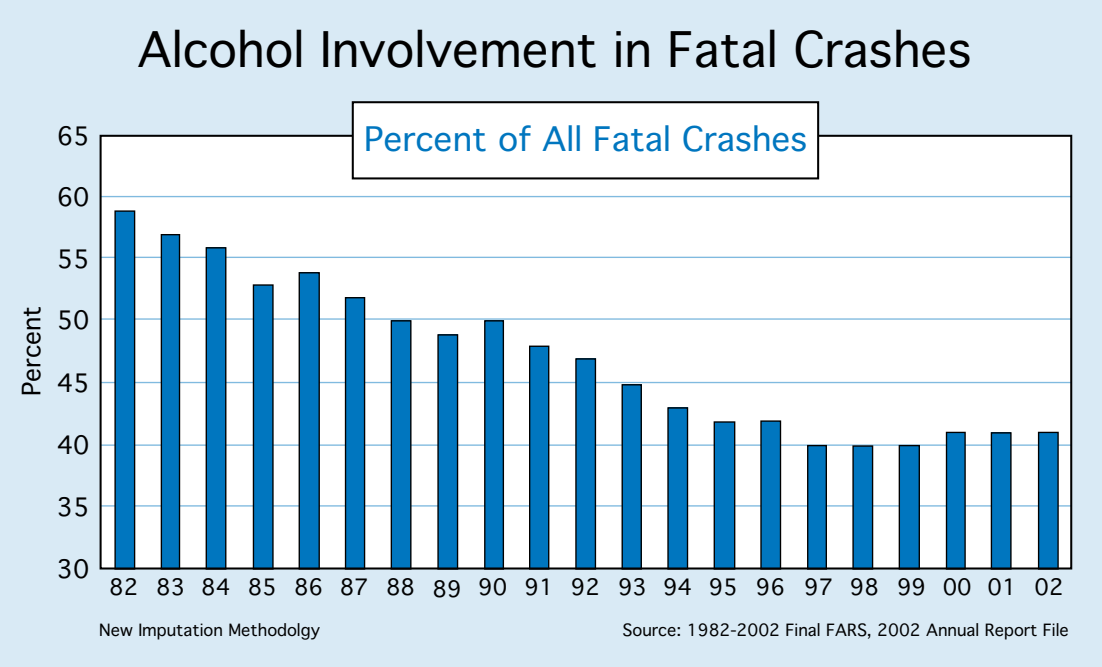


A Guide to Sentencing DWI Offenders

2nd Edition
2005

This sentencing guide is designed to assist judges and prosecutors in reducing recidivism among people convicted of driving while impaired (DWI). While the work of these and other professionals has contributed to the marked reduction in alcohol-related deaths on the highway since the early 1980s, in the past several years progress has stagnated.



The involvement of all practitioners in the sentencing process is crucial from both community and public health perspectives. Dealing most effectively with serious traffic offenders can make a substantial difference in community members' health, quality of life, and public welfare.

This guide focuses only on the offender convicted of DWI. The term DWI is used interchangeably throughout this guide for driving under the influence (DUI) and operating while intoxicated (OWI)-it does not differentiate between DWI offenders convicted as a result of a routine traffic stop and those convicted as a result of involvement in a crash. This guide also does not deal with the more serious charges that could result from a DWI such as vehicular homicide or vehicular manslaughter.

The guide is an update of an earlier manual developed by the National Highway Traffic Safety Administration (NHTSA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) (NHTSA and NIAAA, 1996).

Sanctions That Work Best

Data on the effectiveness of all the different DWI sanctions used in the United States are inadequate and some data is conflicting. However, available information supports the following generalizations:

- Ideally, an evaluation of an offender's problem with alcohol or abuse of alcohol, administered and interpreted by qualified professionals, should be conducted before deciding which sanctions to impose (Popkin, Kannenberg, Lacey, and Waller, 1988; Wells-Parker et al., 1990; Mayhew and Simpson, 1991; Simpson, Mayhew, and Beirness, 1996).
- Consistency in sentencing should be balanced with the need to tailor sanctions and the extent of treatment to individual offenders (Donovan and Marlatt, 1982; Perrine, Peck, and Fell, 1988; Wells-Parker, Landrum, and Topping, 1990; Jones and Lacey, 1998).
- When dealing with recidivists, the focus of sentencing should shift from deterrence to incapacitation or separation of the offender from the vehicle (Jacobs, 1990; Marques, Voas, and Hodgins, 1998).
- There is a growing body of evidence that sanctions administered on the vehicles of DWI offenders substantially reduce DWI recidivism during the period of implementation (Rauch et al., 2002b; Marques et al., 1998).
- Intensive supervision probation combined with frequent meetings with the judge and close monitoring of compliance with the offender's sanctions (e.g., DWI courts) appear to be effective in dealing with multiple repeat offenders (Jones, Wiliszowski, and Lacey, 1996; Jones and Lacey, 1998).

In general, effective sanctions fall into the following areas:

- Licensing sanctions
- Vehicle actions
- Assessment and rehabilitation (appropriate treatment and recovery)
- Other sentencing options

Research indicates that a combination of sanctions is more effective than any individual sanction (Jones and Lacey, 2000).

Treatment Approaches That Work Best

Two generalizations can be made about treatment effectiveness:

- Treatments that combine strategies, such as education in conjunction with therapy and aftercare, appear to be most effective for repeat as well as first-time offenders (Wells-Parker, Bangert-Drowns, McMillen, and Williams, 1995; DeYoung, 1997; National Institute on Alcohol Abuse and Alcoholism, 2000; Wells-Parker and Williams, 2002; Cavaiola and Wuth, 2002).
- The more severe the alcohol problem, the more intensive should be the treatment (Mayhew and Simpson, 1991). For alcohol-dependent offenders, any one of three popular treatment philosophies appear to work equally well in reducing alcohol abuse up to one year post-treatment. These include cognitive-behavioral therapy (CBT), motivational enhancement therapy (MET), and twelve-step facilitation therapy (TSF) (Project MATCH Research Group, 1997).

Data are insufficient to determine the most effective specific treatment strategy for individual offenders. In general, evidence for alcohol problem treatment supports a 7- to 9-percent reduction of DWI recidivism and crashes averaged across all offender and treatment types (Wells-Parker et al., 1995).

Characteristics of A Good Treatment Program

Regardless of treatment type, a treatment program should at least accomplish the following (Center for Substance Abuse Treatment [CSAT], 1994):

- Create a treatment plan for each client with specific, measurable goals
- Provide for family involvement
- Provide for aftercare
- Be willing to report back to the court (or probation official) to help enforce compliance with the order for treatment
- Have medical backup to ensure safe detoxification and healthcare, if required
- Be sensitive to ethnic, gender, and other differences that might affect treatment effectiveness
- Have bilingual capability, if needed

DWI Courts

There is growing evidence that DWI courts, modeled after drug courts, hold promise in substantially reducing DWI recidivism of offenders who complete the requirements of such a court. DWI courts generally involve:

- Frequent interaction of the offender with the DWI court judge
- Intensive supervision by probation officers
- Intensive treatment
- Random alcohol and other drug testing
- Community service or some equivalent
- Lifestyle changes
- Positive reinforcement for successful performance in the program

Most DWI courts assign nonviolent offenders who have had two or more DWI convictions in the past to the court. At the present time, there are multiple sources of funding for drug/DWI courts to help defray their costs. DWI courts have been reported to hold offenders accountable for their actions, change offenders' behavior, curtail alcohol abuse, treat the victims of DWI offenders in a fair and just way, and protect the public (Tauber and Huddleston, 1999; Freeman-Wilson and Wilkosz, 2002).

Screening And Brief Interventions

Recent research on the effectiveness of screening and brief interventions in medical settings is promising. However, most of these interventions are accomplished before drivers are arrested or charged with DWI. Counseling by medical professionals of drinking drivers injured in crashes and treated at hospitals has been shown to reduce future alcohol-related episodes (Gentilello et al., 1999; Longabaugh et al., 2001; Wells-Parker and Williams, 2002).

DWI Sentencing Checklist

The table below summarizes the evidence concerning various DWI sentencing options that are discussed in detail in the text of this guide:

OFFENDER	SANCTION	EFFECTIVENESS	COMMENT
FIRST CONVICTION	**LICENSING**		
	Suspension/revocation (≥90 days; 30 days hard)	Reduces alcohol-related fatalities 6-19% (administrative license revocation)	One study showed it does not cause employment problems.
	VEHICLE ACTIONS (FOR VERY HIGH BACs)		
	Impoundment/ immobilization	Reduces recidivism by 40%-70%.	Immobilization may be more cost-effective.
	Alcohol ignition interlocks	Effective while on vehicle.	Breath test failures in first few weeks are best predictor of recidivism.
	License plate impoundment	Shown to be effective in MN.	More cost-efficient than impoundment.
	ASSESSMENT AND REHABILITATION		
	Treatment as appropriate to problem	Reduces recidivism by 7%-9%.	Should be paid by the offender when possible.
	SENTENCING OPTIONS		
	Electronic monitoring Home confinement	Effective alternative to jail. Reduces recidivism by 33%.	Can be self-sufficient if paid by the offender.
	Fines	No studies of effectiveness found.	Sometimes used to pay for programs.
MULTIPLE CONVICTIONS (Repeat Offender)	**LICENSING**		
	Suspension/ revocation (≥ 1 year) 30-90 days hard Remaining days on restricted license/ work permit	No studies found on the effects of license suspension on repeat offenders. General deterrent effect of 6-19%.	Studies indicate 50-70% of offenders continue to drive to some extent.
	VEHICLE ACTIONS		
	Impoundment/ immobilization	Reduces recidivism by 40%-70%.	Immobilization may be more cost-effective.
	Alcohol ignition interlocks	Reduces recidivism while on vehicle.	Breath test failures in first few weeks are best predictor of recidivism.
	License plate impoundment	Shown to reduce recidivism in MN.	More cost-efficient than impoundment.

DWI Sentencing Checklist (cont.)

OFFENDER	SANCTION	EFFECTIVENESS	COMMENT
MULTIPLE CONVICTIONS (Repeat Offender)	**ASSESSMENT AND REHABILITATION**		
	Mandatory assessment of drinking problem and mandatory treatment.	Reduces recidivism by 7%-9%.	Should be paid by the offender when possible.
	SENTENCING OPTIONS		
	Electronic monitoring and home confinement.	Reduces recidivism by 33%.	Can be self-sufficient if paid by the offender.
	Intensive supervision probation.	Reduces recidivism by 50%.	Should be at least partially funded by the offender.
	Special DWI facilities.	Reduces recidivism by 75%.	
	Day reporting center.	Integrates offender back into society.	More cost-effective than jail.
	Fines, reinstatement fees.	No studies on effectiveness found.	Helps pay for costs of other sanctions.
	DWI court (e.g., frequent contact with judge; intensive supervision probation; treatment; random alcohol/drug testing; lifestyle changes; positive reinforcement).	Some courts reporting reductions in recidivism by 50% or greater.	Multiple funding sources available. NHTSA and the Bureau of Justice Assistance have a joint evaluation underway.

Acknowledgments

This guide was developed by the National Highway Traffic Safety Administration (NHTSA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) with the input of a multidisciplinary working group of judges, prosecutors, and researchers. The conclusions and recommendations in this guide are based on the findings of over 30 years of research on the effectiveness of sanctions for impaired-driving offenders.

NHTSA and NIAAA would like to acknowledge the contributions of the members of an expert panel who reviewed the previous guide, made suggestions for updating it, and reviewed the various drafts of the updated guide. The experts included Judges Karl B. Grube, William F. Todd, Jr., and Robin Smith; prosecutors William D. "Billy" Bond, David Wallace, and Marcia Cunningham; Crime Assistance Coordinator Joan Koechig; and researchers Douglas Beirness, Patricia Waller, and Thomas Nochajski.

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Contents

I. Introduction

Traffic fatalities in alcohol-related crashes rose by 4 percent between 1999 and 2000 and stayed about the same between 2000 and 2002 (NHTSA, 2003a). Alcohol-related fatalities, however, had declined by about one-third between 1982 and 1993. (Fell and Klein, 1994; NHTSA, 1995a, 1995c). The criminal justice system, the responsible Government agencies, and the public must pay more attention to the impaired-driving problem if improvement is to occur again (Fell, 1990, 2001).

Recently, 900 U.S. judges were surveyed concerning their recommendations for improvement of the DWI system. More than 80 percent reported that summaries of scientific research on the effectiveness of DWI sanctions would greatly benefit sentencing decisions and lead to greater consistency and lower recidivism rates (Robertson and Simpson, 2002).

Extent of the Problem

The extent of the DWI problem is exhibited in the following statistics:

- For the past 6 years, more than 17,000 people have been killed annually in alcohol-related traffic crashes. In addition, approximately 300,000 people are injured annually in alcohol-related crashes (about one injury every two minutes) (NHTSA, 2003a).
- DWI recidivism is high. Overall, it has been estimated that one-third of all drivers arrested, convicted, or adjudicated for DWI are repeat offenders (NHTSA, 1995b). Of drivers convicted of DWI in California, for example, 44 percent were reconvicted of DWI within 10 years (Peck et al., 1994).
- Of the 42,815 traffic fatalities that occurred in 2002, an estimated 17,419 (41% or one death every 33 minutes) were alcohol-related (NHTSA, 2003a).
- For the past 10 years, approximately 1.4 to 1.5 million drivers have been arrested annually for DWI (Federal Bureau of Investigation, 2003).

Who Are the DWI Offenders?

No generalization about the "typical" drinking driver applies to every offender. During any given one-year period, self-reported survey data indicated that between 17 and 27 percent of people in the United States drive shortly after drinking – this translates to between 28 and 45 million people who have driven after consuming alcohol in an average year (Balmforth, 1999). Theoretically, any of them may be arrested. Nevertheless, most impaired drivers are not arrested (Zador, Krawchuck, and Moore, 2000).

Much is known about those offenders who have been arrested and convicted of DWI. A study of DWI offenders under correctional supervision (typically repeat offenders) highlighted several differences between DWI offenders and other criminal offenders: DWI offenders are older (by approximately five years), more educated than other criminals, and more likely to be white males (Maruschak, 1999).

Maruschak listed the following additional characteristics for DWI offenders:

- 34 percent of the offenders in jail and 8 percent of the offenders on probation reported having been convicted of three or more DWI offenses in their lifetime.
- Approximately one in three DWI offenders on probation and two out of five in jail reported drinking alcohol daily, whereas 44 percent of jailed DWI offenders and nearly half of DWI offenders on probation report drinking at least once a week.
- Over 37 percent of DWI offenders on probation and almost half of jailed DWI offenders showed signs of alcohol dependence (as measured by the CAGE questionnaire described in Section II, Ewing, 1984), compared to 18 percent and 25 percent of other offenders.

In a review of the drinking and driving literature, Kennedy, Isaac, and Graham (1993) found that the majority of DWI offenders:

- Are age 25 to 45, male, white, not married, have blue-collar jobs, prefer beer and drink it frequently, tend to drink at bars and tend to be "problem drinkers" (i.e., repeat DWI offenders, drink excessively [5 or more drinks in a session], and have problems associated with alcohol use).
- Tend to have experienced alcohol-related problems in the past and tend to be extroverted, impulsive, aggressive, hostile, and antisocial.

In addition, DWI arrestees are more likely to have more arrests for nontraffic offenses, such as assault and public drunkenness (Perrine et al., 1988; Hedlund, 1994) and have poorer physical and mental health, family problems, financial difficulties, and poor job performance (Perrine et al., 1988).

There is evidence from Maryland that anyone arrested or convicted of DWI is at a higher risk of being convicted again (Rauch et al., 2002a). There is also evidence that alcohol-impaired driving recidivism among first offenders more closely resembles that of multiple offenders than nonoffenders (Rauch et al., 2002c; Jones and Lacey, 2000). However, first offenders have been found to differ from second offenders in some respects: second offenders reported involvement in more crashes, drank at fewer locations, took more health risks, and indicated being able to drive safely after more drinks than first offenders (Nochajski and Wieczorek, 2000).

Who Are the Repeat DWI Offenders?

Of repeat DWI offenders who were interviewed while in jail, 52 percent were on probation, parole, or pre-trial release when they committed the offense for which they were imprisoned (Maruschak, 1999). Jones and Lacey (2001) conducted a literature review on repeat DWI offenders and found that they typically share the following characteristics:

- White, male, under 40, single
- High school or less education, non-white-collar employment
- A blood alcohol concentration (BAC) of .18 or greater at arrest
- On average, two or three prior DWI offenses, several prior "other traffic" citations
- More prior criminal offenses than first offenders
- Generally drink beer, in bars and at home
- Often alcohol-dependent and have personality and psychosocial problems, including:
  - Verbal hostility
  - Assault-prone
  - Sensation seeking
  - Impulse expression
  - Personal problems
  - Low levels of responsible values and compatibility with parents

Recidivists have also been found to have more severe mental health problems (Mayhew and Simpson, 1991; McMillen, Pang, Wells-Parker, and Anderson, 1992; McMillen, Adams, Wells-Parker, Pang, and Anderson, 1992), and more frequent nontraffic (sometimes violent) criminal offenses (Adams, 1992; Gould and Gould, 1992). DWI recidivists carry a higher risk of future DWI arrests as well as involvement in both alcohol-related and non-alcohol-related crashes (Perrine et al., 1988; Gould and Gould, 1992), especially fatal crashes (Fell, 1994).

Significance of Blood Alcohol Concentration

Drivers convicted of DWI have an average blood alcohol concentration (BAC) of .16 to .18 g/dL at the time of arrest (Perrine et al., 1988; Jones and Lacey, 2001).

Compared with a nondrinking driver, the relative risk of a single-vehicle fatal crash is 382 times higher for a driver with a BAC of .15 g/dL or higher (Zador, Krawchuk, and Voas, 2000). In fact, Zador et al. (2000) found that each .02 increase in the BAC of a driver more than doubled the risk of male drivers age 16 to 29 being killed in a single-vehicle crash. A recent study by McCartt, Shabanova, and Berning (2002b) notes that as of March 2001, 29 States had provisions for stronger sanctions for offenders with relatively higher BACs. Although more severe sanctions for high BAC offenders are becoming more common, only one evaluation of the effectiveness of these sanctions on DWI recidivism has been completed (McCartt and Northrup, 2004). That study found that first offenders arrested in 1998 in Minnesota (the first year of that State's high-BAC law) who had BACs of .20 or higher had significantly lower recidivism rates than comparable offenders not subject to enhanced penalties.

However, a lower BAC at time of arrest does not rule out the possibility that the offender is at high risk for DWI recidivism (Salter and Ryan, 1976; Forman and Florenzano, 1979; Raymond, 1985; Wieczorek, Miller, and Nochajski, 1992; Yu and Williford, 1995). A thorough evaluation is needed to reliably characterize the offender's risk for recidivism.

Reducing Recidivism

Key to reducing DWI recidivism is certain, consistent, and coordinated sentencing. Keeping the driver away from the vehicle is often an additional component of sentencing that has recently been shown to have a significant effect on DWI recidivism. It is clear that:

- The certainty of a penalty has greater impact than its severity (Ross, 1992).
- Sentencing for DWI should be consistent from one court to another regardless of jurisdiction, yet balanced with the need for matching offenders to the most appropriate sanctions and extent of treatment (Wells-Parker et al., 1990; Jones and Lacey, 1998).
- Communication among the courts, evaluators, probation officers, and treatment providers should be coordinated to ensure compliance with the sentence (Popkin et al., 1988; Tauber and Huddleston, 1999).

Six factors facilitate a reduction in recidivism among DWI offenders:

- Evaluating offenders for alcohol-related problems and recidivism risk.
- Selecting appropriate sanctions and remedies for each offender.
- Including provisions for appropriate alcohol abuse or alcohol-dependent treatment in the sentencing order for offenders who require such treatment.
- Monitoring the offender's compliance with the sanctions and treatment.
- Acting swiftly to correct noncompliance.
- Imposing vehicle sanctions, where appropriate, that make it difficult for offenders to drink and drive during that period (e.g., vehicle immobilization, impoundment, and alcohol ignition interlock devices) (Voas, 1999; Voas and DeYoung, 2002).

II. Sentencing

The Objectives of Sentencing

Sanctions imposed on DWI offenders may have several objectives. These include retribution, incapacitation, specific deterrence, general deterrence, and rehabilitation. In addition, restitution and DWI program financing may be objectives in sentencing decisions.

- ***Retribution*** seeks to punish the offender because it is merited, primarily by confinement and fines. Court-mandated alcoholism treatment, aimed primarily at rehabilitation, may be perceived by the offender as punishment.
- ***Incapacitation*** refers to denying the offender the chance to repeat the offense. For impaired drivers, this may occur through sentencing to confinement in a jail or dedicated detention facility, through home detention and electronic monitoring, by license action, by immobilization or confiscation of the offender's vehicle, or by installing alcohol ignition interlock devices on the offender's vehicles.
- ***Specific deterrence*** is designed to keep the offender from repeating the offense through the experience of punishment and the fear of subsequent sanctions (Jones and Lacey, 2000). Whether offenders actually reduce drinking and driving behavior in response to various sanctions has been the subject of extensive debate and research (for reviews, see Voas, 1986; Nichols and Ross, 1989; Jones and Lacey, 1991; Ross, 1984, 1992; Wilson and Mann, 1990).
- ***General deterrence*** is designed to change the behavior of the general driving public (as opposed to arrested DWI offenders). This strategy, through widespread community awareness that stiff penalties will be imposed for DWI, should result in reduced drinking and driving to avoid the possibility of punishment. The perceived risk of detection, apprehension, and adjudication leading to swift punishment for DWI must be high for this strategy to work (Ross, 1984).
- ***Rehabilitation*** refers to offender reform through sentences that include DWI education and/or alcoholism treatment. The DWI offender's rate of compliance with mandated treatment may depend on the offender's perception of the courts willingness to impose sanctions for failure to comply (Wells-Parker, 1994).
- ***Restitution*** means paying for the damage caused by the DWI act, including property damage and injury costs to victims associated with crashes.
- ***DWI Program Financing*** refers to offenders paying for the programs administered to them, be they treatment, alcohol ignition interlock monitoring and maintenance, license suspension reinstatement, vehicle impoundment storage costs, etc.

Considerations in Sentencing

When sentencing, the following considerations apply:

- Sanctions or remedies should be applied to all offenders, and treatment with accountability should be applied when indicated, based on the results of a professional evaluation. As one judge on the expert panel noted, "Every DWI should be evaluated for alcohol problems and go to education or treatment in conjunction with other programs administered."
- Treatment alone never substitutes for sanctions or remedies, and sanctions and remedies do not substitute for treatment (Wells-Parker et al., 1995).
- No one sanctioning and treatment strategy is effective for all drinking drivers (Mayhew and Simpson, 1991).
- There must be a balance between the need for overall consistency in sentencing and the need to tailor the sentence to the individual offender (Donovan and Marlatt, 1982; Perrine et al., 1988; Wells-Parker et al., 1990; Jones and Lacey, 1998).
- Sentences should be tailored to individual offenders based on an evaluation of offender characteristics and recidivism risk (Jones and Lacey, 2000).

Factors Influencing Risk for Recidivism

Elements of an offender's prior history that may influence recidivism risk include the following (Popkin et al., 1988):

- History of alcohol and other drug use
- Level of social and family functioning
- History of previous evaluations and treatment
- History of arrests and legal interventions associated with alcohol and other drug use
- Ability to become qualified for, obtain, and perform employment
- Ability to function in an educational setting

More recent evidence indicates that the number of breath test results that exceeded the pre-set threshold using alcohol ignition interlock devices (Marques, Voas, and Tippetts, 2003) may be the best predictor yet of DWI recidivism. There is emerging evidence that any first alcohol-impaired driving incident is a significant predictor of future recidivism (Rauch et al., 2002a).

Evaluating the Offender

An evaluation is a formal assessment to identify the extent of a person's alcohol problem, state of mental health, and social adjustment. This assessment helps to determine which sanctions are most likely to reduce recidivism for the individual offender and when to order alcoholism treatment.

Who should be evaluated?

All DWI offenders should be screened by qualified professional evaluators to assess the extent of their alcohol problem. Ideally, these offenders should pay for the evaluations.

When should an evaluation be ordered?

An evaluation should be ordered prior to sentencing (Nichols and Quinlan, 1989). In jurisdictions with high caseloads, this might not be possible. In such cases, evaluation (and any recommended treatment) can be made a condition of probation.

Who is qualified to perform an evaluation?

An evaluation should be conducted by personnel certified in alcoholism screening or with extensive clinical training and experience. Because an evaluation is a first step in intervention, evaluators should have some counseling skills (Popkin et al., 1988).

What are the minimum components of an evaluation?

An evaluation should have at least two components (Lapham et al., 1995):

1. Assessment of alcohol and other drug use (i.e., frequency and quantity of use, consequences of alcohol and other drug use, and evidence of loss of control over use).
2. Assessment of DWI recidivism risk based on factors in addition to drinking behavior.

The evaluation usually consists of:

- The administration of standardized assessment test(s) and
- A personal interview by a trained evaluator.

The information obtained should be supplemented with information from:

- The courts (or other appropriate sources) regarding the client's criminal and driving history and
- Family members, regarding the offender's alcohol and other drug use.

Various standardized alcohol-screening tests are available, including several designed for DWI offenders. (For descriptions of several tests, see Popkin et al., 1988; Beirness, D.R., and Simpson, 1991; Lacey, Jones, and Wiliszowski, 1999; Chang, Gregory, and Lapham, 2002). There are also a number of well-researched and validated standardized tests designed specifically for youth that may be more age-appropriate for DWI offenders under age 21. A proliferation of standardized instruments have been developed during the past decade; while NHTSA does not specifically endorse a particular instrument in this guide, two alcohol screening instruments for youth are the Adolescent Drinking Index (ADI) and the Rutgers Alcohol Problem Index (RAPI). Among several other validated screening instruments that encompass all drugs, including alcohol, are the Personal Experience Screening Questionnaire (PESQ) and the Drug Abuse Screening Test-Adolescents (DAST-A). These and other instruments are described, discussed, and summarized in Winters (2003).

What should be considered before ordering an evaluation?

When the court has the option of choosing an evaluating agency, the following characteristics should be considered:

- Qualifications of staff (as described above)
- Ability to track clients and monitor compliance with treatment recommendations
- Willingness to work as a team in coordinating efforts with the court and the State, taking into consideration the specific facts of the case
- Avoidance of conflicts of interest (ideally, the agency doing the screening should not be providing treatment)
- Capability of evaluating offenders who are illiterate or non-English-speaking, when needed (Popkin et al., 1988)

Lacey et al. (1999) conducted a validity study of a number of popular problem-drinking screening instruments used for DWI offenders. All of the assessment instruments studied were effective in identifying problem drinkers to some degree. The CAGE+C, a relatively short instrument which includes four questions about: **C**utting down on alcohol; friends or family being **A**nnoyed with the offender's drinking; feeling **G**uilty the next day about drinking; and drinking an **E**ye-opener in the morning; plus five questions relating to daily alcohol **C**onsumption, correctly identified 72 percent of the problem drinkers and 76 percent of the nonproblem drinkers. The most sensitive and least specific instrument was the Substance Abuse/Life Circumstance Evaluation (SALCE), which correctly identified 92 percent of the problem drinkers but only 57 percent of the nonproblem drinkers. The other instruments assessed in that study included the Michigan Alcohol Screening Test (MAST) which correctly identified 79 percent of problem drinkers and 85 percent of nonproblem drinkers; the Mortimer-Filkins (M-F) test which correctly identified 78 percent of problem drinkers and 66 percent of nonproblem drinkers; and the Driver Risk Inventory (DRI) which correctly identified 82 percent of problem drinkers and 65 percent of nonproblem drinkers. Also assessed were the CAGE+6, which added six questions about daily consumption of alcohol and correctly identified 83 percent of problem drinkers but only 26 percent of nonproblem drinkers.

However, in a recent review of screening instruments and procedures for evaluating DWI offenders, the best-rated instruments for DWI screening were the MacAndrew scale of the Minnesota Multiphasic Personality Inventory (MMPI) and the Alcohol Use Inventory (AUI), which were demonstrated to have the best predictive value of DWI recidivism (Chang et al., 2002). The MMPI was also demonstrated to best determine alcohol use disorder, and it detects about 67 percent of DWI recidivists but identifies only 48 percent of problem drinkers.

The Research Institute on Addictions Self Inventory (RIASI) is also showing promise as a predictor of DWI recidivism (Nochajski and Wieczorek, 1998; Nochajski, Walter, and Wieczorek, 1997).

III. Specific sanctions and remedies

While the availability of specific sanctions depends on local legislation, the general approach to sanctions must be guided by weighing the objectives of sentencing and determining which predominate in the case. Additional considerations include the underlying psychological principle that certainty and swiftness often have far greater effect than the severity of the sanction in deterring subsequent criminal behavior (Jones and Lacey, 2000; Jones and Lacey, 1991; Ross, 1984), the relative weight of long-term versus short-term effects of an overall sanctioning policy, and individual considerations, such as whether a first-time or repeat offender is being sanctioned. According to several experts, some barriers to implementing certain sanctions include cost, limitations of human resources available to the courts, strength of evidence in the case, and whether legal or constitutional problems exist.

Sanctions for controlling the so-called "hard-core drinking driver" have been categorized by Voas (1999) into "three Rs," as follows:

- Restrictions on driving (license sanctions, vehicle sanctions, etc.)
- Restitution (community service, fines, etc.)
- Rehabilitation (assessment, treatment, probation, etc.)

Sanctioning the Offender

Jail

The number of DWI offenders under some form of correctional supervision almost doubled between 1986 and 1997 (Maruschak, 1999). In the past 15 years, most States have adopted some form of mandatory jail sentences for misdemeanor DWI and prison sentences for felony DWI. The effects of these laws have been hotly debated, and the evidence from studies of incarceration as a specific and general deterrent to DWI is mixed. In general, the available evidence suggests that as a specific deterrent, jail terms are extremely costly and no more effective in reducing DWI recidivism among either first-time or repeat offenders than are other sanctions (Hagen, 1978; Homel, 1981; Salzberg and Paulsrude, 1984; Jones, Joksch, Lacey, and Schmidt, 1988; (Mann, Vingilis, Gavin, Adlaf, and Anglin, 1991; Ross, 1991; Martin, Annan, and Forst, 1993). Nichols and Ross (1989) reviewed available studies of the effect of incarceration on DWI recidivism rates for the Surgeon General's Workshop on Drunk Driving. They found six studies that reported no reduction in recidivism, one that found no difference in recidivism between a special DWI facility and a traditional prison, and one that found reduced recidivism for first-time offenders sentenced to 48 hours in jail. Further, traffic deaths decreased in Norway and Sweden once both countries abandoned mandatory jail sentences for convicted impaired drivers (Ross and Klette, 1995).

There are some indications that the short-term effect of jail as a general deterrent depends on the extent of public awareness, the risk of incarceration, and the size of the community. These short-term effects are initially strong following public announcement of a sanction, but often dissipate over a period of about 3 years. Some studies have found that the use of 2-day jail sentences had a general deterrent effect for first-time offenders (Falkowski, 1984; Jones et al., 1988; Zador, Lund, Fields, and Weinberg, 1988); others concluded that jail terms were ineffective (Ross, McCleary, and LaFree, 1990). Researchers have also noted, however, that mandatory jail sentences tended to negatively affect the court operations and the correctional process by increasing the demand for jury trials, plea-bargaining, and jail crowding (NHTSA, 1986; Voas and Lacey, 1990). Consequently, in some jurisdictions the severity of the sanction was reduced, and swiftness was retarded; inconsistency in implementation raised equity questions.

Additional questions arise regarding sentence severity, or the appropriate length of a jail sentence. For example, 2 days in jail may have a specific deterrent effect and may be more effective than a 2-week sentence in reducing recidivism for first-time offenders (Wheeler and Hissong, 1988). In one study, lengthy periods of incarceration were actually associated with higher recidivism (Mann et al., 1991). This finding may be due to judges giving longer jail sentences to those offenders whom they regard as most likely to recidivate, rather than an indication of the negative effects of more severe penalties.

Based on these findings, it has been suggested that a weekend in jail may be useful for first-time offenders, for whom a "taste of punishment" may be an effective deterrent (Jones et al., 1988; Mayhew and Simpson, 1991). However, since many convicted impaired drivers, particularly repeat offenders, have severe life-stress problems, may be alcohol-dependent, and may have additional health problems, long jail terms are unlikely to resolve their problems and may even exacerbate them (Homel, 1981). For such individuals, incarceration, which effectively incapacitates them as a threat to public safety, but only for the period they are incarcerated, may be most effective as a complement to treatment-oriented measures (Jones and Lacey, 1991).

Weekend Intervention

A weekend intervention program (WIP) is designed to evaluate alcohol and other drug abuse and to create an individualized treatment plan for each offender while housing them away from their normal domicile (a "low-level" form of incarceration). For low-risk offenders, exposure to the WIP evaluation process itself may be sufficient treatment. High-risk offenders are referred to longer-term, more intensive programs. Repeat offenders assigned to WIP have lower recidivism rates than do jailed offenders or those given suspended sentences and fines (Siegal, 1985). An example of a WIP is the Wright State University WIP in Ohio (Siegal, 1987). Programs based on the WIP have been used in some additional locations including, for example, Augusta, Maine; Altoona, Pennsylvania; Gillette, Wyoming; and throughout the State of Missouri.

Dedicated Detention/Special DWI Facilities

Confinement in detention facilities dedicated to DWI offenders incapacitates the high-risk offender and provides supervised rehabilitation services, such as:

- Treatment for alcohol abuse and alcoholism
- DWI driver education
- Vocational training, sometimes in the context of work release
- Individual counseling (Timken, Packard, Wells-Parker, and Bogue, 1995)

Detention typically ranges from two weeks to one year. During this time, offenders may be released for work or community service (Harding, 1989a). Data on effectiveness is limited and inconclusive, although data analyses indicated reduced recidivism among both first-time and repeat offenders sentenced to a facility in Prince George's County, Maryland (Harding, 1989b; Voas and Tippetts, 1989). In a recent study of a special facility in San Juan County, New Mexico, which was modeled after the Prince George's County facility, it was found that recidivism at five years after treatment was 23.4 percent compared to 40.1 percent for a similar group of offenders not treated at the facility (Kunitz et al., 2002). The San Juan County facility mainly treated offenders who were Native American (70%) and Hispanic (10%).

Probation

The U.S. Supreme Court recently wrote about probation and its purposes in the decision of United States v. Knights (2001). The Court concluded: "...a court granting probation may impose reasonable conditions that deprive the offender of some freedoms enjoyed by law-abiding citizens." Although probation may reduce recidivism slightly among drivers at low risk for recidivism (Wells-Parker, Anderson, Landrum, and Snow, 1988), probation alone does not measurably reduce recidivism among those at high risk (Jones and Lacey, 1991). There is some evidence that probation combined with treatment can be effective (Nochajski, Bell, and Augustino, 1995). Conditions of probation vary widely. For DWI offenders, probation may require:

- Abstinence from alcohol and illegal drugs, subject to random screening by breath or urine testing;

- Additional sanctions for driving without a license that has been suspended by the court or motor vehicle administration, or driving without insurance; and
- Court-ordered treatment, home detention (sometimes with alcohol monitoring using various remote devices designed for such purposes), license or vehicle restrictions, or any other sanctioning option discussed in this guide.

Variations of DWI probation include basic supervision probation (monthly visits), unsupervised probation, and case-specific restrictions (individualized). Some of the more promising forms of probation are:

- ***Intensive supervision probation (ISP).*** In ISP programs, offenders have more contact with probation officers compared with standard (nonintensive) probation programs and participate in various educational and therapeutic programs in the community (Harding, 1989a; Transportation Research Board, 1995). Results of intensive probation have traditionally been difficult to evaluate (Latessa and Travis, 1988; Greene and Phillips, 1990). One NHTSA-sponsored evaluation (Jones, Wiliszowski, and Lacey, 1996) examined the Milwaukee County Pretrial Intoxicated Driver Intervention Project (of which ISP was a component). Significantly fewer offenders who received ISP recidivated compared to those who did not receive the program (5.9 % versus 12.5%).
- ***Home detention.*** This approach to incarceration recognizes a defendant's need to drive during the day either to get to work or to court-ordered treatment, but keeps the defendant off the road during evening and nighttime hours, when most DWI violations occur. Home detention as a condition of probation is generally enforced by electronic monitoring (see below), with violation punishable by jail (Jacobs, 1990). No data has been published on the effectiveness of this sanction with DWI offenders except for programs that couple home detention with electronic monitoring.
- ***Electronic monitoring.*** Electronic monitoring is a computerized method of verifying that the offender remains at home except when excused to attend work or treatment (Harding, 1989a). Offenders are outfitted with a waterproof, shock-resistant transmitter on a band that is strapped securely on their ankles (Jones and Lacey, 2000). In a 7-year study (Lilly, Ball, Curry, and McMullen, 1993), recidivism was less than 3 percent among a group of DWI offenders who were electronically monitored over approximately 2 to 3 months while on probation. However, recidivism increased at the completion of the monitoring period. More recently, Jones et al., (1996) evaluated the Los Angeles County Electronic Monitoring/Home Detention Program. Their analysis found that the electronic monitoring program reduced the reconviction rate by nearly one-third. One study of offenders in Pennsylvania looked at the differences between those who served their sentences in jail only and those who served their sentences under house arrest with electronic monitoring. While there were no significant differences between the groups, those offenders who were employed at the time they were sentenced to electronic monitoring were more successful than those on electronic monitoring and unemployed (Courtright, Berg, and Mutchnick, 2000). There are other benefits of house arrest combined with electronic monitoring. For instance, it allows the offender to be home with his/her family, the curfew keeps the offender off the road during prime DWI hours, it can be adapted to employment hours, AA meeting, etc. and it is less expensive than jail (Jones et al., 1996). Some challenges of electronic monitoring include the cost (some suggest using grant money to help certain people pay for it; sliding scales have also been used), trouble with the monitoring devices (e.g., wakes up the offender too often, doesn't recognize his/her voice, disturbs others in the home), and a lack of face-to-face observation. However, at least one company has solved that problem by providing a digital image of the person being monitored when the probation officer calls the offender on the phone.
- ***Day Reporting Centers (DRCs).*** DRCs are highly structured, nonresidential facilities that provide counseling, supervision, employment, education, and community resource referrals to DWI probationers (Jones and Lacey, 2000). In a NHTSA-sponsored study of the Maricopa County (Arizona) DRC program, Jones and Lacey (1999) found that while the DRC was not significantly more effective in reducing recidivism (compared to traditional probation programs), the program facilitated offenders' reintegration into society and was more cost-effective than jail.
- ***DWI courts.*** Modeled after drug courts, and incorporating some of the forms of probation described above, DWI courts are designed to provide constant supervision to offenders by judges and other court officials who closely administer and monitor compliance with court-ordered sanctions coupled with treatment. DWI

courts generally involve frequent interaction of the offender with the DWI court judge, intensive supervision by probation officers, intensive treatment, random alcohol and other drug testing, community service, lifestyle changes, positive reinforcement for successful performance in the program and going back to jail for noncompliance (National Association of Drug Court Professionals, 1997; National Drug Court Institute, 2002). Most DWI courts assign nonviolent offenders who have had two or more DWI convictions in the past to the court. At the present time, there are multiple sources of funding for drug/DWI courts to help defray their costs. DWI courts have been shown to hold offenders accountable for their actions, change offenders' behavior to end recidivism, stop alcohol abuse, treat the victims of DWI offenders in a fair and just way, and protect the public (Tauber and Huddleston, 1999; Freeman-Wilson and Wilkosz, 2002). Breckenridge, Winfree, Maupin, and Clason (2000) report that such a program significantly reduces recidivism among alcoholic DWI offenders. Other studies of this type of program are currently underway and DWI courts are being implemented in Georgia, Pennsylvania, and other States. Specialized DWI courts provide greater opportunity for close monitoring and offender accountability. However, this currently is only done with the most egregious offenders (Robertson and Simpson, 2002). At the end of 2003, there were approximately 70 DWI courts and 1,100 drug courts operating in the U.S. One report on a DWI court in New Mexico indicated that recidivism was reduced by over 50 percent for offenders completing the DWI court compared to similar offenders not assigned to the DWI court (Guerin and Pitts, 2002). Those results, however, were preliminary and did not include statistical tests. NHTSA is completing an evaluation of the Maricopa County (Phoenix), Arizona, DWI court using a random assignment design (Jones, in press). In this research, more than 250 felony DWI offenders were randomly assigned to the DWI court and a comparable number of offenders were assigned to traditional probation services. The Maricopa DWI court includes monthly in-person court appearances by the offenders before the judge, frequent contact with an assigned probation officer, regular meetings with treatment personnel, participation in AA meetings, attendance at Victim Impact Panels (VIP), and random testing for alcohol and other drug use. Qualifications for graduation from the DWI court include meeting all treatment and program requirements, maintaining steady employment for six months, remaining alcohol-free for six months, and having a stable residence. NHTSA presently is collaborating with the Department of Justice to promote the increased use of DWI courts and encourage jurisdictions that utilize drug courts to accept repeat DWI offenders in them (NHTSA, 2003b).

Incapacitating the Vehicle

Ignition Interlocks

An ignition interlock device requires that each vehicle engine start be preceded by a low-BAC or alcohol-free breath sample. Some of the impetus for increasing interlock use in the United States has been the Transportation Equity Act for the 21st Century (TEA-21). Under this law, States must provide legislative support for the interlock (or vehicle immobilization or impoundment) or risk loss of millions of dollars for highway construction purposes; this has been an effective incentive and as of early 2002, 43 States have some interlock program or enabling legislation. The interest in interlocks reflects evidence that they substantially reduce DWI while installed (Voas, Marques, Tippetts, and Beirness, 1999; Beck, Rauch, Baker, and Williams, 1999; Coben and Larkin, 1999). Interlocks reduce repeat DWI rates by 40-95 percent, but after their removal, re-offense rates climb to near control levels. For the DWI offenders and their families, interlocks provide benefits since they allow for continued normal participation in society, including the ability to drive legally and get to and from work or school. Monthly calibration checks and a BAC-test-logging feature on the interlock provide a way to maintain some control over driver behavior. The interlock log file yields a running behavioral record of the BAC profile of the offenders, accumulating an average of eight tests per day for each day on the interlock. In prior research, it has been reported that by the time the interlock is removed, an average of 2,370 breath tests were provided (Marques, Voas, Tippetts, and Beirness, 1999). The rate of breath tests exceeding the pre-set threshold (BAC≥.04 percent in Alberta, Canada) during the early months with an interlock has proven to be the best predictor yet reported of future repeat DWI offenses during the years after the interlock was removed from the vehicle (Marques, Tippetts, Voas, and Beirness, 2001; Marques et al., 2003). Alcohol-positive breath tests that occur near dawn hours - presumed evidence of a prior night's binge - improve prediction of DWI by an additional 45 percent (Marques et al., 2003). This interlock record is, perhaps, the first objective behavioral

profile available on a group that poses significant alcohol risks to itself and to the public. It is a good predictor, but NIAAA is sponsoring additional research evaluating a joint measurement of biological markers, interlock records and other assessments that might make this measure an even better predictor.

A study sponsored by the Insurance Institute for Highway Safety conducted in Maryland evaluated the interlock program on drivers with multiple alcohol-related driving offenses using a design where half of the eligible offenders were randomly assigned to the interlock condition for one year and the other half of eligible offenders received traditional probation services. The authors found that participation in the program reduced offenders' risk of recidivism during the first 12 months by almost 65 percent. There was, however, no statistically significant difference between those offenders who participated in the program and those who did not during the second year (after the interlock was removed) (Beck et al., 1999).

The effectiveness of this sanction can be compromised in several ways: if the interlocks are not installed as ordered, if the offender finds a way to circumvent the device, uses a different car, or is not followed up to ensure compliance (EMT Group, 1990; Baker and Beck, 1991; Popkin, Stewart, Martell, and Birckmayer, 1992). Evidence suggests that interlocks reduce recidivism during the time they remain installed but may not alter underlying alcohol problems; therefore, recidivism rates may rise after the device is removed (Voas et al., 1999; Morse and Elliott, 1992; Popkin et al., 1992). It is not recommended that ignition interlocks be used as a substitute for license sanctions (Transportation Research Board, 1995) but rather as a condition of license reinstatement after a period of suspension. Some have argued that combining treatment with the interlock device may result in more long-term beneficial effects and that approach needs to be thoroughly evaluated (Marques and Voas, 1995).

It is also important to keep in mind the cost of these devices (at present, an installation fee between $100 and $200 and a $75 monthly fee). In most programs today, the burden falls on the offender to pay for it. When met with resistance, some experts have argued that the amount the offender pays for the device is far exceeded by the amount the offender may spend on alcohol during a similar period.

Other Immobilization Devices

In some jurisdictions, a repeat offender's vehicle can be immobilized for a period of 30 days to six months using a "club" or "boot," often in the offender's driveway or near his or her place of residence. The effectiveness of these devices at reducing recidivism is promising. In the only jurisdiction where immobilization has been widely implemented, a study in Ohio showed that vehicle immobilization reduced recidivism during the immobilization period by 50 to 60 percent and by 25 to 35 percent during the post-sanction period (Voas, Tippetts, and Taylor, 1997; Voas, Tippetts, and Fell, 2000). One feature of immobilization is that offenders actually see their cars every day and are constantly reminded of the sanction.

Remedies

License suspension and vehicle impoundment or forfeiture are not technically punitive or deterrent actions but derive from the remedial purpose of protecting the general public from a potentially dangerous driver. The term "remedial" is defined by Black's Law Dictionary (5th edition) as "that which is designed to . . . introduce regulations conducive to the public good." The distinction is important because defense attorneys filed motions to dismiss criminal charges in drinking and driving cases based on grounds of double jeopardy (Gilbert and Stephen, 1995). However, since the U.S. Supreme Court decision in 1997 (Hudson v. United States, 1997) concluded that administrative remedies do not constitute double jeopardy, the number of motions on these grounds has declined dramatically.

License Suspension

A single DWI arrest may result in two kinds of license actions. The first is an administrative license suspension (ALS), usually carried out by the arresting officer as a civil action on behalf of the motor vehicle administration. The second is a judicial post-conviction action ordered by the court (Tashima and Helander, 1995). Both fall under the category of remedies.

Studies of license suspension demonstrate its effectiveness in reducing recidivism and the risk of crash involvement among drinking drivers (NHTSA, 1986; Mann et al., 1991; McKnight and Voas, 1991; Ross, 1991; Sadler, Perrine, and Peck, 1991; Williams, 1992; Rodgers, 1994). Findings include the following:

- Suspension periods between 12 and 18 months appear to be optimal for reducing DWI recidivism (Homel, 1981).
- Suspension periods of less than 3 months seem ineffective (Paulsrude and Klingberg, 1975; Peck, Wilson, and Sutton, 1994).
- Although more than 50 percent of offenders continue to drive under license suspension, it has been hypothesized that they drive less frequently and in a more cautious manner than previously to avoid apprehension, thereby having lowered violation and crash rates (Ross and Gonzalez, 1988; Nichols and Ross, 1990; Ross, 1991; Mayhew and Simpson, 1991).

On the other hand, driving with a suspended license has been shown to be problematic:

- Recently, McCartt, Geary, and Nissen (2002a) found that 36 percent of suspended DWI drivers continued to drive at least once in one county while 88 percent of suspended DWI drivers continued to drive at least once in a different county.
- Griffin III and DeLaZerda (2000) found that 20 percent of all fatal crashes between 1993 and 1997 involved at least one improperly licensed driver or a driver with a suspended or revoked license.

Some evidence shows that license suspension can lead to reform beyond the period of suspension, especially when combined with some form of education or treatment (Ross, 1991). Others suggest that for multiple repeat offenders, suspension may not be effective. Rather, in this view, judges should consider imposing on this category of offender limited driving privileges, such as with an interlock along with strict supervision and intensive probation.

Administrative License Suspension

Administrative license suspension (ALS) is the administrative suspension or revocation of the driver's license of a DWI offender at the time of arrest (Lacey, Jones, and Stewart, 1991). ALS differs from traditional judicial license actions in several ways. First, anyone arrested in States with an ALS law is immediately subject to ALS. Usually, the arresting officer confiscates the license and issues a notice of ALS. Often, the notice of ALS may serve as a temporary license for a period (e.g., 10-30 days) during which the driver may request an administrative hearing for license reinstatement. Regardless of the outcome of such a hearing, the arrestee is still subject to a separate criminal charge that may lead to additional penalties, including judicial license actions (Williams, Weinberg, and Fields, 1991).

At the end of the suspension period, some jurisdictions re-issue the license back to the driver, often charging a license reinstatement fee and requiring verification of insurance. Other jurisdictions require a complete driver's license re-examination, including a reinstatement fee, before driving privileges are restored. Some jurisdictions suspend the license but issue a hardship license while the suspension remains in effect (NHTSA, 1993).

Administrative license revocation (ALR) or suspension (ALS) laws have been shown in a recent nationwide study to reduce fatal crashes involving drinking drivers by 13 to 19 percent (Voas et al., 2000).

Vehicle Impoundment, Forfeiture, and Other Vehicle-Based Sanctions

Vehicle impoundment sanctions have been found to be effective in reducing offender recidivism by 25 to 60 percent in Ohio and California (DeYoung, 1999, 2000; Voas and DeYoung, 2002). However, impoundment, as with other vehicle sanctions, does not guarantee effective incapacitation because the offender may borrow, rent, or steal a different vehicle (Jacobs, 1990). Further, in some cases, an impoundment program may take a long time to be fully implemented. In addition, the vehicle may be a family's only way of getting to and from work, school, and other similar activities. In most States, a DWI offender's vehicle may be impounded over-

night, and the vehicle may be kept longer for offenders who are recidivists or who were caught driving with a suspended license. Oftentimes, even when State law requires impoundment and allows for forfeiture, the local district attorney or judge does not impose such sanctions. This is due mainly to the fact that a procedure for the apprehension and storage of vehicles is not in place and because of the time it takes running title listings and searching for lienholders. One study suggests that vehicle impoundment works best when it can be applied administratively by police without the need to obtain a criminal conviction (Voas, 1992).

Minnesota has a law that provides for the administrative impoundment and destruction of the license plates of the offender's vehicle by the arresting officer. This approach has resulted in a larger proportion of eligible offenders receiving the sanction and reduced recidivism rates (Rodgers, 1994). This can also be used as a remedy for prosecutors to recommend and judges to use as a condition of release of the offender.

Vehicle forfeiture usually requires statutory authority or a civil legal seizure process based upon confiscating the instrument used in the crime. North Carolina has a viable program – proceeds from the forfeitures go to local schools for education, it is highly publicized, and storage and towing are provided by the State (Voas and DeYoung, 2002). However, seizure of the vehicle at the time of arrest or conviction brings up storage issues for police, and lien and title issues for prosecutors. It has been suggested that many offenders defeat this sanction by purchasing "junker" vehicles of little or no value.

Voas and Tippetts (1994) assessed the impact of vehicle license plate sticker laws on drivers convicted of DWI in Oregon and Washington. In these States, upon arresting a motorist for Driving on a Suspended License (DWS), officers could place a "zebra" sticker over the annual portion of the license plate of the offender's vehicle at the time of the stop. Subsequently, any officer could stop these stickered vehicles and request that drivers produce valid licenses. In Oregon, drivers whose licenses were suspended, and at risk of getting zebra stickers if caught driving, showed a 33-percent reduction in moving violations and a 23-percent reduction in crashes after the zebra law was implemented. In Washington, no such effect was observed. The lack of an effect in Washington may have been due to methodological concerns, such as low awareness of the sanction of DWI offenders. The study suggests that if publicized and enforced, the zebra sticker law can have positive traffic safety effects, producing less and/or more careful driving by drivers suspended from a DWI and suspended DWI drivers convicted of DWS who receive a zebra sticker. Programs in both Oregon and Washington were discontinued when the legislation creating them expired.

Additional/innovative sentencing approaches

The following sanctions are being used in some communities, although their effectiveness in reducing DWI recidivism has not been studied as thoroughly as the sanctions discussed above:

- ***Home confinement with electronic monitoring.*** Electronic monitoring (EM) is a computerized method of verifying that the offender remains at home except when excused to attend work or treatment (Harding, 1989a). In a 7-year study, recidivism was less than 3 percent among a group of DWI offenders who were electronically monitored for approximately 2 to 3 months while on probation (Lilly et al., 1993). However, recidivism increased at the completion of the monitoring period. This sanction is used as an alternative to jail and is less costly both because of the high cost of jail confinement and because the offender usually pays for the program (often on a sliding scale). These offenders are, in effect, confined to their homes but provisions may be made to allow them to go to work or school. Jones et al. (1996) found that a Los Angeles program of electronic monitoring resulted in repeat offenders being confined longer than those sentenced to jail (averaging 83 days versus 30 days) and that EM participation reduced recidivism by one-third. The program also proved to be self-sufficient.
- ***Financial sanctions.*** These sanctions may include fines, court costs, costs for private probation, costs for interlocks, and the like, and, in some jurisdictions, the cost of public services responding to an offender-involved crash. Fines may be fixed in amount or based on a portion of the offender's daily income (Winterfield and Hillsman, 1991; McDonald, Greene, and Worzella, 1992). Despite the fact that they are a common element in most sanctioning combinations, fines have not been well evaluated for their impact on recidivism (Nichols and Ross, 1989). Fines may be suspended in some jurisdictions, and that amount is sometimes applied to court-ordered counseling, assuming that the jurisdiction has a court-approved program adminis-

tered by the court or the probation department. Fines are often viewed as a part of societal retribution. However, local jurisdictions and/or State legislatures using fines need to consider carefully and wisely how these funds will be used. Excessive fines may possibly take away some offenders' ability to pay for treatment.

- ***Community service programs.*** These programs direct the offender to pay restitution to the community through activities such as working at local hospitals or caring for the elderly. The few existing studies of these widely applied sanctions have failed to find any significant effects of these programs when used alone on DWI recidivism or crashes (Popkin and Wells-Parker, 1994; Stenzel, Manak, and Murphy, 1987). If used, it is also important to tailor the community service programs to the offender-especially offenders with health problems.
- ***Publishing offenders' names in the newspaper.*** This sanction is rarely used, but is becoming more common according to some expert officials. However, the effect of social stigma on DWI recidivism has not been studied (Harding, 1989b; Popkin and Wells-Parker, 1994). Requiring an offender to place an ad in the newspaper has been upheld in a Florida court decision (Lindsay v. State, 1992).
- Requiring the use of ***bumper stickers*** saying that the driver was "Convicted of DUI" is another method of publicly exposing the offender (Goldschmidtt v. State, 1986). The effectiveness of this approach has not been evaluated.
- Sentencing offenders to place ***flowers for one year on the grave*** of the person killed has also been used by some judges, though this sanction also has not been evaluated.
- ***Attendance at victim impact panels (VIPs).*** Shinar and Compton (1995) studied the effect of participating in Victim Impact Panels (VIPs) on DWI recidivism in Oregon and California. This initial study found that VIPs did not consistently reduce recidivism rates compared to controls. The findings of a subsequent study suggested that referral to VIPs was not a strong predictor of reduced recidivism (deBaca, Lapham, Paine, and Skipper, 2000). Two other studies, however, found lower recidivism rates in offenders who served on the panels (Sprang, 1997; Fors and Rojek, 1999) and a significant decrease in attendees' reported intention to continue drinking and driving (Sprang, 1997).
- ***Victim restitution programs.*** These programs, which direct the offender to pay financial and service benefits to the victim or the victim's family, are rarely invoked and apparently have not been studied (Harding, 1989b; Parent, Auerbach, and Carlson, 1992; Popkin and Wells-Parker, 1994). Victim restitution is often included in dispositions on a case-specific basis. For some offenders, it has been reported that a part of their fines and court costs go directly into State victim community funds.
- ***Court-ordered visits to and/or volunteer service at emergency departments and chronic physical rehabilitation facilities.*** These sanctions have been proposed for both their specific deterrent effects and as a form of community service by the offender (Transportation Research Board, 1995). The Youthful Drunk Driving Program in Tulsa, Oklahoma, requires first-time DWI offenders age 16 to 25 to visit emergency departments and rehabilitative centers, to attend a victim impact panel and an alcohol counseling session, and then to write an essay about the experience. After two years, the reported recidivism was only 1.2 percent (NHTSA, 1999). The American Trauma Society is currently preparing a publication that describes how to implement similar "youth visitation" programs in other parts of the country.
- ***Pretrial Intervention (PTI).*** This type of program generally involves requiring offenders to complete or participate in a treatment program prior to final case disposition. Successful program participants usually receive less severe sanctions than they otherwise would. Jones et al. (1996) evaluated such an Intensive Supervision Probation (ISP) program for repeat offenders in Milwaukee, Wisconsin, and found that participants had a recidivism rate approximately one-half of that of a comparison group.
- ***More Severe Sanctions for High-BAC Drivers.*** Simpson et al. (1996) recommends that more severe sanctions be administered to drivers convicted of DWI with high BACs (usually defined as $\geq$.15), similar to the practice used in many European countries. NHTSA is currently evaluating some of these programs (McCartt et al., 2002b). The high-BAC law in Minnesota appears to be associated with lower rates of recidivism for first-time offenders with BACs of .20 or greater (McCartt and Northrup, 2004).

IV. Rehabilitation options for offenders sentenced to treatment

The toll to the Nation, in terms of the cost of health care and reduced or lost productivity due to alcohol abuse and alcoholism, includes an estimated 100,000 deaths and $184.6 billion in 1998 (NIAAA, 2000). More effective treatment of DWI offenders may help reduce these costs (Holder and Blose, 1992). Court-mandated DWI evaluation and rehabilitation often represent the first opportunity for people with alcohol-related problems to obtain appropriate treatment. Nevertheless, because many may regard such treatment as a dimension of their punishment, treatment providers must overcome DWI offenders' resistance, which may be even greater than resistance to treatment by other alcohol-abusing clients. Treatment that uses a motivational-interviewing (MI)-style feedback session that lasts only 80 minutes has been found to reduce recidivism rates (Nochajski and Stasiewicz, 2002). This style of treatment engages offenders and encourages them to think about measurable changes in their drinking behavior (Miller and Rollnick, 1991).

Many programs and activities are considered to be "treatment," including:

- Brief classroom discussions (i.e., "DWI school")
- Participation in self-help groups, such as Alcoholics Anonymous (AA)
- Attendance at outpatient counseling sessions of varying intensity
- Long-term inpatient (i.e., residential) programs conducted in hospitals or clinics

DWI offenders are best matched to the specific extent of treatment options by means of a professional evaluation (Wells-Parker et al., 1995). For DWI offenders, treatment programs should always be considered in addition to license suspension/revocation rather than in place of it. A comprehensive book on the subject of assessment and treatment of the DWI offender has recently been published (Cavaiola and Wuth, 2002).

Education programs

Education for DWI offenders consists of special schools offering simple, straightforward educational presentations about the medical and legal consequences of drinking, including drinking and driving (Siegal, 1984). In conjunction with lectures and readings, offenders may be shown movies depicting alcohol-related crashes and injuries. For offenders who are not alcoholic, DWI education reduces recidivism by approximately 10 percent compared with a fine alone (NHTSA, 1986; Wells-Parker et al., 1995).

Treatment programs

Recent research on the effectiveness of screening and brief interventions in medical settings is promising. However, most of these interventions are accomplished before drivers are arrested or charged with DWI. Counseling by medical professionals of drinking drivers injured in crashes and treated at hospitals has been shown to reduce future alcohol-related episodes (Gentilello et al., 1999; Longabaugh et al., 2001; Wells-Parker and Williams, 2002). In addition to brief intervention programs (such as where an offender who has been injured in a crash is identified by hospital professionals for a quick, on-site, screening and discussion), offenders evaluated as problem drinkers or alcohol-dependent require a more intensive and longer treatment program than DWI education alone (Wells-Parker et al., 1990; Mayhew and Simpson, 1991). Such rehabilitation may be conducted on an outpatient or inpatient basis. The option of inpatient treatment provides for:

- Incapacitation;
- More intense, broader-spectrum treatment than many outpatient programs; and

- The opportunity to closely monitor the offender's compliance with the treatment regimen (Nace, 1993; Transportation Research Board, 1995).

Intensive inpatient or outpatient alcohol dependent treatment can take several approaches. An example is cognitive-behavioral therapy (CBT), which provides training in ways to confront or avoid everyday situations that might lead to drinking and works to strengthen behaviors that help maintain long-term sobriety (Kadden, 1994; Miller, 1993). Other popular approaches include motivational enhancement therapy (MET) (Miller, Zweben, DiClemente, and Rychtarik, 1992) and 12-step facilitation therapy (TSF) (Nowinski, Baker, and Carroll, 1992). In the largest, most statistically powerful psychotherapy trial ever conducted, the Project MATCH Research Group (1997) essentially found each approach to be equally effective on alcohol-dependent clients in reducing their alcohol abuse post-treatment.

Limited available evidence suggests that recidivism may be reduced if DWI offenders who are problem drinkers are required to participate in an intensive treatment program for at least 1 year. This conclusion was based, in part, on a program that included therapy sessions once a week and an individual interview with either a therapist or probation official every other week (NHTSA, 1986).

Combination treatment and education programs tailored to the number of prior DWI convictions held by an offender have been found to reduce recidivism. In California, for example, first offender programs lasted three months and were comprised of a minimum of 10 hours of alcohol education, 10 hours of counseling, 10 hours of education and counseling combined, and regular face-to-face interviews with program staff (DeYoung, 1997). Second offenders were sentenced to an 18-month program (at least 12 hours of alcohol education, 52 hours counseling and face-to-face interviews twice a week). Third and higher offenders were sentenced to a 30-month program (18 hours of education, 117 hours of counseling, 120-300 hours of community service, and more frequent face-to-face interviews). DeYoung (1997) found that repeat offenders with one prior (i.e., second offenders), were 1.5 times less likely to recidivate in the combination program than those offenders who received only license revocation. For repeat offenders with three or more priors, those who participated in the program were 1.7 times less likely to recidivate compared to those offenders who only had their licenses revoked. In other words, increasingly intense treatment, depending on the number of prior DWIs of the offender, had pronounced positive effects on recidivism rates in this California study.

Use of Medications

For DWI offenders diagnosed with alcoholism, medications to prevent drinking, such as disulfiram (Antabuse), are most likely to succeed in environments in which medication compliance can be closely monitored (Chick et al., 1992). More recently, naltraxone has come into use in the treatment of alcohol-dependent DWI offenders. The effectiveness of naltraxone with DWI offenders is unknown at this time. However, how closely offenders comply with the prescribed dose regimen is obviously an important element for any medication to be effective. In some cases, it may only work when medication is taken under direct professional supervision.

Diversion Programs

Diversion programs generally allow an offender to complete an education, treatment, and/or community service program and then dismiss the DWI charge. This results in no conviction on the driver record of the offender and means that some repeat offenders continue to be treated as first-time offenders. Programs allowing charge dismissal after completion of treatment generally do not appear to reduce recidivism (Jones and Lacey, 1991; Harding, 1989b; Rauch et al., 2002a). However, one study found that deferring prosecution for 2 years while offenders participated in various forms of treatment decreased DWI recidivism during the deferral period and, in some cases, beyond (Baxter, Salzberg, and Kleyn, 1993). NHTSA has recommended that States eliminate diversion programs (NHTSA, 2003b).

Alcoholics Anonymous

AA has been the primary aid to recovery for many alcohol-dependent offenders. For DWI offenders, AA may be most effective in hospital or correctional settings in which attendance can be monitored (McCrady and Miller, 1993). Researchers have questioned the wisdom of requiring all offenders to attend AA and to make it

the core component of offenders' aftercare (Emrick, Tonigan, Montgomery, and Little, 1993) for the following reasons:

- As with any other form of rehabilitation, AA works better for some people than for others (McCrady and Miller, 1993).
- AA spokespersons have expressed concern that court-mandated AA attendance may overwhelm meetings with people who do not want to be there and who are often hostile and disruptive (Speiglman, Witbrodt, and Many, 1992).
- AA is a spiritual, not religion-based, program and may not be appropriate for some offenders.

Summary

In summary, the George Washington University Medical Center (2003) has identified several components of effective alcohol treatment:

- Early detection, including screening and brief interventions (for nondependent problem drinkers)
- Comprehensive assessment and individualized treatment plan
- Care management
- Individually delivered, proven professional interventions
- Contracting with patients in order to ensure compliance
- Social skills training
- Medications
- Specialized services for medical, psychiatric, employment, or family problems
- Continuing care
- Strong bond with therapist or counselor
- Longer duration of treatment for alcohol dependent persons
- Participation in support groups
- Strong patient motivation

(Sources: McLellan, 2002; Miller and Wilbourne, 2002; National Institute on Drug Abuse, 1999; Project MATCH Research Group, 1997).

V. Compliance

Even when offenders are ultimately convicted, there are few mechanisms to ensure the sanction imposed will actually be fulfilled (Robertson and Simpson, 2002). Offenders may or not report back to the judge, the prosecutor, or any other agent of the court as deemed appropriate. An offender who is not compliant with the court's sentence is a persistent public health hazard and is more likely to be rearrested for DWI than offenders who are compliant (Transportation Research Board, 1995). Therefore, compliance enforcement and monitoring are essential components of certain, consistent, and coordinated sentencing.

How Common is Noncompliance?

It has been estimated that one-half to three-quarters of convicted DWI offenders may drive at least occasionally while their licenses are suspended (Mayhew and Simpson, 1991). Thirteen percent of all drivers involved in fatal crashes in California during 1991-1992 were driving with suspended or revoked licenses at the time (Peck et al., 1994). Noncompliance with other terms of the sentence, such as treatment, is problematic as well.

Sanctioning Options for Noncompliance

Driving while a license is suspended, revoked, or otherwise invalid because of a DWI-related conviction should be treated as a serious offense (Goldsmith, 1992). Immediate action is necessary to ensure that offenders do not learn or perceive that the legal system is ineffective. More stringent means of incapacitation (such as imprisonment, home confinement with electronic monitoring, vehicle impoundment or immobilization, or removal of license plates) may be required to keep the offender off the road (Transportation Research Board, 1995). Availability of specific enforcement options may depend on local law. DWI courts focus much of their attention on monitoring and ensuring compliance. Other forms of active interaction between probation departments and judges emphasize compliance and have been shown to reduce recidivism (Jones and Lacey, 1998).

Reporting

Reporting to the court is an essential component of compliance monitoring. Offenders may fail to comply with treatment or fail to appear for court-ordered evaluation. Mandatory, immediate reporting of noncompliance enables the court to respond quickly by instituting other sanctions as noted above (Popkin et al., 1988). Therefore, the court must assign responsibility for such reporting to an appropriate person or agency, within the limits of statutory guidelines.

The progress of the offender's treatment also should be reported to the court. Repeat offenders allowed to regain their driving privileges without evidence that they have effectively managed their drinking problem have a much higher probability of being involved in a serious crash than the average driver does (Nichols, 1990).

The Journal of Offender Monitoring promises to have more information and scientific articles on this subject (Conway, 2003).

VI. Sentencing Support and Research Needs

As mentioned earlier, the past two decades have witnessed a marked decrease in DWI fatalities and a decrease in impaired driving among the driving public, generally. The past six years, however, have shown stagnation in progress. Despite a growing body of research, the relative contribution of many specific sanctions in reducing impaired driving remains unclear. The research suggests that in addition to sanctioning individual offenders, justice system leaders need to continue or expand their focus on the following areas:

- Maintaining the general deterrent effects of DWI sanctions on the driving public.
- Finding ways to increase the certainty and swiftness of apprehending and sanctioning DWI offenders.
- Expediting and simplifying the adjudication process through evidentiary and procedural improvements (e.g., reducing the amount of paperwork) (Robertson and Simpson, 2002).
- Addressing the court overload problem, perhaps by assigning DWI cases to specifically trained prosecutors.
- Improving court records systems and access to other records systems, since about 15 percent of recidivists continue to avoid mandatory penalties. This problem is due in part to the absence of accurate information about the offender or the incident (Goldsmith, 1992), a need which hampers the ability of prosecutors and courts to apply sanctions consistently.
- Expanding research on the effects of various sanctions, particularly combined sanctions; offenders' perceptions of the severity of various sanctions; and public perceptions of these sanctions.

Recently, NHTSA's Southeast Region (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee) established a "Community-Based DWI System Improvement Initiative" focusing on five critical areas: enforcement, prosecution, adjudication, treatment, and evaluation. This system's improvement strategy is based upon best practices and successful models that already exist in some States. A panel of experts established "gold standards" that a community can measure themselves by to determine strengths and weaknesses in the current DWI system (Cotton and Spencer, 2002). It is envisioned that this community assessment tool can be used to improve DWI systems at the State and community level.

VII. Conclusion

Alcohol-impaired driving continues to threaten the health and safety of millions of people daily. Progress in reducing impaired driving has stagnated during the past few years. There is no single solution to the problem of drinking and driving. Combinations of sanctions and treatments that work together as part of a comprehensive DWI sentencing system must be developed. Neither sanctions nor treatment alone is likely to affect all DWI offenders, but each approach is an important component of an integrated strategy.

Responding effectively is especially difficult for the courts of law because they must deal with a diverse population of offenders, including hard-core recidivists who are not easily identified initially and who are resistant to most sanctions. For a sentencing strategy to be effective, both in terms of treatment success and implementation, there must be consistent enforcement of sentence compliance and prompt response by the courts to noncompliance. Courts must expand their limited resources by seeking support from the criminal justice, public safety, and alcoholism prevention and treatment communities. With the wise use of sentencing options described in this guide and the dedicated support of these other communities, significant progress can be made in further reducing the injuries and fatalities caused by alcohol-impaired drivers.

DWI Sentencing Checklist

The table below summarizes the evidence concerning various DWI sentencing options that are discussed in detail in the text of this sentencing guide:

OFFENDER	SANCTION	EFFECTIVENESS	COMMENT
FIRST CONVICTION	**LICENSING**		
	Suspension/revocation (≥90 days; 30 days hard)	Reduces alcohol-related fatalities 6-19% (administrative license revocation)	One study showed it does not cause employment problems.
	VEHICLE ACTIONS (FOR VERY HIGH BACs)		
	Impoundment/ immobilization	Reduces recidivism by 40%-70%.	Immobilization may be more cost-effective.
	Alcohol ignition interlocks	Effective while on vehicle.	Breath test failures in first few weeks are best predictor of recidivism.
	License plate impoundment	Shown to be effective in MN.	More cost-efficient than impoundment.
	ASSESSMENT AND REHABILITATION		
	Treatment as appropriate to problem	Reduces recidivism by 7%-9%.	Should be paid by the offender when possible.
	SENTENCING OPTIONS		
	Electronic monitoring Home confinement	Effective alternative to jail. Reduces recidivism by 33%.	Can be self-sufficient if paid by the offender.
	Fines	No studies of effectiveness found.	Sometimes used to pay for programs.

OFFENDER	SANCTION	EFFECTIVENESS	COMMENT
MULTIPLE CONVICTIONS (Repeat Offender)	**LICENSING**		
	Suspension/ revocation (≥ 1 year) 30-90 days hard Remaining days on restricted license/ work permit	No studies found on the effects of license suspension on repeat offenders. General deterrent effect of 6-19%.	Studies indicate 50-70% of offenders continue to drive to some extent.
	VEHICLE ACTIONS		
	Impoundment/ immobilization	Reduces recidivism by 40%-70%.	Immobilization may be more cost-effective.
	Alcohol ignition interlocks	Reduces recidivism while on vehicle.	Breath test failures in first few weeks are best predictor of recidivism.
	License plate impoundment	Shown to reduce recidivism in MN.	More cost-efficient than impoundment.
	ASSESSMENT AND REHABILITATION		
	Mandatory assessment of drinking problem and mandatory treatment.	Reduces recidivism by 7%-9%.	Should be paid by the offender when possible.
	SENTENCING OPTIONS		
	Electronic monitoring and home confinement.	Reduces recidivism by 33%.	Can be self-sufficient if paid by the offender.
	Intensive supervision probation.	Reduces recidivism by 50%.	Should be at least partially funded by the offender.
	Special DWI facilities.	Reduces recidivism by 75%.	
	Day reporting center.	Integrates offender back into society.	More cost-effective than jail.
	Fines, reinstatement fees.	No studies on effectiveness found.	Helps pay for costs of other sanctions.
	DWI court (e.g., frequent contact with judge; intensive supervision probation; treatment; random alcohol/drug testing; lifestyle changes; positive reinforcement).	Some courts reporting reductions in recidivism by 50% or greater.	Multiple funding sources available. NHTSA and the Bureau of Justice Assistance have a joint evaluation underway.

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