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Implied-Consent Laws: A Review of the Literature and Examination of Current Problems and Related Statutes

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Abstract

Problem—A substantial proportion of drivers arrested for DUI refuse the BAC test, thereby reducing the likelihood that they will be convicted and potentially increasing the number of highrisk multiple offenders contributing to alcohol-related crashes.

Method—This paper reviews the information on the current status of implied-consent laws (which impose a sanction on offenders who refuse the BAC test) in the 50 states and the other relevant traffic safety laws and policies that may influenced state refusal rates.

Results—Although there appears to be only a weak relationship between state refusal rates and crash rates, there is strong evidence that BAC test refusals significantly compromise the arrest, prosecution, and sentencing of DUI suspects and the overall enforcement of DUI laws in the United States.

Discussion—Laws and policies that may reduce the number of refusals are discussed.

Impact on industry—Alcohol-related crash injuries are an important cost problem for U.S. industry, because of property damage from crashes, crash injuries to employees that raise health costs, or through the reduction of time on the job resulting from a highway injury.

Keywords

Implied consent; BAC refusal; breath test refusal; impaired driving; DWI enforcement

Problem

Alcohol-related motor-vehicle fatalities are increasing in the United States. This upward trend follows 15 years of significant decline. Researchers and advocates alike are attempting to understand and identify solutions to this reversal. One of the reasons suggested for such reversal is the inability to properly enforce current laws (Wagenaar, Toomey, & Erickson, 2005). A likely contributing factor to this perceived limitation in the ability to adequately enforce impaired-driving laws is the rise in the number of people refusing to submit to a chemical test of their blood alcohol concentrations (BACs) once they have been arrested for driving under

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the influence (DUI). An Internet search of private legal firms in the United States advertising their services to DUI offenders shows many of these firms advising their prospective clients not to provide a breath sample if stopped for a DUI violation, particularly if the driver has a previous DUI conviction. Failure to collect a BAC makes it more difficult to obtain a conviction for the DUI offense and may therefore erode the law's potential deterrent effect.

Unfortunately, knowledge about the prevalence of the refusal problem, its association with the occurrence of alcohol-related crashes, and the legal environment in which it occurs is very limited. Both lack of proper data and the complexity of the laws and regulations affecting the refusal decision are important contributors to our limited understanding of the problem. Furthermore, although breath-test refusals are believed to be increasing, the prevalence of the refusal problem has not been either adequately measured or its relationship to DUI case outcomes fully established. This paper presents a comprehensive review of the current legal environment related to the refusal problem, including an update of prevalence estimates of the refusal problem.

Overview

This paper is organized as follows. First, a brief history of the evolution of impairment-related traffic laws and regulations in the country is presented. Special emphasis is placed on describing the need for incorporating objective measures of alcohol consumption into the legal arsenal against impaired driving. Second, we review the scarce literature on refusal/implied-consent laws to provide estimates of the prevalence of refusal rates across the nation. Then, we present the current status of implied-consent laws and review several traffic safety policies that may have influenced the implied-consent refusal rates over the past years. Finally, we review the legislation that prevents or discourages refusals. The expected relationships between policies and their possible influence are discussed to better inform future research.

Background

Laws against impaired driving have been in place in the United States for the last century, but for the first 75 years, those laws were based on evidence of impaired behavior as provided by the arresting officer. Because moderate impairment is difficult to detect, drivers arrested under impaired-driving laws tend to have high BACs, averaging .16 or higher. The report on the Surgeon General's Workshop on Drunk Driving (U.S. Department of Health and Human Services, 1988) indicated the average level in California was .18 (Perrine, Peck, & Fell, 1989). Eby (1995) reported that .17 was the average BAC of drivers arrested in Michigan. When limited to brief observation periods, such as those provided in sobriety checkpoints, officers failed to apprehend half of the drivers with BACs greater than .10 (Ferguson, Wells, & Lund, 1995). The development of practical evidential breath-test devices that officers can operate in the police station permitted the passage of laws that defined the impaired-driving offense in terms of BAC (currently .08). These per se laws helped to objectify the drinking-driving offense, potentially protecting the innocent motorist against biases or misperceptions of police officers. The development of the fuel cell as the primary ethanol detection system allowed the manufacture of handheld units that give reliable BAC results at the roadside. Australia, New Zealand, and most European countries used this new technology to establish efficient and effective random breath-test (RBT) impaired-driving enforcement systems in which any motorist can be stopped at random and required to provide a breath test (Ross, 1984; Shults et al., 2001).

The United States was unable to follow this example because the fourth amendment to the Constitution bars unreasonable searches and seizures. The effect of this is to require the officer to have an articulable reason for stopping (seizing) the vehicle and a suspicion of impairment

for requiring a breath test. The Supreme Court in *Spits v. Michigan State Police* relaxed the vehicle seizure requirement by allowing the police to stop and interview drivers at specially established sobriety checkpoints. The Court (in *Schmerber v. California*) also gave police officers authority to require a chemical test for alcohol provided they had probable cause to make an impaired-driving arrest. When drivers are stopped at random at a sobriety checkpoint, however, probable cause to make a DUI arrest is missing until the officer completes an evaluation of the driver's behavior, so a breath test cannot be used initially to detect over-the-limit drivers.

The 50 states, faced with the prospect (under *Schmerber v. California*) that recalcitrant offenders would have to be restrained while blood was drawn, opted to avoid forced blood draws by providing for the suspension of the drivers license of individuals refusing the test. This was accomplished through the passage of implied-consent laws based on the principle that driving is a privilege, not a right, and in accepting a drivers license, an individual is deemed to have given consent to a chemical test (Cleary & Rodgers, 1986). Enacted in an era when the most serious penalty the court would normally impose for impaired driving was license suspension, implied-consent laws initially appeared to be an effective way to persuade DUI suspects to provide the BAC measure on which per se laws are based.

The United States, however, was left with a relatively weak procedure for requiring DUI suspects to participate in a BAC test compared to the rest of the industrialized world where most countries have criminalized test refusal. In Britain, for example, the *Criminal Law Amendment Act*, passed in 1969, made failure to provide a test, or refusal, an offense equivalent to driving with a BAC higher than 80 mg/dL. The *Criminal Code of Canada* specifies that refusal to provide a breath sample is deemed an offense equivalent to impaired driving. In some countries, refusal results in a higher penalty than that imposed for the standard DUI offense. In the Northern Territory of Australia, refusing a blood test carries the same penalties as a BAC higher than .15. In Austria, refusal results in the penalties appropriate to a BAC of .16 (NHTSA, 2000).

Spurred by the emergence of strong victim advocate groups, such as Mothers Against Drunk Driving (MADD), the 1980s saw a rise in public concern with impaired driving. This resulted in the 50 states lowering their legal BAC limits and strengthening the sanctions for impaired driving. Particularly important was the passage of administrative license suspension (ALS) and administrative license revocation (ALR) laws that provide for immediate loss of license if the breath-test result is higher than the legal limit. This changed the legal climate in which the decision to take the breath test was made. Whereas before ALR, immediate loss of license occurred only if the suspect refused the test, it could now occur if the driver took the test but was over the limit. Further, the trend toward increasing the severity of the sanctions for DUI offenses made the consequences of conviction considerably more severe than just the loss of license. Defense attorneys advised their clients not to agree to the test, leaving it open for them to contest whether the officer had probable cause to make the arrest that led to the test requirement. Thus, the U.S. system again had to rely on the historic behavioral enforcement system where innocence or guilt is determined based on the observations of the police officers.

Thus, from the beginning of the 20th century, apprehension and prosecution of offenders driving while alcohol impaired has been based on demonstration of physical impairment due to alcohol. This form of proof remains on the books (Voas & Lacey). However, over the past half century, with the advent of rapid, noninvasive methods of determining BACs through breath tests, DUI laws and their enforcement and prosecution have moved toward an objective chemistry-based means of establishing guilt (Voas & Lacey, 1990). All states and the District of Columbia have now adopted per se laws defining a DUI offense as driving at or higher than a specified BAC, which is currently .08. The effectiveness of these laws, however, may be

undermined if a substantial number of drivers refuse to consent to testing. In most jurisdictions, arrested drivers can legally refuse the test by accepting a period of suspension under the implied-consent law in an effort to avoid the more severe penalties associated with a DUI conviction: jail time, fines, mandatory treatment programs, and vehicle sanctions. This provides a considerable incentive for offenders to refuse the BAC test as reflected by the estimate that state refusal rates vary from 2% to 71% with an average of about 20% (Jones, Jokschi, & Wiliszowski, 1991). Further, there is a strong trend for states to legislate more severe penalties for DUI, potentially increasing the incentive to refuse the BAC test. Thus, the work that advocacy groups and others have done to pass laws and implement other measures to reduce impaired driving based on an objective measure of BAC may be rendered less effective by increases in refusals.

A comprehensive survey of police officers, prosecutors, judges, and other key criminal justice personnel covering the DUI enforcement system by Simpson and Robertson (2001; Robertson & Simpson, 2002a, 2002b) has demonstrated that every stage of the enforcement process is affected by breath-test refusals. Refusal is a significant problem in the arrest process because it prevents officers from employing preliminary breath-test devices to detect alcohol tolerant drivers who may present few signs of intoxication, such as second DUI offenders who are also more likely to refuse the evidential test. It also places a greater burden on the officer who is observing and recording the signs of impairment to establish probable cause for the DUI arrest (Simpson & Robertson, 2001, pp. 39-46). It is a significant problem in the prosecution of DUI offenders because it provides greater leverage for plea-bargaining or obtaining a not-guilty verdict (Simpson & Robertson, 2001, pp. 43-50). Finally, refusals complicate the sentencing of DUI offenders. Forty states currently provide for greater penalties for high BAC drivers (see Table 2). The absence of a BAC prevents the implementation of such additional sanctions. A high BAC is also an indication that the offender should be referred to a treatment program, but without such evidence, the judge is left without the key information required for imposing the most effective sanction program and may encounter strong opposition from defense attorneys in applying such remedial programs (Robertson & Simpson, 2002b, p.52).

As reported by Gullber (2005), jurisdictions with per se alcohol legislation rely heavily on breath-test evidence in prosecuting DUI cases. Consequently, the defense bar has adopted procedures for preventing BAC evidence from being introduced in court when the offender does not refuse and the data are available. A common procedure is to attempt to show that the officer did not have probable cause to make the DUI arrest, which is the basis for requiring the evidential BAC test. This procedure effectively circumvents the illegal per se concept because the issue comes down to the officer's report covering observed evidence of impairment, as was the case before the advent of BAC testing. Another significant problem in the prosecution of DUI cases when a BAC is available are the nuisance attacks on the breath-test equipment or testing procedures. The procedures for certifying and maintaining breath-test equipment, the licensing of operators, and the administration of the test are so detailed that they offer many opportunities for frivolous challenges to the test results. A number of examples can be cited. In Florida, the test results were challenged based on the use of tap water rather than distilled water, despite expert evidence that it made no difference. In another Florida case, the breath-test results were challenged over whether the state inspection reports were testimonial in nature, which required that the inspector to be present in court. In New Jersey, a defendant with a .14 BAC challenged the result based on whether the standard state Certificate of Operability was adequate proof that the breath-test equipment was in working order (case references provided on request). Such challenges slow the adjudication process and increase the expense of the system operations by requiring additional court and prosecutor time.

Current Role of Refusal in DUI Criminal Justice System

Figure 1 depicts the BAC test alternatives available under the current typical implied-consent system. Suspects are subject to penalties under two administrative and two criminal laws: *administrative sanctions* under (a) implied consent or (b) ALR laws; and *criminal penalties* under (c) per se laws or (d) impaired-driving laws. Upon arrest, the suspect is offered the opportunity to provide a breath or blood sample for analysis.

A suspect who *accepts* the test is exposed to penalties under two systems. If the BAC test is higher than the legal limit, the operator's permit will be suspended immediately by the state licensing agency. In addition, the suspect can be prosecuted for DUI under the per se law, with the test results as evidence of guilt. A test result lower than the legal limit, which is unlikely because police officers err on the conservative side when determining whether to administer the BAC test, would prevent a license suspension but not necessarily the criminal penalties. This is because the offender could be convicted based on the DUI law, even if under the limit, with sufficient testimonial evidence from the police officer that indicates impairment.

A suspect who *refuses* the test will have his or her license suspended under the implied-consent law. As noted, that suspension period is generally longer than the ALR period, though not in all states. The suspect also can be charged under the impaired-driving criminal law in the absence of a BAC test result to use in a per se prosecution. This requires the prosecution to depend more heavily on the police officer's testimony, which can be more easily attacked by the defense attorney and is more likely to result in a plea bargain or acquittal. The importance of the BAC test is evidenced by a recent survey of DUI prosecutors conducted by Robertson and Simpson (2002b), who reported that 73% of the prosecutors they interviewed indicated that "a BAC is the single most convincing piece of evidence that can be presented to a jury." However, there is evidence that defense attorneys advise their clients to refuse the test (Simpson & Robertson, 2001). Consequently, even a longer administrative penalty may not persuade offenders to take the test if they believe that a refusal will result in an acquittal on the criminal charge.

Refusals and Alcohol-Related Crashes

Although there is consensus about the negative role BAC test refusals have upon the effectiveness of the DUI criminal justice system, it is less clear whether refusal rates diminish enforcement efficiency and deterrence sufficiently to impact crash rates. To gain some knowledge of the potential association between refusals and crash rates, we attempted to link the most comprehensive prevalence estimates of refusals available today (Zwicker, Hedlund, & Northrup, 2005) with the incidence of alcohol-related fatal crashes. We therefore applied a simple regression analysis to regress the state-based proportion of alcohol-related fatal crashes in 2001 (source: FARS) with the 2001 state-based prevalence of refusal estimates provided by Zwicker et al. Two levels of alcohol involvement were studied: (a) fatal crashes with a BAC > .00, and (b) fatal crashes with a BAC ≥ .08. The unit of analysis was the state. Only 38 states were used (those for which a refusal rate estimate was provided by Zwicker et al.).

The analysis of these data indicated that refusals have a marginally significant effect on alcohol-related crash rates ($p = 0.0592$ for BAC > .00, and $p = 0.0680$ for BAC ≥ .08). Although illustrative about the possible link between refusal rates and alcohol-related crashes, the relevance of this finding must be considered with extreme caution. First, the model we used is simplistic. Second, as indicated by Zwicker et al. (2005), refusal rates by states may vary markedly due to real differences or due to the varying data-collection methods used by different states. In any case, this simplistic exercise illustrates both the need for information on the refusal problem and the current lack of information to address it.

Review of Current Literature

As stated earlier, the prevalence of the refusal problem has not been adequately studied. To alleviate this limitation, NIAAA funded a project (R21 AA0154442) to review the literature on refusal rates, collect more than a decade of crash and arrest data from up to 10 states to estimate refusal rates more accurately, and evaluate the effect of refusals on different aspects of the impaired-driving problem. In a forthcoming paper, we will report on the impact of refusals on the crash, arrest, and conviction rates in the 10 states. In this section, we review the limited literature available on the prevalence and impact of the refusal problem. A review of the literature from 1985 to the present was conducted using various search engines (U.S. National Center for Biotechnology Information, U.S. National Library of Medicine, and U.S. National Institutes of Health; NCBI/*PubMed*:<http://www.ncbi.nlm.nih.gov/sites/entrez?db=PubMed>). Because of the sizable number of publications concerning traffic safety laws in general, we first narrowed our search to include manuscripts and articles that specifically focused on implied-consent laws. Of the seven manuscripts identified—three articles (two non-peer-reviewed and one peer-reviewed) and four reports—most were published from 2003 through 2006. News commentaries and presentations were not included in our review.

Because of the relatively low number of publications identified, we broadened our search and identified some recent publications that discussed refusal rates or issues pertaining to implied-consent laws, even if refusal was not the main topic. This yielded an additional six publications to include in our review; most were research technical reports. Table 1 presents the identified publication titles, dates, authors, and a brief description or abstract. Publications that did not discuss implied-consent laws or BAC refusal issues as the main topic are presented at the end of the table under “Related Topic Publications.”

Status of Implied Consent

Simpson and Robertson (2001), in a review of DUI enforcement in the United States, reported refusal as a significant problem in obtaining evidence for police officers. Further, a significant factor contributing to the failure to convict DUI offenders is a lack of critical evidence, such as breath-alcohol test results, which results from a driver's refusal (Jones, Lacey, & Wiliszowski, 1998). Ross, Simons, Cleary, Lewis, and Storkamp (1995) found that refusal reduced the conviction rate from 75% to 58% among impaired drivers for the first offense and from 87% to 76% for a second offense. Driving record studies indicate that refusers are more likely to recidivate and to have alcohol-related crashes than are those who agree to take the test (Ross et al., 1995; Sadler, 1986).

Recent DUI legislative trends threaten to increase the offenders' motivation to refuse BAC tests, thus complicating prosecution (see Table 2, which is based on MADD data and NHTSA's 2002 *Digest of State Alcohol-Highway Safety Legislation*, for a summary of relevant laws). Judges and prosecutors have reported that in states where penalties for refusal are low, it is more likely that DUI suspects will be acquitted at trial (Hedlund & McCartt, 2002). Increased concern with “hard core” drinking drivers is resulting in significantly more severe penalties being legislated for first-time impaired-driving offenders with high BACs ($\geq .15$) and for repeat offenders. An unintended consequence of this trend may be a rise in the already high refusal rates. Currently, 40 states have passed legislation requiring more severe penalties for high BAC ($\geq .15$) offenders (MADD, 2002). Inevitably, states will be struggling with ways to increase the pressure on offenders to take a BAC test.

In the United States, most drunk-driving suspects can refuse BAC testing. In some states, those involved in serious and fatal injury crashes may be compelled to take a blood test. A consequence of refusal under “implied consent” laws in all 50 states is license suspension. The

suspension periods range from 30 days to 2 years and are generally greater than the suspension period provided under ALR laws. However, as indicated in Table 2 (based on MADD data and NHTSA's 2002 *Digest of State Alcohol-Highway Safety Legislation*.), in 13 states, the suspension period for refusing is no greater than that for complying and failing the test (MADD website, <http://www.madd.org/Drunk-Driving/Drunk-Driving/Laws.aspx>). Only eight states have criminal sanctions—jail time, fines, community service, or treatment programs—in addition to license action for refusing the BAC test (NHTSA, 2006; *NHTSA Digest of Impaired Driving and Selected Beverage Control Laws*, 2006). These generally mild penalties tend to encourage refusal to escape the criminal penalties that result from a DUI conviction. The refusal problem potentially is quite serious. According to a NHTSA report, in 2001, many impaired-driving suspects (more than 80% in two states) refused to take a BAC test (NHTSA, 2005; Zwicker et al., 2005).

Current Legislative Programs

In the last 3 years, two major movements in the promotion of alcohol safety legislation—lowering the BAC limit to .08 and imposing more severe penalties for high BAC offenders and for repeat offenders—may have significantly increased the refusal problem. Researchers, citizen advocate groups, and governmental organizations have promoted the lowering of the BAC limit from .10 to .08, based on evidence that states adopting that measure have experienced significant reductions in alcohol-related fatalities (Shults et al., 2001). Lowering the legal BAC limit makes the BAC test more critical because offenders with low BAC levels will show fewer visible signs of intoxication. At the same time, the lowering of the limit is likely to increase the offender's concern with taking the test. The hospitality industry, concerned that the lower limit would reduce consumption by “social drinkers,” strongly resisted this movement, arguing that the focus of the law should be on high BAC “hardcore” drinking drivers, who are most at risk for involvement in alcohol-related crashes (Simpson, Mayhew, & Beirness, 1996). As an alternative, the industry has supported additional penalties for high BAC and repeat offenders. Congress has supported this position by passing legislation (TEA-21) requiring states to lengthen the suspension period and to require interlocks or vehicle impoundment for second DUI offenders. These more severe sanctions are likely to add to the offenders' motivation to refuse the breath test to avoid a criminal conviction. Thus, both current trends—lowering the limits and increasing the sanctions—may increase the refusal problem. Additionally, the zero-tolerance law for drivers aged 20 and younger might also motivate drivers to refuse the test because even a small amount of alcohol in their breath will be incriminating. The implementation of zero tolerance has been associated with a significant increase in BAC test refusals by young drivers (Blackman, Voas, Gullberg, & Tippetts, 2001).

Thus, current efforts to strengthen alcohol safety legislation have increased pressure on the police to obtain breath tests from suspected drivers. A recent national survey indicated that 95% of police officers have experienced problems with refusals (Simpson & Robertson, 2001). Consequently, legislation to reduce refusals will soon become a major component of efforts to strengthen drunk-driving laws.

Approaches to Discourage or Prevent Refusals

Some states have passed laws or implemented policies designed to discourage or prevent refusals (Table 3). In general, such efforts fall into five categories: (1) ensuring that the ALR period for refusal is substantially longer than for providing an over-the-limit test, (2) criminalization of refusal, (3) enhanced penalties for refusal if convicted, (4) refusal admissible in court, and (5) refusal not permitted.

1. Suspension for refusal greater than providing over-the-limit sample. Most states currently ensure that the suspension period for refusal is at least equal to the suspension period for providing an over-the-limit sample. Because refusal may prevent conviction, states may have to motivate compliance with breath testing by making the suspension for refusal substantially longer than an ALR for providing a positive test.
2. Criminalization of refusal. Following the practice typical of Europe and Australia/New Zealand, refusal is criminalized to have the same penalties as a DUI conviction. Currently, eight states provide for criminal sanctions in addition to license action for refusal (MADD, 2002). Criminalizing refusal generally establishes a separate charge from the DUI offense, so some offenders would be convicted of refusal rather than DUI. Further, a refusal conviction must be counted as a prior DUI conviction; otherwise, the strengthened penalties for second offenders could not be applied.

The effect of criminalizing refusal has not been investigated thoroughly. However, Ross et al. (1995) found that Minnesota's law criminalizing refusals for repeat offenders resulted in a small decrease in DUI convictions that was more than offset by convictions for test refusal, creating a net increase in conviction and punishment of 5%. Criminalizing refusal will probably enhance the officer's ability to collect a breath sample from an arrested offender, but may complicate the problem for the officer of collecting information during the apprehension process. Simpson and Robertson's (2001) review of DUI enforcement noted that the problem of refusal is not confined to the breath test. Some offenders refuse to perform the SFST, which is an important method for gathering evidence of behavioral impairment to provide the probable cause to make an arrest and require the breath test. The only defense against the refusal charge is to demonstrate that the officer did not have probable cause to make the arrest. Being uncooperative with police officers is encouraged by some defense attorneys and most likely will increase if refusal is criminalized. Even so, when the case comes to trial, defense attorneys will focus more strongly on the issue of probable cause because it will be hard to refute the refusal charge on any other basis.

3. Enhanced penalties for refusal if convicted. Statutes that criminalize refusal and that increase sanctions for a DUI conviction have caused some confusion. Some states have enacted laws that enhance the penalties for suspects who are convicted of DUI, despite a refusal to take the test. Thus, this statute provides that first offenders who refuse the test will be given the more stringent penalties for offenders with BACs higher than .15. This action, however, appears to be limited to those who are convicted of DUI; thus, it cannot be imposed on those who, because of their refusal, succeed in avoiding a DUI conviction.
4. Refusal admissible in court. If an offender refuses, the natural assumption is that he or she has something to hide. As a result, defense attorneys have fought to have the offender's refusal inadmissible at trial. Forty-eight states permit the prosecutor to report the refusal in court, although some states specify that the jury is not to assume the offender is guilty based on that information.
5. Refusal not permitted. Some localities have used the Supreme Court's *Schmerber* decision to ensure testing through forced blood draw. Only in Nevada can officers mandate the drawing of a blood sample based on cause to suspect DUI. Confirmation of Nevada's statute was received from the Nevada Highway Patrol that indicated, although the statute has been challenged, it has been upheld. Nevada's officers are maximizing its use as is indicated by the virtually zero refusal rate. Jurisdictions in Arizona, California, and elsewhere also require arrestees to submit to a blood test.

Although not always successful, they have experienced a very high rate of test compliance. Jones, Lacey, and Wiliszowski (1998) provided a detailed description of the process used by the Scottsdale (Arizona) Police Department. Officers inform a suspect who refuses to take the BAC test that a warrant will be issued ordering a blood test. This generally produces compliance. In California, grants from the State Office of Traffic Safety permit the use of phlebotomists. To apply this forced procedure nationwide would require many states to amend their implied-consent statutes to remove the current provision that, if the suspect refuses the test, “no test shall be given” (see the Uniform Vehicle Code, NCUTLO, 1987). There has already been some pressure to remove this provision to permit forced testing in vehicular homicide and other serious injury crash cases.

Discussion

Much more information is needed on the effect of refusal on the DUI criminal justice system, particularly the relationship of refusal to the prevalence of alcohol-related crashes in the United States. Shults et al. (2001), in their study of U.S. checkpoints and Australian random testing, found that the proportional reductions in alcohol-related crashes were approximately the same. This suggests that checkpoints can be effective even if U.S. police cannot require drivers to submit to a roadside breath test. Consequently, the ability of DUI drivers to avoid testing in all cases where a driver is arrested for DUI would be expected to reduce the deterrent effect of the enforcement process. Given the evidence reported by Simpson and Robertson (2001), Hedlund and McCartt (2002), and herein, it appears that the refusal problem is growing and that it seriously interferes with the prosecution of DUI offenders. Consequently, there should be strong support for enacting legislation that will make refusal less attractive to the offender than is currently the case.

Criminalizing refusal and providing penalties as severe for a refusal as for a DUI conviction would provide a sanction similar to that in the European and Australasian nations. However, only eight states currently have such laws. Most popular are laws that provide for longer administrative suspension periods for those who refuse the test. But extending just the length of ALS for refusal is not likely to be highly effective if the penalties for conviction are greater (e.g., jail time, fines, treatment program requirements, and possibly installation of an alcohol ignition interlock device on the car, in addition to license suspension). MADD has launched a national campaign to encourage states to make the interlock a requirement for first offenders, as well as for second offenders. Although there is evidence for the effectiveness of interlocks for first offenders (Roth, Voas, & Marques, 2007), the passage of such laws is likely to encourage DUI arrestees to refuse the test because experience has shown that offenders resist installing such units (Voas, Blackman, Tippetts, & Marques, 2002).

This review found only two states—California and Nevada—in which some police departments are applying the Supreme Court Ruling in *Schmerber v. California*; that is, officers force a blood test if an offender refuses the breath test. Experience with this procedure has demonstrated that most offenders will agree to the breath test if they know that a forced blood draw is the alternative; consequently, such forced tests are actually rare. Although conducting forced tests would require the police department to go to the expense of having a phlebotomist on call, if the policy were rigorously enforced, actual blood draws might be rare. An advantage of applying *Schmerber* is that it does not require new legislation.

Obtaining a BAC on all offenders will not ensure that the BAC will be presented in court because the defense attorney can challenge the evidence for probable cause to make the DUI arrest. If that evidence is found wanting, then the BAC test results cannot be admitted in the trial. Laws or procedures that increase the number of offenders for whom BACs are available

will probably encourage defense attorneys to focus on the probable cause for the arrest, which will be similar to arguing a case when the BAC is not available. Thus, there would be a danger that DUI prosecution in the United States could be returned to its status before the advent of evidential breath tests. To make this alternative less attractive to the defense bar, better documentation of the officer's observations of the driver's impairment is required. This suggests the importance of providing officers with sufficient training in detecting and recording impairment so their documentation of the arrest will fully support DUI convictions and discourage offender challenges.

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Figure 1.
Current Implied-Consent System

Table 1
List of Publications Reviewed

Date	Title	Organization/Author	Description or Abstract	Refusal Rate
Specific Topic Publications				
Jan. 1986	An Evaluation of the Process Efficiency and Traffic Safety Impact of the California Implied Consent Program	California DMV -Sadler, Daniel D.	REPORT: This study describes the California implied-consent system and examines its efficiency and effectiveness in improving traffic safety. The California DMV received nearly 32,000 chemical test-refusal reports in 1982, and 98% of those resulted in license suspensions.	9.5% in 1983 in California
Sep. 1991	Implied Consent Refusal Impact	NHTSA – Jones, Joksch, Wiliszowski	REPORT: This report examines the prevalence of chemical test refusals among those who were suspected of DWI. It describes the implied-consent laws in all 50 states, analyzes the relationship between refusal rates and the state's laws, and describes the characteristics of test refusers in four states. It concludes that between 2% and 71% of drivers arrested for DWI in 1987 refused a chemical test. It recommends stronger traffic laws, treatment, and public information and education initiatives to combat the problem of chemical test refusals.	19%
1995	Causes and Consequences of Implied Consent Test Refusal	Ross, H.L.; Simon, S.; Cleary, J.; Lewis, R.; Storkamp, D.	ARTICLE (peer-reviewed): This study identifies the confusion and incompetence of impaired drivers, the drivers' calculation of the costs and benefits of refusing, and the hostility of the suspects as the three main causes of refusal. Refusal can result in a lower likelihood of conviction for alcohol-related offenses. Minnesota's law criminalizing certain types of refusal has lowered the refusal rate and increased the conviction rate for alcohol-related offenses.	19% nationally 22% in Minnesota
Jan 2005	Factors Associated with Breath-Test Refusals in Drunken Driving Arrests	Gullberg, Rod G.	ARTICLE (peer-reviewed): This study identifies factors that are significantly associated with breath-test refusal because breath-test evidence is heavily relied upon for prosecuting drunk-driving cases. The overall refusal rate was found to be 19.7%, and the single main variable associated with the greatest reduction in risk of refusal was the outcome of the preliminary breath test.	19.70%
May 2005	Breath Test Refusals in DWI Enforcement – An Interim Report	NHTSA Zwicker, T.J.; Hedlund, J.; Northrup, V.S.	REPORT: First-time offenders make up the majority of those refusing the breath test, even when it is to their advantage to take the test, because they generally do not understand the advantages and disadvantages to taking or refusing the test. In some states, repeat offenders refuse more frequently because they may know that it is in their best interest. For repeat offenders in all five states used for this case study, the consequences for refusal are less than the consequences of taking and failing the test.	25.32%
June 2005	Traffic Tech – Breath Test Refusals in DWI Enforcement: An Interim Report	NHTSA	REPORT: This interim report documents breath-test refusal laws and refusal rates across the country and examines whether those rates have increased. It also discusses reasons why some states may have higher refusal rates than others and possible solutions to the refusal problem.	25%
May 2006	White Paper - Criminalizing Refusals to Chemical Testing by DUI Offenders.	Prepared for Wyoming Governor Dave Freudenthal by his Council on Impaired Driving.	REPORT: Having only an administrative suspension for BAC refusals allows offenders to escape prosecution. Criminalizing refusal will help by allowing the prosecution of offenders who refuse a BAC test.	25% nationally and in Wyoming

Date	Title	Organization/Author	Description or Abstract	Refusal Rate
Oct. 2007	Use of Warrants for Breath Test Refusal: Case Studies	Hedlund, J.H.; Beirness, D.J.	REPORT This study examines the use of warrants to obtain blood samples in several jurisdictions, and finds that test refusals have decreased significantly in those jurisdictions since the use of warrants was implemented.	10%-15% in Michigan, 5% in Arizona, 17.3% in Utah, 5.3% in California
Related Topic Publications				
1986	Analysis of the Effects of Recent Changes in Minnesota's DWI Laws, Part III: Longitudinal Analysis of the Policy Impacts	Cleary, James; Rodgers, Alan	REPORT: Implied-consent laws have created new grounds for license revocation, which used to be a consequence only of conviction. The introduction of chemical testing as evidence led to the notion that anyone who has the privilege of driving has implied consent to a chemical test (p. 69).	33% (before adoption of mandatory testing amendment in 1984)
1998	Problems and Solutions in DWI Enforcement Systems	Jones, R.K.; Lacey, J.H.; & Wiliszowski, C.H.	REPORT: This report mentions test refusal as a problem in DWI enforcement because breath-test results are a crucial piece of evidence. It details the process followed when a suspect refuses a BAC test (pp. 41, 61).	No rate mentioned
2001	DWI System Improvements for Dealing with Hard Core Drinking Drivers: Enforcement	Simpson and Robertson: Traffic Injury Research Foundation	REPORT: This report outlines the problem, consequences, and solutions of refusal. It presents the consequences of preventing the collection of important evidence, and the solution of increased penalties for refusal (p. 17).	5% - 50%
2001	DWI System Improvements for Dealing with Hard Core Drinking Drivers: Prosecution	Robertson RD, Simpson HM: Traffic Injury Research Foundation	REPORT: The report describes refusal and the problems that result for the prosecution when chemical test evidence is not available. It recommends that laws should be changed to remove the benefits of refusing (pp. 43-44).	Varies from 2% - 71%, but national average of 20%
2001	Enforcement of Zero Tolerance in the State of Washington — Evidence from Breath-Test Records	Blackman KO, Voas RB, Gullberg RG, Tippetts AS	ARTICLE (peer-reviewed): This article examines the enforcement of Washington's zero-tolerance law by using breath-test records. Research showed that the implementation of a zero-tolerance law was associated with a significant increase in refusals for drivers aged 17 and younger and a significant decrease in refusals for drivers older than age 18.	24.12% in Washington on 1998
2002	Drunk Driving: Seeking Additional Solutions	Hedlund and McCartt: AAA Foundation for Traffic Safety	REPORT: This report recommends making penalties for refusing a test greater than penalties for taking and failing a test.	14% in Minnesota and 38% in Illinois

Table 2
Number of States (and DC) with Legislation Influencing Refusals

Penalties for refusal greater than for test fail (admin sanction)	BAC Test (implied consent) refusal a criminal offense	BAC test refusal not permitted	Refusal counts as prior	.08 BAC per se	High BAC penalties	Lower BAC limit for repeat offenders	Zero tolerance
37	8	1	28	51	40	5	51

Table 3**Status of State Statutes – Approaches to Prevent Refusals**

Statute	States
Administrative penalties for refusal > than for test fail	37
BAC test refusal a criminal offense	8
Refusal admissible in court	48
BAC test refusal not permitted	1 (2 ^a)
Refusal counts as a prior	28

^a Jurisdictions in two states force compliance, but it is not a state requirement.