

Mothers Against Drunk Driving (MADD): The First 25 Years

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Mothers Against Drunk Driving (MADD) has arguably been one of the most successful public-health grassroots citizen advocacy organizations in the United States in the past century. In 2005, MADD celebrated the 25th anniversary of its founding. Based on a national poll by the Gallup Organization in 2005, MADD is recognized by 94% of citizens. It is generally given credit for changing American attitudes toward drinking and driving. Since MADD's founding in 1980, alcohol-related traffic deaths in the United States have decreased from an estimated 30,000 to 16,694 in 2004, according to the National Highway Traffic Safety Administration. This article examines the growth of MADD since its founding and attempts to gauge its contribution to the public's understanding of the impaired-driving problem and to the reductions in alcohol-related highway deaths and injuries that have occurred in the first 25 years of its existence.

Keywords Mothers Against Drunk Driving (MADD); Impaired Driving; Alcohol-Related Traffic Deaths; Policies

IMPAIRED DRIVING (1900–1966)

Motor vehicle crashes became a problem in the beginning of the 20th century. Alcohol has been associated with this problem from the beginning, as is indicated by publication of the first scientific report on the effect of drinking by operators of “motorized wagons” in 1904 (Editorial, 1904). The federal government was a late entrant into the drinking-and-driving field and provided only a minor amount of research funding until the establishment of the Department of Transportation (DOT) and passage of the Highway Safety Act in 1966.

By then the basic scientific foundations of the relationship of alcohol to highway crashes had been established. The classical work of Widmark (1932) in Sweden was the first to establish the basic relationship between alcohol consumption and blood alcohol concentration (BAC), and Herman Heise (1934) published the first-known research on the effects of alcohol on driving. Robert Borkenstein invented the first practical alcohol breath-testing device in 1954 (Borkenstein & Smith, 1961) and conducted the classic so-called “Grand Rapids Study” (Borkenstein et al., 1964) that determined the relationship between BAC and crash risk a decade later. Despite the scientific progress, the effect of this knowledge on the public and public policy in the United States was modest. The primary organization at the national level concerned with impaired driving was the National Safety Council's (NSC's) Committee on Alcohol, Drugs, and

Traffic Safety, which had a strong influence on state legislation. With the support of the American Medical Association (AMA), the NSC Committee promoted laws that established a BAC of .15 or greater as presumptive evidence of intoxication and guided the states through the process of adopting implied consent laws, which allow officers to require a chemical test of drivers suspected of driving under the influence (DUI) with an automatic loss of license if they refused. Despite NSC's leadership, however, most of the key laws—illegal per se laws, administrative license suspension (ALS) laws, zero-tolerance laws for underage drivers, and lowering illegal BAC limits—that influenced drunk-driving law enforcement over the next four decades remained to be enacted by most of the 50 states.

Perhaps as significant for traffic safety as the limited framework for impaired-driving law enforcement was the lack of public understanding of the specific problem presented by drinking and driving and, for that matter, the traffic crash problem in general. As Ross (1982) among others noted, during the first half of the 20th century, crashes were attributed to “driver error.” The term for such events was “accident,” implying that they were chance events. The term “accident proneness” was developed to explain why some individuals were involved in more accidents than others. Although states, beginning with New York in 1910, had all passed impaired-driving laws, they were generally termed “drunk-driving laws,” suggesting that only very heavy drinking was illegal. Impaired driving attracted little attention from the media and was overshadowed by popular entertainment that featured films such as *Animal House* and *Arthur* and comedians who found drunkenness a source of humor.

The publication of *Unsafe at Any Speed* by Ralph Nader (1965) helped to correct the popular impression that most fatal

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crashes were the fault of the “nut behind the wheel.” It made clear that limitations in vehicle design played a significant role in highway injuries and was an important factor in moving the Congress to establish the National Highway Safety Bureau (NHSB, the precursor to the National Highway Traffic Safety Administration [NHTSA]) as part of the new DOT in 1966. At about the same time, Haddon (1970), a public-health physician active in alcohol research, described a matrix approach to traffic safety that noted three elements involved in crashes—the driver, the vehicle, and the environment (roadway)—and that safety programs could be developed for each element in three periods of time—precrash, crash, and postcrash. That formulation not only highlighted the complexity of the crash problem, but also took it out of the realm of chance events and stressed the opportunity for research to produce effective interventions. Haddon’s work had a strong influence on the safety field, though it was unknown to the general public, and he was appointed head of the new federal traffic safety agency when it was established.

EARLY FEDERAL PROGRAMS (1967–1979)

Although the public and congressional attention was focused on improving the safety of vehicles, the establishment of the NHSB and the appointment of Haddon as its first director led to considerable action directed at impaired drivers. The 1968 Alcohol and Highway Safety Report to Congress (USDOT, 1968) summarized what was known about the relationship of alcohol consumption to crash risk and focused on the “problem drinker” as a primary contributor to the problem. This report provided the basis for the initiation of Alcohol Safety Action Projects (ASAPs) in 35 U.S. communities to demonstrate the potential of a comprehensive DUI enforcement and adjudication program (Levy et al., 1977). Ironically, although the new NHSB resulted from a movement away from the focus on driver responsibility to concern with the vehicle/roadway environment, the first and largest (\$88 million) traffic safety demonstration project ever funded by the federal government focused on the problem (drinker) driver.

The ASAP program encountered many of the problems that were exemplified in later “Safe Community” programs. There was some controversy over the evaluation of the projects (Levy et al., 1977; Zador, 1977; Johnson et al., 1976); nonetheless, where any of the local projects succeeded in increasing enforcement activity, crashes were reduced (Levy et al., 1977). One enduring legacy from the ASAP effort was the adoption of required educational programs for DUI offenders as standard court practice. Under this practice, DUI offenders must attend either a treatment program or a short educational program as a probation requirement (Nichols et al., 1978). This procedure was adopted nationwide, in part because of its low cost to the community, as the offenders pay for the program.

Following the ASAP program, several smaller demonstration projects were initiated to evaluate the effectiveness of specific elements of the DUI criminal justice system, such as the effect of increasing the number of DUI patrols on weekends (Voas &

Hause, 1987), the potential value of decriminalizing the DUI offense in order to increase arrests and speed up adjudication, the prohibition of plea bargaining, and the effectiveness of various sentencing procedures. Many of the research studies funded by the NHTSA have been published as governmental reports that are now out of print. These works are not accessible in the research literature, but many of them are covered in the reviews of the literature produced by NHTSA every few years (e.g., Jones & Lacey, 2002). Out of these projects came several procedures and devices that enhanced the efficiency of the criminal-justice system. For example, a list of vehicle maneuvers to alert officers that the driver was possibly intoxicated was developed, as was a three-component field sobriety test that could be used at the roadside and has become the standard field sobriety test nationwide (Burns & Moskowitz, 1977). Another product of this period widely used by the courts today is a standardized procedure for screening DUI drivers to determine the extent of their alcohol problem (Filkins et al., 1973). Finally, the NHTSA supported the development of evidential and preliminary breath-test devices by establishing qualified products lists and providing a test facility for manufacturers (NHTSA, 1984).

The early work on enforcement, adjudication, and treatment procedures, as well as the funds flowing to the states through Section 402 of the Highway Safety Act, has assisted states in improving their laws and enforcement programs. Evidence of this is indicated by the increase in DUI arrests that occurred at the end of the seventies (FBI, 1999). Unfortunately, there was no concurrent evidence of a reduction in alcohol-related crashes in the late 1970s. Although the need to evaluate the ASAPs led to the establishment of the national Fatality Analysis Reporting System (FARS) in 1975, the current system for estimating the number of alcohol-related fatalities was not established until 1982 (Rubin et al., 1998). Consequently, there are no comparable data on alcohol-related crashes for the late 1970s. Total fatal crashes, however, were increasing at that time, so it is unlikely that alcohol-related fatalities were decreasing.

What was certainly lacking was public concern with the drinking-and-driving problem. For some years, the NSC had been issuing “Don’t Drink and Drive” or “If You Drive, Don’t Drink” public service announcements (PSAs). Aside from the limited effectiveness of PSAs in promoting safety behavior (Wilde et al., 1971), it was unlikely that in a society in which drinking was a favorite pastime and in which alternative public transportation was generally lacking, public information programs alone would have much impact (Ross, 1992). The NHTSA, in cooperation with the newly founded National Institute on Alcohol Abuse and Alcoholism (NIAAA), attempted to mount a national campaign to alert the public to the drinking-and-driving problem, focusing on the number of people killed each year. NHTSA also attempted to support the ASAP problem-drinker concept by recruiting Hollywood personalities who had been problem drinkers to participate in PSAs that stressed the risk presented by individuals who cannot control their drinking. There is no evidence that any of these approaches convinced the public that drinking and driving was dangerous.

THE EMERGENCE OF MADD (1980–1982)

In the early 1980s the public’s attitude toward drinking and driving was substantially transformed. Citizen activism is generally given credit for this change. In 1978, Remove Intoxicated Drivers (RID)—the first citizen activist group dedicated to fighting drunk driving—was established by Doris Aiken in New York State. But it was not until 1980 that the victim activist movement began to garner national attention. On May 3, 1980, Candy Lightner’s 13-year-old daughter, Cari, was struck from behind by a car while walking in the bike lane with her friend. The driver did not stop. Lightner was informed by the California Highway Patrol the day after Cari’s funeral that they had arrested a man and charged him with drunk driving, leaving the scene of an accident, and vehicular manslaughter. She was told that he had been out of jail only two days since being arrested for another hit-and-run drunk-driving crash. His driving record reflected three other drunk-driving arrests—two resulted in convictions and one was reduced to reckless driving. Five days after her daughter’s death Candy Lightner and some friends decided they should start an organization of some kind to fight against drunk drivers. A friend suggested they call it “MADD” for Mothers Against Drunk Drivers (Wilkerson, 2003; Weed, 1987).

Coincident with those developments on the West Coast, a newspaper reporter named Sandy Golden was calling attention to another drunk-driving victim, Cindi Lamb, who also was attempting to combat this problem. Cindi Lamb had been struck by a drunk driver (who was a repeat offender) in 1979 that paralyzed her five-month-old daughter, Laura, from the neck down. With the help of Bill Bronrott, press secretary to Maryland Congressman Michael Barnes, Golden brought Lightner and Lamb together for a news conference with Congressman Barnes. That news event created a good amount of public attention to the impaired-driving problem, and resulted in Cindi Lamb establishing the first chapter of MADD in Maryland. Soon, the media routinely began to contact Ms. Lightner for comments as high-profile drunk-driving cases occurred (Wilkerson, 2003).

NHTSA’s national office became active in assisting Lightner and Lamb at press events. In October 1980, Lightner and Lamb held a national press event along with Congressman Barnes, Senator Claiborne Pell of Rhode Island, Joan Claybrook (the Administrator of NHTSA at that time), and Congressman Robert Matsui from Lightner’s home district. Before the press event, some MADD activists marched around the White House carrying placards. Coverage of this protest by the press put MADD on the nation’s radar screen. By the end of 1980, additional MADD chapters had been formed in California and Maryland (Wilkerson, 2003).

MADD was incorporated on September 5, 1980, as a California corporation. By June of 1981 it had achieved IRS tax-free status; later in the year, it received more than \$100,000 in private funding and \$60,000 from NHTSA to support chapter development. Articles on the organization appeared in the *Los Angeles Times* and *Family Circle*, and Lightner appeared on national television as a guest on both the *Today Show* and the *Phil Donahue*

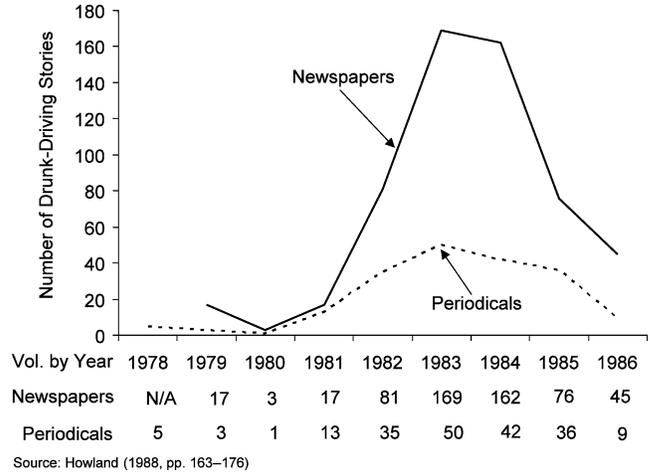
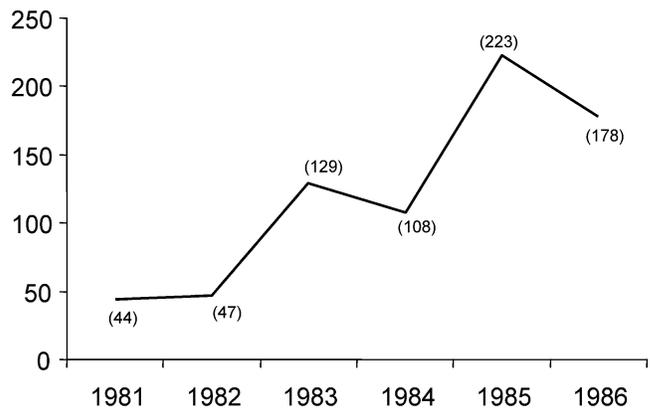


Figure 1 Number of News Stories on Drunk Driving, 1979 to 1986 (Volume of National Newspaper and Periodical Coverage of Drunk Driving by Year. Newspaper volume based on count of stories in the [National Newspaper Index includes the New York Times, the Los Angeles Times, the Wall Street Journal, and The Washington Post]). Periodical volume based on the Magazine Index).

Show. This launched MADD as the leading national advocate organization concerned with impaired driving (Wilkerson, 2003).

THE GROWTH OF IMPAIRED-DRIVING PROGRAMS (1980–1994)

Concurrent with the growth in national attention to the victims of drunk driving and the founding and growth of MADD, media coverage of alcohol safety issues increased substantially (Figure 1), as did the number of DUI laws being considered by state legislatures (Figure 2). During this period state legislatures also increased the severity of the penalties for impaired driving. Key Congressional legislation, sponsored by Congressman Michael Barnes of Maryland and Jim Howard from New Jersey, provided incentive grants for states that adopted proven enforcement strategies and measures that strengthened laws designed to deter impaired driving. These measures included laws that made it illegal per se to drive with a BAC of .10 or greater and ALS laws that provided officers with the authority to confiscate licenses of DUI offenders at the time of arrest.



Source: Howland (1988, pp. 163–176)
Figure 2 Number of drunk-driving laws passed by states from 1981 to 1986.

In part due to the stimulus provided by the emergence of the impaired-driving activist movement and by active supporters in Washington, D.C., such as Sandy Golden and Bill Bronrott, the U.S. Congress called on the White House to establish a Presidential Commission on Drunk Driving. In April 1982, President Reagan took that action by announcing the formation of the Commission; MADD was invited to participate. By the end of 1982 there were governor-appointed DUI task forces in 16 states. MADD chapters and particularly MADD state organizations were active in pushing the introduction of new legislation and supporting its passage by lobbying state legislators and officials. Beginning in 1988 with funding from the NHTSA, MADD conducted a series of state workshops for citizen activists, police officers, judges, and prosecutors to promote the need for strengthened DUI laws and more intensive DUI enforcement (Wilkerson, 2003). A major enforcement issue for NHTSA and the nation was “sobriety checkpoints,” which have been shown to be highly effective in producing general deterrence to impaired driving (Elder et al., 2002), but were viewed as unconstitutional by some legal authorities. Their legality was affirmed by the U.S. Supreme Court in the *Michigan State Police v Sitz* case in 1990, in which MADD participated by submitting an amicus curiae brief.

Perhaps most importantly during this period, Congress with support from the scientific community and MADD and its allies in the Congress enacted the national minimum legal drinking age (MLDA) law that required states to pass legislation establishing a prohibition against sale of alcohol to youths aged 20 and younger (Toomey et al., 1996). In July 1984, President Reagan signed into law the Federal Minimum Legal Drinking Age 21 (MLDA 21) Act. Senator Frank Lautenberg from New Jersey, Congressman Jim Howard from New Jersey, Elizabeth Dole (Secretary of Transportation at that time), Chuck Hurley from the NSC (and currently the Chief Executive Officer for MADD), and Bill Bronrott (from Congressman Michael Barnes staff and currently an elected Maryland Delegate), as well as others, worked closely with Candy Lightner and the MADD activists to build support for this law.

In 1988, based on a Congressional resolution, President Reagan established the U.S. Surgeon General’s Workshop on Drunk Driving that, for the first time, brought together public health and traffic-safety scientists and advocates (USDHHS, 1988). This group, in which MADD was an active participant, called attention to the significance of environmental factors, such as alcohol availability and advertising on impaired driving.

STALLED PROGRESS IN REDUCING ALCOHOL FATALITIES (1995–2005)

With the great increase in media attention to the impaired-driving problem and the surge in alcohol legislation in the 1980s, there was a heartening reduction in alcohol-related fatal crashes between 1980 and 1995 (NHTSA, 2004). This encouraged the setting of ambitious goals for alcohol-safety programs. For its 10th anniversary in 1990, MADD produced a “20 by 2000”

plan that set a goal to reduce alcohol-related traffic fatalities by 20% in the following decade—a goal that actually was met three years early in 1997. In 1995, Secretary of Transportation Federico Peña called a national meeting—“Partners in Progress”—in which MADD played a very prominent role as it established many of the agenda items (NHTSA, 1995). The meeting set an even more ambitious national goal for the reduction of alcohol-related crashes: *reduce alcohol-related fatalities to 11,000 a year by 2005*. Unfortunately, the 17-year decline in alcohol fatalities came to an end in 1997, and in 2005—the 10th anniversary of the new national goals—alcohol-related traffic fatalities remain between 16,000 and 17,000.

Despite the discouraging lack of progress in reducing alcohol-related fatal crashes, the last decade has seen the passage of important new alcohol-safety legislation in which MADD played a significant role through its state offices and congressional education activities. Among the more significant pieces of legislation was the zero-tolerance law that made it illegal for underage drivers to operate a vehicle with any amount of alcohol in their bodies. This new law was a natural complement to the existing national MLDA 21 law under which it was illegal for a person younger than 21 to drink alcohol (Hingson et al., 1994; Voas et al., 2003). The National Highway System Designation Act of 1995 (23 USC § 161, 1995) provided sanctions for states that failed to enact a zero-tolerance law by withholding a portion of their federal highway construction funds. By June 1998 all states had enacted legislation that complied with the federal zero-tolerance criteria: 12 states and the District of Columbia set the limit at .00, two states at .01, and 36 states at .02.

Another of the most significant legislative achievements advancing alcohol safety during this period was the passage of legislation lowering the illegal BAC limit from .10 to .08. Beginning in the 1970s, the DOT used its authority under the Highway Safety Act of 1966 to encourage states to adopt illegal per se laws specifying .10 BAC as the legal limit defining impaired driving. From the outset of the movement to adopt .10 BAC as the national standard, there were advocates for even lower BAC levels. In 1986, DOT formally advocated a lower illegal limit by including a .08 BAC law as one of the regulatory criteria for a supplemental alcohol traffic safety grant under the program authorized by the U.S. Congress (23 USC § 408). By 1983, this movement toward a lower BAC limit had resulted in Oregon and Utah enacting .08 laws; similar legislation was enacted in Maine in 1988, California in 1990, and Vermont in 1991.

Beginning in 1992, the growing evidence for impairment at lower BAC levels (Zador et al., 2000; Moskowitz & Fiorentino, 2000) and for the effectiveness of the .08 limit (Hingson et al., 1996; Voas et al., 2000a; Hingson et al., 2000; Shults et al., 2001), as well as MADD’s efforts with state legislators, induced 10 additional states to adopt .08 BAC per se laws by 1998: Kansas and North Carolina (1993); Florida, New Hampshire, New Mexico, and Virginia (1994); Alabama and Hawaii (1995); and Idaho and Illinois (1997). However, the movement toward a national standard of .08 BAC was slowed by the strong opposition from the alcohol and hospitality industries, claiming that the lower limit

would impact social drinking. This led to the introduction of a bill by Senator Frank Lautenberg of New Jersey and Congressman Frank Wolf of Virginia that called for the withholding of a portion of the federal highway construction funds from states that did not enact .08 legislation.

On June 15, 2000, the Senate passed H.R. 4475 (the DOT Appropriations Bill for Fiscal Year [FY] 2001) that, through the threat of sanctions, encouraged states to adopt .08 BAC laws by FY 2004. The final .08 BAC bill (Section 351) was adopted by Congress and signed by the President shortly after that (23 CFR § 1225, 2000). MADD played a prominent role in pushing the legislation, including the convening of a “Youth Summit” of 435 young people from every congressional district gathering on the Capitol steps in Washington, D.C., to visit their representatives and promote the passage of the .08 limit. New research on the .08 BAC limit has confirmed its effectiveness (Dee, 2001; Eisenberg, 2001; Bernat et al., 2004; Tippetts et al., 2005).

MADD also played a key role in the adoption of administrative license revocation (ALR) and ALS laws, which have proven to be an effective general deterrent to impaired driving (Voas et al., 2000a). Throughout the 1990s, MADD officials were key members of the Administrative License Revocation Coalition, which was established to work toward the adoption of ALR and ALS laws in the states. During the 1990s, 17 states adopted ALR/ALS laws to add to the 24 states already with these laws, at least in part due to the efforts by MADD.

Increased penalties for repeat DUI offenders also were enacted during this period. The Transportation Equity Act for the 21st Century (TEA-21) was passed by the Congress in 1998. MADD played a significant role in supporting the section of the act that provided for a minimum license suspension of one year for second DUI offenders, as well as impoundment of the offender’s vehicle or installation of an alcohol ignition interlock on the vehicle. States were required to adopt such legislation or face a transfer of funds from highway construction to highway safety programs. Both vehicle impoundment (Voas & DeYoung, 2002) and alcohol interlocks (Willis et al., 2005) have proven to effectively reduce DUI offender recidivism.

REASONS FOR THE GROWTH OF MADD

The rise of the drinking-and-driving activist movement in the early 1980s led to the formation of several citizen-activist organizations, such as RID, MADD, and Students Against Driving Drunk (SADD), together with the establishment of the Presidential Commission on Drunk Driving and its successor the National Commission Against Drunk Driving (NCADD). All of these organizations played a role in the development of public policy in the impaired-driving area. Over the last 25 years, however, they have followed different organizational paths. The reasons why MADD has emerged as the best known of these entities has interested scholars and activists. MADD was not the first such organization. RID had been founded in 1978, two years before the advent of MADD, and had several community units in the New York State area by the time MADD arrived on the

scene. The Presidential Commission was formed shortly after MADD was founded and had the full support of the federal government during its 18-month action period. It was followed by a succeeding organization (NCADD) sponsored by a broad cross-section of the U.S. industry. All four of these organizations have contributed to traffic safety and are still active today; however, MADD has the largest membership and is the best known to the public (Gallup Organization, 2005).

The growth of MADD has attracted the attention of a number of social scientists: Weed (1993), McCarthy and Crishock (1996), McCarthy and Wolfson (1996), Reinerman (1988), and Marshall and Oleson (1993). Some researchers have attributed the emergence of MADD to the charismatic personality of its founder, Candy Lightner (e.g., Weed, 1993), and certainly she played a prominent role, particularly after NBC produced a movie on her life in 1983. MADD did enjoy the advantage of a very photogenic, outspoken leader who rapidly became proficient at using the public media to spread MADD’s message (Weed, 1993; Reinerman, 1988). With this initial leadership and the support of public-media experts from the broadcast industry and the federal government, MADD developed a strong capability to respond effectively to the growing press interest in the drinking-and-driving problem. The MADD president provided what had generally been missing in the past—a ready source of comment for reporters on alcohol-related highway deaths and a personification of the drunk-driving problem by a prominent victim.

Other scientists, such as McCarthy and Crishock (1996) and Reinerman (1988), have suggested that funding and general support from the hospitality industry played an important role because they saw MADD’s policies as focused on “killer drunk drivers” and not on normal social drinkers. Reinerman noted that the alcohol industry’s interest in blaming the problem on the deviant driver, to deflect attention away from the full range of problems related to alcohol consumption, moved them to support MADD in its early years. Whatever affinity the alcohol industry felt for the MADD objectives, there is little evidence that alcohol industry financial support had a significant influence on the growth of the MADD organization. The only alcohol industry gift to MADD came from Anheuser-Busch. Reported to be \$175,000, it actually only amounted to \$50,000 in cash when the in-kind components failed to materialize. This support did not materialize until 1983, well after much larger (more than \$1 million) and more crucial contributions were received from insurance industry leaders and NHTSA in 1981 (Wilkerson, 2003). The issue as to whether MADD profited from indirect support or lack of opposition from the hospitality industry is difficult to determine because there are no useful measures of that assistance. MADD may have initially enjoyed a period during which it was not strongly opposed by the industry; however, in the 1990s, when it expanded its program to include lowering the legal limit, it encountered considerable opposition from alcohol interests that remains to this day.

Reinerman (1988) suggested that the conservative political climate represented by the Reagan presidency contributed to the

rise of MADD because its message stressed the immorality of drunk driving and the individual's responsibility for avoiding that criminal act, which fit well with that administration's conservative law-and-order philosophy. This suggestion also is difficult to evaluate objectively. Clearly, the public's sympathy for injured children can be readily aroused and the drinking driver is an easy target, but it is not clear why that message should resonate more under conservative governments because liberal governments are reputed to be more supportive of federal action in the health and safety area.

Much of the reasoning related to the emergence of MADD is based on anecdote and opinion because there is relatively little research evidence directly relating the organizations' activities to public knowledge and drinking and driving. Four conjectures can be offered for MADD's emergence as the leading grassroots organization in the impaired-driving area:

- *The "placing of a face on the traffic injury problem."* As noted, media campaigns directed at the alcohol safety problem before 1980 had failed to move the public to action. Reports of thousands of victims were just statistics and were ineffective because numbers are too impersonal to convey the toll on victims' lives and their families. Appeals to avoid drinking and driving without the public first accepting that there was a problem were, for the most part, ignored. MADD not only personalized the traffic-crash victim, but also focused attention on the most appealing of the victims—children—that caught the attention of the media and the public.
- *Governmental assistance.* In the early 1980s, NHTSA's special effort to promote community involvement in the traffic-safety problem included providing staff to support the emerging citizen-activist movement. NHTSA provided technical assistance on alcohol-safety laws and research and provided introductions to members of Congress, existing safety organizations, and the press that MADD leadership could exploit more successfully than other emerging groups at that time.
- *Recruitment of national experts.* Although it caused considerable tension and stress within the organization and contributed to the loss of its founder, MADD was ultimately successful in bringing onto its national board and into its national office experts in citizen-activist organization, traffic safety, legislation, lobbying, media, and fundraising, while maintaining a strong role for victims in the governance of the organization.
- *Effective victim services.* MADD appears to have been particularly successful in developing a strong victim-services organization as evidenced by its continuing substantial support from the Department of Justice, Office for Victims of Crime. This served as an important recruiting base for its membership. In addition, the MADD leadership was effective in bringing forward the families of victims to present their stories, which received wide coverage in the press, increasing its name recognition and supporting its fund-raising efforts.

McCarthy and Wolfson (1996) have provided a relatively detailed analysis of the growth and characteristics of the two best known drinking-and-driving activist organizations: MADD and RID. They note that between 1979 and 1985, MADD received far more national publicity than RID. MADD activists at the local level had the advantage of approaching communities that already were aware of MADD and its goals. They characterized MADD as a top-down organization, noting its stronger control over membership requirements by the national office compared to the bottom-up organization of the more loosely affiliated RID community groups. The MADD chapters tended to have larger mailing lists and budgets that were five times higher than their RID counterparts. The authors conclude that three factors account for the differences between MADD and RID: (1) the selection effects from MADD's more stringent criteria for group chartering; (2) greater interest and enthusiasm for MADD groups due to the wide popularity and knowledge of MADD; and (3) the direct chartering of the organization and its leaders, which motivated individuals to become associated with a highly prestigious national organization.

Weed (1993, pp. 330–333) has provided a sociological analysis of the early history of MADD based on the work of Weber (1964), pointing to the traditional conflict among founders of reform movements who gain authority from their victimization experiences. They attract other advocates to an organization that is not highly structured and where no one has an office, but all are answering a "call to action." In such organizations, the leader has full authority, and the unit is held together by a common passion for the cause (Weber, 1964, p. 360). The problem presented by such organizations is that to grow they must raise funds and deal with the complexities of fund-raising regulations and taxation. This requires standard business practices and procedures that may lead to a modification of goals or the setting of new goals for the organization (McCarthy et al., 1991). This, in turn, results in recruiting specialists in finance and administration into the organization who might support the objectives of the organization but do not share the passion of the victim's experience or motivation.

Weed (1993), who had access to MADD staff and records during the period from 1984 to 1987, applied this social-science theory to what he saw as the conflict in the early history of MADD between the National Board of Directors and the charismatic founder, Candy Lightner. He saw a part of the conflict as resulting from outside pressures from such organizations as the Better Business Bureau, but, ultimately, he concluded it was the inability of charismatic leadership to work with administrative structures. He gives Lightner a great deal of credit for MADD's legislative successes and building the organization, which by the time she left MADD in 1985, had grown to 360 chapters. Nonetheless, he leaves the picture of an organization bereft of its engine, with some threat to its continued existence.

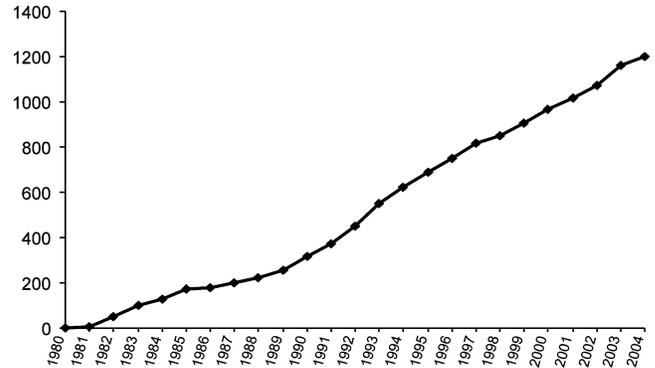
Unfortunately, Weed's analysis ended at that point and thus failed to follow the full development of the MADD organization beyond 1985. MADD ultimately developed into a large, highly organized national entity while preserving much of its

charismatic element. The organization that evolved in the years immediately following Lightner's resignation established a governing board of directors. Initially, most of the directors were drawn from the business world and were not local MADD members; however, following Lightner's departure, chapter members became the majority on the board. As is the case for most large, nonprofit organizations, MADD employs an executive director who manages the central office staff with specialists divided into several departments (e.g., field issues, programs, public policy) and reports to the Chairman of the Board. Recently, the new executive director of MADD has been given the title of Chief Executive Officer, further distinguishing that position from the national president, who is the chief spokesperson for MADD. The central office staff supports local chapters and conducts national programs. A key feature of MADD's public-media program is the president, who is always a victim member of the organization. The president fills the role of chief spokesperson for MADD and management of the central office is left to the executive director. This preserves the authority and passion of the public face of the organization without placing the burden of managing a large national staff on a victim volunteer.

A part of this organizational growth and transformation, not recorded by Weed, was the development of a strong support program for the victims of impaired drivers. A unique 21-hour training program was developed to assist members in supporting victims and helping them deal with the courts and with their physical and psychological injuries. Currently, MADD has 1,200 victim advocates trained under that program, 1,100 of whom are volunteers (100 are paid by MADD). Though less well known to the public than its campaign for stronger DUI laws, it was MADD's service to victims that helped ensure a growing membership. McCarthy and Wolfson (1996) found that victim services are strongly related to membership. In 2003, MADD provided service to more than 27,000 victims, and in 2004 served more than 31,000 victims of alcohol-related crashes.

Aside from developing a very professional model for assisting impaired-driving crash survivors and victim families, the organization promoted victims'-rights legislation to ensure that state victim-compensation laws included victims of drunk drivers. MADD also has supported a National Victim Rights Amendment to the Constitution. MADD was the first organization to develop a formal program that used victims in an intervention effort with individuals convicted of crime. The organization is currently involved with Victim Impact Panels (VIPs) in 190 communities. VIPs are designed as a therapeutic experience for the victims and an opportunity for convicted DUI drivers, most of which have not yet been in a crash, to understand the injuries that their behavior can inflict on other road users. Although Shinar and Compton (1995) found some evidence for the effectiveness of VIPs, other studies did not support their results (e.g., Polacsek et al., 2001). These results, however, do not reduce the potential importance of VIPs to the recovery of the victim.

Also not recorded by Weed—because it occurred somewhat after his study—was the integration of researchers into the development of MADD's public-policy program. As noted in the

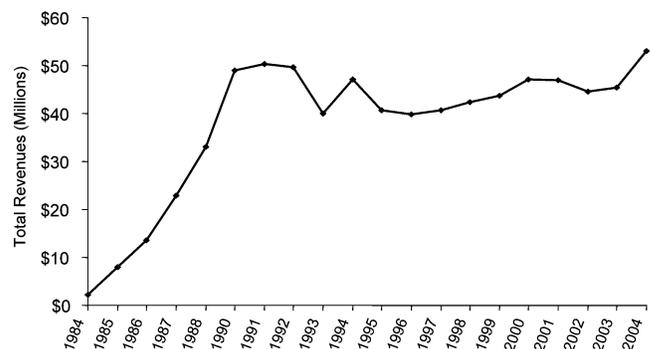


Source: MADD National Office, 2005.

Figure 3 Cumulative growth in the number of MADD chapters, 1980 to 2004.

beginning of this article, alcohol safety is a complex field requiring programs that deal with alcohol availability and consumption, as well as drinking and driving itself. To establish a broad base of national support, it was necessary for MADD to develop public policies beyond the focus of increasing sanctions for impaired drivers. This program expansion, which included not only underage drinking but also support for responsible beverage service and sales practices and safety belt legislation, was considered essential to MADD accomplishing its mission to eliminate impaired driving. However, this expansion had to be accomplished without it appearing to the public that MADD was diluting its primary mission and without diminishing the support of the volunteer members. MADD achieved this transition by inviting researchers to serve on the national board, establishing the position of vice president for public policy, and adopting the position that no policy action would be supported unless there was scientific evidence for its effectiveness.

Thus, MADD moved rapidly from a small local group with no formal structure in 1980 to a highly structured national organization with revenues of almost \$50 million by 1990 (Wilkerson, 2003). McCarthy and Wolfson (1996) attributed much of MADD's success to its organizational ability and its effectiveness in attracting members and funds. The resulting rapid expansion in the number of chapters is shown in Figure 3 and the increased revenues are shown in Figure 4. This growth was in



Source: MADD National Office, 2005.

Figure 4 Growth in total MADD revenue, 1984–2004.

contrast to the RID organization (www.rid-usa.org) that was the principal alternative victims' organization to MADD. RID, although making important contributions to the impaired-driving effort, remained an affiliation of more local, autonomous entities under the leadership of the founding members with a limited number of local chapters and limited national visibility.

The McCarthy and Wolfson study provides an interesting comparison between an organization that retained its initial, purely volunteer character and its original charismatic leader (RID) and one that went through a considerable transformation (MADD). MADD established a strong central administration, encompassing policies not in its original charter while taking steps to preserve the passion exhibited by its founder, Lightner, who was no longer with the organization. Despite some financial crises along the way and premature obituary announcements (Marshall & Oleson, 1993), MADD has become a unique organization that other activist groups might profit from emulating. The management of the organization is vested in the board, comprised of a majority of MADD members from local chapters and a professional executive director who manages the central office staff. The MADD president is relieved of administrative duties and thus is freed to act as a full-time spokesperson for the organization. The absence of its charismatic founder has allowed other victim members of MADD to represent the organization to the nation. This experience has demonstrated the power of the message—the personal stories of loss and grief—in obtaining legislative action and public support. In 2005, for the first time, a male victim was elected to the presidency of MADD.

MADD POLICY DEVELOPMENT

During its 25-year history, MADD has dealt with many issues central to highway-safety policy while developing its own program. An understanding of its efforts as a victims' organization in dealing with the wide range of critical and controversial issues in the traffic-safety and public-health fields can be instructive to similar organizations and to public-health researchers. Unfortunately, most of this activity is undocumented. However, both the authors have served on the MADD National Board in different periods of time beginning in 1982 to the present, covering most of the organization's existence, and can provide some observations based on that experience. A brief review of some major issues will assist both in understanding the way in which MADD grew into its present status and in evaluating its achievements. A few of the developmental issues encountered over the 25-year history of the organization can be described.

Individual Versus Systems Approach

The attention of victims is naturally drawn to the drunk driver and his or her conviction and sanctions. Therefore, MADD policies naturally and necessarily focused on the criminal drunk driver when it was first established. However, this emphasis is reminiscent of the "nut behind the wheel" approach to traffic safety in the first half of the 20th century. That impaired drivers cause crashes is not doubted. Alcohol-related incidents,

however, are influenced by a multiplicity of factors: those in the criminal justice system, such as safety campaigns, driver licensing, traffic-law enforcement; those in the alcohol regulatory system, such as alcohol sales taxes and beverage-service practices; and those in the drinking-and-driving environment, such as alcohol advertising and alternative transportation strategies. Public-health researchers, such as Holder (1987) and Wagenaar and Farrell (1989), and criminologists, such as Ross (1992), have focused on environmental factors central to the long-term challenge of reducing alcohol problems including drinking and driving. To encompass the broader field of environmental prevention it was important to avoid a limited focus on the "killer drunk" (Gusfield, 1981).

A critical concern of any organization is to maintain its identity and stay on target. Early in its history, MADD was faced with a focus on the individual offender versus the environmental prevention issue when it became involved in the movement to raise the drinking age to 21. This issue clearly falls into the realm of alcohol regulation, but also is definitely related to underage impaired-driving crashes (Wagenaar & Wolfson, 1994; Shults et al., 2001). Lightner recognized this relationship and, although this threatened a dilution of the MADD mission of focusing on drunk drivers, led the organization to strongly support the measure. Over time, MADD broadened its support to other alcohol-safety issues, such as zero-tolerance laws for youth and .08 per se laws, as well as programs related to alcohol sales. This broadening of the MADD agenda was institutionalized when in 1985 the name was changed from *Mothers Against Drunk Drivers* to *Mothers Against Drunk Driving*.

Position on Drinking Versus Drinking and Driving

From its inception, MADD was faced with the conflict between measures to control drinking and driving and policies and programs to control alcohol consumption. This problem was a part of the individual versus systems approach just discussed. There is substantial evidence that alcohol availability, particularly to youth, is related to the frequency of impaired-driving crashes (Wagenaar & Holder, 1991, 1995). It was inevitable that MADD would be challenged to take positions on such issues as underage drinking, alcohol taxation, and alcohol advertising. Moreover, even if such issues could have been entirely avoided, purely traffic-safety policies, such as lowering the illegal BAC limit to .08, brought MADD into conflict with most of the alcohol and hospitality industries. Some representatives of the alcohol industry saw that as an attack on their core clientele of "social drinkers" (Peña, 2003). MADD has attempted to maintain the distinction between its opposition to drunk driving and advocacy of the responsible use of alcohol by adults. It is often difficult to maintain such a separation in public statements when research suggests that any measurable amount of alcohol affects performance (Moskowitz et al., 1985, 2000). Thus, the "best practice" is no driving after any drinking, a message that provokes a response that the speaker is a neoprohibitionist (Peña, 2003).

This issue of MADD's position on drinking, as opposed to impaired driving, became a focus of the political controversy

over the reduction of the legal limit from .10 to .08 in the period leading up to action by the U.S. Congress in 2000. Using a BAC prediction system (NHTSA, 1994) to estimate the BAC of a small woman and large servings of wine consumed rapidly on an empty stomach, spokespersons from the alcohol industry claimed that two glasses of wine could result in an .08 offense (Peña, 2003). The alcohol industry, and particularly the Century Council, also promoted the concept of the “hard core drinking driver” from Simpson, Mayhew, and Beirness (1996), which suggested that the emphasis in drinking-and-driving programs should be placed on drivers with high BACs in the .15 or higher range rather than those with low or moderate BACs. Thus, they claimed that MADD was focusing on social drinkers rather than the problem drinkers at highest risk for crash involvement. The issue was further sensitized by the AMA calling for lowering the illegal BAC to .05. This supported the alcohol industry’s contention that the .08 limit was just the first step in the direction of lowering the legal BAC to .05 (the current level in most of Europe) or even to .02 (the current level in Sweden). Although MADD spokespersons have never advocated moving to the .05 level, some representing the alcohol industry pushed the view that “The road to neo-Prohibition proceeds along two lines of attack. First, anti-drunk-driving advocates aim to steadily decrease the amount of alcohol a motorist can consume before becoming a criminal. Second, the movement works to ever expand the settings where *any* drinking of alcohol beverages is verboten” (Peña, 2003, p. 7). Although MADD succeeded in promoting the passage of a Congressional mandate to the states to adopt .08 per se laws and all 50 states and DC now have such laws, the problem of fending off claims that it is “prohibitionist” remains.

Punitive Versus Remedial Measures for Drunk Drivers

When their loved ones have been seriously injured or killed, the victims naturally demand severe sanctions for the offenders. An early goal of MADD public policy was to demand jail terms for first offenders as well as multiple DUI offenders. In the 1960s and 1970s sanctioning of DUI offenders by the courts was relatively lenient, even to the extent of avoiding license suspension in many cases. Appropriately, MADD supported more substantial penalties to strengthen general deterrence and to prevent convicted offenders from immediately getting back on the road. Thus, MADD played an important role in encouraging states to lengthen the periods of license suspension and to adopt ALS laws.

The call for jail for first offenders and increased jail time for multiple offenders was more controversial. The jail sanction can be seen as having what Ross (1984) has called a short-term “general deterrence” impact on potential drunk drivers and a long-term “educational” component (Andenaes, 1974) for society as a whole that characterizes impaired driving as a crime. Thus, jail had a potential role to play in combating the public disregard of the drinking-and-driving problem before 1980. However, jail space is limited and the cost of confinement to the community and the criminal-justice system is high, as noted in a study of the California legislation requiring jail sentences for first offenders

by Kinkade and Leone (1992). Although there is some evidence (Zador et al., 1988) that jail is effective in producing general deterrence, that evidence is compromised by the fact that most state laws mandating incarceration provide for the substitution of community service due to the lack of jail space. Further, there is no evidence that serving jail time reduces future recidivism (Voas, 1985). Consequently, MADD has accepted the limitations of jail for first offenders; although, it continues to support longer license suspension periods. However, MADD’s position on jail sentences for multiple offenders remains unchanged. Despite its initial punitive focus, MADD also has come to support improved treatment programs for offenders as it has accepted the evidence that offenders, particularly multiple offenders, exhibit drinking problems (Wells-Parker & Williams, 2002) and that court treatment programs are effective (Wells-Parker et al., 1995).

Participation in Safety-Belt Campaigns

The prevention of impaired driving and the use of safety belts are two of the three most important driver-behavior issues related to crash injury (along with excessive speed). Early in its history, MADD’s effort to keep on message was challenged by the issue of supporting safety-belt messages and particularly safety-belt laws. Many national organizations adopted safety belt laws as a central element of their programs and the NHTSA initiated programs to encourage states to adopt primary enforcement safety belt laws, so there was not a direct need for MADD to be involved. Even so, there are a number of possibilities for combined enforcement campaigns such as checking safety-belt use at sobriety checkpoints and detecting impaired drivers during nighttime safety-belt usage enforcement activities. Initially, some were concerned that this would dilute MADD’s drinking-and-driving message, but, ultimately, these concerns were resolved by promoting safety belts as the best protection for potential victims against the drunk driver. This ability to assume other key safety measures within the MADD mission was probably an important factor in keeping the organization within the mainstream of the highway-safety movement.

Integration of Youth Programs into MADD Activities

Early support for the MLDA 21 law represented MADD’s first major step toward broadening its original focus on the criminal drunk driver. This commitment was carried forward in its strong support for the national zero-tolerance law. This law established a legal base for reducing the availability of alcohol and controlling underage impaired driving and also presented a challenge to MADD for the inclusion of youth in its activities, particularly in the areas of alcohol safety and enforcement of underage drinking-and-driving laws.

A national organization of youth called “Students Against Driving Drunk” developed independently. In the early nineties, the two organizations entered into discussions of the possibility of an amalgamation (Wilkerson, 2003). This did not occur for a number of reasons, but clearly a central issue was that the SADD leadership was uncomfortable with strongly supporting

the MLDA 21 and zero-tolerance laws. SADD went on to change its name to “Students Against Destructive Decisions,” and its focus is primarily on peer-to-peer education programs.

Consequently, the MADD leadership still needed to develop a system for mobilizing underage youths concerned with impaired driving. Its approach was to develop an outreach program—Youth in Action (YIA)—to youths. This program established youth groups (principally at the high-school level) sponsored by local MADD chapters. The YIA program partners young people with adult leaders in the community to work toward “environmental” prevention strategies. Projects focus on strengthening enforcement of underage drinking laws and policy change. YIA teams have been trained in more than 40 communities across the country. These young activists have proved to be particularly effective in drawing the attention of the press and community members to the underage drinking problem. Their partnerships with local law enforcement agencies, schools, and community leaders have helped to promote local enforcement programs and support key underage-drinking legislation (Fell, 2004).

The power of young activists also was mobilized at the national level through a National Youth Summit conducted in 2000. The summit had a potentially significant effect on the congressional passage of the .08 BAC limit. This effort to recruit youth involvement culminated in the establishment of a youth position on MADD’s National Board in 1998 and in 1999 and the modification of MADD’s mission statement “The mission of Mothers Against Drunk Driving is to stop drunk driving and support the victims of this violent crime” to include the words “and prevent underage drinking” (Wilkerson, 2003).

Coordinating Policy with Research

A large number of policies and programs can influence impaired driving. Several of these policies (such as ALS laws, .08 laws, and MLDA 21 laws) have been evaluated, and their effectiveness has been well documented. Other measures have not been evaluated or have been poorly assessed. In the rapidly developing technological area dealing with impaired driving, new devices and measures touted to be effective in preventing or reducing injuries appear regularly. Only recently has the Centers for Disease Control and Prevention (CDC) initiated a coordinated effort to assess major countermeasure programs (Shults et al., 2001). As with other organizations, MADD has been repeatedly faced with decisions about which programs to support and the level of effort that should be devoted to their promotion.

Such issues arrived early for the MADD leadership. Some of the policies growing out of the victims’ concern with strong penalties for drunk driving, such as jail terms, were difficult to implement and not as well supported by research as other policies, such as ALS and MLDA 21. To meet the need for expert advice on program priorities, MADD leaned heavily on the NHTSA’s research and program staff and a few outside scientists. In 1990, MADD Public Policy Committee Chairman, Beckie Brown, convened an advisory group of scientists to develop recommendations for action over the next decade titled “20 by 2000.” This group provided a set of priorities based on

the best research available at the time and provided consulting services on program issues as they arose (Brown et al., 2004). The general success of that program led to the national board adopting the principle of only supporting laws and policies for which there was scientific evidence of effectiveness. The reliance on scientific information to guide policy and program planning was further institutionalized by providing two positions on the national board for research specialists. In recognition of MADD’s efforts to coordinate policy based upon scientific research, the International Council on Alcohol, Drugs and Traffic Safety (ICADTS) presented the MADD organization the prestigious Widmark Institutional Award in 1995. In recognition of Ms. Brown’s individual efforts, she was given the Haddon Award in 2004 by ICADTS for advocating “scientifically-based changes in public policy which have reduced the adverse effects of alcohol or other drugs on traffic safety.”

Increasing Membership Diversity

The founders of the drunk-driving activist movement initially tended to be White and, for the most part, early chapters were formed by White middle-class victims. Because a major source of new members for MADD was the service that members provided to the victims of alcohol-related traffic crashes, and because this activity had to be highly sensitive to the stress that the families of crash victims were under, it was natural that members could bond best with individuals most like themselves. Consequently, MADD grew into a predominantly White organization and experienced some difficulty in providing victim services to minorities. The MADD National Board recognized this limitation and in 1997 established a diversity task force with the objective of strengthening the minority membership of MADD. This led to the development of a permanent position on the national office staff for a Diversity Coordinator. In 1999, in conjunction with the NHTSA, MADD sponsored a National Diversity Forum in Florida, to which the leaders of the nation’s major minority organizations were invited. This movement toward diversity is critical to MADD’s continued growth, because research indicates that certain minorities, such as Hispanics, are more involved in drinking and driving and alcohol-related crashes and minority involvement in this problem will grow as they become a larger part of the driving population (Voas et al., 1998, 2000b). In 2004, of the 15,346 new victims served by MADD—where the ethnicity of the victim was known—15% were Black, 13% were Hispanic, and 69% were White (MADD, personal communication from the MADD National Office, Irving, Texas, 2005). At the present time, the MADD national president is an African-American male.

Influencing State Programs

Funds for state traffic-safety programs are managed through the state offices of highway safety and are under the control of the Governor’s Highway Safety Representative. In the early days of the Highway Safety Act, NHTSA regional administrators exercised considerable influence over state expenditures under their authority to review and approve the annual safety plans

submitted by the state directors. Over time, resistance by some state officials to submitting the plans for review and approval resulted in the abolishment of that requirement in favor of requiring the state to go through a prescribed planning process without the detailed approval process. This resulted in less federal influence on state safety programs. NHTSA might have strengthened its influence by establishing some national performance criteria for rating state programs, but the agency apparently determined that this was not practical given the political sensitivities surrounding the distribution of highway safety funds.

The MADD leadership became concerned that, as a result of the weakening of federal influence over state highway-safety expenditures, support for alcohol-related countermeasure programs was decreasing. Consequently, MADD began to provide regular appraisals of the adequacy of state highway-safety programs. This involved considerable political risk, as low assessments were likely to antagonize state officials and the failure to be critical risked a lack of credibility. The availability of the core group of researchers and highway-safety specialists brought together by Brown to develop the “20 by 2000” plan provided the basis for designing a comprehensive survey of state impaired-driving countermeasure programs. The survey was conducted by the state MADD chairman or public-policy specialist by contacting state officials and gathering information on state laws, programs, and traffic statistics.

In 1991, MADD launched its “*Rating the States*” (RTS) program, which became a continuing series of reports (MADD, 1991–2005) that provided a letter-grade score in nine impaired-driving program areas: DUI laws, DUI enforcement, DUI sanctions, underage-drinking programs, victims’ issues, political leadership, state traffic-records systems, regulation and control of alcohol sales, and alcohol-related fatality trends. Each report was released at a national news conference that garnered extensive coverage by the news media. Individual state press events also were held. As expected, some state officials were outraged when their state programs received low grades. Nonetheless, in several states, the news coverage stimulated action by the governor or the state legislature to adopt much needed legislation (Russell et al., 1995).

Much of the information that went into the RTS program was qualitative, thus making it less usable for program evaluation. Despite this limitation, Shults et al. (2002) found that the RTS grades that the states received were associated with self-reported impaired driving in those states. This association between MADD state grades and a measure of alcohol-impaired driving was calculated using multiple logistic regression analyses on the Behavioral Risk Factor Surveillance System (BRFSS) survey data from each state. Those living in states with a MADD grade of “D” were 60% more likely to report driving after drinking too much than those living in states that received an “A” grade from MADD. The association was for both men and women. These findings suggest that stronger state-level DUI laws, enforcement, and programs are associated with reductions in alcohol-impaired driving (Elder et al., 2002).

These policy adaptations to the ongoing federal and state program activities appear to have helped MADD broaden its base

while still maintaining its identity as the premier victims’ organization concerned with impaired driving. Had the organization not been able to incorporate the broader objectives growing out of traffic safety and public-health research, it would have had difficulty obtaining the support of government agencies and other related safety organizations.

EVIDENCE FOR THE EFFECTIVENESS OF MADD

Press reports and statements by governmental officials and safety activists provide a vast amount of qualitative evidence for MADD’s effect on the impaired-driving problem in the United States (Gladwell, 2001). However, crashes are a function of a complex set of factors that makes the evaluation of any intervention effort difficult. Attempting to assess the effect of the wide variety of programs and policies sponsored or promoted by MADD over 25 years using objective data is clearly difficult to accomplish with any precision. This is particularly true as many organizations (NHTSA, NSC, RID, state and local officials, and individual industries) are working toward the same goals, so teasing out the relative contribution of each organization is clearly not possible. Perhaps the best analysis can be made by considering the factors that enter into the general model for predicting crash involvement. There is general acceptance of the relationship between laws, their enforcement, and public education on driver perceptions of the risk of being caught for DUI and punished which affect public attitudes toward impaired driving. These perceptions and attitudes are, in turn, related to crash involvements. Thus, the causal model (Figure 5) may be useful in analyzing the potential effect of MADD’s programs on crashes.

Legislation

MADD played a major role in the strong growth of impaired-driving legislation shown in Figure 2. Merki and Lingg (1987) concluded that MADD had been a major force behind the adoption by the states and communities of eight effective impaired-driving strategies. Perhaps the six most important pieces of alcohol safety legislation in state legislatures in the last quarter century were (1) MLDA 21 laws, (2) zero tolerance for youth laws, (3) .08 BAC limit laws, (4) ALS laws, (5) illegal per se laws, and (6) increased sanctions for repeat DUI offenders. MADD played a central role at both the national and the state levels in obtaining the passage of the first three laws, as was indicated by the MADD president being invited to speak at the formal signing of each of the bills. MLDA 21, zero-tolerance, and .08 laws were the only pieces of safety legislation for which the Congress authorized the withholding of highway safety funds from states that did not enact the legislation. MADD’s role in the other three legislative areas also was substantial. The movement of the states to illegal per se laws was already underway before MADD was founded, but MADD support hastened the adoption of the legislation during the 1980s and 1990s.



Figure 5 Model of major elements in law enforcement programs to reduce alcohol-related crashes.

MADD played a direct role in the drafting of the TEA-21 legislation that strengthened the sanctions for repeat DUI offenders. MADD's role in the adoption of ALS laws was previously discussed.

Enforcement

At the community level, MADD chapters have supported police-enforcement activities by demanding strong DUI enforcement and acknowledging police efforts through annual awards to the officers who make the most DUI arrests. At both the local and national levels, MADD has supported sobriety checkpoints. At the national level they have supported special incentive funding for checkpoints under Section 410 of the Highway Safety Act. They also submitted an amicus curiae brief in support of checkpoints when the U.S. Supreme Court reviewed the issue in the *Sitz* case. FBI crime-record data (Figure 6) indicate that DUI arrests began to rise in 1978, before the advent of MADD, indicating that the effort of the NHTSA to provide new tools for the police and to finance DUI enforcement programs through the Highway Safety Act was beginning to pay off. However, DUI arrests reached their peak between 1982 and 1992, the years in which MADD was most visible and politically active, so it is probable that MADD was important in sustaining this rise in enforcement activity.

Although Ross and Voas (Ross, 1982; Ross & Voas, 1990) noted that the probability of apprehension is the most important factor in producing deterrence, the severity of the sanction and the speed with which it follows the arrest also are important factors in deterrence. At the beginning of the 1980s, DUI offenders were frequently given relatively light sentences. The driver involved in the death of Candy Lightner's daughter was a three-time offender. Thus, from the beginning of the movement there was active concern with court-sentencing practices. Consequently, MADD developed an active court-monitoring process that Compton (1988) credited as having a positive effect on the adjudication of DUI offenders. Additionally, MADD actively supported efforts at the state level to pass ALS laws, which have been shown to be associated with crash-injury reductions (Zador et al., 1988; Voas et al., 2000a) and gave such legislation high priority in its RTS program.

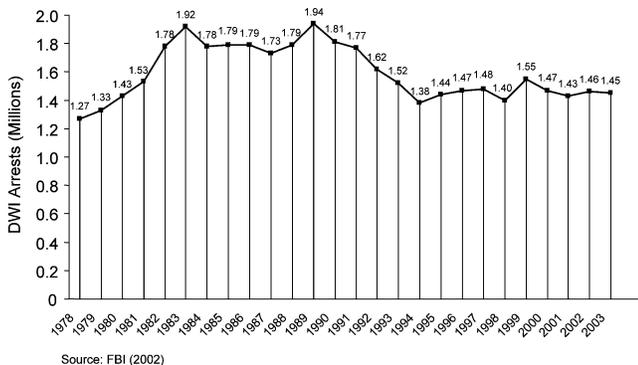


Figure 6 Estimated DUI arrests in the United States (1978 to 2003).

Publicity

Figure 1 clearly shows a major increase in media coverage of the drunk-driving issue beginning in 1980. Most observers (McCarthy et al., 1987) have given credit to victim activist groups, particularly MADD, for this sudden increase in press coverage. As noted, MADD has maintained a public-relations capability to respond rapidly to print and electronic media inquiries through statements and interviews with its president. Although media coverage has declined since the early 1980s, MADD still has kept the issue before the public, particularly in connection with holiday periods and highly publicized crash events and by responding to attacks on MADD supported programs by some of their critics.

Deterrence

Surveys shortly after MADD's founding indicated a reduction in reported drinking and driving. The Harris polling organization reported that its annual national survey of U.S. adults showed an increase in respondents who said they never drink or never drove after drinking from 68% in 1983 to 74% in 1986 (Howland, 1988, p. 169). The CDC also reported reductions in reported impaired driving in its state behavioral risk surveys. The percentage of respondents who reported "driving after drinking too much" decreased from 5.5% in 1984 to 4.5% in 1986/1987 (CDC, 1986a, 1986b, 1987).

More recent surveys have shown a continuing public awareness of the drinking-and-driving problem. Unfortunately, there have been no completely comparable drinking-and-driving surveys that cover the period from 1980 to the present. NHTSA has conducted biannual national surveys since 1990. These surveys indicate little change during the 1990s in the percentage of U.S. residents who report driving within two hours of drinking in the past year (Royal, 2000), despite the change in trend in alcohol-related fatal crashes (Figure 7). The role of MADD in producing deterrence to drinking and driving is difficult to determine. However, two national Gallup surveys conducted in the early 1990s indicated that 71% of the public recognized MADD's name unaided and, when the term MADD was recognized, 95% perceived that it was effective in reducing drunk driving (Gallup, 1993, 2000, 2005). This suggests that, at least

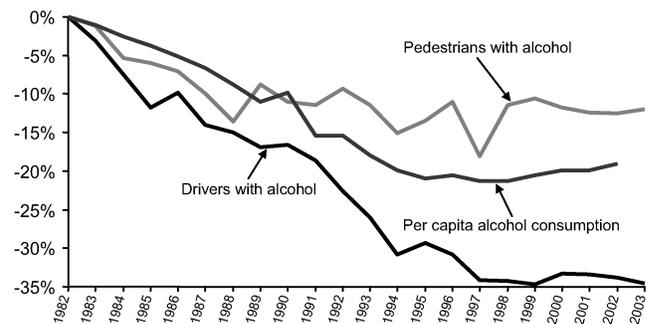
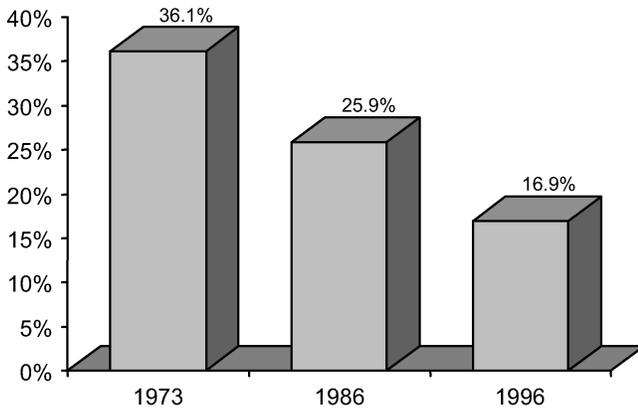


Figure 7 Percentage of reduction in fatally injured drinking drivers and pedestrians and per capita alcohol consumption in the U.S. from 1982 base line year.



Source: Voas et al., 1998

Figure 8 Percentage of weekend nighttime drivers with positive BACs on U.S. roads.

by the second decade after its founding, MADD was having an impact on the public's view of impaired driving.

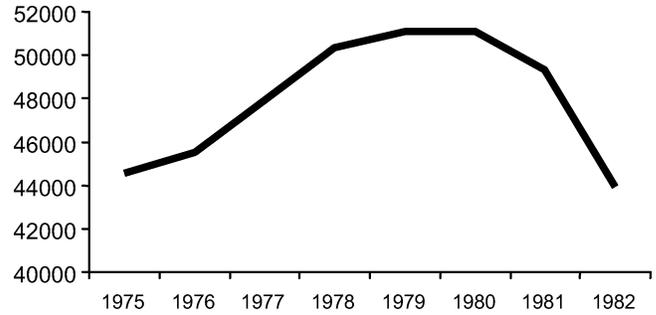
Impaired Driving

National surveys of weekend nighttime drivers on U.S. roads were conducted in each of the last three decades of the 20th century. The results of these surveys (Figure 8) provide strong evidence of a substantial reduction in impaired driving in the United States between 1973 and 1996 (Voas et al., 1998). The point at which the downward trend from 36.1% of drivers with positive BACs in 1973 to the 25.9% in 1986 cannot be determined, so the role of MADD in this change is unclear, though it is likely based on the trends in publicity and DUI laws, much of which occurred after 1980. The reduction between 1986 and 1996 clearly occurred during the period in which MADD had established itself as the leading advocate organization with chapters throughout the country. The decade from 1986 to 1996 corresponds to a period after which much of the early surge in legislation peaked (see Figure 2) and was in place in many states, presumably having an effect on impaired driving.

Alcohol-related Crashes

One study (McCarthy & Ziliak, 1990) that has attempted to directly measure the MADD contribution to crash reduction was limited to the state of California during the years from 1982 to 1985. Using data from state crash files and the number of MADD chapters, the authors concluded that the incidence of DUI crashes in a locality increases the probability that a MADD chapter will be established in the community and that the presence of a MADD chapter significantly reduces the number of DUI injury crashes. McCarthy and Ziliak also confirmed the expectation that a higher level of enforcement activity reduced alcohol-related injury crashes.

A more qualitative estimate of the impact of MADD on crashes can be deduced from the trend in alcohol-related fatal crashes. The FARS is a census of all fatal crashes on U.S. roadways since 1975, but the current system for estimating alcohol-related fatalities was not initiated until 1982. Based on the NHTSA imputation system (Subramanian, 2002), alcohol-



Source: NHTSA, 2004

Figure 9 Total U.S. highway fatalities 1975 to 1985.

related traffic fatalities have declined from 26,173 in 1982 to 16,694 in 2004, a 36% decrease, whereas non-alcohol-related traffic fatalities have gradually increased from 17,772 in 1982 to 25,942 in 2004, a 46% increase. Similar percentages for 1975 to 1982 are not available, but as shown in Figure 9, the *total* annual number of traffic fatalities during that period increased during the last half of the 1970s, peaked in 1979 and 1980, but declined in 1981 and 1982. Thus, there is no indication of a significant reduction in alcohol-related fatalities before 1981. Beginning in 1982, the percentage of all fatally injured drivers and all fatally injured pedestrians who had had been drinking (with positive BACs) declined from 1982 through 1995 and then leveled off for the next decade (Figure 7). The reduction in the percentage of fatally injured drivers who were drinking was substantially greater than that experienced for fatally injured pedestrians. The percentage reduction in fatally injured drivers with alcohol also was greater than the percentage reduction in per capita alcohol consumption. This suggests that the change in national alcohol consumption that might have produced much of the reduction in fatally injured drinking pedestrians did not account for the larger reduction in impaired driver deaths. Because MADD targeted drivers, not pedestrians or drinking in general, this difference supports the hypothesis that it had an effect on drinking-driver deaths and injuries beyond that which might be accounted for by the observed reduction in alcohol consumption.

The reduction in alcohol-related fatalities following the emergence of victim-activist groups supports the hypothesis that they had an important effect on highway safety in the 1980s. The continuation of substantial reductions into the early 1990s when MADD emerged as the primary victim-activist organization suggests that it had the primary influence on the observed reduction. It is estimated that more than 300,000 lives have been saved due to the reduction of alcohol involvement in fatal crashes from 60% in 1982 to 39% in 2004 (Table I).

However, to accept the hypothesis that MADD was partially responsible for the observed reductions requires a comparison set of data not influenced by a victim-activist organization. Because alcohol-related fatalities in other industrialized countries also were reduced during the 1980s (Sweedler et al., 2004), the interpretation of the relationship of MADD to the reduction in alcohol-related fatalities in the United States must be guarded.

Table I Lives saved due to the reduction of alcohol involvement in fatal traffic crashes from 1982–2004, source: Fell (1995)

Year	Total Traffic Fatalities	Alcohol-Related Fatalities		Non-Alcohol-Related Fatalities		Estimated Total Fatalities if Alcohol-Related had Remained at 1980 Level	Lives Saved due to Reduction in Alcohol in Fatal Crashes
		%	Number	%	Number		
1982	43,945	60%	26,173	40%	17,772	43,945	—
1983	42,589	58%	24,635	42%	17,954	44,395	1,806
1984	44,257	56%	24,762	44%	19,495	48,205	3,948
1985	43,825	53%	23,167	47%	20,658	51,081	7,256
1986	46,087	54%	25,017	46%	21,070	52,100	6,013
1987	46,390	52%	24,094	48%	22,296	55,132	8,742
1988	47,087	51%	23,833	49%	23,254	57,500	10,413
1989	45,582	49%	22,424	51%	23,158	57,263	11,681
1990	44,599	51%	22,587	49%	22,012	54,429	9,830
1991	41,508	49%	20,159	51%	21,349	52,790	11,282
1992	39,250	47%	18,290	53%	20,960	51,828	12,578
1993	40,150	45%	17,908	55%	22,242	54,998	14,848
1994	40,716	43%	17,308	57%	23,408	57,881	17,165
1995	41,817	42%	17,732	58%	24,085	59,555	17,738
1996	42,065	42%	17,749	58%	24,316	60,126	18,061
1997	42,013	40%	16,711	60%	25,302	62,564	20,551
1998	41,501	40%	16,673	60%	24,828	61,392	19,891
1999	41,717	40%	16,572	60%	25,145	62,176	20,459
2000	41,945	41%	17,380	59%	24,565	60,742	18,797
2001	42,196	41%	17,400	59%	24,796	61,313	18,881
2002	43,005	41%	17,524	59%	25,481	63,007	20,002
2003	42,884	40%	17,105	60%	25,779	63,744	20,860
2004	42,636	39%	16,694	61%	25,942	64,147	21,511
TOTAL LIVES SAVED							312,549

If the proportion of alcohol-related fatalities had stayed the same as 1980–1982, lives saved per year could be calculated by converting the 40% non-alcohol-related to decimal .4044147 and dividing the non-alcohol-related fatalities each year by this decimal. As in 1983, non-alcohol-related fatalities were 17,954. If divided by the decimal .4044147, the estimated total fatalities if the proportion had remained the same would be 44,395. Taking the 44,395 and deducting the actual 1983 fatalities of 42,589 would result in a figure of 1,806 lives saved. This same formula would be used for each year. Alcohol-related fatalities from 1982–2004 are from the new FARS Imputation Method.

The relationship of MADD activities to news coverage, state DUI legislation, the reductions in impaired drivers on the road, and the alcohol-related fatalities described herein have generally persuaded researchers that MADD should receive substantial credit for the reductions in alcohol-related highway injuries in the United States. Aside from the McCarthy and Ziliak (1990) study that found a measurable relationship between the presence of a MADD chapter and a reduction in DUI-related injury crashes, Merki and Lingg (1987) concluded that MADD has been a major force behind whether states and communities adopted eight effective impaired-driving strategies. Marshall and Oleson (1996) described the beneficial effects of MADD's victim services, and McCarthy and Wolfson (1996) concluded that an affiliation with MADD appears to energize local leaders in countering drunk driving. Compton (1988) found a preliminary effect of the adjudication of DWI offenders due to MADD's court-monitoring program.

Although the focus of most evaluations of MADD have been on the extent of its impact on alcohol-related crashes, ironically, its most important impact may have been on the public's attitude about drinking itself. MADD played an important role in the passage of the national MLDA 21 law. O'Malley and Wagenaar (1991) demonstrated that youths growing up in states

with such laws drank less once they came of age than did youths from states where the drinking age was lower than 21. By making impaired-driving socially unacceptable MADD created a standard for consumption and a credible basis for those who choose not to drink to provide the socially condoned excuse that "I am driving." Although publicizing the impaired-driving problem has not resulted in drivers avoiding drinking, it has placed pressure on those that might otherwise consume more heavily. It is possible that the campaign against drinking and driving, with greater enforcement and more severe sanctions for offenders, has had an impact on alcohol consumption. Data from youths leaving heavy-drinking locations (Lange et al., 2006) have demonstrated that, relative to passengers, patrons who are drivers have lower BACs.

A potentially unintended negative consequence of the success of the anti-drunk-driving campaign, compared to other public health educational efforts, is that, although the public recognizes the driving risks involved in heavy drinking, they have failed to appreciate other alcohol-related health risks, such as nontraffic injuries, violence, and risky sexual behavior. This is manifested in parents who preside at teen beer parties under the impression that as long as they confiscate the car keys and keep the youths from driving, the young people are safe (e.g., Balko, 2005).

LOOKING TO THE FUTURE

MADD's 25th anniversary came approximately 40 years after the initiation of federal efforts in the field of alcohol safety with the establishment of the NHTSA. During that time alcohol-related fatalities have decreased by at least 35%. That is a substantial success, but the failure over the last decade to make substantial progress is disappointing. Given the relatively strong criminal-justice framework constructed over the last four decades, a critical question for the future is "What remains to be done?" In the 1980s when MADD was founded, the alcohol safety infrastructure at the state level was incomplete. Many states lacked the basic foundations of an alcohol-safety legislative system, including illegal per se laws, ALS, MLDA 21 laws, and zero-tolerance laws. Most states had established relatively high BAC limits for driving at .10 or .15, and the sanctions for DUI offenders were low or compromised by plea bargaining and unregulated diversion programs. Currently, all states have age 21 MLDA, zero tolerance, and .08 laws, and most states have the other elements of a comprehensive alcohol traffic safety legal system. A key problem currently is the lack of effective enforcement of these laws. It has proved to be easier for organizations such as MADD to encourage states to pass laws than to motivate state and local governments to provide the resources to support their enforcement.

Impaired-Driving Goal

MADD has responded to the lack of progress over the last decade by setting a goal to reduce the percentage of drunk drivers in fatal crashes by 25% over the next three years (2006–2008). In 2003 (the last year of available detailed data when MADD established this goal) 42,509 people were killed in traffic crashes in the United States. Drivers who were legally drunk (i.e., BACs of .08 or greater, the limit in every state) were involved in 31% of those fatal crashes, resulting in 13,045 fatalities. By focusing on five key strategies MADD believes that rate can be cut by 25% from 31% to 23% over the next three years. If the 25% reduction goal can be achieved, 3,261 lives would have been saved in 2003, for example.

MADD, with its partners, has proposed five strategies to meet that goal: (1) working with law enforcement to promote highly publicized, frequent sobriety checkpoints or similar enforcement methods in each state; (2) working to achieve high levels of safety belt use in each state, including the enactment of primary safety belt laws in the 26 states that do not have such laws; (3) supporting the development and use of effective technology, such as alcohol ignition interlocks on vehicles to prevent impaired driving by DUI offenders; (4) working to improve the DUI criminal-justice system performance and accountability, including the reinstatement of court monitoring by MADD volunteers; and (5) promoting effective alternative transportation programs to prevent drunk driving. It remains to be seen whether these strategies will have an effect on the problem.

Underage-Drinking Goal

It is a mark of the growth of MADD since its origin in 1980 that, in addition to an impaired-driving goal, it has set a goal for

reducing underage binge drinking (five or more drinks in a row for men and four or more for women in the past month). The objective is to reduce by five percentage points the 31% of 16 to 20 year olds who report binge drinking (SAMHSA, 2004). Although MADD supports all of the recommendations from the Institute of Medicine report on underage drinking (Bonnie and O'Connell, 2003), MADD plans to focus on two strategies: (1) work with police departments to strengthen the enforcement of MLDA 21 laws and (2) support and ensure adequate resources for a national media campaign on underage drinking focused on the adults. Most alcohol obtained by underage drinkers is through adults older than 21 and, in many instances, the parents.

To be successful in this endeavor, MADD plans to build on recent research funded by the NIAAA (Grant & Dawson, 1997; Hingson, Heeren, Zakocs, Winter, & Wechsler, 2003) demonstrating the impact of early onset of drinking on adult drinking and driving-and-drinking problems.

More difficult still will be the reduction of binge drinking on the college level. Despite substantial efforts to reduce college drinking problems, Hingson and colleagues (2005) estimated that each year 1,400 college students between the ages of 18 and 24 die and 500,000 are injured from alcohol-related causes. In a more recent article, Hingson and colleagues (2005) reported that alcohol-related injury deaths increased from 1,400 to 1,700 between 1998 and 2001, indicating that high-risk drinking at colleges and universities is increasing. Consequently, there is still pressure from some college administrators and the media to repeal the age 21 drinking limit (Seaman, 2005). Bills to repeal age 21 laws have been introduced in the legislatures of Vermont, Wisconsin, and Louisiana. MADD may find that a substantial effort will be needed to keep the Congress from rolling back the minimum drinking age. The organization that, when founded, was focused on the criminal drunk driver, has moved to make the reduction of underage drinking—the spawning ground for the problem—into one of its' major objectives for the future. Thus, MADD may be taking on a problem more difficult than impaired driving.

Victim Services Goal

As indicated earlier, a major source of strength for MADD is its highly developed program of service to the victims of drunk drivers. Its Victim Assistance Program had more than 1,200 trained victim advocates and, in 2004, assisted more than 31,000 victims and survivors of impaired-driving crashes nationwide, a 15% increase from 2003. Marshall and Oleson (1996, p. 6) have recognized the program as "filling a cultural void and providing a way for people to manage and channel their grief in ways that are psychologically healthy and socially constructive." Weed (1987) noted that victim activists gain status and experience that facilitates their playing leadership roles—leadership that MADD has harnessed in building its local chapters (McCarthy & Wolfson, 1996). MADD has set a goal of increasing the number of victims served by at least 20% a year through 2008, an important objective to its continued growth.

CONCLUSION

There is considerable evidence that MADD has made a difference in the United States regarding alcohol-impaired driving. MADD has contributed to the public's view that drunk driving is socially unacceptable. MADD has played an important role in encouraging state legislatures to enact more effective impaired-driving laws and has been a prominent player in landmark federal legislation (MLDA 21, zero tolerance, .08 BAC per se). Because of these accomplishments, there are now official MADD affiliations in Guam, Puerto Rico, Canada, Sweden, and Japan.

MADD's best-kept secret is its service to victims. More than 31,000 victims were served by MADD in 2004 with emotional support, victim assistance, and court accompaniment. Currently, 41,000 of MADD's 67,000 active members, and an unknown number of contributors, are alcohol-related crash victims. Because the source of their motivation for the cause is direct experience, and not the varying waves of public opinion, they form the bedrock of the organization for the future.

Since 1999, when it added preventing underage drinking to its mission statement, MADD has provided strong support for the enforcement of drinking-age laws, which unfortunately are in a very similar stage as was drunk driving in this country in the 1960s and 1970s—illegal but tolerated. That must change if long-term progress is to be made in reducing impaired-driving and other alcohol-related problems. MADD is attempting to meet this challenge, just as it did the impaired-driving problem 25 years ago.

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