

**Research Report:
Current Status of Alcohol Enforcement and
Compliance Data Collection:
Preliminary Report**

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Introduction

A great deal of data is available on the harmful effects of alcohol consumption. We know for example, that at least 85,000 Americans die each year from alcohol-related causes, that alcohol was involved in 40 percent of traffic crash fatalities, and that one in four violent crimes involved alcohol consumption by the perpetrator (Mokdad, et al, 2004; NHTSA, 2004; Greenfield, 1998). In response to these problems, governments at the local, state and federal level have enacted a wide variety of public policies -- designed to prevent and treat the problems, punish offenders, and raise awareness in the general population among other goals. Alcohol policies address who may sell alcohol, in what manner and in what types of outlets, what levels of consumption are permissible before driving or conducting other potentially hazardous activities. Research suggests that alcohol policies have varying degrees of success in fulfilling their purposes.

A critical issue for policy makers, community groups, and researchers is the availability of data on how these policies are enforced and the extent to which they are complied with. However, unlike the extensive data that are available describing the extent of problems, little is accessible regarding alcohol policy enforcement and compliance. This is a serious gap for the field, as these data provide the foundation for answering important questions as:

- What enforcement strategies are successful at reducing drinking and driving and other forms of alcohol-related harm? Can these strategies be used as models for enforcement efforts around the nation?
- What level of enforcement is necessary to achieve a satisfactory rate of compliance and a reduction in alcohol-related harms, such as alcohol-related traffic crashes?
- What degree of resource allocation for alcohol enforcement is necessary to increase compliance with alcohol policies?

Answers to these questions are significant for researchers, alcohol law enforcement agencies, and policy makers, particularly in a time when resources for enforcement are growing more limited, despite the ongoing threat that alcohol-related harms pose to the public's health. The scarcity of comprehensive enforcement and compliance data has serious implications for the prevention of alcohol-related harm. Without this information, it is difficult for researchers to evaluate the effectiveness of enforcement strategies. Policy makers who wish to make more effective resource allocations to reduce alcohol problems are also hampered by the absence of this data. Without facts about enforcement and compliance, allocation decisions are being made in a vacuum.

This report describes preliminary research conducted to determine the availability of alcohol enforcement and compliance data collection. It includes a summary of the availability of national data and the status of state-specific data collection by alcohol law enforcement agencies. The report concludes with a brief summary of a pilot project to develop more consistent collection of enforcement and compliance data by the state Alcoholic Beverage Control (ABC) agencies, and the preliminary recommendations generated by this effort.

The following sources of information were utilized: 1) a review of existing national enforcement databases for measures of enforcement and compliance on selected alcohol policies;¹ 2) in-depth interviews with officials of state alcohol enforcement agencies in 45 states and the District of Columbia²; and 3) a pilot data collection from states represented by the Advisory Board of the National Liquor Law Enforcement Association (NLLEA).³

National Data on Alcohol Enforcement and Compliance⁴

A review of existing national databases demonstrated the absence of comprehensive alcohol enforcement and compliance data at the national level. (See Appendix A for a chart of existing databases.) While containing some useful data, very few meet minimal standards for studying of the enforcement of, and compliance with, a particular alcohol policy. Most significantly, even the most basic data for many significant measures of alcohol policy enforcement and compliance are simply unavailable. Data that are available suffer from additional weaknesses, including:

- Data tend to be aggregated, making it difficult to differentiate between measures of different alcohol policies, and/or other factors such as age, which may be relevant to understanding the impact of enforcement on underage drinking.
- Data presented are not always reliable, as data collection may be limited to one or two years, or may vary from year to year as far as the consistency of sources used.

¹ The database review project was funded in whole or in part with Federal funds from the National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, Department of Health and Human Services, under Contract No. N01AA12009. The CDM Group, Inc. (primary contractor) and Pacific Institute for Research and Evaluation (subcontractor) conducted the review as part of the development of the Alcohol Policy Information System (APIS), an electronic resource that provides authoritative, detailed, and comparable information on alcohol-related policies in the United States, at both State and Federal levels. Alcohol policies highlighted in this review included those pertaining to underage drinking, blood alcohol concentration (BAC) levels and impaired driving, and sales to intoxicated persons.

² These interviews were conducted as part of a contract with the National Highway Traffic Safety Administration, Contract No. IDC DTNH22-98-D-35079. In the remaining five states, the researchers were either not able to locate a state agency that held the primary responsibility for enforcing alcohol laws or the agency identified declined to participate in the interview. In addition, the enforcement of alcohol laws in Hawaii and Maryland is primarily conducted at the county level. In those states, interviews were conducted with representatives from one county. The results are therefore not applicable to the entire state.

³ The Pilot Project was funded in whole or in part with Federal funds from: the National Highway Transportation Safety Administration (NHTSA) to the Pacific Institute for Research and Evaluation (Contract No. IDC DTNH22-98-D-35079), and the National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health, Department of Health and Human Services, under Contract No. N01AA12009. The CDM Group, Inc. (primary contractor) and Pacific Institute for Research and Evaluation (subcontractor) conducted the Pilot Project as part of the development of the Alcohol Policy Information System (APIS), an electronic resource that provides authoritative, detailed, and comparable information on alcohol-related policies in the United States, at both State and Federal levels. The Pilot Project informed the writing of this report, a deliverable under the NHTSA contract; it also provided data for assessing the feasibility of including enforcement and compliance data on the APIS website, a requirement of the NIAAA contract. By coordinating the tasks of these two contracts (with the consent of the respective project officers), PIRE was able to conduct a more in-depth investigation than would have been otherwise possible.

⁴ This section draws from the report, *Alcohol Policy Information System (APIS) Report #5 (Revised), Subsection B: An Assessment of Existing Databases to Measure Enforcement and Compliance* ("Report #5"), submitted to (and created in collaboration with) The CDM Group, Inc. by the Pacific Institute for Research and Evaluation. Report #5 was funded in whole or in part with Federal funds from the National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, Department of Health and Human Services, under Contract No. N01AA12009. Michael Klitzner, The CDM Group, Inc., made substantial contributions to Report #5.

- There are large gaps in the availability of data on significant measures. Much of the available data are focused on the actions of individual consumers (or violators of the law), while little data are available on enforcement and compliance by alcohol merchants or retailers, institutions, or other corporate entities.
- Data on enforcement resources are not available.
- Databases often do not contain data from all 50 states and the District of Columbia, or data availability varies from year to year.

The following tables summarize the availability of nationwide enforcement and compliance data by alcohol policy area. For a detailed presentation of data sources, see Appendix A. Note that certain kinds of data, such as place of purchase/place of last drink are being collected by some states, but the chart below reflects the availability of these data nationwide.

TABLE 1 SUMMARY: AVAILABILITY OF NATIONWIDE ALCOHOL POLICY ENFORCEMENT DATA			
POLICY AREA	DATA TYPE	EXAMPLES OF DATA	AVAILABILITY
General	1. Resources devoted to enforcement	a. Enforcement budget	NO
		b. Staffing level	NO
		c. Hours	NO
Underage Drinking	Directed at Entities (e.g., retail outlets)		
	1. Enforcement actions	a. Number of compliance checks in retail alcohol outlets	NO
		b. Number of enforcement actions (warnings, arrests, citations)	LIMITED
		c. Number and severity of sanctions imposed (administrative/criminal)	LIMITED
	Directed at Individuals (e.g., youth, social hosts, servers/sellers)		
	1. Enforcement actions	a. Number of enforcement actions (warnings, arrests, citations)	YES
b. Number and severity of sanctions imposed		YES	
Transportation Crime and Public Safety	Directed at Entities (e.g., retail outlets)		
	1. Enforcement actions for: a. Sales to intoxicated b. Happy hour and other sales restrictions c. Compliance with RBS	a. Number of compliance checks in retail alcohol outlets	NO
		b. Number of enforcement actions (warnings, arrests, citations)	NO
		c. Number and severity of sanctions imposed (administrative/criminal)	LIMITED
	Directed at Individuals		
	1. Enforcement actions - all violations	a. Number of enforcement actions (warnings, arrests, citations)	YES
		b. Number and severity of sanctions imposed	YES
	2. Enforcement actions for DWI	a. Amount/availability of equipment and technology (passive breath sensors, mobile breath tests, etc.) devoted to enforcement	NO
		b. Number of roadblocks/roadside checks	NO
		b. Number of special DWI patrols	NO

**TABLE 2
SUMMARY: AVAILABILITY OF NATIONWIDE
ALCOHOL POLICY COMPLIANCE DATA**

POLICY AREA	DATA TYPE	EXAMPLES OF DATA	AVAILABILITY
Underage Drinking	By Entities (e.g., retail outlets)		
	1. Primary compliance	a. Decoy studies	NO
		b. Place of purchase/place of last drink notations in police reports of MIPs ⁵	NO
		c. Youth self-reports of ease of access/method of access	YES
	2. Recidivism	a. Tracking of repeat citations	NO
	By Individuals (e.g., youth, social hosts, servers/sellers)		
	1. Service/provision to underage	a. Youth self-reports of ease of access/method of access	YES
		b. Place of purchase/place of last drink notations in police reports of MIPs	NO
	2. Underage consumption	a. Youth self-reports of consumption	YES
		b. Rates of DWI involving underage	YES
		c. Rates of alcohol-related ER admissions	YES
		d. Rates of alcohol-related school disciplinary referrals	NO
Transportation Crime and Public Safety	By Entities (e.g., retail outlets)		
	1. Primary compliance with: a. Sales to intoxicated b. Happy hour and other sales restrictions c. Compliance with RBS	a. Decoy studies	NO
		b. Place of purchase/place of last drink notations in police reports or self-reported	LIMITED
		c. Compliance with RBS	
	2. Recidivism	a. Tracking of repeat citations	NO
	Directed at Individuals		
	1. DWI compliance	a. Self-reports of impaired driving	YES
		b. Rates/levels of driver BAC gathered at roadside checks	LIMITED
		c. Data on alcohol involvement in fatal crashes	YES
	2. DWI Recidivism	a. Tracking of repeat offenses	LIMITED
	3. Other compliance	a. Rates/levels of BAC collected in toxin screens by medical examiners of suicide and other victims of alcohol-related violence	NO
		b. Rates of alcohol-involved suicides	LIMITED
c. Rates of alcohol involvement in accidental/intentional trauma		LIMITED	
d. Self-reports of victims and offenders		LIMITED	

Blood Alcohol Concentration and Impaired Driving Enforcement and Compliance Data:

The most comprehensive set of data on alcohol policy enforcement and compliance are policies pertaining to Blood Alcohol Concentration (BAC) and impaired driving. Even in this case, there are wide gaps in data collection and reporting as indicated below. The review of which data are

⁵ Minor in Possession charges.

readily available or not provides a case study of both the strengths and weaknesses of general data availability on alcohol enforcement.

There is a considerable amount of data available regarding rate of arrests for impaired driving.⁶ Fewer data are available on specific BAC levels of those arrested. Two sources that provide some BAC data include the Fatality Analysis Reporting System (FARS), which contains estimates of BAC levels involved in motor vehicle crashes that resulted in a fatality, and the National Roadside Breath Test (NRBT) Survey which includes both BAC data and self-reports of drinking and driving. The utility of data from the NRBT Survey is limited by the fact that this survey was conducted only three times in the last 31 years and data collection occurred only on weekend nights.⁷

Generally available data on BAC and impaired driving include:⁸

- Arrest rates
- Some data on BACs of those arrested
- BACs for drivers involved in fatal crashes
- Some information regarding the perception of enforcement, perception of risk, and perception of sanctions

Data that are not readily available include:

- BACs for non-fatal crashes
- Law enforcement resources, including:
 - Availability of equipment and technology (e.g. passive breath sensors and mobile breath testing equipment)
 - Amount of enforcement resources, measured by budget, staffing levels, number of hours devoted to enforcement
 - Number of roadside checks for BAC, number of patrols for impaired driving

State-Specific Enforcement and Compliance Data Collection

Many of the gaps and omissions evident in national databases can be traced to the sources upon which these databases draw on—most notably, the state ABC agencies that are directly involved in the enforcement of laws pertaining to the manufacture, distribution, and sale of alcoholic beverages. Not surprisingly, officials of state alcohol enforcement agencies who we interviewed reported similar gaps in state level collection of enforcement and compliance data and information processing. The sometimes complicated organization of the enforcement and adjudication of alcohol policy create barriers to the data collection process.⁹ These issues include:

⁶ Arrest data of various sorts are among the most commonly available potential measures of enforcement and compliance. For a review of available sources of arrest data, see Appendix A. However, arrest data as a measure of compliance by itself can be misleading unless adjusted using measures of “enforcement pressure” (e.g., level of enforcement resources allocated). Unfortunately, data on enforcement resources are rare. Thus, the utility of available arrest data is significantly reduced in practice.

⁷ For a more detailed discussion of these two data sources, please see Appendix A, Table 2.

⁸ See Appendix A, Table 2 for sources of these data.

⁹ For a more detailed discussion of the organization of ABCs, please see the report, *The Role of Alcohol Beverage Control Agencies in the Enforcement and Adjudication of Alcohol Laws* (PIRE, 2003b).

- 1) Licensing and enforcement can be conducted by one state agency, by more than one division within the same agency, by two separate state agencies, or by local agencies, thus potentially multiplying the number of data collection methods;
- 2) Enforcement of liquor laws can be conducted primarily or exclusively by the state agency, in conjunction with local law enforcement, or primarily or exclusively by local law enforcement, again complicating and multiplying the potential sources of data;
- 3) Penalties and sanctions taken against establishments in violation of the law may be of an administrative nature (and therefore, tracked by the state alcohol agency) or go through the court system (and tracked by a separate system). In some states, the state alcohol beverage control agency can only track cases to the point at which they enter the courts, but have no record of their disposition in court.
- 4) State laws also vary widely in their definitions of what constitutes a violation. For example, all states and the District of Columbia prohibit furnishing alcoholic beverages to minors, yet there is great variation in what specifically constitutes “furnishing” (selling, giving, exchanging, etc.) and who may be exempt from this prohibition. For example, 23 states permit parents and legal guardians to provide alcohol to their minor children or wards (PIRE, 2003c).

A fifth complicating factor is the enormous range of information technology in use by state ABCs. In some states, field agents fill out their reports by hand, and the reports are entered into a database at the state level. In other states, agents are equipped with handheld or other portable devices to enter their data, which can then be quickly uploaded into the state’s database. In some states, multiple software systems are employed; for example, in several states, agents fill their data into Excel files, which are then imported into an Access database. Some states use custom-designed systems, which in two cases (Delaware, Utah), are part of a larger law enforcement data collection system. It should be noted that the types of data collected vary widely. For some agencies, the primary use of this technology is to track liquor law violations and arrests. For others, the primary function may be to maintain licensee records. In some control states (states involved in the sale of alcohol beverages at the wholesale and/or retail level) information technology is primarily used for inventory control and sales data.

The following table of software and systems is included to illustrate the wide range in type and complexity of information technologies used by the state ABCs.

Table 3: Survey of Information Technology Use by State ABCs	
Software or System Used for Collecting Enforcement and Compliance Data¹⁰	States Reporting Use
Access	AK, GA ¹¹ , IN, MA, NH, SC, TN, WY
CABIN information system (tracks licensee applications, enforcement assignments and visits, and accusations)	CA

¹⁰ Information reported in this chart is current as of the time of the interview with the state ABC official in each state. As these interviews were conducted between September 2001 and December 2002, there may have been changes in the software and systems utilized.

¹¹ In the case of Georgia, they use more than one system. They have a web-based system developed by the Georgia Technology Authority, which can be downloaded into Access and Excel, used to record underage alcohol and tobacco enforcement actions. They have another for licensee information, which is on their mainframe, but is downloaded onto the web-based system every night; this contains no citation history data.

Table 3: Survey of Information Technology Use by State ABCs	
Software or System Used for Collecting Enforcement and Compliance Data¹⁰	States Reporting Use
Catalyst (for hand-held systems to be used by law enforcement officers)	WA
CRIMES (customized for liquor law; tracks arrests and citations, does not track final dispositions)	NC
DelJIS, the Delaware Criminal Justice Information System (not publicly accessible)	DE
Excel	AK, AL, AR, GA, IA, ME, MA, MS, NC, TN
Filemaker Pro	CT
Information Management Corporation (IMC)-an integrated law enforcement software system (records administrative and criminal liquor law offenses)	NH ¹²
License 2000. (Ties liquor law violation information to licensee records)	NM
Licensee by the Accenture Company	FL, IN
Lotus Notes	LA
Mainframe system (AS400, M204, etc.)	MO, TX, WA
Multiple systems or software (e.g. combination of Access and Excel, or Excel and other database, where field agents' records are dumped from Excel into something else.)	AL, AR, GA, IN, ME, MA, MS, NH, NC, TN, WY
Not specified	ID, KY, MN, ND, NY, OH, OK, OR, VA, WI
Oracle database	KS, MI
Paradox	MD (Montgomery County)
PSR by Indico (tracks all criminal and administrative cases investigated and/or cited, but does not track final penalty disposition)	CO
SABER (State Alcohol Beverage Enforcement Records) system, a computer based custom written information system	MS
SAP (used for tracking customer orders, purchasing, and inventory control)	WY
Utah Law Enforcement Network, (with program tailored for liquor law enforcement to track their cases)	UT
Violation Tracking System (VTS)	WV
"Web-based"	GA (see footnote #8), VT (after handwritten records of investigations, inspections, other records are input)
Word	ME
Works	ME

The interviews with alcohol enforcement officials provide important insights into why there are insufficient and inconsistent data available on alcohol law enforcement and compliance:

- Data collection within a state can be fragmented and incomplete, with different agencies collecting different elements of enforcement and compliance data.
- Enforcement and compliance data may be difficult to compare between states, given the wide variation in the organization of alcohol enforcement agencies and differing characterizations

¹² System is used for administrative and criminal offenses, not license-based information such as suspensions. IMC does not track final disposition of cases, so they use Access for this.

of what constitutes a violation. This is further complicated by the variation that exists in the use of technology to collect such data.

Pilot Project: Developing Consistent Collection of Enforcement and Compliance Data

In recognition of the importance of collecting consistent and accurate enforcement and compliance data, a pilot project was launched in cooperation with the National Institute on Alcohol Abuse and Alcoholism (NIAAA) to begin collection of enforcement and compliance data. A review of the project with members of the NLLEA Advisory Board indicated that this was a feasible goal.

The first phase of the data collection feasibility project involved obtaining data from the state Alcohol Beverage Control agencies represented by the NLLEA Advisory Board. At the time of this collection, the Advisory Board consisted of representatives from the State ABCs of Colorado, Maine, Mississippi, New Hampshire, Oklahoma, Oregon, Texas, Virginia, Washington, and Wisconsin (as well as from Montgomery County, Maryland and Ontario, Canada).¹³

Data were requested for the 2001-2002 fiscal year on such topics as:

- Liquor law enforcement resources;
- Compliance checks and compliance check outcomes;
- Citations, fines, suspensions; and
- Disposition of liquor law violations.

A review of the data provided further confirmed the data collection problems highlighted by the interviews with ABC officials. In particular, two issues that affect the availability and usefulness of enforcement and compliance data were identified:

- 1) Availability of data: There is considerable variation among states in:
 - a. Availability of current data
 - b. Availability of past data
- 2) Comparability of data collection protocols and data: There is considerable variation among states in:
 - a. Terminology used to describe both violations of the law and enforcement actions
 - b. Protocol for carrying out enforcement actions (e.g. whether compliance checks are conducted on a regular basis, randomly, or on a complaint-driven basis)
 - c. Degree of involvement of local law enforcement or other state agencies
 - d. Sources of revenue (control versus license states)
 - e. Allocation of resources between state and local agencies

Despite these issues, the data collected also demonstrated the potential that such an effort has for collecting comprehensive and useful enforcement and compliance data. The responses from nine states (Colorado, Mississippi, New Hampshire, Oklahoma, Oregon, Texas, Virginia, Washington, Wisconsin) and Montgomery County, Maryland provided data on alcohol law enforcement resources that have not been available in existing national databases, including:

¹³ Data were collected in May, 2003.

- Ratio of Alcohol Outlets to Field Agents:
 - Lowest: 48 outlets per agent
 - Highest: 7,083 outlets per agent
- Per Capita State Expenditure for Alcohol Law Enforcement:
 - Highest: \$2.43 per resident
 - Lowest: \$0.16 per resident
- Per Capita Revenue from Alcohol Revenue in Control States:
 - Highest: \$51.44 per resident
 - Lowest: \$12.14 per resident

Data on enforcement and compliance rates also illustrated the usefulness of this form of data collection. The responses included such data as:

- Compliance checks for sales to underage and compliance rates:
 - Percentages of outlets found out of compliance ranged from 18 to 53 percent.
- Routine license inspections and compliance rates:
 - Percentages of outlets found out of compliance ranged from 0 to 51 percent.
- Numbers of citations, fines, and suspensions issued for sales or service to underage violations:
 - Numbers of citations ranged from 0 to 1359.
 - Numbers of fines ranged from 0 to 581.
 - Numbers of suspensions ranged from 0 to 778.

For detailed charts of data collected, please see Appendix B. These data must, of course, be viewed with two caveats: 1) because the selection of the states was based on the membership on of the Advisory Board and not as a scientifically designed sample, the variance in actual data collected cannot be seen as representative of the nation as a whole; and 2) the states selected differ widely in their administration and adjudication of alcohol law enforcement. As indicated above, different laws, different terminology, and different procedures all contribute to the difficulty of making strict comparisons between states. The next phase of this project will involve the further refinement of the data collection process to create more comparable data categories. Its ultimate goal is to develop a prototype for a national alcohol enforcement and compliance data collection instrument.

Conclusion and Recommendations

As this report makes clear, data on alcohol policy enforcement and compliance are not readily available. Data collection by state ABCs is hampered by the often complicated nature of state alcohol enforcement and by diminishing resources for up to date and comprehensive data collection technologies. Nationwide enforcement and compliance data are almost impossible to access, except in fragmented and limited forms. This is attributable not only to the barriers to thorough data collection experienced by state agencies, but to the problem of comparability between states. Differences between states in the organization and adjudication of alcohol

enforcement, enforcement terminology and practices, sources of revenue, and division of labor between state and local agencies, all contribute to the difficulty of finding comparable national data.

Alcohol policy enforcement and compliance data should be readily available to law enforcement, policy makers, and researchers. The data would be an invaluable resource for gauging the effectiveness of enforcement strategies in reducing alcohol-related harms. The FARS database, for example, has drawn attention to the significant problem of drinking and driving, and highlights the critical importance of enforcement of laws prohibiting drunk driving.

As a long-term solution to the problems listed above, we recommend the development of a national database of alcohol enforcement and compliance data, which could easily and regularly be updated by the state ABCs. To reach this goal, we would recommend the following preliminary actions:

- Increase resources to state ABCs to help them improve and update their data collection technologies.
- Study effective state data collection systems and promote these systems as models for other states to utilize.
- Initiate a pilot project to develop a basic data collection instrument for collecting comparable enforcement and compliance data from all states. Begin a phased testing of the instrument to establish the feasibility of dissemination of the instrument to all states.

References

- Greenfeld, L. (1998) *Alcohol and Crime: An analysis of national data on the prevalence of alcohol involvement in crime*. Prepared for the Assistant Attorney General's National Symposium on Alcohol Abuse and Crime, Washington D.C., 5-7 April.
- Mokdad, A, Marks, J, Stroup, D, and Gerberding, J. (2004) Actual Causes of Death in the United States, 2000. *JAMA* 291(10):1238-1245.
- National Highway Traffic Safety Administration (NHTSA). (2004). Traffic Safety Facts 2003: Alcohol. DOT HS 809 761.
- Pacific Institute for Research and Evaluation (PIRE). (2003a) Preventing Over-Consumption of Alcohol Through Sales to the Intoxicated and "Happy Hour" (Drink Specials) Laws. Working Paper. Calverton, MD: PIRE.
- Pacific Institute for Research and Evaluation (PIRE). (2003b) The Role of Alcohol Beverage Control Agencies in the Enforcement and Adjudication of Alcohol Laws. Working Paper. Calverton, MD: PIRE.
- Pacific Institute for Research and Evaluation (PIRE). (2003c). Alcohol Beverage Control Enforcement: Legal Research Report. Felton, CA: PIRE.