

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**YOUTH AND ALCOHOL:
DRINKING AND CRIME**



**Richard P. Kusserow
INSPECTOR GENERAL**

APRIL 1992

OFFICE OF INSPECTOR GENERAL

The mission of the Office of Inspector General (OIG), as mandated by Public Law 95-452, as amended, is to protect the integrity of the Department of Health and Human Services' (HHS) programs as well as the health and welfare of beneficiaries served by those programs. This statutory mission is carried out through a nationwide network of audits, investigations, and inspections conducted by three OIG operating components: the Office of Audit Services, the Office of Investigations, and the Office of Evaluation and Inspections. The OIG also informs the Secretary of HHS of program, and management problems, and recommends courses to correct them.

OFFICE OF AUDIT SERVICES

The OIG's Office of Audit Services (OAS) provides all auditing services for HHS, either by conducting audits with its own audit resources or by overseeing audit work done by others. Audits examine the performance of HHS programs and/or its grantees and contractors in carrying out their respective responsibilities and are intended to provide independent assessments of HHS programs and operations in order to reduce waste, abuse, and mismanagement and to promote economy and efficiency throughout the Department.

OFFICE OF INVESTIGATIONS

The OIG's Office of Investigations (OI) conducts criminal, civil, and administrative investigations of allegations of wrongdoing in HHS programs or to HHS beneficiaries and of unjust enrichment by providers. The investigative efforts of OI lead to criminal convictions, administrative sanctions, or civil money penalties. The OI also oversees State Medicaid fraud control units which investigate and prosecute fraud and patient abuse in the Medicaid program.

OFFICE OF EVALUATION AND INSPECTIONS

The OIG's Office of Evaluation and Inspections (OEI) conducts short-term management and program evaluations (called inspections) that focus on issues of concern to the Department, the Congress, and the public. The findings and recommendations contained in these inspection reports generate rapid, accurate, and up-to-date information on the efficiency, vulnerability, and effectiveness of departmental programs.

This report was prepared under the direction of Kaye D. Kidwell, Regional Inspector General, and Paul A. Gottlober, Deputy Regional Inspector General, Office of Evaluation and Inspections, Region IX. Participating in this project were:

Brad Rollin, Project Leader
Donald Loeb
Brian Pattison
Maruta Zitans, Headquarters

Department of Health and Human Services

**OFFICE OF
INSPECTOR GENERAL**

**YOUTH AND ALCOHOL:
DRINKING AND CRIME**



**Richard P. Kusserow
INSPECTOR GENERAL**

OEI-09-92-00260

EXECUTIVE SUMMARY

PURPOSE

The purpose of this study was to determine how many youth were under the influence of alcohol when they committed crimes.

BACKGROUND

In response to public health concerns and the adverse consequences of alcohol abuse, the Surgeon General requested that the Office of Inspector General (OIG) provide information on the number or percentage of youth who were under the influence of alcohol when they committed a crime. This concern mirrors one of the Department of Health and Human Services (HHS) Secretary's goals which is to reduce the prevalence of alcohol problems among children and youth. This study is one in a series conducted by the OIG related to youth and alcohol. A related report, "Youth and Alcohol: Dangerous and Deadly Consequences" (OEI-09-92-00261), describes alcohol's role in youth problems such as rape, risky sexual behavior, suicide, and drowning.

We conducted interviews with 51 Federal, State, and local agencies to determine whether they collect data about minors' sobriety at the time of crime or arrest. In addition, we conducted an extensive literature search and 13 interviews with researchers to determine whether they had been able to measure alcohol's role in youth crime.

FINDINGS

Data collection obstacles are difficult to overcome

No agencies maintain data on a regular basis. Depending on the circumstances, a youth who commits a crime may be involved with one or many different agencies. In addition, States have varying procedures and agencies to handle youth offenders. Although several agencies mentioned that they had statistics, their data proved to be inaccessible or inherently biased. In addition, we were unable to collect our own statistics. All data collection methods presented barriers that prohibited us from obtaining useful, reliable data. In addition, national youth surveys do not address this issue.

Department of Justice researchers have limited information and data

Department of Justice (DOJ) researchers at times have attempted to determine the extent to which youth alcohol use is associated with criminal activity. The DOJ

studies, which are limited to serious juvenile offenders, found a strong association between alcohol use and criminal activity.

Other researchers have linked alcohol and crime statistically

Other studies and articles show alcohol's involvement in crimes of aggression, including murder and rape.

Future technology may enable data collection and analysis

Technological advances such as a computerized national crime reporting system may aid researchers in studying the link between underage drinking and crime.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

INTRODUCTION 1

FINDINGS

Data collection obstacles are difficult to overcome 2

Department of Justice researchers have limited information and data 4

Other researchers have linked alcohol and crime statistically 7

Future technology may enable data collection and analysis 8

APPENDIX A: List of Contacts

APPENDIX B: Alcohol and Youth Crime Bibliography

INTRODUCTION

PURPOSE

The purpose of this study was to determine how many youth were under the influence of alcohol when they committed crimes.

BACKGROUND

In response to public health concerns and the adverse consequences of alcohol abuse, the Surgeon General requested that the Office of Inspector General (OIG) provide information on the number or percentage of youth who were under the influence of alcohol when they committed a crime. This concern mirrors one of the Department of Health and Human Services (HHS) Secretary's goals which is to reduce the prevalence of alcohol problems among children and youth. This study is one in a series conducted by the OIG related to youth and alcohol. A related report, "Youth and Alcohol: Dangerous and Deadly Consequences" (OEI-09-92-00261), describes alcohol's role in youth problems such as rape, risky sexual behavior, suicide, and drowning.

We conducted interviews with 51 Federal, State, and local agencies to determine whether they collect data about minors' sobriety at the time of crime or arrest. In addition, we conducted an extensive literature search and 13 interviews with researchers to determine whether they had been able to measure alcohol's role in youth crime.

Appendix A contains a list of the agencies and researchers we contacted. Appendix B contains a bibliography of youth and crime research and articles.

FINDINGS

DATA COLLECTION OBSTACLES ARE DIFFICULT TO OVERCOME

Data Collection Problems

Numerous Federal, State, and local agencies administer juvenile justice. Depending on the circumstances, an arrested youth may be involved with one or many different State and local agencies. State agencies may include the State alcoholic beverage control agency, social service agencies, Attorney General's office, courts, corrections department, State police, youth authority, and health services department. Local agencies may include the city police, county sheriff, social service agencies, health department, youth guidance center, juvenile courts, probation department, and public school system. Although rare, the Federal government also may become involved in the adjudication of certain juvenile offenses.

Juvenile justice agencies have varying procedures to handle youth offenders. Most agencies do not maintain statistics related to arrested minors' use of alcohol. Although officials from several agencies mentioned that they had some data, their data proved to be inaccessible or inherently biased. Although some officials stated that we might be able to compile and review individual case files, not all communities allow researchers access to case files. In addition, files would reveal alcohol's involvement only if police or attorneys specifically included it. One official acknowledged that not all arresting officers follow the procedure for reporting alcohol use. Therefore, statistics probably would be biased. In summary, our attempt to collect statistics was unsuccessful.

Methodological Problems

We examined the feasibility of collecting data ourselves. We could interview youth who have been arrested or analyze police arrest records to determine the percentage of minors who were under the influence of alcohol when they committed a crime. Both methods presented barriers that would prohibit us from obtaining useful, reliable data.

► **Interviewing youth who have been arrested**

Interviewing youth offenders about whether they were under the influence of alcohol when they committed a crime is one method to establish the link between alcohol use and crime. Researchers who have used this method have noted, however, that most offenders are never caught. In addition, researchers have not been able to determine whether arrested youth represent an accurate cross-section of youth criminal offenders.

The focus on arrested youth poses other methodological problems. Establishing the universe of youth offenders who have been caught is almost impossible. These youth experience many different outcomes. They may be:

- released without charges,
- cited and released,
- granted probation,
- given alternative treatment, such as community service or admission to an alcohol education or treatment program,
- committed to local juvenile detention facilities,
- placed under the jurisdiction of State youth authorities,
- required to serve time in State-operated youth facilities, or
- tried in adult courts and placed in adult correctional institutions.

State and local authorities do not automate their records sufficiently for researchers to select samples of all arrested youth. Youth who have been released, cited, or given alternative treatment may be impossible to track. The only youth available for interviews are those who are being detained or incarcerated. Surveying these youth may yield highly biased data, according to some critics. Youth who are in detention tend to be the most serious offenders, with a history of social and/or psychological problems. Researchers stress that it is not uncommon for youth with these problems to abuse alcohol. In addition, one researcher expressed serious doubts about seriously troubled minors' willingness to disclose alcohol or drug use after being incarcerated.

► **Analyzing police arrest records**

Analyzing arrest records is another method to determine the youth alcohol and crime rate. This requires, however, that police make an arrest at the scene of the crime. One researcher estimates a minute percentage of all criminals are caught at the scene of the crime. Some may be arrested after a lengthy investigation, but authorities are unable to determine whether the offender had used alcohol before committing the crime.

In addition, most police departments we surveyed do not require arresting officers to note the sobriety of an arrested minor or to even ask if a suspect has been drinking. Researchers and authorities explained that enforcement agencies focus on the crime, not the related circumstances such as alcohol use. An arresting officer may notice only very obvious alcohol use.

An arresting officer may be the only person who can ascertain whether a youth offender has been drinking. The human body breaks down and eliminates alcohol faster than many other drugs. A drug test administered several hours after an arrest is not an accurate measure of a youth's condition at the time of the crime.

Although we found several police departments that record offenders' sobriety, their records are not automated sufficiently for analytical purposes. Authorities use the sobriety record to adjudicate individual cases, not for research purposes. In addition, juvenile courts often seal juvenile records, rendering them inaccessible to researchers.

National Youth Survey Limitations

Annual youth surveys, such as the Center for Disease Control's Youth Risk Behavior studies or the National Institute on Drug Abuse's National Household Survey on Drug Abuse, do not include questions about alcohol's role in criminal activity. If they did, they might be hindered by a lack of reliable self-reporting. A minor might be hesitant to admit or not even know that he had committed a crime.

DEPARTMENT OF JUSTICE RESEARCHERS HAVE LIMITED INFORMATION AND DATA

The Department of Justice's (DOJ) Bureau of Justice Statistics and Office of Juvenile Justice Prevention have attempted to determine the extent to which youth alcohol use is associated with criminal activity. The DOJ's most recent and comprehensive study related to this subject is its "Survey of Youth in Custody, 1987."

According to the survey report, 31.9 percent of youth under 18 in long-term, State-operated juvenile institutions in 1987 were under the influence of alcohol at the time of the offense. In addition, 55.4 percent admitted that they drank one or more times per week in the year before their incarceration. Youth in these facilities represent only a small percentage of all handled by the juvenile justice system, however. They are generally the most serious offenders, with a history of criminal activity.¹ The DOJ analyzed alcohol use rates for different crimes. The table on page 5 illustrates the results.

¹ U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, "Survey of Youth in Custody, 1987," Bureau of Justice Statistics Special Report, September 1988, p. 6.

PERCENT OF OFFENDERS UNDER AGE 18 IN LONG-TERM STATE-OPERATED JUVENILE FACILITIES WHO COMMITTED CURRENT OFFENSE UNDER THE INFLUENCE OF ALCOHOL (1987)*

	Total Number (Weighted)	Number Under the Influence of Alcohol During the Crime**	Percentage
All Offenses***	18,226	5,814	31.9%
Violent Offenses	7,081	2,294	32.4%
Murder	326	89	27.3
Rape	431	132	30.7
Other Sexual Assault	634	110	17.4
Robbery	2,372	887	37.4
Assault	2,926	986	33.7
Other Violent Offenses	392	90	23.0
Property Offenses	8,221	2,696	32.8%
Burglary	4,303	1,463	34.0
Larceny/Theft	1,303	410	31.5
Motor Vehicle Theft	1,402	437	31.2
Arson	319	66	20.6
Other Property Offenses	894	320	35.8
Drug Offenses	1,020	254	24.9%
Possession	521	122	23.4
Trafficking	464	108	23.2
Other Drug Offenses (Including alcohol-related offenses)	35	24	68.6
Public-Order Offenses	1,296	267	20.6%
Juvenile Status Offenses	380	130	34.1%

* Includes those who were under the influence of alcohol only or alcohol and other drugs.

** This column represents our estimate because the DOJ supplied only the total weighted number and the percentage under the influence of alcohol at the time of the crime. The DOJ states that because of missing data, some percentages may be slightly off.

*** Totals are slightly higher than the sum of the subcategories because of missing data.

According to another DOJ 11-city survey, from 4 to 32 percent of male juvenile arrestees admitted using alcohol in the 72 hours prior to their arrest. The DOJ's Drug Use Forecasting (DUF) program interviews minors about their alcohol use. This is not useful for determining the extent to which alcohol use influences crime, however. The DUF interviewers do not ask minors specifically if they were under the influence of alcohol at the time of the crime.²

MALE JUVENILES' SELF-REPORTED ALCOHOL USE BEFORE COMMITTING A CRIME RANGES FROM 4 TO 32 PERCENT*

City	Percent Who Used Alcohol in the 72 Hours before Committing a Crime
Birmingham	15
Cleveland	8
Indianapolis	15
Kansas City	12
Los Angeles	27
Portland	16
St. Louis	9
San Antonio	26
San Diego	26
San Jose	32
Washington, D.C.	4

* Source: DOJ, Office of Justice Programs, National Institute of Justice, "Drugs & Crime: 1990 Annual Report," Drug Use Forecasting, August 1991.

The DUF program relies on interviews only to gather information about alcohol use. Although DUF interviewers obtain urine samples from most minors who are arrested, they do not analyze for alcohol. The DUF admits that in certain cities--such as Washington D.C. where only 4 percent of minors interviewed admitted using alcohol in the previous 72 hours--minors clearly underreported their alcohol use. Two local enforcement officials were highly critical of the DUF program because it neglects to collect adequate information about youth alcohol use. "Including alcohol in the DUF

² U.S. Department of Justice, Office of Justice Programs, National Institute of Justice, "Drugs & Crime: 1990 Annual Report," Drug Use Forecasting, August 1991, p. 16.

network's drug scan would not be difficult at all," one official stated. The other added, "We have found that the urine testing that we do detects substantially more than any of the self-report studies, even the confidential ones. Adding alcohol is no big deal as far as cost goes. Urine samples cost 21 cents."

A 1974 survey of youth under 21 in State adult correctional facilities found that approximately 36.4 to 38.6 percent reported drinking at the time of the offense. Although this study is dated, it sheds light on the alcohol problems of minors who commit the most serious crimes. Minors incarcerated for crimes against persons (murder, assault, rape, robbery) were slightly more likely to be under the influence of alcohol than those who committed crimes against property (arson, grand theft, burglary).³ Youth in adult correction facilities represent a very small proportion of all juvenile offenders.

OTHER RESEARCHERS HAVE LINKED ALCOHOL AND CRIME STATISTICALLY

Other studies and articles report that:

- ▶ Almost 50 percent of German juvenile offenders surveyed in 1971 were intoxicated when they committed criminal offenses. For crimes of aggression--such as murder, robbery, rape, and assault--the rates were "rather higher."⁴
- ▶ More than 52 percent of college students who admitted committing crimes were under the influence of alcohol when the incident occurred.⁵
- ▶ According to a school administrator who investigated the problem, 100 percent of sexual assault cases at the University of Colorado involve alcohol.⁶

One researcher had reviewed other researchers' attempts to link alcohol use and crime. He noted that researchers' have found that anywhere from 6 to 72 percent of

³ James J. Collins, "Alcohol Careers and Criminal Careers," in Collins, (Ed.), Drinking and Crime: Perspectives on the Relationships Between Alcohol Consumption and Criminal Behavior, 1981, p. 191. Data were first reported in a survey of State correctional inmates conducted by the Bureau of the Census for the former Law Enforcement Assistance Administration, 1974.

⁴ Joachim Gerchow, "Alcohol Use and Juvenile Delinquency," Child Health, v. 2, 1983, p. 129.

⁵ National Families in Action (NFIA), "College Students Report Strong Link Between Substance Abuse and Campus Crime," Drug Abuse Update, no. 34, September 1990, p. 13.

⁶ NFIA, "Alcohol Use Linked with Sexual Assault, Gang Rape on College Campuses," Drug Abuse Update, no. 28, March 1989, p. 17.

minors were under the influence of alcohol at the time of the crime.⁷ This wide range further illustrates the barriers that researchers encounter when examining this issue.

FUTURE TECHNOLOGY MAY ENABLE DATA COLLECTION AND ANALYSIS

Technological advances may aid researchers attempting to link underage drinking and crime. A new, computerized national crime reporting system and a passive alcohol sensor may provide data on alcohol's role in youth crime in the future.

The FBI has collected, analyzed, and published national crime data since 1930. The FBI's Uniform Crime Reports contains data relating to the number and types of crimes committed every year. To improve the quality, accuracy, and usefulness of this information, the FBI has initiated a program to automate and standardize the way communities report crime statistics. The National Incident-Based Reporting System (NIBRS) requires that State and local agencies enter certain crime information into a computer database.

The FBI requires that each database contain a field to indicate whether authorities suspect that an offender consumed alcohol or drugs prior to the incident. In its implementation guidelines to State and local agencies, however, the FBI states that the field may be left empty if the reporting police officer does not note any alcohol or drug use. In order for the system to provide reliable national data, arresting officers must note alcohol use.

Another barrier is the cost to States and local communities. Implementing the NIBRS requires costly computer equipment and technical expertise. Because of current budget difficulties, only a handful of communities participate in the program.

Another technological advance is a new alcohol sensor that may allow police officers to determine immediately whether criminal suspects have consumed alcohol. Authorities in some communities have begun implementing a new "passive" alcohol sensor. The device monitors the alcohol content of air near a suspect's mouth without requiring any special effort on the suspect's part. Although the sensors primarily are used to detect drunk drivers, they could be used quickly and legally to determine the sobriety of a criminal suspect. Authorities could record this information in the arrest report or in an automated computer database.

⁷ Gerchow, p. 129.

APPENDIX A

LIST OF CONTACTS

FEDERAL AGENCIES

Department of Health and Human Services:

Public Health Service:

Alcohol, Drug Abuse, and Mental Health Administration:

National Institute on Alcohol Abuse and Alcoholism

National Institute on Drug Abuse

Office for Substance Abuse Prevention

Department of Justice:

Drug Enforcement Agency

Federal Bureau of Investigation

Office of Justice Programs:

Bureau of Justice Statistics

National Institute of Justice

Office of Juvenile Justice and Delinquency

STATE ENFORCEMENT/JUVENILE JUSTICE AGENCIES

Alabama Criminal Justice Information Center

California Attorney General's Office

California Youth Authority

California Department of Justice, Bureau of Criminal Statistics

Illinois Criminal Justice Information Authority

Massachusetts Department of Probation

New Mexico Youth Authority

Oklahoma Department of Human Services

Oregon Law Enforcement Data System

Pennsylvania State Police

Vermont Administrator for the Courts

Washington Department of Social and Health Services, Office of
Juvenile Rehabilitation

STATE ALCOHOLIC BEVERAGE CONTROL AGENCIES

Indiana Alcoholic Beverage Commission

Oklahoma Alcohol and Beverage Laws and Enforcement Commission

Oregon Liquor Control Commission

Washington Liquor Control Board

West Virginia Alcoholic Beverage Control

CITY/COUNTY JUVENILE JUSTICE AGENCIES

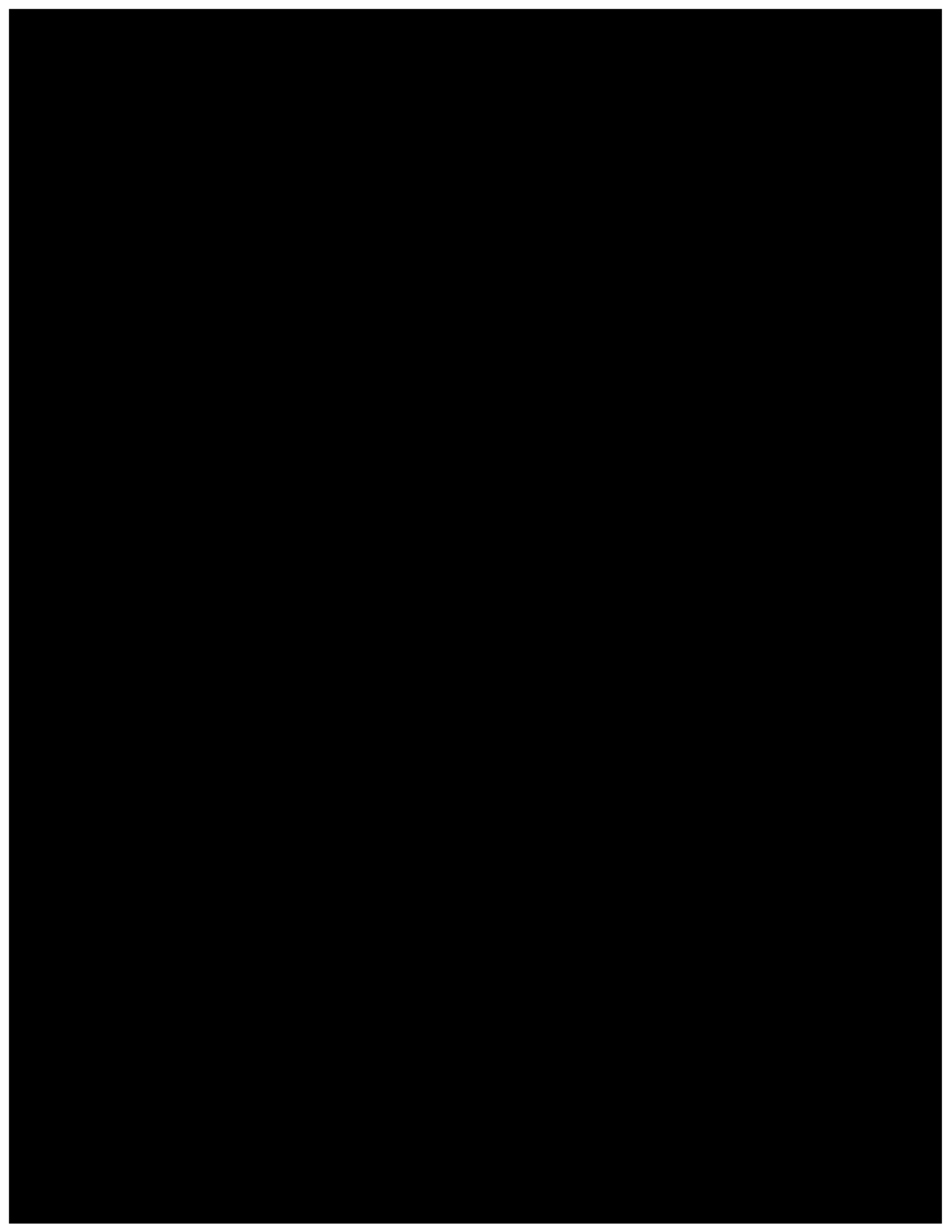
Boise, ID Juvenile Probation Department
Boston, MA Juvenile Court System
Charlotte, NC Juvenile Courts
Dallas, TX Juvenile Court System
Denver, CO Juvenile Intake Division
Detroit, MI Juvenile System
Little Rock, AR Juvenile Courts, Prosecution Office
Los Angeles, CA Juvenile Court System
Louisville, KY Juvenile and Family Courts
Memphis, TN and Shelby County Juvenile Court
Miami, FL Juvenile Intake
Milwaukee, WI Probation Department
San Francisco, CA Probation Department
Springfield, IL Juvenile Division, Department of Corrections
St. Louis, MO Juvenile Court Intake Department
Tulsa, OK Juvenile Courts
Wichita, KS Juvenile Court Administration

LOCAL ENFORCEMENT AGENCIES

Charles County, MD Office of the Sheriff
Columbus, NE Police Department
Honolulu, HI Police Department
Los Angeles, CA Police Department
Plymouth, NH Police Department
Portland, OR Police Department
San Francisco, CA Department of Public Health
South Paris, ME Sheriff Department

RESEARCHERS/ACADEMIA/CLEARINGHOUSES

Drugs & Crime Clearinghouse
Ernie Chavez, Colorado State University
Delbert Elliott, University of Colorado
Jeff Fagan, Rutgers University
Jim Inciardi, University of Delaware
Interuniversity Consortium for Political and Social Research
(University of Michigan)
National Clearinghouse for Alcohol and Drug Information
National Council on Crime and Delinquency
National Criminal Justice Reference Service
Prevention Research Center (University of California, Berkeley)
Rutgers University Criminal Justice/NCCD Collection
Eric Wish, University of Maryland



APPENDIX B

ALCOHOL AND YOUTH CRIME BIBLIOGRAPHY

- Brent, David A., Perper, Joshua A., and Allman, Christopher, "Alcohol, Firearms, and Suicide Among Youth: Temporal Trends in Allegheny County, Pennsylvania, 1960 to 1983," Journal of the American Medical Association, June 26, 1987, pp. 3369-3372.
- Collins, James J., "Alcohol Careers and Criminal Careers," in Collins, (Ed.), Drinking and Crime: Perspectives on the Relationships Between Alcohol Consumption and Criminal Behavior, 1981, pp. 152-206.
- _____, "The Relationship of Problem Drinking to Individual Offending Sequences," in Blumstein, Cohen, Roth, and Visher (Eds.), Criminal Careers and Career Criminals, v. 2, 1986, pp. 89-120.
- Fagan, Jeffrey, "Intoxication and Aggression," in Tonry and Wilson (Eds.), Drugs and Crime, v. 13, 1990, pp. 241-320.
- Gerchow, Joachim, "Alcohol Use and Juvenile Delinquency," Child Health, v. 2, pp. 127-135.
- Haggerty, Kevin P., Wells, Elizabeth A., Jenson, Jeffrey M., Catalano, Richard F., and Hawkins, J. David, "Delinquents and Drug Use: A Model Program for Community Reintegration," Adolescence, Summer 1989, pp. 439-456.
- Harrison, Carlos, "Kids on Crack: 880 Crimes Each in a Year," Miami Herald, August 3, 1989, p. 1.
- Illinois Criminal Justice Information Authority, Trends and Issues 89: Criminal and Juvenile Justice in Illinois, 1989.
- Illinois Department of Alcoholism and Substance Abuse, Addictions Research Institute, Youth Survey: 1990--Our Youth Is Our Future, April 1991.
- Inciardi, James A. and McBride, Duane C., Treatment Alternatives to Street Crime, developed for U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, National Institute on Drug Abuse, 1991.
- Insurance Institute for Highway Safety, "For Patrol Officers, Alcohol Sensors are Helpful Screening Tool," Status Report, November 30, 1991, p. 9.

- Jacobs, James B., "Drinking and Crime," National Institute of Justice Crime File Study Guide.
- Jenson, Randy, "Severity of Delinquent Offense and Alcohol Involvement Among Residents from a Rural Midwestern Juvenile Correctional Facility," Juvenile and Family Court Journal, November 1982, pp. 63-66.
- Loeber, Rolf, van Kammen, Welmoet, Huizinga, David, and Krohn, Marvin D., "The Crime-Substance Use Nexus in Young People," in Projects of the Program of Research on the Causes and Correlates of Delinquency (Compilation of articles stemming from the Denver and Pittsburgh Youth Surveys and the Rochester Youth Development Study), September 1991, chapter 5.
- Males, Mike, "Commentaries: Youth Behavior: Subcultural Effect or Mirror of Adult Behavior," Journal of School Health, December 1990, pp. 505-508.
- Martin, Susan E., "Alcohol-Related Interpersonal Violence: Current Knowledge and Research Directions," to be published in Journal of the American Medical Association, 1992.
- Nadelman, Ethan A., "Drugs: The Case for Legalization," Washington Post, October 8, 1989.
- National Families in Action, "Alcohol Use Linked with Sexual Assault, Gang Rape on College Campuses," Drug Abuse Update, March 1989, p. 17.
- _____, "College Students Report Strong Link Between Substance Abuse and Campus Crime," Drug Abuse Update, September 1990.
- Newcomb, Michael D. and McGee, Linda, "Adolescent Alcohol Use and Other Delinquent Behaviors: A One-Year Longitudinal Analysis Controlling for Sensation Seeking," Criminal Justice and Behavior, September 1989, pp. 345-369.
- Rivers, James E., Drug Use and Criminal Activity Among Miami Youth Involved in the Crack-Cocaine Business, July 1989
- Temple, Mark and Ladouceur, Patricia, "The Alcohol-Crime Relationship as an Age-Specific Phenomenon: A Longitudinal Study," Contemporary Drug Problems, Spring 1988, pp. 89-115.
- U.S. Department of Health and Human Services, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, National Institute on Alcohol Abuse and Alcoholism, Seventh Special Report to the U.S. Congress on Alcohol and Health From the Secretary of Health and Human Services, January 1990.

_____, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, National Institute on Drug Abuse, Research Monograph Series #103--Drugs and Violence: Causes, Correlates, and Consequences, 1990.

_____, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, Office for Substance Abuse Prevention, "OSAP Mobilizes to Combat a National Crisis," The Fact Is..., Spring 1991.

_____, Public Health Service, Homeless and Runaway Youth: Public Health Issues and the Need for Action, 1991.

U.S. Department of Justice, Federal Bureau of Investigation, Uniform Crime Reporting--National Incident-Based Reporting System, v. 1-3, July 1, 1988.

_____, Office of Justice Programs, Bureau of Justice Statistics, Correctional Populations in the United States, 1987, December 1989.

_____, Office of Justice Programs, Bureau of Justice Statistics, "Drugs and Jail Inmates, 1989," Bureau of Justice Statistics Special Report, August 1991.

_____, Office of Justice Programs, Bureau of Justice Statistics, "Fact Sheet: Drug Data Summary," Drugs & Crime Data, November 1991.

_____, Office of Justice Programs, Bureau of Justice Statistics, "Profile of State Prison Inmates, 1986," Bureau of Justice Statistics Special Report, January 1988.

_____, Office of Justice Programs, Bureau of Justice Statistics, Sourcebook of Criminal Justice Statistics--1990, 1991.

_____, Office of Justice Programs, Bureau of Justice Statistics, "Survey of Youth in Custody, 1987," Bureau of Justice Statistics Special Report, September 1988.

_____, Office of Justice Programs, Bureau of Justice Statistics, Violent Crime in the United States, 1991.

_____, Office of Justice Programs, National Institute of Justice, "Drugs & Crime: 1990 Annual Report," Drug Use Forecasting, August 1991.

_____, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, "Improving Juvenile Justice at the Local Level," OJJDP Juvenile Justice Bulletin, Reprinted from NIJ Reports, March/April 1990.

_____, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, "Growth in Minority Detentions Attributed to Drug Law Violators," OJJDP Update on Statistics, Reprinted from March 1990.

_____, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, "Juvenile Courts Vary Greatly in How They Handle Drug and Alcohol Cases," OJJDP Update on Statistics, Reprinted from NIJ Reports, July/August 1989.

_____, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, "Public Juvenile Facilities: Children in Custody," OJJDP Update on Statistics, January 1991.

Watts, W. David and Wright, Loyd S., "The Relationship of Alcohol, Tobacco, Marijuana, and Other Illegal Drug Use to Delinquency, Among Mexican-American, Black, and White Adolescent Males," Adolescence, Spring 1990, pp. 171-181.

White, Helene R., Pandina, Robert J., and LaGrange, Randy L., "Longitudinal Predictors of Serious Substance Abuse and Delinquency," Criminology, v. 25, no. 3, 1987, pp. 715-740.