

The Maryland Automated Hotline Reporting System (MAHRS): Final Report

Conducted by

**Center for Substance Abuse Research (CESAR)
University of Maryland at College Park**

for

Maryland Alcohol and Drug Abuse Administration

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**Center for Substance Abuse Research (CESAR)
University of Maryland
4321 Hartwick Road, Suite 501
College Park, Maryland 20740
Telephone: 301-403-8329
Fax: 301-403-8342**

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by

Michael Wagner and Eric D. Wish

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ABSTRACT

Maryland is one of many states that have been funded by the federal Center for Substance Abuse Treatment (CSAT) to conduct a family of studies designed to assess the need for alcohol and drug treatment statewide. The Center for Substance Abuse Research (CESAR) is conducting these studies for Maryland's Alcohol and Drug Abuse Administration. For one of the studies, CESAR developed the Maryland Automated Hotline Reporting System (MAHRS). Data collected through MAHRS provide a new indicator of substance use and the need for treatment across the state.

Working in conjunction with six Maryland telephone crisis hotlines, CESAR developed a scannable telephone log form that met the data collection needs of each hotline and CESAR. In return, the hotlines agreed to ask several drug-related questions of all callers who mentioned alcohol or drugs as a problem. Completed forms were sent to CESAR for optical scanning and analysis, and CESAR returned an updated computer file to each hotline. Using MAHRS, each hotline could then generate descriptive reports tailored to its needs, as well as county-level and statewide data on alcohol and drug use, frequency of specific drug mentions, patterns of injection drug use, callers' assessment of their need for alcohol or drug treatment, and many other aspects of the data.

Based on three years of MAHRS data collection (March 1, 1993-December 31, 1995), about 9% of calls to the seven hotlines (the seventh hotline was added on April 1, 1995) involve alcohol or other drugs (AOD). The monthly number of AOD-related calls was highly stable over the period. More than half of the callers who mentioned alcohol or other drugs as a problem reported a current need for treatment, which lends credibility to MAHRS as a needs assessment and treatment planning tool. More than one-third of the AOD-related calls resulted in referrals to addiction services.

The AOD-related problems mentioned by hotline callers are consistent with what is known from other sources about patterns of AOD use in the state. For example, the steady increase over the period in mentions of heroin use by hotline callers in the Baltimore Metro area is consistent with reports of the ready availability of low-cost, high-purity heroin in that part of the state. A comparison of MAHRS data and data from the Substance Abuse Management Information System, an established indicator of substance use and treatment utilization, also indicates considerable agreement regarding the regional distribution of substance use.

The data from the three years of MAHRS operation provide a baseline against which changes in drug use and need for treatment can be measured. Subsequent analyses of the MAHRS data will be incorporated in a modeling study that uses data from the family of studies that constitute the Maryland CSAT Treatment Needs Assessment.

ACKNOWLEDGMENTS

On October 1, 1992, the State of Maryland was awarded a multi-year contract by the Center for Substance Abuse Treatment (CSAT), Substance Abuse and Mental Health Services Administration (SAMHSA), to launch a family of studies to measure the need for substance abuse treatment in Maryland. Maryland was among 13 states chosen to receive awards in the first round of funding for CSAT's national program of State Demand and Needs Assessment Studies, Alcohol and Other Drugs.

This award was the result of a successful collaboration between staff at Maryland's Alcohol and Drug Abuse Administration (ADAA) and the University of Maryland's Center for Substance Abuse Research (CESAR). CESAR received a subcontract from ADAA to conduct a series of studies, one of which investigated calls to telephone crisis hotlines as a potential indicator of the need for substance abuse treatment.* The results of the study are described in this report.

This report would not have been possible without the cooperation and support of the Alcohol and Drug Abuse Administration of the state of Maryland. Mr. William Rusinko, project manager of the Maryland CSAT Needs Assessment study, was particularly supportive of this project.

Thanks are also due to all the individual hotline coordinators and counselors, whose compassionate interventions and thorough recordkeeping ensured successful data collection for the project. Henry Westray of the Maryland Mental Hygiene Administration coordinates the Maryland Youth Crisis Hotline, a network of telephone crisis hotlines across the state. Directors of the participating hotlines are Ginny Simpson of Walden/Sierra Inc., Sylvia Strop of the Life Crisis Center, Chrissy Polce of the Frederick County Mental Health Association, Debra Popiel of Grassroots Crisis Intervention, David Pollock of the Mental Health Association of Montgomery County, Richard Reap of Hotline & Suicide Prevention Center Inc., and Kevin Fidgeon of For All Seasons, Inc.

**Substance Abuse and Need for Treatment in Maryland* (1996), by Kenneth R. Petronis and Eric D. Wish, reports the results of a telephone survey of adults residing in Maryland households. Another study is assessing the level of drug abuse and need for treatment among adult arrestees in Baltimore City and juvenile detainees across the state. A final study will employ statistical modeling techniques that combine data from the preceding studies to develop an estimate of the overall need for drug treatment in Maryland.

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BACKGROUND

The Maryland Automated Hotline Reporting System (MAHRS) automates the collection of data from calls to seven telephone crisis hotlines in Maryland. Based on information from approximately 90,000 calls to the hotlines a year, it is now possible to track substance abuse trends that may correlate with the need for treatment among the caller population. Data from the three years of operation (March 1, 1993-December 31, 1995) show a high level of stability in reported drug use, which suggests that the hotline statistics may be sensitive to community drug-use trends. We expect that these data will be a valuable addition to the set of substance abuse indicators monitored by the Center for Substance Abuse Research (CESAR) and state and local agencies.

This report describes findings from the three years of MAHRS data collection. The research methodology is described in Appendix A. Future analyses will include the MAHRS data in an overall assessment of need for treatment in the state of Maryland, the final study in the family of studies that constitute the Maryland CSAT Treatment Needs Assessment.

Calls to telephone crisis hotlines are a potential source of information about substance abuse treatment needs among the general population. Data collected from hotlines have been used to investigate such drug-related problems as smoking (Shiffman, 1986; Shiffman and Jarvik, 1987), cocaine abuse (Gold, 1990; Roehrich, 1988), and substance abuse trends (Gold, 1984; Washton et al., 1984). Data can typically be collected more quickly through hotlines than through other means, as demonstrated by the two substance abuse hotlines that reported the crack epidemic several years before other sources (Hall, 1988). Hotline research also provides information about substance abusers who might not be reached by traditional methods (Center for Substance Abuse Treatment, 1996; Washton and Gold, 1987).

When CESAR began working with the six hotlines that initially made up MAHRS, the hotlines were recording information about callers on paper forms and then transferring it later to a computer in order to generate reports. Time-consuming data entry demands often resulted in backlogs of several months. Hotline staff also often had difficulty generating timely reports for internal purposes and the agency or organization operating the hotline.

Hotline counselors had earlier told CESAR staff that substance abuse problems were discussed in many of the calls they received, so caller information appeared to be a potentially valuable source of data on the use of alcohol and other drugs (AOD). Unfortunately, none of the hotlines had systematic procedures for collecting AOD information. CESAR offered to automate the hotlines' data collection if, in return, the hotlines would ask several AOD-related questions of any caller who mentioned alcohol or drugs as a problem. The questions ask if the alcohol or drug user has ever injected illegal drugs and if the user thinks he or she needs treatment for alcohol or drug use.

Also included is an inventory of drugs that are checked off by hotline staff if mentioned by the caller.

CESAR collaborated with the hotlines over a period of months to create a scannable data collection form (Figure 1) that accommodated the needs of the hotlines. The forms were filled out by hotline staff during telephone interviews and were sent once a month to CESAR for optical scanning and analysis. CESAR also created a customized software application for this database that enables individual hotlines to create a variety of descriptive reports about the calls they receive, including reports on the characteristics of callers, key concerns of callers (e.g., substance abuse, domestic violence, pregnancy, AIDS, homelessness), outcome of calls (e.g., hang-up, client sent to emergency room), and referrals (e.g., addiction services, legal services, other hotlines).

The AOD questions are analyzed by CESAR to obtain information about substance abuse trends in Maryland. Reports can be generated describing the county-level distribution of alcohol and other drug use, number of specific drug mentions, patterns of injection drug use, callers' assessment of the need for alcohol or drug treatment, and many other aspects of the data.

FINDINGS

This section analyzes data collected from the six MAHRS hotlines from March 1, 1993 through December 31, 1995. A seventh hotline was added to MAHRS on April 1, 1995; nine months of data from that hotline are included in the 1995 data. To ensure anonymity, each hotline is identified only by a letter of the alphabet ("A" through "G").

MAHRS Call Volume

The total number of calls received over the three years was 247,163; 69,086 in 1993, 86,709 in 1994, and 91,368 in 1995. One-quarter of the calls (N = 68,633) were from "frequent callers," people who called many times a month for companionship rather than crisis help. As explained in Appendix A, frequent callers were excluded from the analyses so they would not distort the results. Thus, the total number of calls analyzed is 178,530 (Table 1). All subsequent tables are based on those 178,530 calls.

Each hotline's call volume remained relatively stable during each of the three years of data collection. The total number of calls per month across all hotlines also stayed within a narrow range. This range was 4,205 to 5,296 in 1993, 4,548 to 6,264 in 1994, and 5,148 to 5,928 in 1995. Call volume varied across hotlines, however. One hotline received more than 54,000 calls in the three-year period, and two hotlines each received fewer than 14,000 calls.

Table 1: Yearly Number of Calls to Hotlines
(March 1993-December 1995)

Year	Hotline							Total
	A	B	C	D	E	F	G	
1993	15,060	5,883	3,745	10,359	10,426	3,356	0	48,829
1994	19,609	7,615	4,564	12,127	15,523	3,719	0	63,157
1995	19,441	8,740	4,763	14,047	14,334	3,732	1,487	66,544
Total	54,110	22,238	13,072	36,533	40,283	10,807	1,487	178,530

NOTES: Excludes 68,633 calls from frequent callers. Hotline G joined MAHRS in April 1995.

SOURCE: Appendix Tables B1, C1, and D1.

Characteristics of Callers

Eighty-four percent of MAHRS calls were from people calling to discuss their own problems (Table 2). The remaining calls were from people calling about a third party (someone other than themselves—10%), from agencies (4%), or from people calling about themselves and a third party (2%). Sixty-nine percent of the calls were from females, and although the median age was 32, almost one-third of the calls were from persons under age 20 or over age 44.

Table 2: Characteristics of Hotline Callers
(N = 178,530 calls; March 1993-December 1995)

Characteristic	Percent
Caller: Self	84.0%
Third Party	10.1
Agency	3.8
Self and Third Party	2.1
	100.0%
Gender: Female	68.8%
Age: < 20 years	12.8%
20 - 29	22.5
30 - 44	47.6
≥ 45	17.1
	100.0%
Median	32
Hotline Called: A	30.3%
B	12.5
C	7.3
D	20.5
E	22.6
F	6.1
G	.8
	100.0%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Percents may not add to 100% due to rounding.

SOURCE: Appendix Tables B2, C2, and D2.

AOD-Related Calls to Hotlines

Of the 39 issues of concern listed on the data collection form (Figure 1), up to 4 issues are recorded by hotline counselors for each call (average = 1.7). Issues that were mentioned more frequently than alcohol and drugs were social and personal relationships (21%), daily stressors (17%), mental health concerns (16%), general family issues (13%), and housing and homelessness (12%). (See Appendix Tables B16, C16, and D16.)

Alcohol use and drug use were mentioned in 16,242 (9%) of the 178,530 calls included in the analysis (Table 3). The

remainder of this report focuses on those 16,242 calls. Each hotline's AOD call volume remained relatively stable during each of the three years of data collection. The total number of calls per month across all hotlines also stayed within a narrow range. This range was 413 to 541 in 1993, 366 to 567 in 1994, and 403 to 530 in 1995. Call volume varied across hotlines, however. Two hotlines received more than 4,000 AOD calls in the three-year period, while two other hotlines each received about 1,000 AOD-related calls.

Table 3: Yearly AOD-Related Calls to Hotlines (March 1993-December 1995)

Year	Hotline							Total
	A	B	C	D	E	F	G	
1993	1,583	603	402	312	619	1,206	0	4,725
1994	2,212	706	394	341	808	1,400	0	5,861
1995	1,674	805	337	332	868	1,524	116	5,656
Total	5,469	2,114	1,133	985	2,295	4,130	116	16,242

NOTES: Excludes 3,364 calls from frequent and common callers. Hotline G joined MAHRS in April 1995.

SOURCE: Appendix Tables B3, C3, and D3.

AOD and Non-AOD Calls, by County

Most of the AOD-related calls came from just five jurisdictions—St. Mary's County (3,881), Baltimore City (2,029), Prince George's County (2,020), Baltimore County (1,133), and Wicomico County (1,132). (See Table 4.) The remaining 19 counties received fewer than 1,000 AOD-related calls during the three-year period. As might be expected, the four counties in which the MAHRS hotlines are located (Table 4) had four of the six highest total call volumes. The fifth and sixth are Baltimore City and Baltimore County, which had high call volumes but are not the site of a MAHRS hotline.

Population and Call Volume, by Region

Because the number of calls to many counties was small, we aggregated counties into regions for the analysis (Figure 2). Assignment was based on the Maryland Adolescent Survey (MAS) regional divisions, as follows: Western Maryland (Allegany, Frederick, Garrett, and Washington counties), Southern Maryland (Calvert, Charles, and St. Mary's counties), Lower Shore (Dorchester, Somerset, Wicomico, and Worcester counties), Baltimore Metro (Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties), DC Metro (Montgomery and Prince George's counties), and Upper Shore (Caroline, Cecil, Kent, Queen Anne's, and Talbot counties).

Callers from the Upper Shore placed only 1.7% of total calls (and only 16 calls with AOD mentions) during the period (Table 5), so drawing meaningful conclusions about alcohol and other drug trends in the Upper Shore region is difficult. To simplify the presentation of regional results, in subsequent tables we combined calls from the Upper Shore region and out-of-state calls into an "Other" category.

Table 4: AOD and Non-AOD Calls, by County
(N = 178,530 calls; March 1993-December 1995)

County*	Calls with No AOD Mention	Calls with AOD Mention	Total Calls
Anne Arundel	1,892	369	2,261
Allegany	299	22	321
Baltimore City	11,218	2,029	13,247
Baltimore County	8,915	1,133	10,048
Calvert	276	88	364
Caroline	226	21	247
Carroll	861	98	959
Cecil	1,431	128	1,559
Charles	194	72	266
Dorchester	883	40	923
Frederick*	9,266	926	10,192
Garrett	491	49	540
Harford	951	117	1,068
Howard*	13,731	896	14,627
Kent	94	12	106
Montgomery*	21,205	727	21,932
Prince George's*	32,392	2,020	34,412
Queen Anne's	189	32	221
Somerset	1,284	201	1,485
St. Mary's*	6,102	3,881	9,983
Talbot*	370	33	403
Washington	1,328	127	1,455
Wicomico*	12,118	1,132	13,250
Worcester	2,872	446	3,318
Out of State	5,556	214	5,770
Unknown	28,144	1,429	29,573
Total	162,288	16,242	178,530

*Counties in which the hotlines are located.
SOURCE: Appendix Tables B4, C4, and D4.

The DC Metro and Baltimore Metro regions generated the greatest percentage of calls (66%), but they also have the largest population by far (80% of state population). In addition, three of the hotlines are in the DC Metro and Baltimore Metro regions, and a fourth is nearby in the Western Maryland region. The Lower Shore region had a higher percentage of calls than expected (13%) given that the region has only 3% of the state's population. In general, the percentage of calls from a region was roughly equivalent to the region's share of the state's population.

Table 5: Percentage of Population and
Call Volume of MAHRS Regions (March 1993-December 1995)

Region*	% of State Population (N = 4,781,468)	% of Total Calls (N = 148,957)**
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Baltimore Metro	49.1%	28.3%
DC Metro	31.1	37.8
Western Maryland	7.8	8.4
Southern Maryland	4.8	7.1
Upper Shore	3.8	1.7
Lower Shore	3.4	12.7
Out of State	0.0	3.9
	<hr/>	<hr/>
	100.0%	100.0%

*Western Maryland = Allegany, Frederick, Garrett, and Washington counties; Southern Maryland = Calvert, Charles, and St. Mary's counties; Lower Shore = Dorchester, Somerset, Wicomico, and Worcester counties; Baltimore Metro = Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties; DC Metro = Montgomery and Prince George's counties; Upper Shore = Caroline, Cecil, Kent, Queen Anne's, and Talbot counties.
 **Excludes calls from "Unknown" category (29,573), which reduces the total number of calls from 178,530 to 148,957.
 SOURCE: Appendix Tables B5, C5, and D5.

Drugs Used, Ever Injected, and Need for Treatment*

For the three-year period, an average of 9.1% of calls included AOD-related mentions; the number of calls decreased from 9.7% of total calls in 1993 to 8.5% of calls in 1995 (Table 6). Except for alcohol mentions, which declined from 6.4% to 5.4%, mentions of specific drugs were stable over the period. Reports of injecting illegal drugs were made in 1.0% of calls, on average. Self-reported need for treatment was relatively steady in all three years: an average of 2.0% of callers reported a need for alcohol treatment, an average of 1.9% reported a need for drug treatment, and an average of 1.1% reported a need for both alcohol and drug treatment.

Calls from agencies, which make up 4% of total calls, are excluded from the drug injection and treatment statistics because they frequently do not provide information on the history of a specific client. Generally, these calls represent agencies contacting hotlines on behalf of a client, to inquire about hotline services, or to tell hotlines about their services.

*The validity of AOD data relies on consistent completion of AOD-related items (the "drug box") on the hotline log form. Completion rates rose steadily throughout the first five months of data collection, due to more consistent reporting by hotline counselors, and then remained stable thereafter. Appendix A provides a discussion of this issue.

Table 6: Percentage of Yearly Calls with AOD Mentions, Reported History of Injecting Illegal Drugs, and Reported Needed for Treatment (N = 178,530 calls; March 1993-December 1995)

Year	Any AOD Mention	Alcohol	Cocaine	Crack	Marijuana	Heroin	Other	Total Calls
1993	9.7%	6.4%	1.8%	1.8%	1.2%	.6%	1.7%	48,829
1994	9.3	5.8	1.5	2.1	1.2	.7	1.8	63,157
1995	8.5	5.4	1.3	1.9	1.3	.8	1.5	66,544
Average	9.1%	5.8%	1.5	1.9	1.2	.7	1.7	178,530

Year	Ever Injected*	Needs Treatment*				Total Calls
		Alcohol	Drug	Alcohol & Drug	None	
1993	1.9%	2.2%	1.8%	1.1%	94.9%	48,829
1994	.9	1.8	1.9	1.1	95.1	63,157
1995	.9	2.0	1.9	1.0	95.1	66,544
Average	1.0%	2.0%	1.9%	1.1%	95.0%	178,530

*Excludes "doesn't know" and "refused to answer"; calls from agencies are also excluded.
SOURCE: Appendix Tables B6, C6, and D6.

AOD Mentions per 100 AOD Calls, by Region and Year

Some of the data presented above could be misleading because of changes in the number of calls to hotlines from month to month. To control for this potential bias, Table 7 focuses on the rate at which specific drugs were mentioned in each region. It is a useful table for examining changes in alcohol and drug use calls over time. The "total" column is the only column not based on rates; it is included so the reader can see the *absolute* number of AOD mentions per region per month.

A noteworthy trend evident in Table 7 is the steady increase in total rates of crack, marijuana, and heroin mentions over the period. Rates of crack mentions increased in four of six regions (Baltimore Metro, Lower Shore, DC Metro, and Other), rates of marijuana mentions increased in three regions (Southern Maryland, DC Metro, and Baltimore Metro), and rates of heroin mentions increased in three regions (Western Maryland, Baltimore Metro, and DC Metro). It is possible that these increases are linked to increases in drug box completion rates (see Appendix A). However, given that rates of alcohol and cocaine mentions did not increase consistently in any region, despite the high number of mentions in both categories, the increased rates of other drug mentions are not explainable by increased drug box completion rates alone.

Table 7: AOD Mentions per 100 AOD-Related Calls and Total Drug Mentions, by Region and Year
(N = 16,242 calls from March 1993-December 1995)

Region*	Year	Alcohol	Cocaine	Crack	Marijuana	Cigarettes	Heroin	LSD	PCP	Other	Absolute No. of AOD Mentions**
Western Maryland	'93	74	12	12	21	6	3	2	2	12	389
	'94	69	9	17	21	5	4	5	1	15	403
	'95	64	10	12	18	5	5	5	2	17	332
Southern Maryland	'93	71	16	23	12	4	4	3	3	5	1,187
	'94	74	13	27	16	3	2	3	3	7	1,376
	'95	76	12	20	19	6	2	3	3	5	1,478
Lower Shore	'93	69	12	27	13	4	3	1	0	9	489
	'94	71	9	30	12	3	3	2	0	7	596
	'95	71	9	32	12	2	2	1	1	6	734
Baltimore Metro	'93	56	27	13	10	4	13	2	2	10	1,347
	'94	52	20	18	12	3	15	3	2	13	1,855
	'95	48	18	18	12	2	20	3	1	11	1,440
DC Metro	'93	61	18	22	13	13	4	1	2	12	746
	'94	55	22	25	9	7	5	2	4	15	1,000
	'95	58	18	25	14	6	5	2	2	12	1,001
Other	'93	66	11	18	18	6	4	2	3	8	125
	'94	75	12	25	27	14	9	7	1	21	153
	'95	62	20	25	17	9	4	1	3	16	162
Total	'93	65	19	19	12	6	7	2	2	9	4,283
	'94	62	16	23	13	4	8	3	2	12	5,383
	'95	63	15	22	15	4	8	3	2	10	5,147

*Other = Upper Shore and out of state.

**This column reports the absolute number of AOD mentions per region per year. All other columns are rates of

AOD mentions per 100 AOD-related calls.
SOURCE: Appendix Tables B7, C7, and D7.

As shown in Table 7, alcohol was mentioned in all regions far more frequently than any other substance. (See also Appendix Tables B15, C15, and D15.) The highest rates of heroin and cocaine mentions were in the Baltimore Metro region; crack mentions were more widely distributed.

Comparison of AOD and Non-AOD Callers

Sixty-nine percent of the total calls to the hotlines were from females, but only 54% of calls with AOD mentions were from females (Table 8). Thus, calls from women were less likely to involve AOD mentions than calls from men. The median age of AOD callers was 33 while the median age of non-AOD callers was 31. Differences in age between AOD and non-AOD callers were generally small. The largest difference was in the over-44 age group, in which non-AOD callers outnumbered AOD callers by almost 8 percentage. Hotlines D and E received a lower percentage of AOD calls than non-AOD calls, but Hotline F, which is affiliated with a drug treatment center, received 25% of AOD calls and only 4% of non-AOD calls.

Calls from Southern Maryland accounted for 5% of the calls without AOD mentions but 27% of calls with AOD mentions. Callers from the DC Metro region made 40% of the calls without AOD mentions but 19% of calls with AOD mentions. Almost 80% of AOD calls came from three regions—Baltimore Metro, DC Metro, and Southern Maryland.

Characteristics of AOD Callers

Females, as noted, made 54% of the calls with AOD mentions, but they were underrepresented (47%) among calls with LSD mentions (Table 9). The median age of 31 is consistent for almost all groups of callers with specific drug mentions, except for the LSD group, which was considerably younger (22), and the marijuana group, which was slightly younger (27). Callers in the middle age groups, ages 20-29 and 30-44, placed 79% of total AOD calls and from 54% to 88% of calls for each individual drug. Callers in the under-20 age group, who placed 11% of the AOD calls, were overrepresented among calls with marijuana (27%), LSD (41%), and PCP (17%) mentions. Callers in the over-44 group, who placed 10% of the calls with AOD mentions, were underrepresented in all drug mentions with the exception of alcohol. A pattern of age-related usage is evident here: alcohol mentions were more prevalent among older callers and marijuana and LSD mentions were more prevalent among younger callers. In addition, PCP mentions may be more prevalent among young callers.

Thirty-one percent of calls with AOD mentions were from the Baltimore Metro region, but Baltimore Metro was overrepresented among calls with heroin (68%) and cocaine (41%) mentions. All other regions were underrepresented among calls with heroin

Table 8: Characteristics of AOD-Related and Non-AOD-Related Calls
(N = 178,530 calls from March 1993-December 1995)

Characteristic	Non-AOD (162,288)	AOD (16,242)
Gender: Female	70.2%	53.8%
Age: < 20 years	13.0%	10.8%
20-29	22.0	27.0
30-44	47.2	52.0
≥ 45	17.8	10.2
	100.0%	100.0%
Median	31	33
Hotline Called: A	30.0%	33.7%
B	12.4	13.0
C	7.4	7.0
D	21.9	6.1
E	23.4	14.1
F	4.1	25.4
G	.8	.7
	100.0%	100.0%
Region: DC Metro	40.0%	18.5%
Baltimore Metro	28.0	31.3
Lower Shore	12.8	12.3
Southern Maryland	4.9	27.3
Western Maryland	8.5	7.6
Other	5.9	3.0
	100.0%	100.0%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Hotline G joined MAHRS in April 1995.
SOURCE: Appendix Tables B8, C8, and D8.

mentions, largely due to the high number of heroin mentions in Baltimore Metro. Twenty-seven percent of calls with AOD mentions were from Southern Maryland, but the region was overrepresented among calls with marijuana (32%), alcohol (32%), LSD (33%), and PCP (39%) mentions. The other regions were proportionally represented in AOD-related calls for most drugs. The information collected on injection of illegal drugs lends validity to the data. Although only 11% of the calls with AOD mentions involved a person who had ever injected illegal drugs, 67% of the calls with heroin mentions involved a person who had injected. The next highest group was cocaine calls, 25% of which involved a report of drug injection. The substantial difference in injection practices between heroin calls and all other alcohol and drug calls is consistent with the typical route of administration of heroin.

Callers with AOD mentions were asked, "Does this person think he/she now needs treatment for alcohol or drug use?" Twenty-one percent responded "yes" for just drug treatment, 22% for just alcohol treatment, and 12% for both alcohol and drug treatment.

Table 9: Demographics, Ever Injected, and Need for Treatment of Callers with Drug Mentions,
by Drug Mentioned (N = 16,242 calls from March 1993-December 1995)

		Percent Mentioned							
Characteristic		Alcohol (10,257)	Cocaine (2,686)	Crack (3,413)	Marijuana (2,215)	Heroin (1,232)	LSD (451)	PCP (388)	Any Alc/Drug (16,242)
Gender:	Female	51.6%	51.0%	55.2%	51.5%	52.0%	47.2%	50.7%	53.8%
Age:	< 20 years	9.7%	9.3%	6.7%	27.0%	8.0%	40.6%	16.8%	10.8%
	20 - 29	24.8	32.7	37.6	28.6	33.4	23.5	32.8	27.0
	30 - 44	53.8	52.4	50.0	39.2	51.0	30.5	47.3	52.0
	≥ 45	11.6	5.6	5.6	5.2	7.6	5.4	3.1	10.2
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Median	32	30	30	27	30	22	30	31
Region:	DC Metro	17.0%	21.8%	21.1%	16.0%	11.7%	13.6%	23.0%	18.5%
	Baltimore Metro	25.8	40.9	24.1	25.6	67.5	32.3	26.2	31.3
	Lower Shore	13.7	7.4	17.2	11.0	4.6	5.4	2.9	12.3
	Southern Md.	31.9	22.5	29.5	31.7	9.8	32.6	38.5	27.3
	Western Md.	8.3	4.8	4.9	11.1	4.1	12.0	6.1	7.6
	Other	3.2	2.7	3.2	4.6	2.3	4.1	3.2	3.0
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Ever	Yes	7.0%	24.8%	15.6%	10.5%	67.4%	15.9%	15.8%	10.5%
Injected	No	60.3	44.7	51.8	55.9	16.5	50.7	58.7	54.7
Illegal	Refused	7.4	7.1	6.8	5.6	3.1	4.6	5.7	7.3
Drugs:	Doesn't Know	25.3	23.3	25.7	28.0	13.0	28.8	19.8	27.4
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Thinks	No	30.9%	22.9%	20.5%	32.6%	18.0%	31.0%	26.5%	29.3%
He/She	Yes - Drug	3.7	40.4	43.8	22.6	53.4	24.6	29.9	20.8
Needs	Yes - Alcohol	33.9	2.5	1.4	5.3	2.0	3.5	2.7	21.8
Treatment	Yes - Both	16.4	23.2	22.6	21.4	18.1	20.6	31.5	11.6
Now:	Refused	2.5	2.2	2.1	1.2	1.3	1.9	1.3	2.4
	Doesn't Know	12.6	8.8	9.7	16.9	7.3	18.4	8.1	14.0
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics.
Agency calls are also excluded from injection and treatment statistics.
Percents may not add to exactly 100 due to rounding.
SOURCE: Appendix Tables B9, C9, and D9.

Hence, more than half (54%) of calls with AOD mentions involved a person who needed some kind of AOD treatment services. The highest rates of treatment need were associated with heroin (74%), crack (68%), and cocaine (66%). The lowest rates were for marijuana and LSD (49%).

Characteristics of AOD Callers, by Need for Treatment

Forty-seven percent of callers who reported a need for alcohol treatment were female, compared with 51% of callers who reported a need for both alcohol and drug treatment (Table 10). Callers who reported a need for just alcohol treatment were slightly older (median age 34) than callers who reported a need for drug treatment or alcohol and drug treatment (median age 30). Not all hotlines and regions had equal proportions of callers who reported a need for treatment. Callers to Hotline A placed 34% of calls with AOD mentions but only 26% of calls with reported need for alcohol treatment. Callers from Southern Maryland placed 37% of calls with reported need for both alcohol and drug treatment, but overall they accounted for only 27% of calls with AOD mentions. Among all calls in which need for alcohol and drug treatment was reported, 28% involved a history of injection of illegal drugs.

Callers Referred to Addiction Services

Of 16,242 calls with alcohol or drug mentions, 40% resulted in referrals to addiction services (Table 11). Calls with crack (51%), PCP (52%), LSD (48%), and heroin (48%) mentions were the calls most likely to result in referrals to addiction services. In 44% of calls that included mention of injection of illegal drugs, the callers were referred to addiction services. Not surprisingly, the highest rates of referral were for calls in which a need for treatment was reported—from 51% to 58% of these calls resulted in referrals, depending on what kind of treatment was needed. The reason that only about half of these calls resulted in treatment referrals is that many of the callers were currently in treatment.

Comparison of MAHRS and SAMIS Data

The principal purpose of MAHRS is to investigate hotline calls as indicators of need for substance abuse treatment among the caller population. One way to determine if hotline calls are valid indicators of treatment need is to compare the MAHRS findings to an indicator of treatment utilization, such as the Substance Abuse Management Information System (SAMIS) data collected by the Alcohol and Drug Abuse Administration (ADAA). For each person admitted to alcohol or drug treatment in Maryland, SAMIS records up to three substances mentioned by the client as most problematic in his or her life. If AOD-related hotline calls are a good indicator of relative need for substance abuse treatment, MAHRS callers can be

Table 10: Characteristics of AOD-Related Calls and Callers, by Need for Treatment
(N = 16,242 calls with AOD mentions from March 1993-December 1995)

		Treatment Needed Now?				
Characteristic		No (4,264)	Alc Only (3,183)	Drug Only (3,036)	Alc & Drug (1,696)	Total (12,179)*
Gender:	Female	57.1%	46.8%	50.7%	50.6%	52.0%
Age:	< 20 years	14.3%	5.6%	8.3%	9.3%	9.8%
	20 - 29	24.8	21.9	38.1	31.4	28.1
	30 - 44	48.4	59.2	48.2	54.6	52.2
	≥ 45	12.4	13.2	5.4	4.6	9.9
		100.0%	100.0%	100.0%	100.0%	100.0%
	Median	32	34	30	30	31
Hotline Called:	A	33.5%	26.4%	45.7%	28.7%	34.0%
	B	11.9	16.3	10.6	13.9	13.0
	C	8.2	7.9	4.3	5.1	6.7
	D	7.1	4.7	4.1	4.2	5.3
	E	19.9	12.1	14.4	10.8	15.2
	F	18.8	31.9	20.2	36.7	25.1
	G	.6	.6	.6	.6	.6
		100.0%	100.0%	100.0%	100.0%	100.0%
Region:	DC Metro	23.6%	15.4%	17.4%	15.4%	18.7%
	Baltimore Metro	31.7	23.2	44.5	26.0	31.9
	Lower Shore	11.3	15.8	10.3	13.1	12.5
	Southern Maryland	21.0	34.3	21.2	36.9	26.8
	Western Maryland	9.4	8.5	4.4	5.3	7.3
	Other	3.0	2.8	2.2	3.4	2.8
		100.0%	100.0%	100.0%	100.0%	100.0%
Drug** Mentioned:	Alcohol	67.4%	99.0%	11.2%	90.0%	64.8%
	Cocaine	13.0	1.9	32.2	33.0	17.7
	Crack	14.8	1.4	44.6	41.2	22.4
	Marijuana	15.3	3.4	14.9	25.4	13.5
	Heroin	4.7	.7	19.5	11.8	8.3
Ever Injected (yes)		10.9%	3.3%	30.8%	27.8%	16.0%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Hotline G joined MAHRS in April 1995.

Agency calls are also excluded from injection and treatment statistics.

*Excludes "refused" (372 calls), "doesn't know" (2,198), and "missing" (899).

**Sums to more than 100% because some callers mentioned multiple drugs.

SOURCE: Appendix Tables B10, C10, and D10.

Table 11: Drug Mentioned, Ever Injected, and Need for Treatment
for Those Referred to Addiction Services
(N = 16,242 calls from March 1993-December 1995)

	N	Referred to Addiction Services
Drug Mentioned		
Crack	3,413	51.2%*
PCP	388	51.8
LSD	451	48.3
Cocaine	2,686	45.9
Heroin	1,232	48.0
Alcohol	10,257	39.5
Marijuana	2,215	43.2
Other Drug	2,360	54.3
All AOD Calls	16,242	39.6
Ever Injected		
	1,590	43.5%
Self-reported Need for Treatment**		
Both	1,817	56.5%
Drug	3,174	58.3
Alcohol	3,360	50.5
No	4,422	19.5

NOTE: Percentages may sum to more than 100% because some callers mentioned multiple drugs.
*Sums to more than 100% because some callers mentioned multiple drugs.
**Excludes "refused" (372 calls) "doesn't know" (2,198) and "missing" (899).
SOURCE: Appendix Tables B11, C11, and D11.

expected to mention alcohol and other drugs in similar proportions to SAMIS clients. If crack was mentioned in 30% of MAHRS calls with AOD mentions, for example, one would expect a similar proportion of SAMIS clients to mention crack. Total correspondence is not expected, because unlike MAHRS callers, SAMIS clients are currently entering treatment, so the two populations presumably represent populations that differ to some degree with regard to life-style, severity of drug problem, motivation to seek treatment, and other important dimensions.

A comparison of SAMIS and MAHRS data shows considerable agreement regarding regional distribution of substance use (Table 12). In general, the region with the highest percentage of SAMIS mentions for a given drug is also the region with the highest percentage of MAHRS calls with mentions of the same drug, and so on for the second, third, and the rest of the regions. The only substantial deviation from this pattern is found with Western Maryland's alcohol mentions (highest in SAMIS, third lowest in MAHRS). As discussed above, some differences between the two indicators should be expected because they are likely to represent somewhat different populations of AOD users.

Broad agreement is also found between the MAHRS and SAMIS indicators regarding relative number of mentions of each drug in a

Table 12: Comparison of SAMIS and MAHRS AOD Mentions, by Drug

Alcohol Mentions			Marijuana Mentions		
	SAMIS (N = 40,932)	MAHRS (N = 9,051)		SAMIS (N = 14,915)	MAHRS (N = 1,924)
Baltimore Metro	63%	52%	Baltimore Metro	24%	11%
DC Metro	77	58	DC Metro	22	12
Western Maryland	88	69	Western Maryland	35	20
Southern Maryland	87	74	Southern Maryland	25	16
Lower Shore	84	70	Lower Shore	33	12
Upper Shore	87	72	Upper Shore	40	27

Cocaine/Crack Mentions			Heroin Mentions		
	SAMIS (N = 23,583)	MAHRS (N = 4,783)		SAMIS (N = 12,294)	MAHRS (N = 1,078)
Baltimore Metro	47%	35%	Baltimore Metro	34%	16%
DC Metro	41	36	DC Metro	8	5
Western Maryland	24	20	Western Maryland	2	4
Southern Maryland	25	32	Southern Maryland	2	3
Lower Shore	30	36	Lower Shore	3	3
Upper Shore	28	27	Upper Shore	2	8

PCP Mentions		
	SAMIS (N = 40,932)	MAHRS (N = 299)
Baltimore Metro	3%	2%
DC Metro	8	3
Western Maryland	3	2
Southern Maryland	7	3
Lower Shore	0	0
Upper Shore	1	2

NOTES: SAMIS (Substance Abuse Management Information System) data are for fiscal year 1993. MAHRS data are for March 1993 through February 1994.

SOURCE: Appendix Tables B12, C12, and D12.

given region (Table 13). The drug with the greatest proportion of SAMIS mentions in a region is also the drug with the greatest proportion of MAHRS mentions in the same region, and so on for the second, third, fourth, and fifth drug. This pattern holds for all drugs in four regions (DC Metro, Baltimore Metro, Southern Maryland, and Upper Shore), and in the remaining regions (Western Maryland and Lower Shore), four out of five drugs are in corresponding order.

Table 13: Comparison of SAMIS and MAHRS AOD Mentions, by Region

Baltimore Metro			DC Metro		
	SAMIS (N = 32,906)	MAHRS (N = 4,642)		SAMIS (N = 11,036)	MAHRS (N = 2,747)
Alcohol	63%	52%	Alcohol	77%	58%
Marijuana	24	11	Marijuana	22	12
Cocaine/Crack	47	35	Cocaine/Crack	41	36
Heroin	34	16	Heroin	8	5
PCP	3	2	PCP	8	3

Western Maryland			Southern Maryland		
	SAMIS (N = 4,355)	MAHRS (N = 1,124)		SAMIS (N = 3,442)	MAHRS (N = 4,041)
Alcohol	88%	69%	Alcohol	87%	74%
Marijuana	35	20	Marijuana	25	16
Cocaine/Crack	24	20	Cocaine/Crack	25	32
Heroin	2	4	Heroin	2	3
PCP	3	2	PCP	7	3

Lower Shore			Upper Shore		
	SAMIS (N = 2,864)	MAHRS (N = 1,819)		SAMIS (N = 3,017)	MAHRS (N = 226)
Alcohol	84%	70%	Alcohol	87%	72%
Marijuana	33	12	Marijuana	40	27
Cocaine/Crack	30	36	Cocaine/Crack	28	27
Heroin	3	3	Heroin	2	8
PCP	0	0	PCP	1	2

NOTES: SAMIS (Substance Abuse Management Information System) data are for fiscal year 1993. MAHRS data are for March 1993 through February 1994.
 SOURCE: Appendix Tables B13, C13, and D14.

IMPLICATIONS

Several findings indicate that calls to MAHRS hotlines are a promising indicator of need for substance abuse treatment in Maryland. First, steady numbers of monthly AOD-related calls to the seven hotlines provide a baseline against which changes in drug use can be measured. Second, the compliance of hotline counselors with data collection protocols is high, which ensures that findings are representative of the overall caller population. Third, the internal consistency of the data is good. For example, Hotline F, which is affiliated with a drug treatment center, received 25% of the AOD-related calls and only 4% of non-AOD calls. Also, although only 11% of the calls with AOD mentions involved a person who had ever injected illegal drugs, 67% of the calls with heroin mentions involved a person who had injected, which is consistent with the typical route of administration of heroin. Fourth, most Maryland counties are represented among MAHRS callers, so findings can be used to assess statewide substance use trends. Fifth, the MAHRS data show impressive agreement with SAMIS, an established indicator of substance abuse treatment utilization in Maryland.

The current findings provide important information about substance use and need for treatment in Maryland. Of 178,530 calls in the three years of MAHRS operation, 9% of callers mentioned alcohol and/or drugs as a problem, 10% reported a history of injecting illegal drugs, and 50% reported a need for substance abuse treatment. The highest rates of injection of illegal drugs were reported in calls with heroin, crack, and cocaine mentions. The data also show that the highest percentage of calls with reported need for treatment were from callers who mentioned alcohol only. In the current sample, about half of the calls with reported need for treatment resulted in referral to treatment.

Another important finding is the successful operation of the MAHRS system. Based on a review of published literature, this is the first time that several hotlines have adopted a mutually acceptable data collection process for operational and research purposes and then demonstrated a high level of compliance with research protocols.

After three years of operation, MAHRS has demonstrated the kind of stability that is required for tracking trends. If heroin mentions increased rapidly after being consistently low over a long period, CESAR could alert state and local agencies to the problem. If researchers suspected a declining trend in crack use, perhaps it would be reflected in the hotline calls. In

addition, more than half of the callers who mentioned alcohol and other drugs as a problem reported a current need for treatment, which lends credibility to MAHRS as a needs assessment and treatment planning tool.

APPENDIX A

METHODOLOGICAL AND ADMINISTRATIVE CONSIDERATIONS

METHODOLOGICAL AND ADMINISTRATIVE CONSIDERATIONS

Development of the Common Data Collection Form

The first step in automating the data collection and analysis procedures was to design a single telephone log form that would meet the needs of the hotlines and CESAR. Each hotline already had its own form, but a consensus was reached to use one hotline's form as a base. Changes were then made in two areas. First, staff at each hotline recommended items to be eliminated or added so that the form would better meet their individual data needs. This was an iterative process involving several revisions and meetings with staff of all the hotlines. Second, CESAR added a set of items, known as the "drug box" questions, that were to be asked of any caller who mentioned alcohol or drugs as a problem. The drug box questions are, "Has this person ever injected illegal drugs?" and "Does this person think that s/he now needs treatment for alcohol or drug abuse?"¹ Also included is a list of drugs that are checked off if mentioned by the caller.

Once the data needs were established, CESAR staff worked with National Computer Systems to design a scannable version of the telephone log form (Figure 1). An important design concern involved maintaining the anonymity of the callers. CESAR needed to receive the forms for data processing, but hotline staff were accustomed to recording confidential information directly on the forms. A lesser concern was devising a convenient way to provide the hotline with a copy of the form.

To deal with these problems, CESAR developed a "snap set" scanning sheet. This is a two-sheet form bound on one side. The scannable sheet is the first page, and the second sheet is a non-scannable copy of the first. A piece of carbon paper separates the two sheets and is used to produce the copy. The sheet was designed so that all machine-scannable information was on the front of the first sheet and all confidential information was on the back of the second sheet. When a call has been completed, the scannable form and the carbon copy are separated, and counselors write their confidential assessment of the call on the back of the copy. The scannable forms are then sent to CESAR monthly for processing, for which CESAR purchased an optical scanner and wrote a customized scanning program. A more complete discussion of these procedures is found in the *MAHRS Training and Procedures Manual* (Wagner, 1993).

¹When a caller is calling about someone else (a third party) and mentions the third party's drug use, the caller is asked to report on the third party's injection history and need for treatment.

After the form was designed, CESAR and the hotlines began pilot testing. CESAR obtained a sample of completed forms to ensure that the drug box questions were being answered properly and to determine the percentage of calls involving alcohol and other drug issues. The hotlines provided feedback about the data collection system, which was modified and reevaluated several times. In March 1993, all hotlines switched to the new system.

Each month, CESAR provides each hotline with an updated file of its data. Using a software application created by CESAR, the hotlines can then produce reports tailored to their individual needs.

Data Collection

To obtain answers to the drug box questions, hotline counselors have to deviate only slightly from their standard procedures. If a caller mentions alcohol or drugs, the counselors are instructed to ask the drug box questions. They are not asked to probe for specific drugs used by callers, but rather to record on the log form any drugs mentioned spontaneously by the caller.

In most cases, hotline counselors fill out one form per phone call. However, counselors were asked to fill out only one form per month for each frequent caller, some of whom call daily or even more often.² If frequent callers are identified in this way, CESAR can adjust the database so that characteristics of frequent callers are not overrepresented in the sample. For example, if a heroin user from Baltimore called twice every day, and a counselor filled out a new log sheet each time, Baltimore's heroin problem would appear spuriously high.

Ideally, one call per month from each frequent caller would be included in the analyses. Unfortunately, some hotlines are unable to record data in a way that makes this possible. It was therefore necessary either to include or exclude all calls from frequent callers. Given that frequent callers generate 33% of all calls but constitute much less than 33% of all callers,³ we decided that excluding them would result in less bias than

²Two categories of frequent callers ("frequent" and "common") were designated on the data collection form, principally to meet cite-specific needs of different hotlines. For this report, the categories are equivalent, and the term "frequent" is used throughout to refer to both groups.

³It is impossible to determine the exact percentage from the existing data, but since frequent callers by definition call several times per month, they constitute a much larger fraction of total calls than of total callers.

including them. Nonetheless, some people probably called two or more times in a month and were not categorized as frequent callers, so some multiple counting is inevitable.

Because call volume is a principal concern of hotlines, hotline staff wanted statistics on all their calls, including those from frequent callers. To accommodate the hotlines while excluding frequent callers from CESAR's analyses, log forms include a numeric tally of the number of calls per month from each frequent caller. This tally is then used to tailor reports to the specific needs of individual hotlines.

Drug Box Completion Rates

A crucial aspect of MAHRS data collection is that each counselor ask the drug box questions when a caller identifies alcohol or drugs as a problem. If the drug box completion rate is low, trends might be missed or differences might exist between calls for which the drug box is and is not completed. For example, if a hotline had low completion rates during a period of increasing heroin mentions among its callers, the trend would be missed by MAHRS. One important measure of data quality is, therefore, the drug box completion rate.

In the first month of data collection, drug box questions were completed only 70% of the time. However, this rate increased to 87% in the third month, and the average for the three-year period is 96%. The "user" column in Table A indicates whether an AOD mention involves the caller, a third party, or both. The lowest completion rate for a question was 93% for the "ever injected" question. Only one hotline had a completion rate below 90%, and that was the newest hotline to join MAHRS.

Limitations of Data

Because the hotlines vary in terms of location, call volume, caller characteristics, advertising, and other dimensions, sampling is nonrandom. As a result, explaining differences between hotlines can be difficult. For example, even though MAHRS hotlines are geographically diverse, some counties have greater access to hotline services than others. A difference between counties in drug prevalence rates could therefore be attributed to either hotline access or severity of the drug problem. Similarly, all hotlines handle drug-related calls, but some hotlines are better known for this service than others. In fact, the hotline with the highest rate of AOD-related calls is part of a substance abuse treatment agency that encourages clients to call the hotline. If one hotline received a high volume of drug-related calls, it could be explained by the orientation of the hotline, severity of the local drug problem, extent of advertising, or a combination of these and other factors. Establishing the validity of the MAHRS data, therefore,

requires comparison with previously validated measures of substance use prevalence and need for substance abuse services.

Despite these limitations, standardized data collection permits assessment of treatment needs and AOD use trends. If procedures are followed consistently, and if rates of AOD use and need for treatment remain stable over time, deviations can be assumed to be associated with underlying drug trends.

Table A: Completion Rates for Three "Drug Box" Questions
(N = 19,606 AOD-related calls; March 1993-December 1995)*

	Percent Completing Question			Average of 3 Questions
	User**	Ever Injected	Needs Treatment	
Hotline A	95%	93%	95%	94%
Hotline B	97	97	97	97
Hotline C	95	93	94	94
Hotline D	94	92	93	93
Hotline E	90	92	94	92
Hotline F	94	92	93	93
Hotline G	84	88	91	88
Hotline Average	94%	93%	94%	94%

*Includes frequent callers.

**Identifies whether the "user" who is the focus of the call is the caller, a third party, or both.

SOURCE: Appendix Tables B14, C14, and D14.

APPENDIX B

1993 SUPPLEMENTAL DATA TABLES

(March-December 1993)

Table B1: Monthly Number of Calls to Hotlines

Month/Year	Hotline						Total Calls
	A	B	C	D	E	F	
Mar '93	1,580	564	411	1,004	1,255	336	5,150
Apr '93	1,408	469	371	884	954	319	4,405
May '93	1,345	426	340	861	878	355	4,205
Jun '93	1,484	409	334	948	1,015	346	4,536
Jul '93	1,447	741	403	1,090	1,049	287	5,017
Aug '93	1,553	766	420	1,142	1,019	360	5,260
Sep '93	1,556	695	409	1,214	1,077	345	5,296
Oct '93	1,492	686	420	1,087	1,142	361	5,188
Nov '93	1,622	578	326	1,057	1,067	329	4,979
Dec '93	1,573	549	311	1,072	970	318	4,793
Total	15,060	5,883	3,745	10,359	10,426	3,356	48,829

NOTE: Excludes 20,257 calls from frequent callers.

Table B2: Characteristics of Hotline Callers
(N = 48,829 calls from 3/01/93 to 12/31/93)

Characteristic	Percent
Caller: Self	87.0%
Third Party	8.2
Agency	3.0
Self & Third Party	1.8
	<hr/> 100.0%
Gender: Female	69.4%
Age: < 20 years	14.4%
20 - 29	24.6
30 - 44	47.2
≥ 45	13.9
	<hr/> 100.0%
Median	31
Hotline Called: A	30.8%
B	12.0%
C	7.7
D	21.2
E	21.4
F	6.9
	<hr/> 100.0%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Percents may not add to exactly 100% due to rounding.

Table B3: Monthly AOD-Related Calls to Hotlines
(N = 4,725 calls with AOD mentions)

Month/Year	Hotline						Total Calls
	A	B	C	D	E	F	
Mar '93	208	66	29	39	67	95	504
Apr '93	158	58	45	20	57	107	445
May '93	155	30	37	21	61	151	455
Jun '93	163	36	34	28	81	133	475
Jul '93	171	71	49	37	66	111	505
Aug '93	162	90	43	39	75	132	541
Sep '93	156	72	48	37	45	109	467
Oct '93	133	72	45	27	68	121	466
Nov '93	142	61	36	32	52	131	454
Dec '93	135	47	36	32	47	116	413
Total	1,583	603	402	312	619	1,206	4,725

NOTE: Excludes 793 calls from frequent callers.

Table B4: AOD and Non-AOD Calls, by County
(N = 48,829 calls from 3/01/93 to 12/31/93)

County*	Calls with No AOD Mention	Calls with AOD Mention	Total Calls
Anne Arundel	559	82	641
Allegany	50	8	58
Balt. City	3,371	626	3,997
Balt. County	2,445	331	2,776
Calvert	126	34	160
Caroline	83	8	91
Carroll	185	36	221
Cecil	490	27	517
Charles	53	18	71
Dorchester	135	15	150
Frederick*	2,787	325	3,112
Garrett	100	14	114
Harford	269	20	289
Howard*	3,380	252	3,632
Kent	18	2	20
Montgomery*	6,034	202	6,236
Pr. George's*	8,202	544	8,746
Queen Anne	32	10	42
Somerset	333	42	375
St. Mary's*	1,938	1,135	3,073
Talbot	86	13	99
Washington	282	42	324
Wicomico*	2,827	293	3,120
Worcester	786	139	925
Out of State	1,677	65	1,742
Unknown	7,856	442	8,298
Total	44,104	4,725	48,829

*Counties in which the hotlines are located.

Table B5: Percentage of Population and
Call Volume of MAHRS Regions (3/01/93 to 12/31/93)

Region*	% of State Population (N = 4,781,468)	% of Total Calls (N = 40,531)**
Baltimore Metro	49.1%	28.5%
DC Metro	31.1	37.0
Western Maryland	7.8	8.9
Southern Maryland	4.8	8.2
Upper Shore	3.8	1.9
Lower Shore	3.4	11.3
Out of State	0.0	4.3
	100.0%	100.0%

*Western Maryland = Allegany, Frederick, Garrett, and Washington counties; Southern Maryland = Calvert, Charles, and St. Mary's counties; Lower Shore = Dorchester, Somerset, Wicomico, and Worcester counties; Baltimore Metro = Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties; DC Metro = Montgomery and Prince George's counties; Upper Shore = Caroline, Cecil, Kent, Queen Anne's, and Talbot counties.

**Excludes calls from "Unknown" category (8,298), which reduces the total number of calls from 48,829 to 40,531.

Table B8: Characteristics of AOD-Related and
 Non-AOD-Related Calls
 (N = 48,829 calls from 3/01/93 to 12/31/93)

Characteristic	Non-AOD (44,104)	AOD (4,725)
Gender: Female	71.0%	54.0%
Age:		
< 20 years	14.9%	9.6%
20 - 29	24.0	29.7
30 - 44	46.8	50.9
≥ 45	14.4	9.8
	100.0%	100.0%
Median	30	31
Hotline Called:		
A	30.6%	33.5%
B	12.0	12.8
C	7.6	8.5
D	22.8	6.6
E	22.2	13.1
F	4.9	25.5
	100.0%	100.0%
Region:		
DC Metro	39.3%	17.4%
Baltimore Metro	28.2	31.4
Lower Shore	11.3	11.4
Southern Maryland	5.8	27.7
Western Maryland	8.9	9.1
Other	6.6	2.9
	100.0%	100.0%

NOTE: Calls from an agency or a third party are excluded from age and gender statistics.

Table B10: Characteristics of AOD-Related Calls and Callers, by Need for Treatment
(N = 4,725 calls with AOD mentions from 3/01/93 to 12/31/93)

		Treatment Needed Now?				
Characteristic		No (1,313)	Alc Only (951)	Drug Only (805)	Alc & Drug (466)	Total (3,535)*
Gender:	Female	56.9%	48.3%	51.8%	46.1%	52.1%
Age:	< 20 years	11.4%	4.6%	7.5%	10.2%	8.6%
	20 - 29	25.5	24.0	43.8	37.9	30.8
	30 - 44	52.9	57.7	42.7	47.5	51.2
	≥ 45	10.2	13.7	6.1	4.4	9.4
		100.0%	100.0%	100.0%	100.0%	100.0%
	Median	32	34	29	30	31
Hotline Called:	A	41.6%	24.7%	42.9%	24.7%	35.1%
	B	11.7	15.8	11.3	15.5	13.2
	C	8.8	10.0	4.5	5.8	7.8
	D	9.0	5.7	5.0	2.8	6.4
	E	11.3	13.4	15.8	12.7	13.0
	F	17.7	30.5	20.6	38.6	24.6
		100.0%	100.0%	100.0%	100.0%	100.0%
Region:	DC Metro	17.2%	17.4%	19.6%	13.4%	17.3%
	Baltimore Metro	39.5	22.0	41.1	24.1	33.0
	Lower Shore	10.5	13.2	10.5	13.6	11.6
	Southern Maryland	20.1	32.8	21.8	39.4	26.6
	Western Maryland	9.9	10.6	4.8	6.2	8.4
	Other	2.7	3.9	2.3	3.3	3.0
		100.0%	100.0%	100.0%	100.0%	100.0%
Drug** Mentioned:	Alcohol	68.0%	98.2%	12.0%	86.7%	65.9%
	Cocaine	16.1	2.2	37.0	37.8	20.0
	Crack	14.5	1.9	42.4	41.4	21.0
	Marijuana	14.4	4.4	14.5	22.5	12.8
	Heroin	4.9	.4	15.5	13.9	7.3
Ever Injected (yes)		12.8%	4.3%	28.6%	35.2%	17.0%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Agency calls are also excluded from injection and treatment statistics.
*Excludes "refused" (111 calls), "doesn't know" (503), and "missing" (384).
**Sums to more than 100% because some callers mentioned multiple drugs.

Table B11: Drug Mentioned, Ever Injected, and Need for Treatment
for Those Referred to Addiction Services
(N = 4,725 calls from 3/01/93 to 12/31/93)

	N	Referred to Addiction Services
Alcohol or Drug Mentioned		
Crack	880	46.1%*
PCP	106	37.7
LSD	84	47.6
Cocaine	879	38.6
Heroin	298	41.3
Alcohol	3,059	33.1
Marijuana	577	35.5
Other Drug	673	50.5
All AOD Calls	4,725	33.9
Ever injected		
	481	38.0%
Self-Reported Need for Treatment**		
Both	499	53.7%
Drug	847	53.0
Alcohol	1,018	43.9
No	1,363	16.1

*Sums to more than 100% because some callers mentioned multiple drugs.

**Excludes "refused" (111 calls), "doesn't know" (503), and "missing" (384).

Table B14: Completion Rates for Three "Drug Box" Questions
(N = 5,518 calls from 3/01/93 to 12/31/93)*

Percent Completing Question				
	User**	Ever Injected	Needs Treatment	Average of 3 Questions
Hotline A	93%	88%	91%	91%
Hotline B	98	95	96	96
Hotline C	94	87	90	90
Hotline D	87	82	85	84
Hotline E	83	85	88	85
Hotline F	92	90	93	92
Hotline Average	92%	89%	91%	91%

*Includes frequent callers.

**Identifies whether the "user" who is the focus of the call is the caller, a third party, or both.

Table B16: Calls to Hotlines, by Issue Mentioned
(N = 48,829 calls from 3/01/93 to 12/31/93)

Issue	N	Percent Of Issues	Percent Of Calls
Alcohol/Drugs	4,725	5.7%	9.7%
Drug Dealer	88	.1	.2
Other Addictions	153	.2	.3
Eating Disorders	363	.4	.7
Domestic Violence	2,235	2.7	4.6
Batterers	313	.4	.6
Sexual Assault/Rape	620	.7	1.3
Child Sexual Abuse	508	.6	1.0
Child Sexual Assault	176	.2	.4
Adult Molested As Child	1,343	1.6	2.8
Adult Abuse/Neglect	444	.5	.9
Child Abuse/Neglect	2,504	3.0	5.1
Sexual Issues	2,040	2.5	4.2
Sexual Minorities	428	.5	.9
Pregnancy	773	.9	1.6
AIDS	318	.4	.7
Sexually Transmitted Disease	187	.2	.4
Physical Health Concerns	2,782	3.4	5.7
Separation/Divorce	1,700	2.0	3.5
Parenting Issues	2,482	3.0	5.1
Runaway/Throwaway	658	.8	1.3
Gen. Family Issues	6,026	7.3	12.3
Latch Key Concerns	596	.7	1.2
Social Personal Relat.	10,210	12.3	20.9
Mental Health Concerns	7,917	9.5	16.2
Psychological Crisis	2,918	3.5	6.0
Marital Stress	2,017	2.4	4.1
Daily Stressors	8,459	10.2	17.3
Employment/School	3,007	3.6	6.2
Financial Stress	2,522	3.0	5.2
Housing/Homelessness	5,981	7.2	12.2
Legal Concerns	1,253	1.5	2.6
Suicide (active attempt)	543	.7	1.1
Suicide Ideation	3,319	4.0	6.8
Survivor (family mem.)	166	.2	.3
Homicide	114	.1	.2
Death/Dying	790	1.0	1.6
Religious/Cult Issues	214	.3	.4
Service Inquiry	2,108	2.5	4.3
Total	83,000	100.0%	170.0%

NOTES: Excludes calls from frequent callers.
Percent of Calls column adds to more than 100% because more than one issue per call can be selected.

APPENDIX C

1994 SUPPLEMENTAL DATA TABLES

Table C1: Monthly Number of Calls to Hotlines

Month/Year	Hotline						Total Calls
	A	B	C	D	E	F	
Jan '94	1,464	528	322	1,083	1,258	296	4,951
Feb '94	1,498	475	344	899	1,035	297	4,548
Mar '94	1,551	727	368	1,002	991	403	5,042
Apr '94	1,818	512	344	1,052	1,070	312	5,108
May '94	1,566	571	379	854	1,178	320	4,868
Jun '94	1,633	794	520	919	982	279	5,127
Jul '94	1,484	672	381	1,099	1,153	310	5,099
Aug '94	1,739	707	372	1,066	864	260	5,008
Sep '94	1,761	606	371	1,004	1,322	311	5,375
Oct '94	1,633	727	444	958	1,867	336	5,965
Nov '94	1,901	655	375	1,047	1,959	327	6,264
Dec '94	1,561	641	344	1,144	1,844	268	5,802
Total	19,609	7,615	4,564	12,127	15,523	3,719	63,157

NOTE: Excludes 23,552 calls from frequent callers.

Table C2: Characteristics of Hotline Callers
(N = 63,157 calls from 1/01/94 to 12/31/94)

Characteristic	Percent
Caller: Self	83.7%
Third Party	11.0
Agency	3.3
Self & Third Party	1.9
	100.0%
Gender: Female	69.0%
Age: < 20 years	12.4%
20 - 29	22.4
30 - 44	47.7
≥ 45	17.4
	100.0%
Median	33
Hotline Called: A	31.0%
B	12.1%
C	7.2
D	19.2
E	24.6
F	5.9
	100.0%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Percents may not add to exactly 100% due to rounding.

Table C3: Monthly AOD-Related Calls to Hotlines
(N = 5,861 calls with AOD mentions)

Month/Year	Hotline						Total Calls
	A	B	C	D	E	F	
Jan '94	130	46	30	26	34	100	366
Feb '94	215	44	25	22	31	97	434
Mar '94	175	40	24	32	45	138	454
Apr '94	263	53	38	38	53	94	539
May '94	163	69	24	19	48	133	456
Jun '94	175	77	41	26	50	124	493
Jul '94	163	54	37	36	61	119	470
Aug '94	232	62	38	32	43	112	519
Sep '94	178	51	28	27	104	137	525
Oct '94	162	77	43	30	123	120	555
Nov '94	177	57	43	31	131	128	567
Dec '94	179	76	23	22	85	98	483
Total	2,212	706	394	341	808	1,400	5,861

NOTE: Excludes 758 calls from frequent callers.

Table C4: AOD and Non-AOD Calls, by County
(N = 63,157 calls from 1/01/94 to 12/31/94)

County*	Calls with No AOD Mention	Calls with AOD Mention	Total Calls
Anne Arundel	635	162	797
Allegany	167	7	174
Balt. City	4,252	770	5,022
Balt. County	3,322	472	3,794
Calvert	73	30	103
Caroline	54	2	56
Carroll	282	29	311
Cecil	401	50	451
Charles	83	23	106
Dorchester	352	13	365
Frederick*	3,198	324	3,522
Garrett	170	23	193
Harford	320	43	363
Howard*	5,448	379	5,827
Kent	22	3	25
Montgomery*	6,764	302	7,066
Pr. George's*	12,685	698	13,383
Queen Anne	101	15	116
Somerset	406	72	478
St. Mary's*	2,147	1,323	3,470
Talbot	135	8	143
Washington	440	49	489
Wicomico*	3,882	363	4,245
Worcester	1,040	148	1,188
Out of State	2,050	75	2,125
Unknown	8,867	478	9,345
Total	57,296	5,861	63,157

*Counties in which the hotlines are located.

Table C5: Percentage of Population and Call
Volume of MAHRS Regions (1/01/94 to 12/31/94)

Region*	% of State Population (N = 4,781,468)	% of Total Calls (N = 53,812)**
Baltimore Metro	49.1%	29.9%
DC Metro	31.1	38.0
Western Maryland	7.8	8.1
Southern Maryland	4.8	6.8
Upper Shore	3.8	1.5
Lower Shore	3.4	11.7
Out of State	0.0	3.9
	100.0%	100.0%

*Western Maryland = Allegany, Frederick, Garrett, and Washington counties; Southern Maryland = Calvert, Charles, and St. Mary's counties; Lower Shore = Dorchester, Somerset, Wicomico, and Worcester counties; Baltimore Metro = Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties; DC Metro = Montgomery and Prince George's counties; Upper Shore = Caroline, Cecil, Kent, Queen Anne's, and Talbot counties.

**Excludes calls from "Unknown" category (9,345), which reduces the total number of calls from 63,157 to 53,812.

Table C8: Characteristics of AOD-Related and
 Non-AOD-Related Calls
 (N = 63,157 calls from 1/01/94 to 12/31/94)

Characteristic	Non-AOD (57,296)	AOD (5,861)
Gender: Female	70.4%	54.4%
Age:		
< 20 years	12.5%	11.2%
20 - 29	22.0	26.9
30 - 44	47.3	51.9
≥ 45	18.2	10.0
	<u>100.0%</u>	<u>100.0%</u>
Median	31	33
Hotline Called:		
A	30.4%	37.7%
B	12.1	12.0
C	7.3	6.7
D	20.6	5.8
E	25.7	13.8
F	4.0	23.9
	<u>100.0%</u>	<u>100.0%</u>
Region:		
DC Metro	40.2%	18.6%
Baltimore Metro	29.4	34.5
Lower Shore	11.7	11.1
Southern Maryland	4.8	25.6
Western Maryland	8.2	7.5
Other	5.7	2.8
	<u>100.0%</u>	<u>100.0%</u>

NOTE: Calls from an agency or a third party are excluded from age and gender statistics.

Table C10: Characteristics of AOD-Related Calls and Callers, by Need for Treatment
(N = 5,861 calls with AOD mentions from 1/01/94 to 12/31/94)

		Treatment Needed Now?				
Characteristic		No (1,578)	Alc Only (1,067)	Drug Only (1,107)	Alc & Drug (656)	Total (4,408)*
Gender:	Female	58.9%	44.8%	48.4%	56.9%	52.7%
Age:	< 20 years	16.5%	6.0%	7.9%	8.3%	10.6%
	20 - 29	26.8	22.2	38.4	25.8	28.2
	30 - 44	43.7	59.7	49.2	62.1	51.8
	≥ 45	13.0	12.1	4.5	3.8	9.4
		100.0%	100.0%	100.0%	100.0%	100.0%
	Median	30	33	30	32	31
Hotline Called:	A	33.8%	29.5%	46.3%	35.4%	36.1%
	B	10.8	17.2	9.9	10.8	12.1
	C	8.8	7.5	4.7	5.6	7.0
	D	6.2	5.5	4.5	2.9	5.1
	E	19.3	12.4	13.8	9.5	14.8
	F	21.1	27.8	20.7	35.8	24.8
		100.0%	100.0%	100.0%	100.0%	100.0%
Region:	DC Metro	21.6%	15.2%	17.1%	16.7%	18.2%
	Baltimore Metro	32.5	26.9	44.8	28.8	33.8
	Lower Shore	9.6	16.6	9.5	10.1	11.3
	Southern Maryland	23.1	30.8	21.6	35.5	26.4
	Western Maryland	10.2	8.0	4.8	6.0	7.6
	Other	3.0	2.6	2.2	2.8	2.7
		100.0%	100.0%	100.0%	100.0%	100.0%
Drug** Mentioned:	Alcohol	66.7%	99.2%	10.1%	91.6%	64.0%
	Cocaine	13.1	1.8	31.1	30.0	17.4
	Crack	15.5	1.2	49.1	39.6	24.0
	Marijuana	16.8	2.7	13.2	25.0	13.7
	Heroin	4.1	1.2	18.8	11.7	8.2
Ever Injected (yes)		10.3%	3.7%	28.2%	24.6%	15.4%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Agency calls are also excluded from injection and treatment statistics.
*Excludes "refused" (172 calls), "doesn't know" (890), and "missing" (201).
**Sums to more than 100% because some callers mentioned multiple drugs.

Table C11: Drug Mentioned, Ever Injected, and Need for Treatment
for Those Referred to Addiction Services
(N = 5,861 calls from 1/01/94 to 12/31/94)

	N	Referred to Addiction Services
Alcohol or Drug Mentioned		
Crack	1,305	50.5%*
PCP	126	44.4
LSD	174	32.8
Cocaine	939	44.8
Heroin	435	45.5
Alcohol	3,649	36.5
Marijuana	778	38.3
Other Drug	885	47.8
All AOD Calls	5,861	37.3
Ever injected		
	568	43.0%
Self-Reported Need for Treatment**		
Both	699	53.5%
Drug	1,156	56.6
Alcohol	1,110	45.0
No	1,633	20.9

*Sums to more than 100% because some callers mentioned multiple drugs.

**Excludes "refused" (172 calls), "doesn't know" (890), and "missing" (201).

Table C14: Completion Rates for Three "Drug Box" Questions
(N = 6,619 calls from 1/01/94 to 12/31/94)*

Percent Completing Question				
	User**	Ever Injected	Needs Treatment	Average of 3 Questions
Hotline A	94%	95%	95%	95%
Hotline B	98	99	99	99
Hotline C	98	98	99	98
Hotline D	95	96	96	96
Hotline E	93	95	96	95
Hotline F	98	96	97	97
Hotline Average	96%	96%	96%	96%

*Includes frequent callers.

**Identifies whether the "user" who is the focus of the call is the caller, a third party, or both.

Table C16: Calls to Hotlines, by Issue Mentioned
(N = 63,157 calls from 1/01/94 to 12/31/94)

Issue	N	Percent Of Issues	Percent Of Calls
Alcohol/Drugs	5,861	5.3%	9.3%
Drug Dealer	124	.1	.2
Other Addictions	109	.1	.2
Eating Disorders	323	.3	.5
Domestic Violence	2,938	2.7	4.7
Batterers	427	.4	.7
Sexual Assault/Rape	734	.7	1.2
Child Sexual Abuse	560	.5	.9
Child Sexual Assault	186	.2	.3
Adult Molested As Child	1,326	1.2	2.1
Adult Abuse/Neglect	581	.5	.9
Child Abuse/Neglect	3,798	3.4	6.0
Sexual Issues	2,482	2.2	3.9
Sexual Minorities	550	.5	.9
Pregnancy	925	.8	1.5
AIDS	385	.3	.6
Sexually Transmitted Disease	237	.2	.4
Physical Health Concerns	4,495	4.1	7.1
Separation/Divorce	1,976	1.8	3.1
Parenting Issues	4,163	3.8	6.6
Runaway/Throwaway	898	.8	1.4
Gen. Family Issues	8,804	8.0	13.9
Latch Key Concerns	516	.5	.8
Social Personal Relat.	13,022	11.8	20.6
Mental Health Concerns	10,528	9.5	16.7
Psychological Crisis	4,113	3.7	6.5
Marital Stress	2,472	2.2	3.9
Daily Stressors	10,504	9.5	16.6
Employment/School	4,060	3.7	6.4
Financial Stress	3,014	2.7	4.8
Housing/Homelessness	7,454	6.7	11.8
Legal Concerns	1,936	1.8	3.1
Suicide (active attempt)	543	.5	.9
Suicide Ideation	4,883	4.4	7.7
Survivor (family mem.)	236	.2	.4
Homicide	167	.2	.3
Death/Dying	1,038	.9	1.6
Religious/Cult Issues	337	.3	.5
Service Inquiry	3,747	3.4	5.9
Total	110,452	100.0%	174.9%

NOTES: Excludes calls from frequent callers.
Percent of Calls column adds to more than 100% because more than one issue per call can be selected.

APPENDIX D

1995 SUPPLEMENTAL DATA TABLES

Table D1: Monthly Number of Calls to Hotlines

Month/Year	Hotline							Total Calls
	A	B	C	D	E	F	G	
Jan '95	1,656	662	433	1,108	1,705	332	0	5,896
Feb '95	1,470	721	399	941	1,319	298	0	5,148
Mar '95	1,521	677	452	1,120	1,312	439	0	5,521
Apr '95	1,563	695	355	1,239	1,019	341	179	5,391
May '95	1,437	709	419	1,151	1,070	327	169	5,282
Jun '95	1,590	947	433	1,081	1,095	312	170	5,628
Jul '95	1,599	849	429	1,374	1,112	335	183	5,881
Aug '95	1,654	754	402	1,333	1,161	264	194	5,762
Sep '95	1,687	687	350	1,175	1,039	267	163	5,368
Oct '95	1,913	748	378	1,258	1,187	295	149	5,928
Nov '95	1,871	639	371	1,139	1,150	250	154	5,574
Dec '95	1,480	652	342	1,128	1,165	272	126	5,165
Total	19,441	8,740	4,763	14,047	14,334	3,732	1,487	66,544

NOTES: Excludes 24,824 calls from frequent callers. Hotline G joined MAHRS in April 1995.

Table D2: Characteristics of Hotline Callers
(N = 66,544 calls from 1/01/95 to 12/31/95)

Characteristic	Percent
Caller: Self	82.2%
Third Party	10.5
Agency	4.8
Self & Third Party	2.5
	100.0%
Gender: Female	68.1%
Age: < 20 years	11.9%
20 - 29	20.8
30 - 44	48.0
≥ 45	19.4
	100.0%
Median	33
Hotline Called: A	29.2%
B	13.1
C	7.2
D	21.1
E	21.5
F	5.6
G	2.2
	100.0%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Percents may not add to exactly 100% due to rounding. Hotline G joined MAHRS in April 1995.

Table D3: Monthly AOD-Related Calls to Hotlines
(N = 5,656 calls with AOD mentions)

Month/Year	Hotline							Total Calls
	A	B	C	D	E	F	G	
Jan '95	188	64	23	27	98	130	0	530
Feb '95	163	47	29	22	86	119	0	466
Mar '95	140	60	24	39	91	161	0	515
Apr '95	139	56	25	35	69	124	17	465
May '95	131	60	27	26	57	136	17	454
Jun '95	147	78	21	23	77	106	23	475
Jul '95	131	72	33	33	84	139	15	507
Aug '95	124	77	24	32	56	110	8	431
Sep '95	153	103	39	24	44	113	9	485
Oct '95	131	94	33	16	57	130	12	473
Nov '95	131	57	35	27	72	125	5	452
Dec '95	96	37	24	28	77	131	10	403
Total	1,674	805	337	332	868	1,524	116	5,656

NOTES: Excludes 1,813 calls from frequent callers. Hotline G joined MAHRS in April 1995.

Table D4: AOD and Non-AOD Calls, by County
(N = 66,544 calls from 1/01/95 to 12/31/95)

County*	Calls with No AOD Mention	Calls with AOD Mention	Total Calls
Anne Arundel	698	125	823
Allegany	82	7	89
Balt. City	3,595	633	4,228
Balt. County	3,148	330	3,478
Calvert	77	24	101
Caroline	89	11	100
Carroll	394	33	427
Cecil	540	51	591
Charles	58	31	89
Dorchester	396	12	408
Frederick*	3,281	277	3,558
Garrett	221	12	233
Harford	362	54	416
Howard*	4,903	265	5,168
Kent	54	7	61
Montgomery*	8,407	223	8,630
Pr. George's*	11,505	778	12,283
Queen Anne	56	7	63
Somerset	545	87	632
St. Mary's*	2,017	1,423	3,440
Talbot*	149	12	161
Washington	606	36	642
Wicomico*	5,409	476	5,885
Worcester	1,046	159	1,205
Out of State	1,829	74	1,903
Unknown	11,421	509	11,930
Total	60,888	5,656	66,544

*Counties in which the hotlines are located.

Table D5: Percentage of Population and
Call Volume of MAHRS Regions (1/01/95 to 12/31/95)

Region*	% of State Population (N = 4,781,468)	% of Total Calls (N = 54,614)**
Baltimore Metro	49.1%	26.6%
DC Metro	31.1	38.3
Western Maryland	7.8	8.3
Southern Maryland	4.8	6.6
Upper Shore	3.8	1.8
Lower Shore	3.4	14.9
Out of State	0.0	3.5
	100.0%	100.0%

*Western Maryland = Allegany, Frederick, Garrett, and Washington counties; Southern Maryland = Calvert, Charles, and St. Mary's counties; Lower Shore = Dorchester, Somerset, Wicomico, and Worcester counties; Baltimore Metro = Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties; DC Metro = Montgomery and Prince George's counties; Upper Shore = Caroline, Cecil, Kent, Queen Anne's, and Talbot counties.

**Excludes calls from "Unknown" category (11,930), which reduces the total number of calls from 66,544 to 54,614.

Table D8: Characteristics of AOD-Related and
 Non-AOD-Related Calls
 (N = 66,544 calls from 1/01/95 to 12/31/95)

Characteristic	Non-AOD (60,888)	AOD (5,656)
Gender: Female	69.5%	52.9%
Age:		
< 20 years	11.9%	11.4%
20 - 29	20.4	24.8
30 - 44	47.5	53.2
≥ 45	20.2	10.7
	100.0%	100.0%
Median	32	34
Hotline Called:		
A	29.2%	29.6%
B	13.0	14.2
C	7.3	6.0
D	22.5	5.9
E	22.1	15.3
F	3.6	26.9
G	2.3	2.1
	100.0%	100.0%
Region:		
DC Metro	40.3%	19.4%
Baltimore Metro	26.5	28.0
Lower Shore	15.0	14.3
Southern Maryland	4.4	28.7
Western Maryland	8.5	6.5
Other	5.5	3.1
	100.0%	100.0%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Hotline G joined MAHRS in April 1995.

Table D10: Characteristics of AOD-Related Calls and Callers, by Need for Treatment
(N = 5,656 calls with AOD mentions from 1/01/95 to 12/31/95)

		Treatment Needed Now?				
Characteristic		No (1,373)	Alc Only (1,165)	Drug Only (1,124)	Alc & Drug (574)	Total (4,236) *
Gender:	Female	55.2%	47.3%	52.1%	46.8%	51.1%
Age:	< 20 years	14.9%	6.0%	9.2%	9.9%	10.1%
	20 - 29	21.3	20.0	33.3	32.9	25.6
	30 - 44	49.5	60.1	51.5	51.2	53.4
	≥ 45	14.4	13.9	5.9	5.9	10.9
		100.0%	100.0%	100.0%	100.0%	100.0%
	Median	33	34	30	30	32
Hotline Called:	A	25.5%	24.8%	47.2%	24.4%	30.9%
	B	13.5	15.9	10.9	16.0	13.8
	C	6.9	6.7	3.9	3.8	5.6
	D	6.2	3.3	2.9	6.8	4.6
	E	28.8	10.9	14.0	11.0	17.5
	F	17.3	36.8	19.5	36.1	25.8
	G**	1.9	1.6	1.7	1.9	1.8
		100.0%	100.0%	100.0%	100.0%	100.0%
Region:	DC Metro	32.0%	13.9%	16.2%	15.6%	20.4%
	Baltimore Metro	23.5	20.9	46.6	24.4	29.1
	Lower Shore	14.0	17.2	11.0	16.1	14.4
	Southern Maryland	19.3	38.6	20.4	36.3	27.3
	Western Maryland	7.8	7.2	3.7	3.6	5.9
	Other	3.4	2.1	2.2	4.0	2.8
		100.0%	100.0%	100.0%	100.0%	100.0%
Drug*** Mentioned:	Alcohol	67.6%	99.4%	11.7%	90.8%	64.6%
	Cocaine	10.0	1.8	29.8	32.6	16.1
	Crack	14.4	1.1	41.9	42.9	21.9
	Marijuana	14.6	3.1	16.9	28.0	13.9
	Heroin	5.2	.4	23.0	10.1	9.3
Ever Injected (yes)		9.8%	2.0%	35.0%	25.8%	15.9%

NOTES: Calls from an agency or a third party are excluded from age and gender statistics. Agency calls are also excluded from injection and treatment statistics.

*Excludes "refused" (89 calls), "doesn't know" (805), and "missing" (314).

**Hotline G joined MAHRS in April 1995.

***Sums to more than 100% because some callers mentioned multiple drugs.

Table D11: Drug Mentioned, Ever Injected, and Need for Treatment
for Those Referred to Addiction Services
(N = 5,656 calls from 1/01/95 to 12/31/95)

	N	Referral to Addiction Services
Alcohol or Drug Mentioned		
Crack	1,228	55.7%*
PCP	156	67.3
LSD	193	62.7
Cocaine	868	54.5
Heroin	499	54.1
Alcohol	3,549	48.2
Marijuana	860	52.7
Other Drug	802	64.7
All AOD Calls	5,656	46.8
Ever injected		
	541	48.8%
Self-Reported Need for Treatment**		
Both	619	62.2%
Drug	1,171	63.7
Alcohol	1,232	61.0
No	1,426	21.0

*Sums to more than 100% because some callers mentioned multiple drugs.
**Excludes "refused" (89 calls), "doesn't know" (805),
and "missing" (314).

Table D14: Completion Rates for Three "Drug Box" Questions
(N = 7,469 calls from 1/01/95 to 12/31/95)*

Percent Completing Question				
	User**	Ever Injected	Needs Treatment	Average of 3 Questions
Hotline A	96%	96%	97%	96%
Hotline B	95	96	96	96
Hotline C	94	93	93	94
Hotline D	99	98	98	98
Hotline E	93	95	96	95
Hotline F	92	91	91	91
Hotline G	84	88	91	88
Hotline Average	94%	94%	94%	94%

*Includes frequent callers.

**Identifies whether the "user" who is the focus of the call is the caller, a third party, or both.

Table D16: Calls to Hotlines, by Issue Mentioned
(N = 66,544 calls from 1/01/95 to 12/31/95)

Issue	N	Percent Of Issues	Percent Of Calls
Alcohol/Drugs	5,656	5.0%	8.5%
Drug Dealer	143	.1	.2
Other Addictions	177	.2	.3
Eating Disorders	376	.3	.6
Domestic Violence	3,752	3.3	5.6
Batterers	553	.5	.8
Sexual Assault/Rape	773	.7	1.2
Child Sexual Abuse	503	.4	.8
Child Sexual Assault	166	.1	.2
Adult Molested As Child	1,049	.9	1.6
Adult Abuse/Neglect	476	.4	.7
Child Abuse/Neglect	3,481	3.1	5.2
Sexual Issues	2,309	2.0	3.5
Sexual Minorities	460	.4	.7
Pregnancy	921	.8	1.4
AIDS	401	.4	.6
Sexually Transmitted Disease	284	.3	.4
Physical Health Concerns	4,500	4.0	6.8
Separation/Divorce	2,089	1.9	3.1
Parenting Issues	3,786	3.4	5.7
Runaway/Throwaway	814	.7	1.2
Gen. Family Issues	8,876	7.9	13.3
Latch Key Concerns	360	.3	.5
Social Personal Relat.	13,881	12.3	20.9
Mental Health Concerns	10,530	9.3	15.8
Psychological Crisis	3,922	3.5	5.9
Marital Stress	2,362	2.1	3.5
Daily Stressors	11,556	10.2	17.4
Employment/School	3,964	3.5	6.0
Financial Stress	3,173	2.8	4.8
Housing/Homelessness	7,439	6.6	11.2
Legal Concerns	2,168	1.9	3.3
Suicide (active attempt)	491	.4	.7
Suicide Ideation	4,263	3.8	6.4
Survivor (family mem.)	217	.2	.3
Homicide	132	.1	.2
Death/Dying	1,062	.9	1.6
Religious/Cult Issues	394	.3	.6
Service Inquiry	5,371	4.8	8.1
Total	112,830	100.0%	169.6%

NOTES: Excludes calls from frequent callers.
Percent of Calls column adds to more than 100% because more than one issue per call can be selected.

APPENDIX E

REFERENCES

REFERENCES

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