Kentucky DUI Assessment Report for 2002

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EXECUTIVE SUMMARY

In 2002, 21,296 DUI assessments were submitted to the Kentucky Division of Substance Abuse by 105 DUI assessment programs. These records include education and treatment information for persons convicted of DUI who were assessed and referred for a treatment intervention. Once a person has met or failed to meet the requirements of the treatment and or education intervention to which they were referred, that record is considered closed and submitted. The University of Kentucky Center on Drug and Alcohol Research is contracted by the Division of Substance Abuse to receive these records from DUI assessment programs each month and to maintain this information in a database. This report provides information on records submitted from January 1, 2002 through December 31, 2002.

The typical person assessed for a DUI in Kentucky is a male in his 20's who has been convicted of his first DUI. His blood alcohol level is about 0.10 and there is about a 50% chance he meets DSM-IV diagnostic criteria for abuse or dependence. The typical offender is referred for a 20 hour education intervention which he completes within 6 months.

- For 2002, the number of DUI Assessments was 21,296.
  Gender:
  - Males 82%
  - Females 18%

  Age:
  - 21-30 years old 35%
  - 31-40 years old 28%
  - 41-50 years old 23%

- Program referrals were made to:
  - 20-Hour Education 61%
  - Outpatient 44%
  - Intensive Outpatient 2%
  - Residential 2%

  *Percentages add up to more than 100% since referrals can be made to more than one type of intervention.

- Overall, more than 80% of persons were compliant with their education/treatment recommendations. Non-compliers were most likely to be under 40 years of age, have multiple convictions, and

meet DSM-IV criteria for dependence. However, combinations of these risk factors may not increase the risk of non-compliance.

- The number of females who met DSM-IV criteria for alcohol or drug dependence was slightly higher than that of males (12.2% vs. 11.9%)[9]. This is different from national data which shows that females are dependent about half as much as males (2.6% vs. 6.3%).

- Only 5% of all assessments used the Diagnostic Interview Schedule (DIS) for drugs; 15% of assessments used the Diagnostic Interview Schedule (DIS) for alcohol.

- Assessment programs referred individuals to themselves for education and/or treatment services 92% of the time.

- Community Mental Health Centers, which represent about 13% of assessment programs in Kentucky, completed 28% of assessments.

- Males scored higher than females on the Alcohol Use Disorders Identification Test (AUDIT) 7.5 vs. 6.2, which measures problems associated with alcohol use, but no gender differences were found on the Drug Abuse Screening Test (DAST) 4.7 vs. 4.8, which screens for problems associated with drug use.

- There are wide variations in compliance with education/treatment referrals between Mental Health/Mental Retardation regions which ranged from 60% to 90%. There were also differences in the percentage of persons across MHMR regions who met DSM-IV criteria for dependence and/or abuse which ranged from 11% to 44% for abuse and 8% to 27% for dependence.

- Almost half (54%) of all individuals were referred for education rather than treatment.

BACKGROUND

Study Overview

In accordance with Kentucky Revised Statute 189A.040, Kentucky licensed drivers convicted of Driving Under the Influence (DUI) are required to receive an assessment by a state certified DUI assessor in a state licensed and certified DUI assessment program. The purpose of the assessment is to determine the appropriate level of care to address the severity of the person's problem. If treatment is needed, the person can be referred to one or more of the following modalities: outpatient, intensive outpatient, or residential treatment. Referral may also include an education intervention or an education intervention coupled with treatment.

If the person finishes their education and/or treatment requirements consistent with his or her referral within a stipulated timeframe, the person is considered "compliant." However, if the person fails to meet the referral requirements he/she is considered "non-compliant." In either case, once a person is designated as compliant or non-compliant, that assessment is "completed." DUI Assessment programs are required (908 KAR 1:310) to send completed records each month to the University of Kentucky Center on Drug and Alcohol Research (CDAR), which receives them on behalf of the Kentucky Division of Substance Abuse.

CDAR serves as the repository for state DUI assessment records. CDAR receives a disk every month from each DUI assessment program containing the completed records for that month. The data is entered into a database from which this report was developed.

Data Description

DUI assessment records provide demographic information about the person, results of the assessment, and education/treatment information. Demographic information includes age, gender, blood alcohol content, DUI conviction history, and county of conviction. Records include four assessment instruments:

- Alcohol Use Disorders Identification Test (AUDIT)[1] – The AUDIT was developed by the World Health Organization as a screening method for excessive drinking. The test consists of 10 questions scored from 0 to 4. A combined score of 8 or more is considered as positive (i.e. the individual has a drinking problem).
- Drug Abuse Screening Test (DAST)[2] – The DAST was developed to assess the extent of drug problems. The test consists of 28 true/false questions with a score of 1 or 0. A combined score of 5 or more is considered as positive (i.e. the individual has a drug problem).
- DSM-IV[3] checklist for Substance Abuse and Dependence. The Diagnostic and Statistical Manual, Fourth Edition (DSM-IV) was developed by the American Psychiatric Association as the standard for psychiatric diagnoses.
- Diagnostic Interview Schedule (DIS)[4] The DIS was developed at the request of the National Institute of Mental Health (NIMH) as a comprehensive diagnostic instrument which could be administered either by lay interviewers or by clinicians. The instrument includes 30 questions which address abuse and dependence criteria.

Information about the intervention referral is noted. This includes the level(s) of education and/or treatment to which the person is referred as well as the person's compliance. The DUI Assessment program was pilot tested by certified assessors and their input was integral in determining which assessment instruments were included.

Sample

This report presents DUI assessment records received in 2002. A total of 21,296 records were received from 105 certified DUI Assessment Programs from January 1, 2002 through December 31, 2002. Completed assessment records in 2002 are not the same as the number of DUI convictions in 2002 since persons can be convicted, assessed, and complete their intervention in separate years.

Limitations

There are several limitations to this data. There is the issue of incomplete, erroneous, and/or missing data. Table 1 presents the level of missing data.

Table 1: Missing Data

	Missing Assessments	Percent of Cases
Gender	13	0.1%
Assessment Program	51	0.2%
MHMR Region	163	0.8%
County of Conviction	425	2.0%
Age	852	4.0%
Recommended Level of Care	1894	8.9%
AUDIT Score	2069	9.7%
Time to Completion	2427	11.4%
Treatment Program	2944	13.8%
DAST Score	3825	18.0%
Blood Alcohol Content	9725	45.7%

Blood Alcohol Content has the highest percent of missing cases which is largely due to individuals who either refused the test or did not remember the level. Each update to the Kentucky DUI Assessment protocol has successfully reduced the amount of missing data, but certain fields remain problematic. In addition, these data represent a subset of a larger, unknown number of State DUI's. For example, data from the Kentucky State Police[5] annual crime report indicates the State of Kentucky has between 30,000 to 35,000 DUI convictions per year. In 2001 there were 40,710 DUI arrests with 32,159 convictions (79.0%). A proportion of the unaccounted records includes out-of-state licensees who are not assessed in Kentucky and do not have a Kentucky assessment record. Data collection also involves self-report and therefore the accuracy may be less than optimal. CDAR receives a small percentage of disks which are damaged. When CDAR receives an unreadable disk, those records cannot be added to the database. An unreadable disk does not affect information required by other government agencies (Courts and Transportation Cabinet) since they receive paper data. CDAR makes every effort to retrieve data when a damaged disk is received. Attempts to retrieve the data are first made by phone and if

needed a site visit is made. In 2002, 58 damaged disks were received with an estimated loss of 870 records.

Summary

Despite the limitations listed above, this is a robust data set to compare variables which gives a detailed view of persons convicted of DUI in Kentucky. In addition to presenting 2002 information, comparisons will be presented between selected items in the following figures and tables.

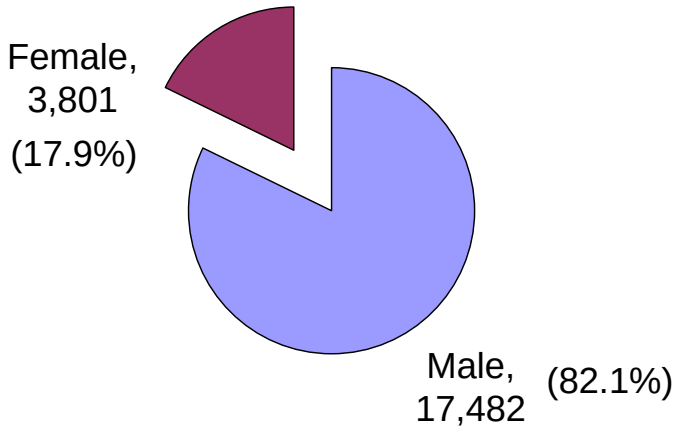
Data is presented in sections that describe demographic information, results of screenings, and the type and frequency of referrals. Special attention is paid to non-compliant persons who are at high risk for recidivism.

SECTION ONE: DEMOGRAPHICS

I) **Number of DUI Assessments submitted in 2002**:
The number of DUI assessments submitted in calendar year 2002 was 21,296. However, in 2001 there were 40,710 DUI arrests with 32,159 DUI convictions. The five year average for convictions was 32,796. 2002 DUI arrest data was not available when this report was developed.

II) **DUI Assessments by Gender**:
Of the 21,296 assessments, 82.1% were males, 17.9% females.

Figure 1: Assessments by Gender*

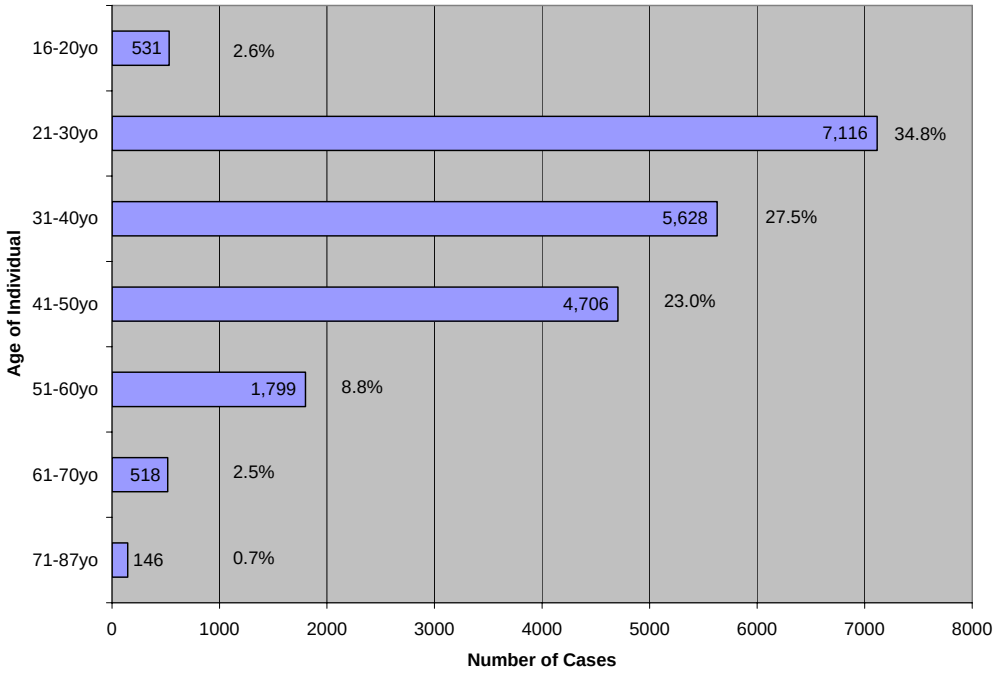


*Missing Data = 13 Assessments

III) **Assessments by Age**:

The 2002 assessment data is very similar to the DUI arrest data with respect to age. Overall, there is a decrease in the number of assessments as individuals grow older. The majority of persons assessed were between 21 and 40 years old (62.3%). Persons who are under the legal drinking age are typically referred to an Early Intervention Program (EIP) for assessment. However, 531 persons between 16 and 20 were assessed. The oldest aged person was 87 years old.

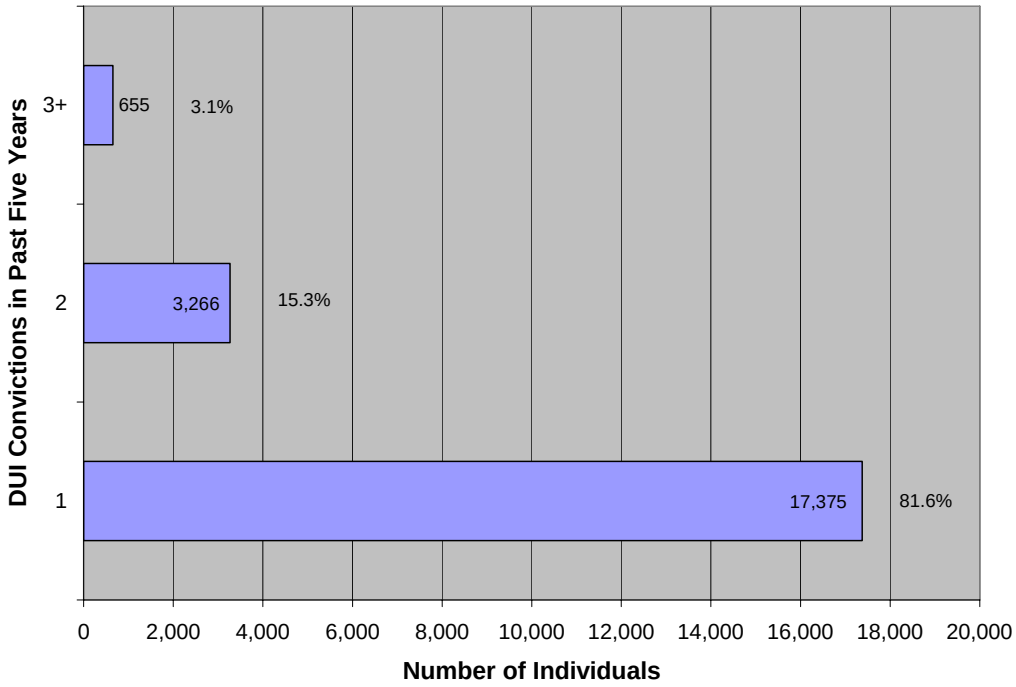
Figure 2: Assessments by Age*



*Missing Data = 852 Assessments

IV) **DUI Convictions in the Previous Five Years**. Figure 3 shows the number of DUI's that individuals had within the past five years. This number includes the DUI which resulted in the current assessment. 205 cases had no DUI convictions in the past five years. This seems highly unlikely unless the person sought his/her assessment before the actual conviction in order to "appease" the courts.

Figure 3: DUI Convictions in the Previous Five Years*



*Missing Data = None

NOTE: Due to the small number of individuals with no convictions and individuals with 4 or more convictions, figures and tables combine the 0 to 1 convictions and 3 to 4 or more convictions creating three levels: 0-1, 2 and 3+.

V) **Percentage of Convictions and Population by Wet, Dry, or Moist County**. Figure 4 shows the percentage of DUI convictions by wet, dry, or moist county compared to the percentage of the population (over 20 years of age) living in each type of county. The three types of counties[6] are:

- Wet – Alcohol can be purchased or sold anywhere in the county with the proper license.
- Moist – A Dry county which contains a Wet city
- Dry – No alcohol is sold or served.

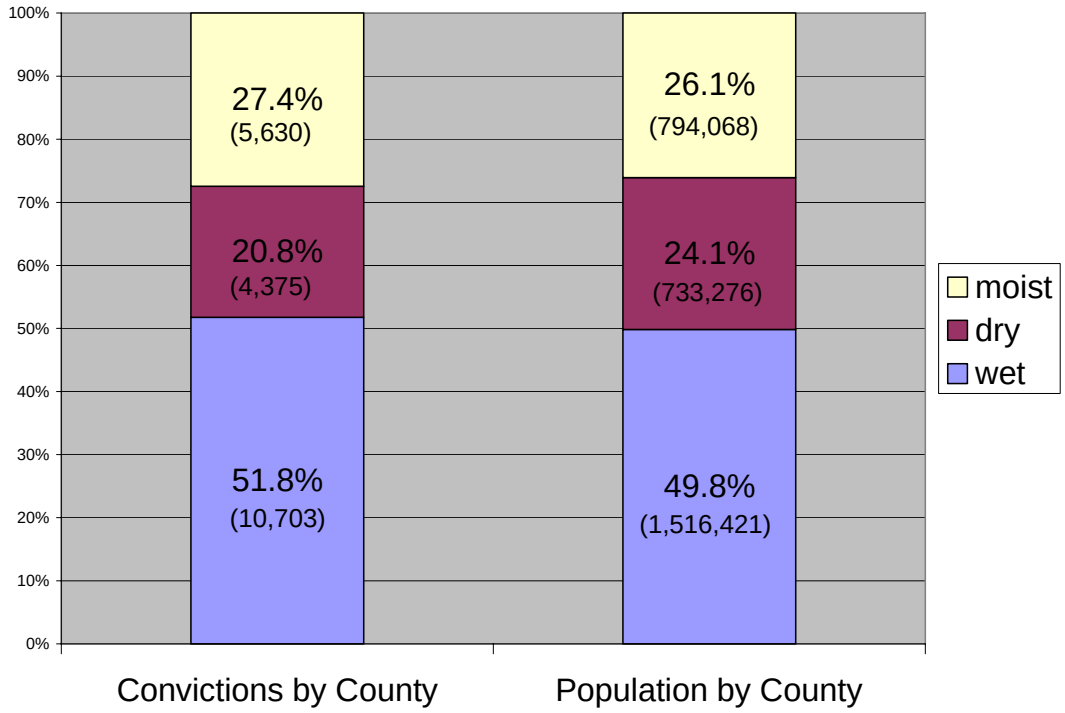
There are three exceptions to Moist and Dry counties:

- Limited – Where a dry county or city has elected to allow alcohol sales in restaurants only by the drink. Such a restaurant must be able to seat 100 diners and food sales must account for at least 70% of income.
- Golf – Where sales of alcohol by the drink are approved on golf courses only.
- Winery – Where a business may produce and serve wine in a dry county.

For this presentation, Moist counties include Dry counties with Limited, Winery, and/or Golf exceptions. Population estimates[7] presented here are for 2002.

Figure 4 shows that DUI convictions are not related to the wet, dry, or moist county status. However, there is a slightly higher percentage of convictions in Wet counties but not significantly higher.

Figure 4: Convictions by Wet, Dry or Moist County*



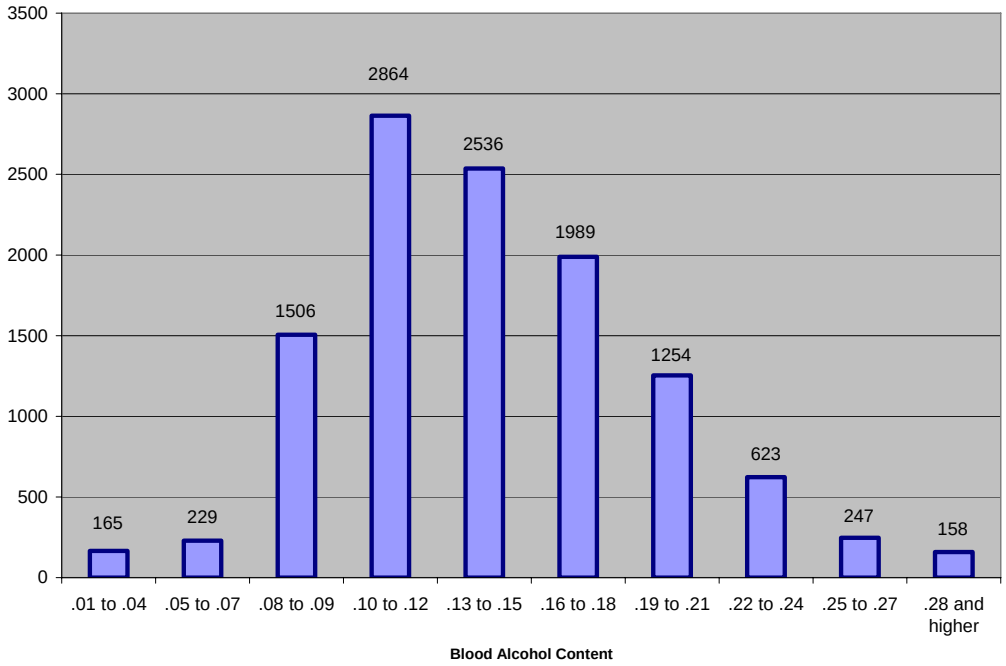
*Missing Data = 425 Assessments

VI) **Blood Alcohol Content**. Figure 5 presents the Blood Alcohol Content (BAC) for the number of persons arrested. What this indicates is a peak in arrests at the 0.10 to 0.12 levels with a decline at higher levels. Very few cases (158) were above the 0.28 level. 4,271 cases were at least twice the legal limit. Most cases are over the 0.10 range which is an important level. According to the National Highway Traffic Safety Administration (NHTSA)[8], Kentucky's BAC's in 2002 over 0.10 were involved in an estimated 30,700 crashes (750.1 per 100,000 residents) that killed 203 (5.0/100,000) and injured 9,700 (237.0/100,000). BAC's 0.09 and below accounted for 1,500 crashes, 53 fatalities, and 1,300 injuries. Kentucky is above the national average for:

- Alcohol related crashes (750.1 per 100,000 Kentucky residents vs. 713.8/100,000 for the nation)
- Deaths from alcohol related crashes (5.0/100,000 KY vs. 4.5/100,000 US)
- Injuries from alcohol related crashes (237.0/100,000 KY vs. 156.6/100,000 US)

In 2002, BAC's over 0.10 represented 45.4% of assessments, including those for which BAC is unknown.

Figure 5: Blood Alcohol Content by Number of Assessments*



* Missing Data = 9,725 Assessments

Demographics Summary: The individuals assessed in 2002 were most likely to be male between 21 and 40 years old who was arrested for his first DUI in five years with a BAC greater than 0.10. However, the County of Conviction did not appear to be related to the Wet, Moist, or Dry status of the county.

SECTION TWO: SCREENING

VII) **AUDIT**. The AUDIT[1] is a screening test which is used to identify excessive drinking. The test consists of 10 questions, each scored from 0 to 4. The final score is the combination of the 10 question scores. A final score of 8 or more is considered positive. Males generally score higher than females. An adjusted average score was used because of an abnormally high number of cases that scored the maximum 40/40. Cases which scored 40/40 were excluded.

Table 2: AUDIT Scores*

	Males	Females	Total
Positive (8+)	6,231 (38.9%)	939 (26.9%)	7,173 (36.7%)
Average Score	7.5	6.2	7.2
Number of Cases	15,780	3,447	19,227

*Missing Data = 2,069 Assessments

VIII) **DAST.** The DAST[2] assesses drug use problems. The test consists of 28 true/false questions with a score of 1 or 0. A combined score of 5 or more identifies a person with a drug problem. Table 3 shows the DAST results. Males and females scored similarly on this measure.

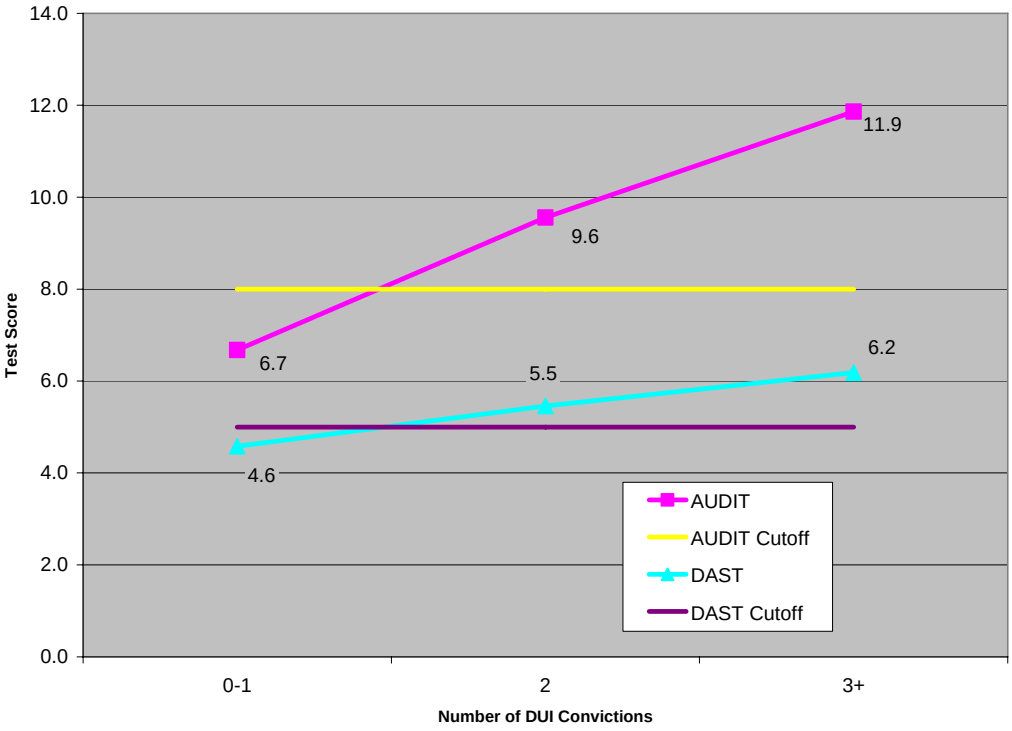
Table 3: DAST Scores*

	Males	Females	Total
Positive (5+)	4,626 (32.3%)	911 (29.1%)	5,537 (31.7%)
Average Score	4.7	4.8	4.8
Number of Cases	14,344	3,127	17,471

*Missing Data = 3,825 Assessments

IX) **AUDIT and DAST Scores by the Number of DUI Convictions**: Figure 6 shows the relation between AUDIT and DAST scores and the number of DUI convictions in the past five years. The horizontal line for a test score of 8 differentiates between a positive and negative AUDIT score. The horizontal line at 5 differentiates between a positive and negative DAST score. Persons convicted of their first DUI had an average score of 6.7 on the AUDIT and 4.6 on the DAST. Both scores are considered negative for alcohol or drug problems. Offenders with two or more DUI convictions in the past five years had an average score of 9.6 on the AUDIT and 5.5 on the DAST. Those persons with three or more prior convictions scored 11.9 on the AUDIT and 6.2 on the DAST. The average AUDIT and DAST scores for persons with multiple convictions were positive on both tests, indicating a more severe alcohol and/or drug problem.

Figure 6: AUDIT and DAST Scores by Number of DUI Convictions



X) **DSM-IV Abuse and Dependence Criteria**. The U.S. national average (NIAAA, 1994)[9] for alcoholism is 4.4%. Males = 6.3%, females = 2.6%. This average increases when looking only at "current drinkers" to 9.7%[10]. Males = 11.3%, females = 7.6%. In both cases the national average for females is about half that of all males, however, here females (12.2%) have about the same rate of dependence as males (11.9%).

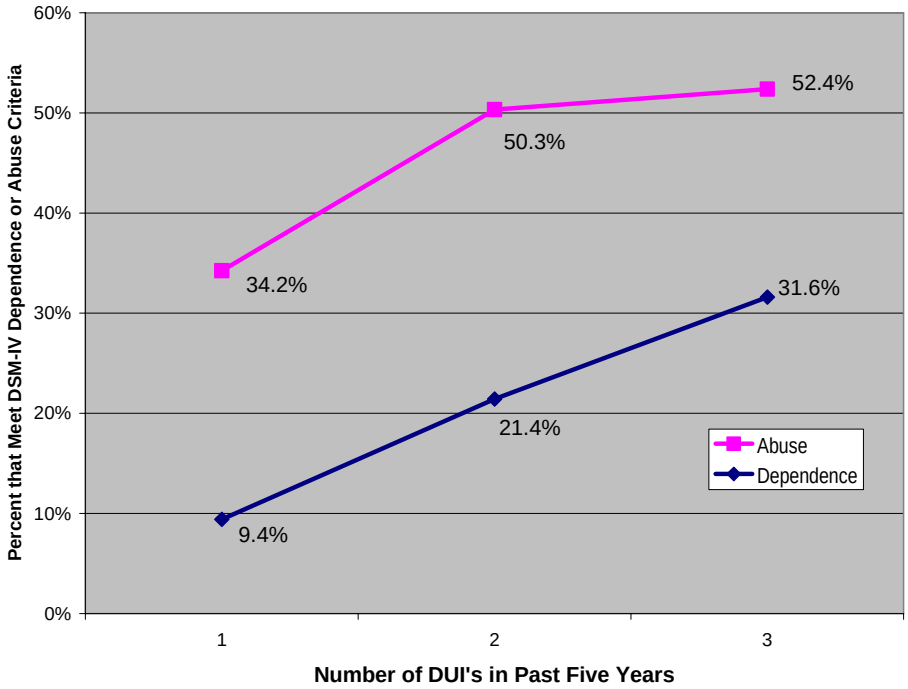
Table 4: Percent of Persons Meeting Dependence Criteria by Gender*

	Males	Females	Total
Alcohol Dependent	2,077 (11.9%)	462 (12.2%)	2,539 (11.9%)
2 or less criteria met	15,405 (88.1%)	3,339 (87.8%)	18,744 (87.8%)

*Missing Data = 13 Assessments.

Figure 7 compares the percentage of persons who meet DSM-IV criteria for abuse or dependence with the number of previous DUI convictions in the past five years. The percentage of dependence increases about 10% for each prior DUI offense. Abuse, however, seems to peak at two prior DUI convictions. The odds of being arrested for driving while impaired range from 1:200 to 1:2000 with the national average around 1:770[11]. One of the abuse criteria is "Recurrent substance use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine while impaired by substance use)". Therefore, almost all persons with multiple DUI convictions should meet criteria for Alcohol Abuse which differs from the 50% to 53% shown here.

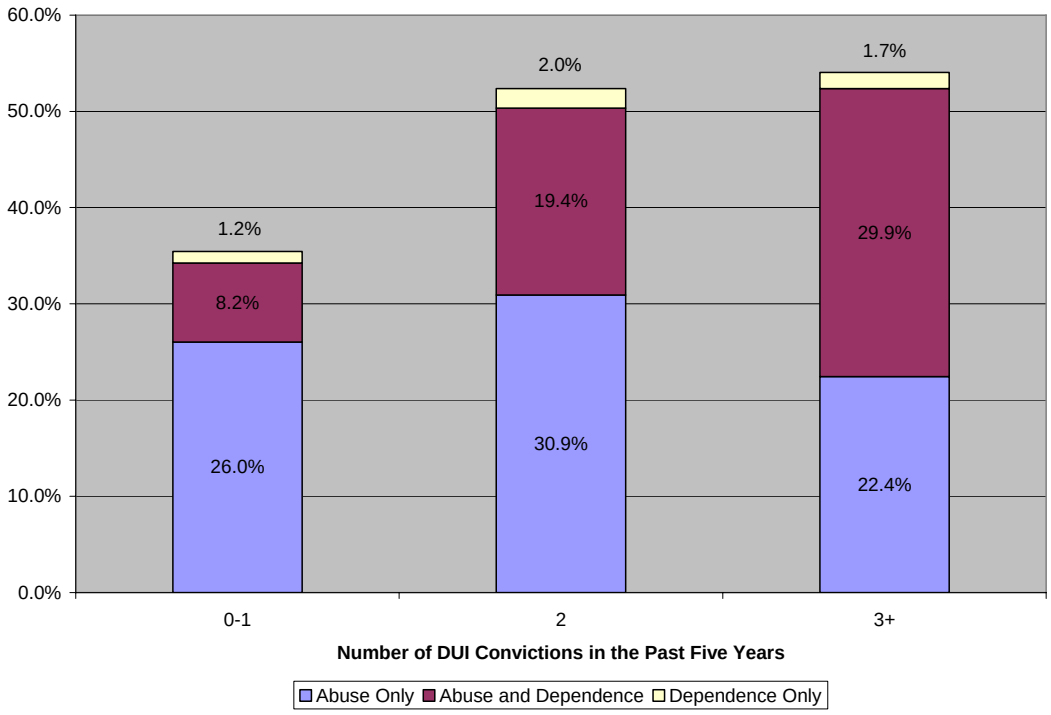
Figure 7: Percent of Persons meeting Dependence or Abuse Criteria by Number of DUI Convictions in the Past Five Years*



*Missing Data = none

Another way of looking at DSM-IV abuse and dependence criteria is to combine them. Figure 8 presents this combination. The top section shows individuals who met dependence, but not abuse. The bottom section shows individuals who met abuse but not dependence. The center section shows those persons who met criteria for both abuse and dependence. The overall trend is that persons convicted of multiple DUI's meet criteria for abuse and/or dependence at a higher rate than those convicted of their first DUI. From a clinical standpoint, once a person meets DSM-IV criteria for Substance Dependence there is no need to identify Substance Abuse. The number of persons who met dependence but did not meet abuse is small compared to the number of persons who met both so it appears that most assessors are using abuse criteria even when the person meets dependence. This differentiation is also important since the recent literature suggests that abuse is not just a precursor of dependence[12].

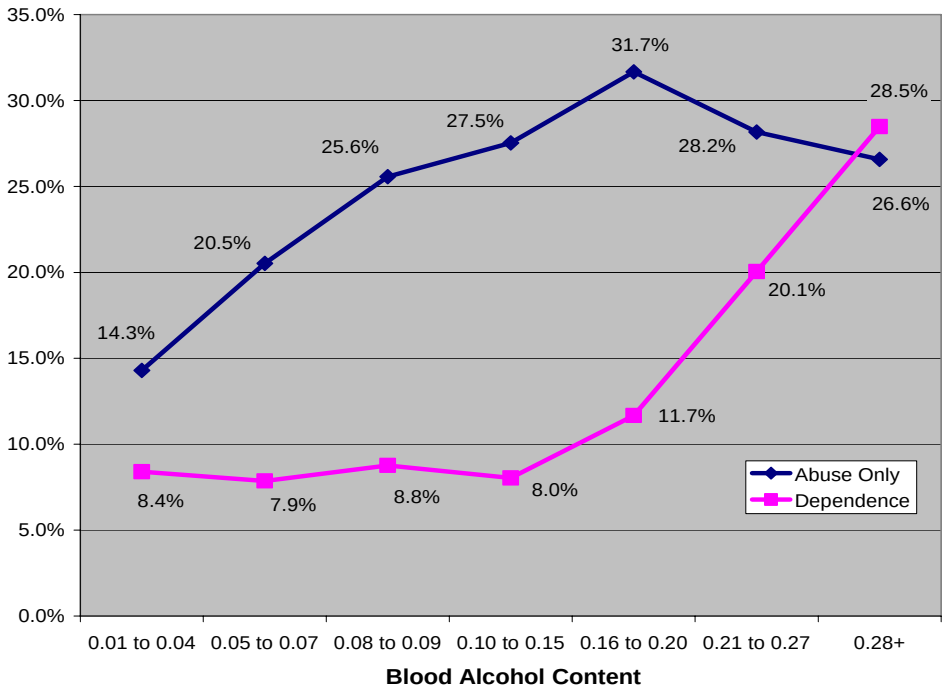
Figure 8: Percent of Persons who met Dependence Criteria, Abuse Criteria, or Both by Number of DUI Convictions*



*Missing Data = none

XI) **DSM-IV Criteria and Blood Alcohol Content**. There was an expected relationship between Blood Alcohol Content (BAC) and individuals who met DSM-IV abuse and/or dependence criteria. A person who is convicted with a higher BAC is more likely to present with DSM-IV criteria for abuse and/or dependence. There is a sharp increase in persons who meet criteria for dependence as BAC increases from 0.16 to greater than 0.28 mg/dL. Persons meeting abuse criteria increases steadily from .01 through 0.20 with a surprising decrease at higher levels. Figure 9 presents these trends between BAC and DSM-IV abuse criteria from 0.01 through 0.20 and between BAC and DSM-IV dependence criteria from 0.16 and higher. Consequently, it appears that approximately twice the legal limit for BAC (0.16mg/dL) is where persons switch from meeting abuse criteria to dependence criteria.

Figure 9: Percent of Persons meeting Abuse or Dependence Criteria by Blood Alcohol Content*

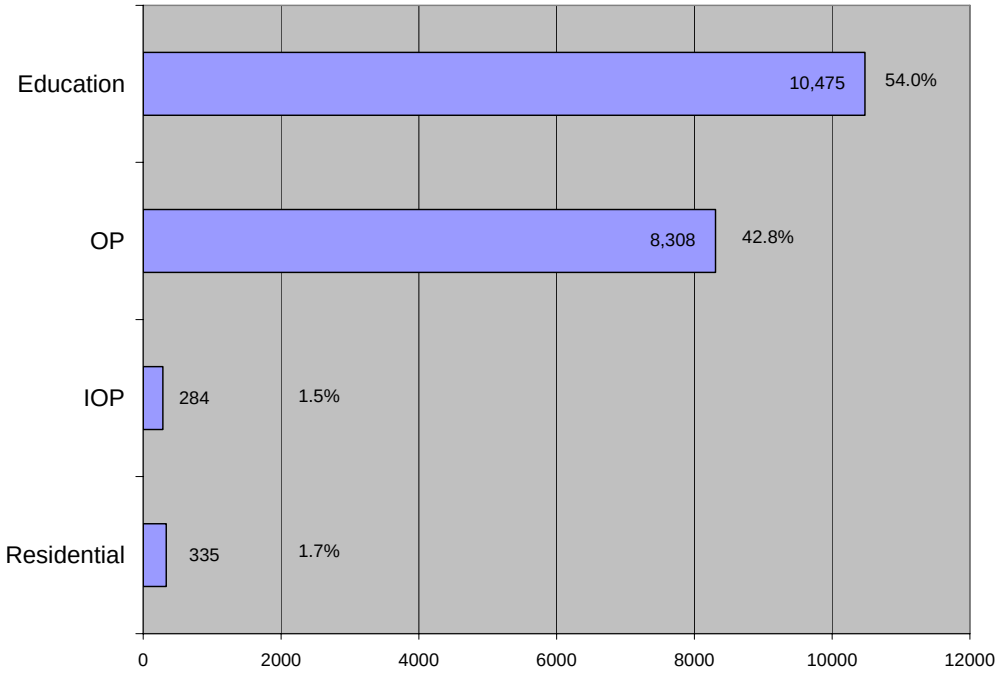


*Missing Data = 9,771 Assessments

Screening Summary: AUDIT and DAST scores, DSM-IV criteria for abuse and dependence and Blood Alcohol Content (BAC) are all closely related. Consequently these screening instruments appear to be valid for this population. Persons convicted for multiple DUI's and those arrested with elevated BAC's are at most risk for meeting criteria for a significant alcohol or drug problem.

XII) **Highest Level of Care Recommended**. Figure 10 presents education and treatment recommendations. For any combination only the highest level of care is included. For example, if an individual was recommended for Outpatient (OP) and Intensive Outpatient (IOP), only the IOP recommendation is presented. Figure 10 indicates that almost all clients (96.8%) are referred for Education or Outpatient as their highest level of care.

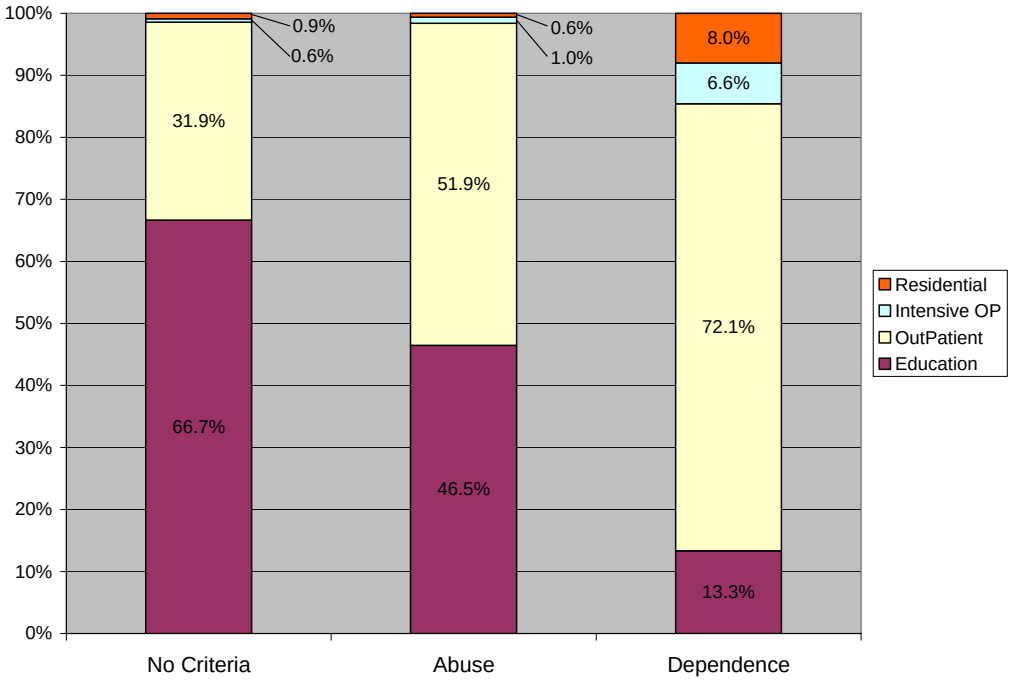
Figure 10: Highest Level of Care Recommended*



*Missing Data = 1,894 Assessments

Figure 11 and Table 5 present the highest level of care by DSM-IV criteria. Treatment referrals are related to DSM-IV criteria. Those persons who meet dependence criteria are more likely to receive an intensive outpatient or a residential treatment recommendation. Persons who did not meet criteria for abuse or dependence were most often referred for Education. In addition, an increase in treatment referrals (Outpatient, Intensive Outpatient, Residential) and a decrease in Education referrals can be seen when the person meets more significant criteria. Additionally, the highest percentage of Intensive Outpatient and Residential referrals come when an individual meets dependence criteria.

Figure 11: Level of Care by DSM-IV Criteria*



*Missing Data = 1,894 Assessments

Table 5 shows the number of cases presented in Figure 11. While the number of cases is small, it is interesting to note that 164 persons were referred for Intensive Outpatient and/or Residential who did not meet DSM-IV criteria for abuse or dependence.

Table 5: Highest Level of Care compared to DSM-IV Criteria

	No Criteria	Abuse	Dependence
Residential	100	35	200
IOP	64	56	164
OP	3608	2901	1799
Education	7545	2597	333

Table 6 presents the number of referrals to each level, including all cases with multiple levels. This indicates the total number of referrals to a specific level of care regardless of how many other levels of care were recommended for an individual. Table 7 shows all combinations.

Table 6: Total Referrals*

Education	11,766
Outpatient	8,512
Intensive Outpatient	299
Residential	335

*Some assessments are counted twice because some individuals are referred to more than one level of care.

Table 7 shows all treatment combinations for the year. Persons referred for Residential services tended to have the most combinations of referrals. Almost half of the persons referred for Residential services were also referred to another level of education/treatment.

Table 7: Total Referrals by Combination*

Ed	10,475
OP	7,094
OP + Ed	1,214
IOP	186
IOP + Ed	20
IOP + OP	71
IOP + OP + Ed	7
Res	173
Res + Ed	27
Res + OP	97
Res + OP + Ed	23
Res + IOP	9
Res + IOP + OP	6

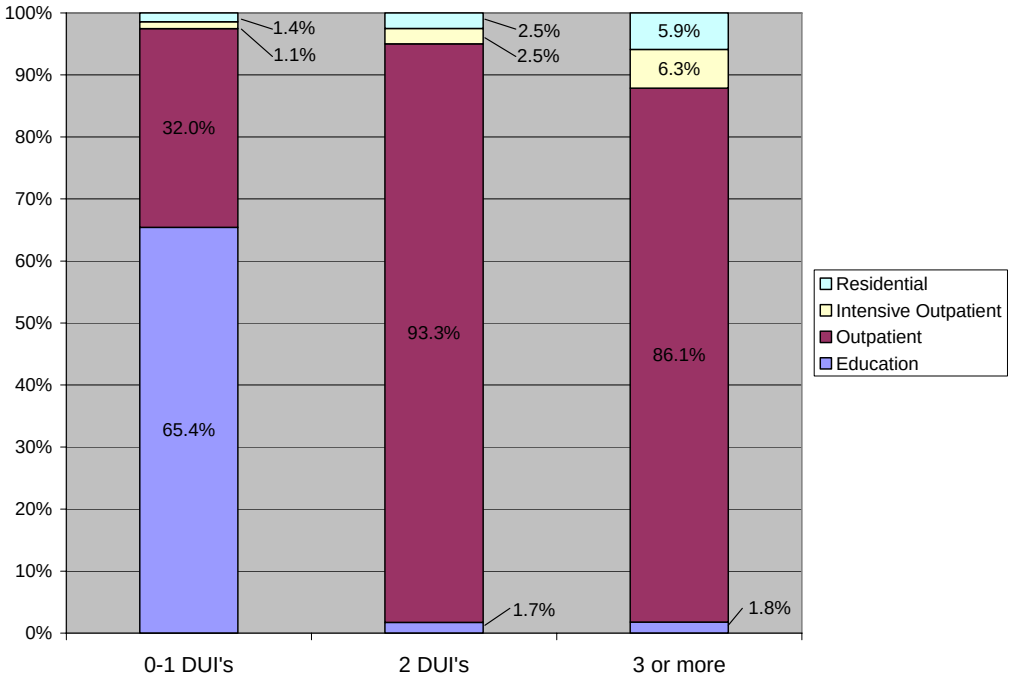
Key:

Education	Ed
Outpatient	OP
Intensive Outpatient	IOP
Residential	Res

*Missing Data = 1,894 Assessments

XIII) **Type of Intervention Recommended by Number of DUI Convictions in the Previous Five Years**. Figure 12 presents the type of referral an individual received by the number of DUI convictions in the past 5 years. This figure is similar to Figure 11 because individuals who have had multiple DUI convictions are reported as referred to a higher level of care. It is interesting to note the change from Education to Outpatient recommendations when previous convictions change from 0-1 to 2 convictions. Education referrals decreased from 59.9% to 1.6% while Outpatient referrals increased from 29.3% to 83.6%. Referrals to Residential and Intensive Outpatient increase moderately with more convictions. For those persons with 2 convictions, there was a 93.3% chance they will be recommended for Outpatient services.

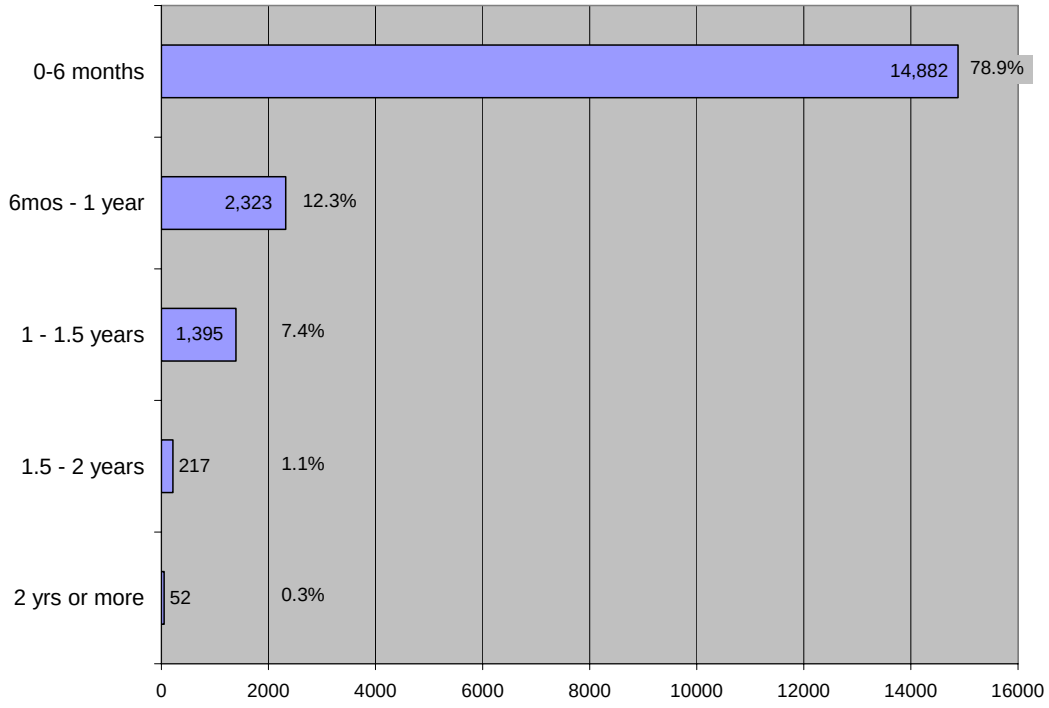
Figure 12: Highest Level of Care Recommended Compared to Number of DUI Convictions*



*Missing Data = 1,894 Assessments

XIV) **Time to Completion**. Figure 13 presents the length of time to complete DUI requirements for compliant and non-compliant individuals. Overall, almost 80% of cases are closed within 6 months and over 90% are closed within 1 year. Virtually all cases (99.7%) are closed within 2 years.

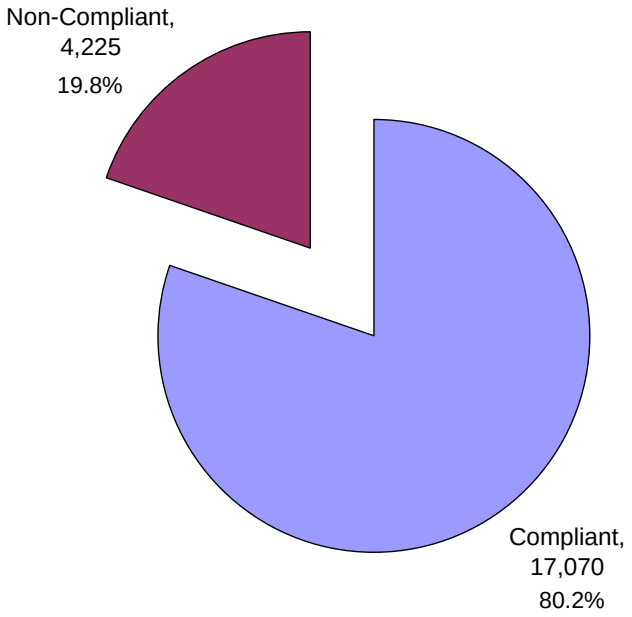
Figure 13: Time to Completion*



*Missing Data = 2,427 Assessments

XV) **Compliant vs. Non-Compliant**. Figure 14 presents compliant persons and non-compliant persons. As noted in Figure 13, over 90% of cases are closed within one year. There were no major differences between males and females for compliance (79.8% vs. 81.9%). Overall, about 4 out of 5 cases were considered compliant while about 1 of 5 was non-compliant. Individuals can be considered as non-compliant for a number of reasons, including persons who complete their treatment recommendation but are unable to pay for their assessment and/or treatment.

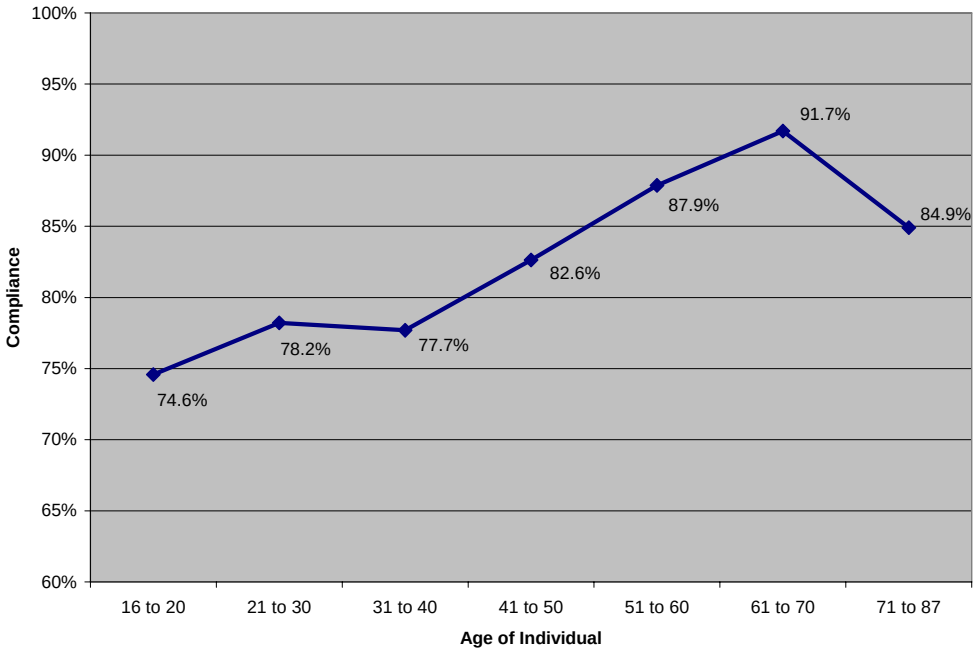
Figure 14: Compliant vs. Non-Compliant*



*Missing Data = 1 Assessment

Figure 15 shows compliance rates by age. Younger individuals tend to be less compliant. The decrease in compliance for persons between 71 and 87 years old could be related to the small number of persons in this range, which accounted for only 146 assessments (0.7%).

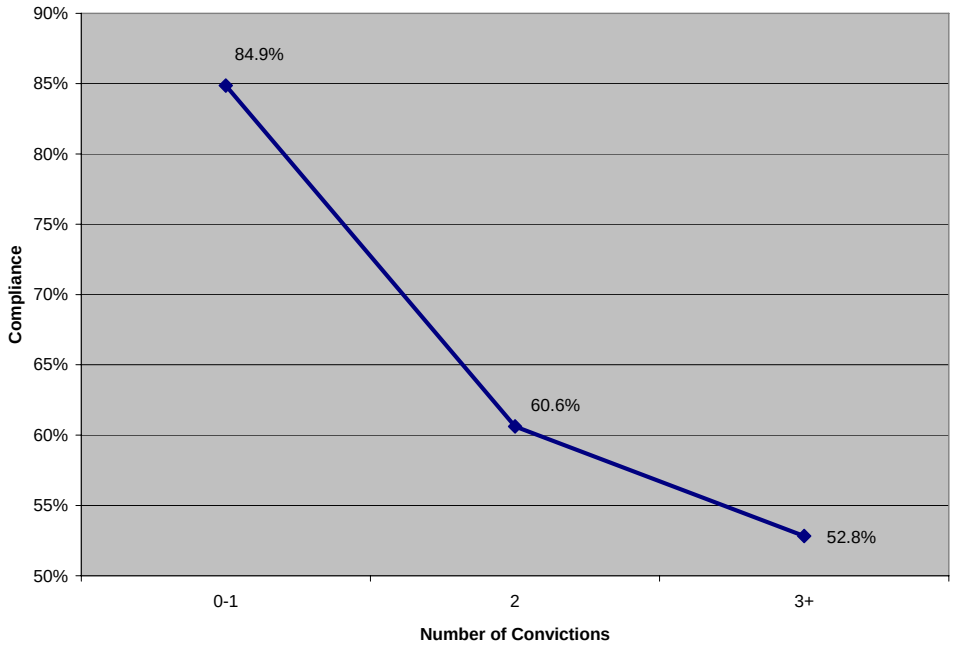
Figure 15: Compliance by Age*



*Missing Data = none

Figure 16 shows compliance rates by DUI convictions in the past 5 years. There is a steep decline in rates of compliance between a person's first DUI and subsequent DUI's. First time convictions comply at a rate of 84.9%. Compliance drops 24.3% with a second DUI conviction to 60.6%. As a group, multiple conviction persons are about 25 to 30% less likely to successfully complete their recommended level of care.

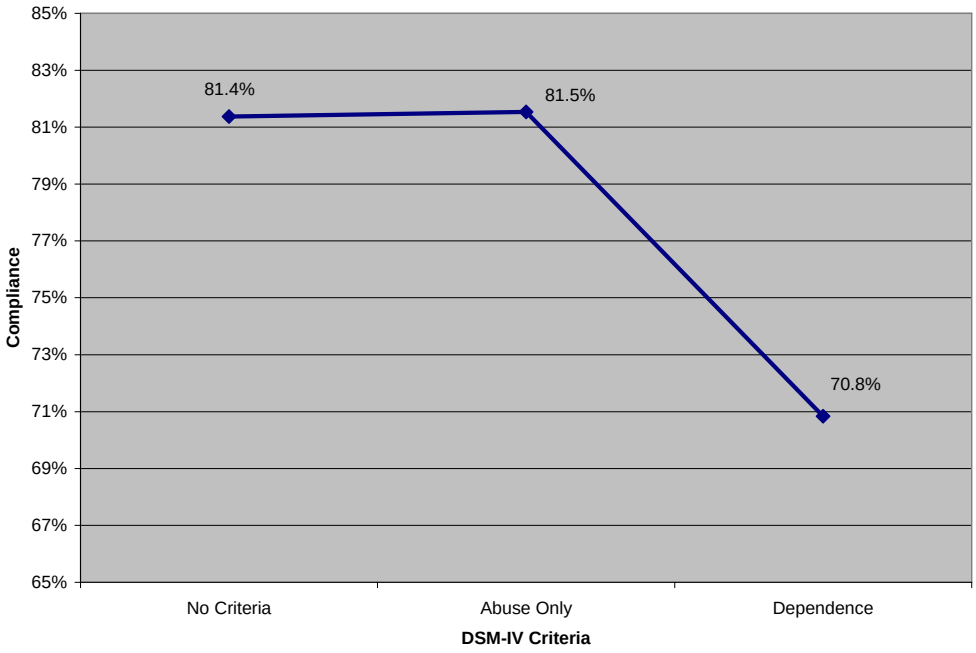
Figure 16: Compliance by Number of DUI Convictions*



*Missing Data = none

Figure 17 presents compliance by DSM-IV criteria. An individual who meets criteria for dependence is less likely to be compliant with their intervention.

Figure 17: Compliance by DSM-IV Criteria*



*Missing Data = none

Compliance Summary:
When the three figures on compliance are examined, persons who are under 40 years of age, have multiple convictions, and meet dependence criteria are at higher risk for non-compliance. However, this does not necessarily indicate that combinations of risk factors increase the risk for non-compliance.

XVI) **Assessments**. In 2002, 105 programs submitted at least one assessment. There were twelve programs that submitted fewer than ten assessments. Of those twelve programs, seven closed in 2002. Table 8 presents the number of programs and assessments completed by community mental health programs and private assessment programs. There are fourteen publicly funded programs in Kentucky. Table 8 indicates that although their program numbers were smaller by 6.5 times, community programs complete about 2.5 more assessments per program than privately funded programs.

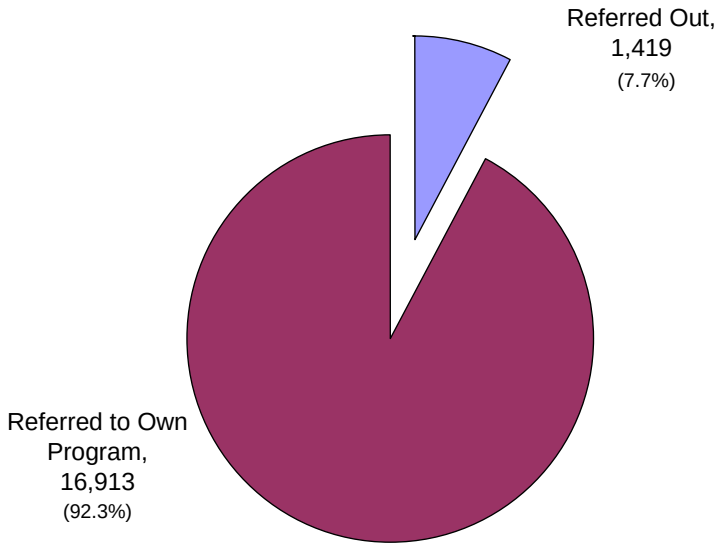
Table 8: Community and Privately Funded Program Assessments*

	Total	Community	Private
Assessments Completed	21,245	5,987 (28.2%)	15,285 (71.8%)
Number of Programs	105	14 (13.3%)	91 (86.7%)
Average Assessments per Program	202.3	427.6	167.7

*Missing Data = 51 Assessments

XVII) **Self referrals vs. other referrals**. Figure 18 presents the number of times an assessment program referred an individual to their own education or treatment program for services. Over 90% of the time, an assessor referred an individual to their own program.

Figure 18: Self-Referrals vs. Outside Referrals*



*Missing Data = 2,964 Assessments

Assessment Summary: Community Programs, which typically have more sites than Privately Funded programs, complete more assessments per program. In addition, programs tend to refer individuals to their own program for education and treatment interventions.

SECTION FOUR: REGIONS

XVIII) **Division of Substance Abuse (DSA) Regions**. Table 9 presents a relatively even distribution of cases, gender, and age by region. It is interesting to note that AUDIT scores are higher in the West and Central areas while DAST scores are higher in the East. Average Blood Alcohol Content is also higher in the West and Central areas. Persons in the West seem to have lower court compliance. East cases show a higher percentage of individuals who meet criteria for abuse and dependence.

Table 9: Distribution by DSA Region

	EAST	WEST	CENTRAL
Total Cases	6,791	6,940	6,967
Gender:			
Males	5,531 (81.4%)	5, 801 (83.6%)	5,664 (81.3%)
Females	1,260 (18.6%)	1,139 (16.4%)	1,303 (18.7%)
Age:			
16 - 20yo	161 (2.4%)	256 (3.7%)	107 (1.5%)
21 - 30yo	2,496 (36.7%)	2,236 (32.2%)	2,229 (32.0%)
31 - 40yo	1,769 (26.0%)	1,789 (25.8%)	1,920 (27.6%)
41 - 50yo	1,393 (20.5%)	1,497 (21.6%)	1,663 (23.9%)
51 - 60yo	513 (7.6%)	618 (8.9%)	608 (8.7%)
61 - 87yo	220 (3.2%)	225 (3.2%)	202 (2.9%)
Blood Alcohol Content*:			
Average	0.127	0.133	0.134
Court Compliance:			
Percent	81.7%	77.7%	80.6%
DSM-IV Criteria:			
No Criteria	3,784 (55.7%)	4,503 (64.8%)	4,399 (63.1%)
Abuse	2,003 (29.5%)	1,713 (24.7%)	1,837 (26.4%)
Dependence	1,006 (14.8%)	730 (10.5%)	733 (10.5%)
AUDIT and DAST Scores:			
AUDIT			
Average score	7.0	7.4	7.4
Score ≥ 8	2,155 (34.8%)	2,201 (36.3%)	2,360 (36.5%)
DAST			
Average score	5.2	4.9	4.3
Score ≥ 5	2,044 (35.6%)	1,841 (33.4%)	1,522 (26.5%)

* - BAC excludes cases where the person refuses, BAC isn't known, and BAC > 0.50

XIX) **Mental Health/Mental Retardation (MHMR) Regions**. Table 10 presents the number of assessments, compliance, and abuse/dependence criteria for the fourteen Mental Health/Mental Retardation regions. This data is based on all programs (private and community funded) located within the MHMR region. Compliance rates ranged from 60.1% to 90.4%. Abuse criteria ranged from 11.1% to 44.2% and dependence rates ranged from 7.7% to 26.5%. Specifically:

- Region 12 had the highest dependence rate at 26.5%, which is 7.7% higher than other regions.
- Region 10 had the highest abuse rate at 44.2%, which is 10.1% higher than the next region.
- Region 8 had a compliance rate of 60.1% which is 11.0% lower than the next highest region.

It should be noted that some of these variations may be accounted for by the relatively small number of assessments.

Table 10: Number of Assessments, Compliance, and DSM-IV Criteria by MHMR Region*

	Cases	Compliant	% Abuse	% Dependent
Region 1 - Four Rivers	1268	80.3%	34.1%	9.7%
Region 2 - Pennyroyal	979	75.8%	11.1%	7.7%
Region 3 - River Valley	1425	73.8%	24.6%	9.3%
Region 4 - Lifeskills	1694	73.5%	22.3%	15.6%
Region 5 - Communicare	1446	85.2%	28.6%	8.0%
Region 6 - Seven Counties	3508	79.5%	28.3%	10.8%
Region 7 - North Key	2234	85.8%	26.5%	7.5%
Region 8 - Comprehend	383	60.1%	23.5%	18.3%
Region 10 - Pathways	1209	81.2%	44.2%	18.8%
Region 11 - Mountain	719	90.4%	13.9%	9.2%
Region 12 - Kentucky River	520	87.5%	27.7%	26.5%
Region 13 - Cumberland	909	76.1%	15.4%	18.2%
Region 14 - Adanta	997	71.7%	23.2%	15.8%
Region 15 - Bluegrass	3417	83.2%	30.5%	11.3%
Out Of State	425	n/a	n/a	n/a

*Missing Data = 163 Assessments

Region Summary: Although there were no real differences between DSA regions, MHMR regions showed variations in compliance and DSM-IV criteria.

XX) **Trends 2001 to 2002.** Table 11 presents the total number of DUI Assessments for 2001 to 2002. The number of cases increased from 2001 to 2002 by 244.8%. This increase may be related to using the computerized DUI Assessment. There was an equal distribution by gender, DSA region, and DSM-IV dependence criteria between 2001 and 2002. The percentage of persons under 21 years old decreased from 10.9% to 2.5%. Individuals under 21 years of age are not supposed to be referred for this type of assessment unless they are convicted of DUI. Additionally, the percentage of persons who were positive on the AUDIT and DAST increased from 2001 to 2002.

Table 11: Comparison of 2001 and 2002 Variables

Gender:	**2001**	**2002**
Male	7,170 (82.4%)	17,482 (82.1%)
Female	1,497 (17.2%)	3,801 (17.8%)
Missing	32 (0.4%)	13 (0.1%)
Total	8,699	21,296
Age:		
16 to 20	952 (10.9%)	531 (2.5%)
21 to 30	2,759 (31.7%)	7,116 (33.4%)
31 to 40	2,151 (24.7%)	5,628 (26.4%)
41 to 50	1,404 (16.1%)	4,706 (22.1%)
51 and older	678 (7.8%)	2,463 (11.6%)
Missing	755 (8.7%)	852 (4.0%)
DSA Region:		
West	3,026 (34.8%)	6,946 (32.6%)
East	2,642 (30.4%)	6,793 (31.9%)
Central	2,791 (32.1%)	6,969 (32.7%)
Missing	240 (2.8%)	588 (2.8%)
Assessment Instruments:		
AUDIT score $\geq$ 8	2,472 (29.0%)	7,173 (36.7%)
DAST score $\geq$ 5	2,146 (28.0%)	5,537 (31.7%)
DSM Dependent	1,032 (10.0%)	2,539 (11.9%)

SUMMARY

In 2002, the typical person assessed for Driving Under the Influence was male, under 40 years of age, who was arrested for his first DUI within the past five years. Overall, most individuals completed their intervention within 6 months. The average person assessed had a Blood Alcohol Content (BAC) greater than 0.10 mg/dL. Persons who were under 40 years of age, had multiple convictions, or met dependence criteria were at higher risk for non-compliance. The screening instruments used were consistent since AUDIT scores, DAST scores, DSM-IV criteria for abuse and dependence, and Blood Alcohol Content were closely related. These screening tools allow assessors to make appropriate treatment referrals. Persons convicted of multiple DUI's and those arrested with elevated BAC's are at most risk for meeting criteria for a significant alcohol or drug problem. Publicly funded programs completed almost 30% of all assessments. Although there are fewer public programs in Kentucky, these programs tended to have more sites than privately funded programs. All programs tended to refer individuals to their own program for education and treatment interventions. There were no differences between DSA regions but MHMR regions showed variation between compliance and DSM-IV criteria.

Areas for further examination include non-compliant individuals, Drug DUI's, and the education/treatment referral process. Specifically:

- Since about one in five individuals do not complete their assigned intervention, decreasing non-compliance could decrease DUI recidivism.
- Drug DUI's could increase as more law enforcement officers are trained. There is limited research comparing the difference between Alcohol DUI and Drug DUI.
- The use of objective placement criteria should be examined.

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