Kentucky DUI Assessment Report for 2006

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Executive Summary

In calendar year 2006, 21,979 DUI Assessments were submitted to the Kentucky Division of Mental Health and Substance Abuse by 92 licensed and certified DUI Assessment Programs. These records include education and treatment information for persons convicted of DUI who were assessed and referred for an intervention. Once a person met or did not meet the requirements of the treatment and/or education intervention to which they were referred, that record was considered closed and submitted. The University of Kentucky Center on Drug and Alcohol Research is contracted by the Division of Mental Health and 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 completed from January 1, 2006 through December 31, 2006.

The typical person assessed for DUI in Kentucky in 2006 was a male in his 20's who was convicted of his first DUI. His blood alcohol level was between 0.08 and 0.15 g/dL and there was a 40% chance he met DSM-IV-TR diagnostic criteria for substance abuse or substance dependence in his lifetime. The typical offender was referred to either a 20-hour education intervention or an outpatient alcohol/drug treatment program. This finding is consistent with previous years.

- For 2006, the number of DUI Assessments submitted was 21,979
  Gender:
  - Males 81%
  - Females 19%

- Program referrals* were made to:
  - 20-Hour Education 44%
  - Outpatient 52%
  - IOP or Residential 4%

  *Only the highest level of care is presented here for persons referred to more than one level of care

- Overall, 78% of persons were compliant with their education/treatment referrals. Persons who were non-compliant were most likely to have been under 40 years of age, have multiple DUI convictions, and met at least three DSM-IV-TR criteria for substance dependence in their lifetime. Additionally, non-compliant persons scored higher on the AUDIT and DAST screening instruments, were referred to higher levels of care, and were more likely to have been convicted in a Dry county than compliant persons. Combinations of risk factors appear to increase the risk of non-compliance.

- The number of females who met DSM-IV-TR criteria for substance abuse or three or more criteria for substance dependence in their lifetime was lower than that for males (48.7% for males and 45.6% for females).

- 1,980 (9.4%) of assessments submitted were for persons under the legal drinking age.

BACKGROUND

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Study Overview

The Kentucky Revised Statute 189A.040 requires Kentucky licensed drivers convicted of Driving Under the Influence (DUI) to receive an assessment by a state certified DUI assessor in a state licensed and certified DUI assessment program[1]. The purpose of the assessment is to determine the appropriate level of care to address the person's drug and/or alcohol problem. If treatment need is determined, a 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 a 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 record is "completed." DUI Assessment programs are required (908 KAR 1:310) to send completed assessment records each month to the University of Kentucky Center on Drug and Alcohol Research (CDAR), which receives them for the Kentucky Division of Mental Health and Substance Abuse.

CDAR serves as the repository for state DUI assessment records. CDAR receives a disk or CD 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 three assessment instruments:

- Alcohol Use Disorders Identification Test (AUDIT)[2] – 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)[3] – 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-TR[4] checklist for Substance Abuse and Dependence. The Diagnostic and Statistical Manual, Fourth Edition (DSM-IV-TR) was developed by the American Psychiatric Association as the standard for psychiatric diagnoses. A person who meets three (or more) of the seven dependence criteria within a 12-month period is considered as dependent on the substance in question. A person who meets at least one of four abuse criteria is considered as abusing the substance.

Information about the intervention referral is also noted. This includes the education and/or level(s) of treatment to which the person is referred, as well as the person's compliance. The Kentucky 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 completed between January 1, 2006 and December 31, 2006. A total of 21,979 records were received from 92 licensed and certified DUI Assessment Programs. It should be noted that completed assessment records in 2006 are not the same as the number of DUI convictions in 2006 because persons can be convicted, assessed, and complete their intervention in separate years.

Limitations

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

Table 1: Missing Data

	2006		2005	
	Missing Assessments	Percent of Cases	Missing Assessments	Percent of Cases
Gender	5	< 0.1%	68	0.3%
Assessment Program	220	1.0%	254	1.2%
Age	829	3.8%	996	4.7%
AUDIT Score	1,073	4.9%	1,534	7.3%
Treatment Program	1,313	6.0%	1,832	8.7%
County of Conviction	1,393	6.3%	1,368	6.5%
Recommended Level of Care	1,514	6.9%	1,408	7.0%
DAST Score	2,531	11.5%	2,906	13.8%
Time to Completion*	2,675	12.2%	2,494	11.9%
Blood Alcohol Content	10,206	46.4%	10,132	48.2%

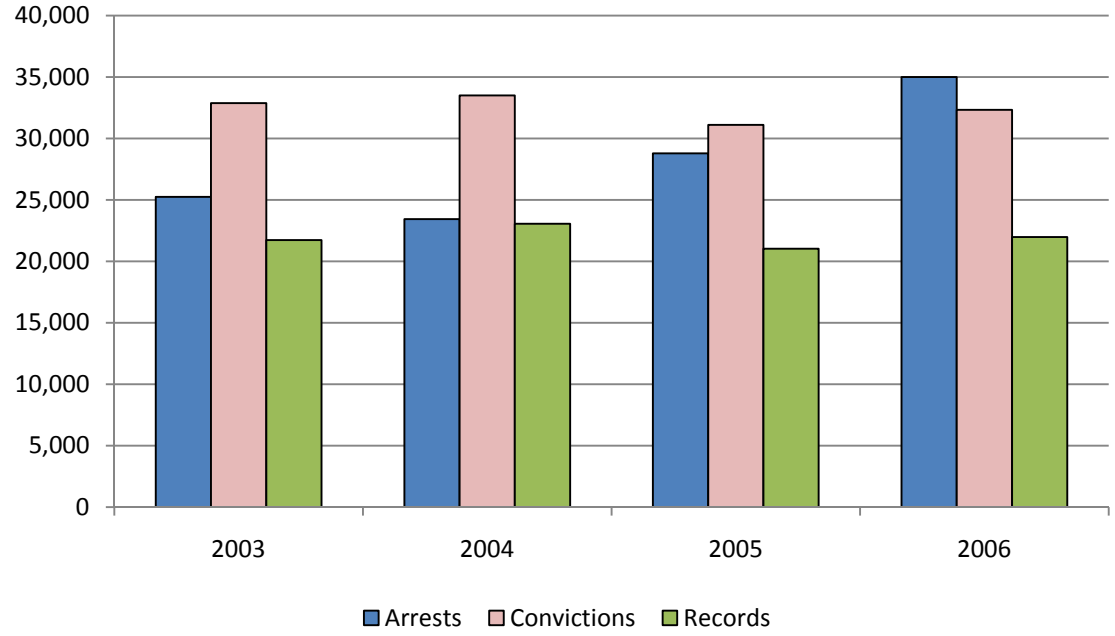
* Cases where time to completion was 0 days (n = 618) were considered as missing data since persons cannot be convicted, assessed, and complete treatment in the same day.

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 software has successfully reduced the amount of missing data, but certain fields remain problematic.

The second limitation is that these data represent a subset of a larger, unknown number of DUIs in Kentucky. For example, in 2006 there were 34,997 DUI arrests, 32,325 DUI convictions, and 21,979 completed assessments[5]. This difference emphasizes the dangers in comparing these data since there are different requirements and timelines for records. Figure 1 presents the number of DUI arrests and convictions submitted to the Kentucky

State Police, and completed assessment records submitted to CDAR for 2003 through 2006.

Figure 1: DUI Arrests, DUI Convictions, and Completed Records, 2003 through 2006



This report presents assessments completed in 2006, which is independent of violation date and date of conviction. Caution should be used in comparing these data to other data. For example, a portion of the unaccounted records includes out-of-state licensees who are arrested in Kentucky but are not required to receive a Kentucky assessment. Assessments would also not be completed or submitted for persons who are incarcerated for an extensive period of time following their DUI. Persons who are arrested for DUI may plea bargain to a lesser charge or plea bargain to remove the DUI charge altogether.

A third limitation is that the data are self-reported which can be limited by recall.

A final limitation is that CDAR received a small number of data disks which were 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 (Administrative Office of the Courts and Transportation Cabinet) which receive paper copies. CDAR makes every effort to retrieve data when a damaged disk is received. Attempts to retrieve the data are made by phone and if needed followed by a site visit. In 2006, 32 damaged disks were received with an estimated loss of 192 records. This is a decrease from 2005 when 43 damaged disks were received with an estimated loss of 258 records.

Summary

This report presents data which provides demographic information, screening results, and the type/frequency of referrals. Information on non-compliant persons who are at high risk for recidivism is also provided. Finally, data on Mental Health/Mental Retardation (MHMR) regions, Division of Mental Health and Substance Abuse (DMHSA) regions, and trends from 2002 through 2006 are described.

SECTION ONE

DEMOGRAPHICS

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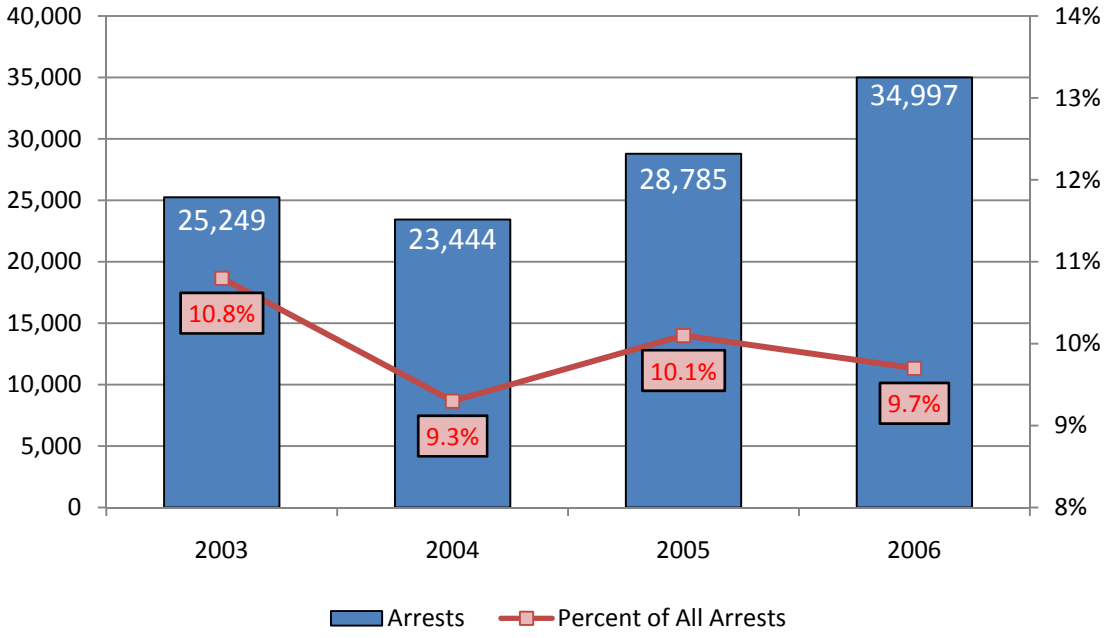
1.1 Number of DUI Assessments Submitted in 2006

The number of completed DUI assessments submitted in calendar year 2006 was 21,979. In 2006 there were 34,997 arrests for DUI which represented 9.7% of all arrests in Kentucky in 2006[5]. Figure 1.1 presents the number of DUI arrests from 2003 to 2006. Figure 1.1 includes the percent of total arrests in Kentucky that DUIs represent.

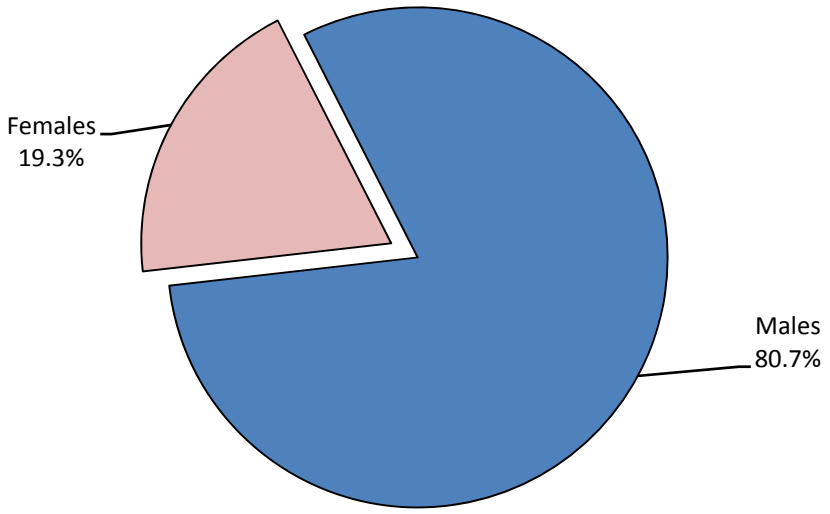
Figure 1.1: Number of DUI Arrests and Percent of Total Arrests 2003 to 2006



1.2 DUI Assessments by Gender

Of the 21,974 assessments that reported gender, 17,740 (80.7%) were males and 4,234 (19.3%) were females.

Figure 1.2: Assessments by Gender*

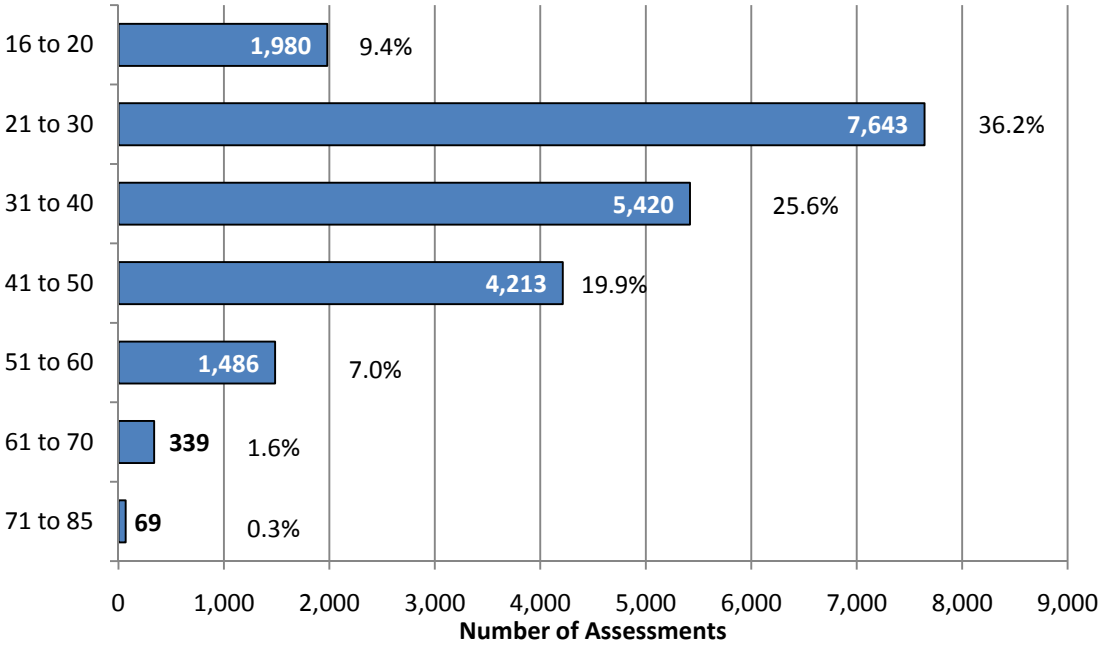


* Missing Data = 5 Assessments

1.3 Assessments by Age

The majority of assessments submitted in 2006 were for persons between 21 and 40 years of age (61.8%). The oldest person was 85 years old. There were 1,980 assessments (9.4%) submitted for persons who were between 16 through 20 years of age at the time they were convicted. Figure 1.3 presents the number of assessments by age at conviction.

Figure 1.3: Assessments by Age at Conviction*

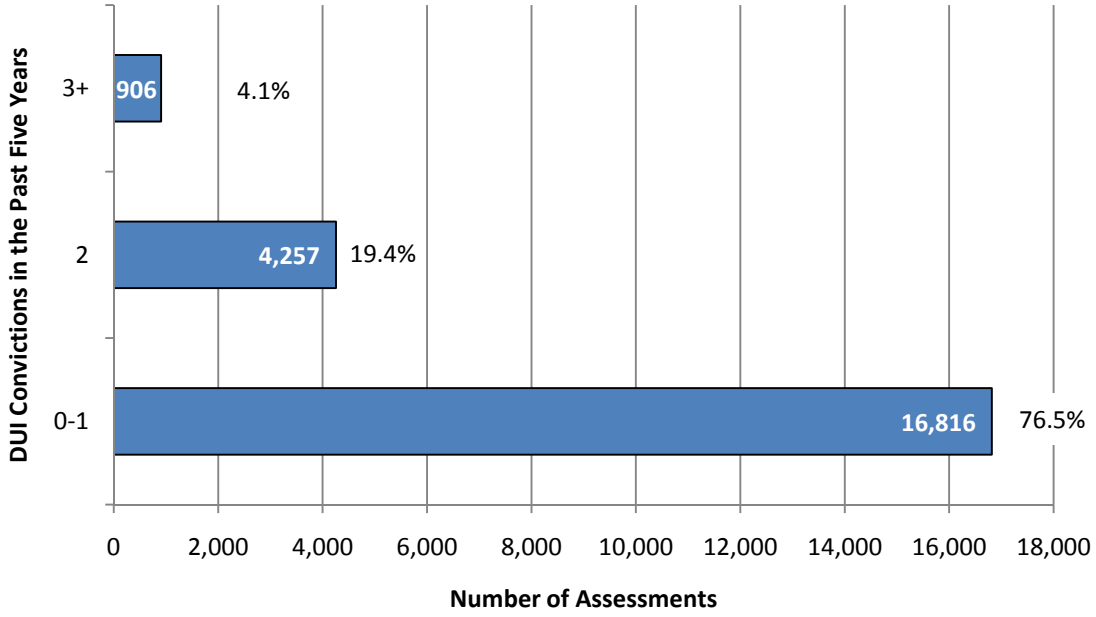


* Missing Data = 829 Assessments

1.4 DUI Convictions in the Previous Five Years

Figure 1.4 presents the number of DUI convictions that individuals had within the past five years. This number includes the DUI conviction which resulted in the current assessment.

Figure 1.4: DUI Convictions in the Previous Five Years*

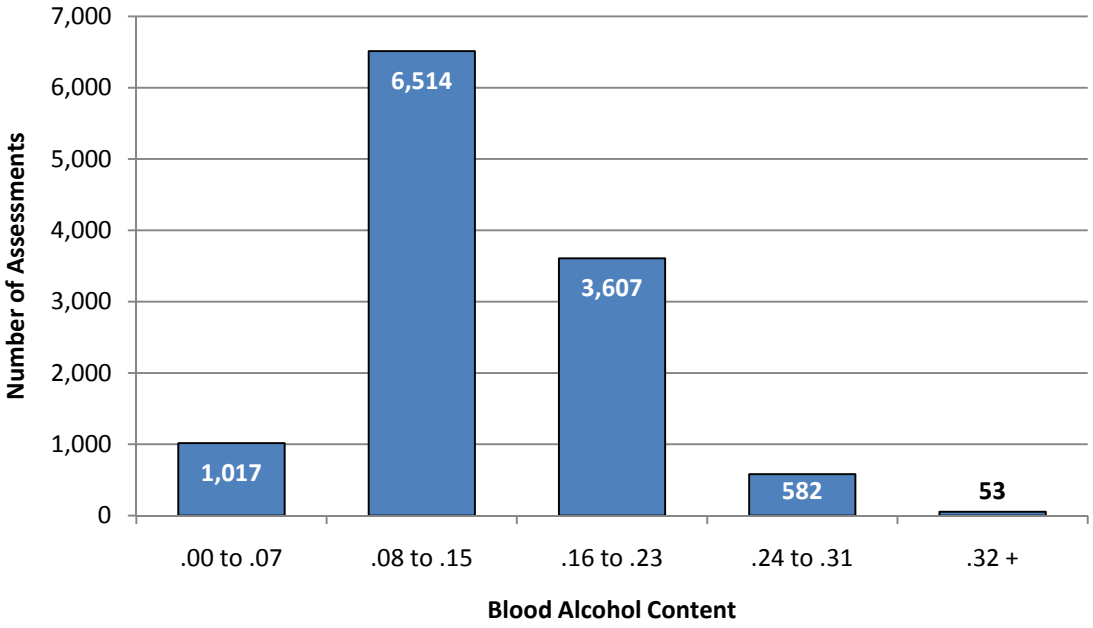


* Missing Data = None

1.5 Blood Alcohol Content

Figure 1.5 presents the Blood Alcohol Content (BAC) for the assessments. A large number of assessments were in the 0.08 to 0.15 g/dL range. There were very few cases above 0.24 (n = 635).

Figure 1.5: Blood Alcohol Content by Number of Assessments*



* Missing Data = 10,206 Assessments

Demographics Summary

Persons assessed in 2006 were most likely to be a male between 21 and 40 years old who was arrested for his first DUI in five years and had a BAC between 0.08 and 0.15g/dL.

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SECTION TWO

SCREENING

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2.1 AUDIT

The Alcohol Use Disorders Identification Test (AUDIT) is designed to identify problem 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 indicative of a drinking problem. Males generally score higher than females (see Table 2.1). Appendix A contains average AUDIT scores for each question by gender.

Table 2.1: AUDIT Scores*

	Males	Females	Total
Positive (8+)	6,449 (38.3%)	1,112 (27.4%)	7,561 (36.2%)
Average Score	7.83	6.45	7.56
Number of Assessments	16,837	4,064	20,901

* Missing Data = 1,078 Assessments

2.2 DAST

The Drug Abuse Screening Test (DAST) 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 potential drug problem. Females had a higher average score than males (see Table 2.2).

Table 2.2: DAST Scores*

	Males	Females	Total
Positive (5+)	5,063 (32.4%)	1,202 (32.5%)	6,072 (32.1%)
Average Score	5.01	5.50	5.11
Number of Assessments	15,636	3,809	19,445

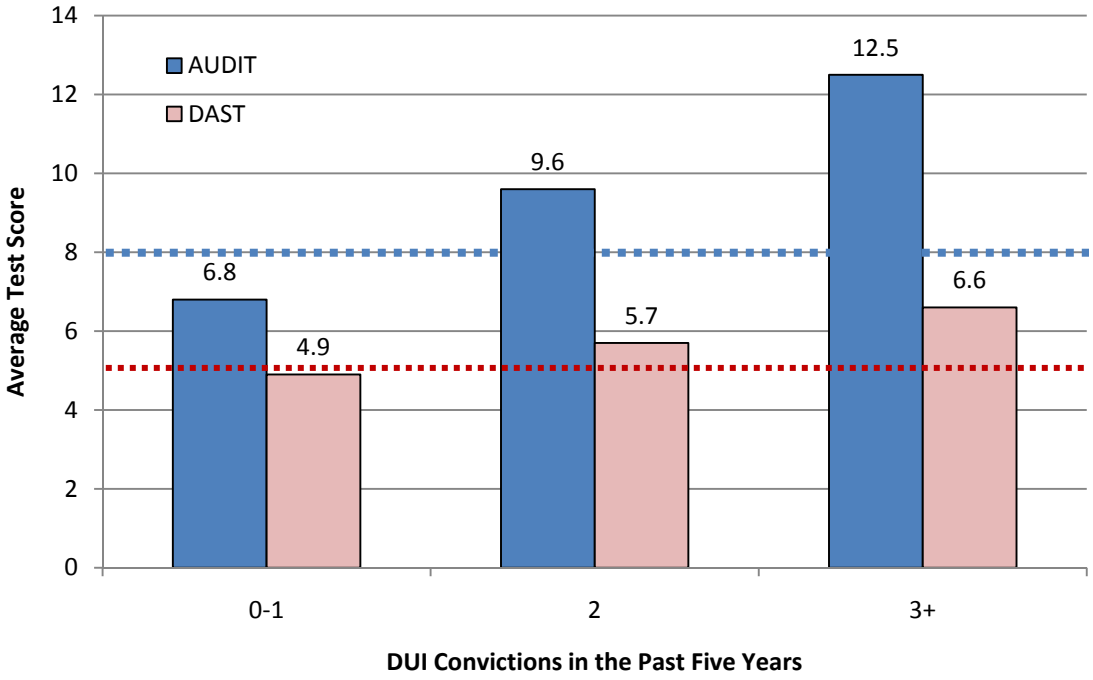
* Missing Data = 2,534 Assessments

Please note that screening instruments do not dictate a level of care. Screening instruments, in combination with a face-to-face interview, assist clinicians in determining the appropriate level of care for individuals.

2.3 AUDIT and DAST by Number of Convictions

Figure 2.1 presents 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 6.8 on the AUDIT and 4.9 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 5.7 on the DAST. Those persons with three or more prior convictions scored 12.5 on the AUDIT and 6.6 on the DAST. The average AUDIT and DAST scores for persons with multiple convictions were positive on both tests suggesting a more severe alcohol and/or drug problem.

Figure 2.1: AUDIT and DAST by Number of DUI Convictions*

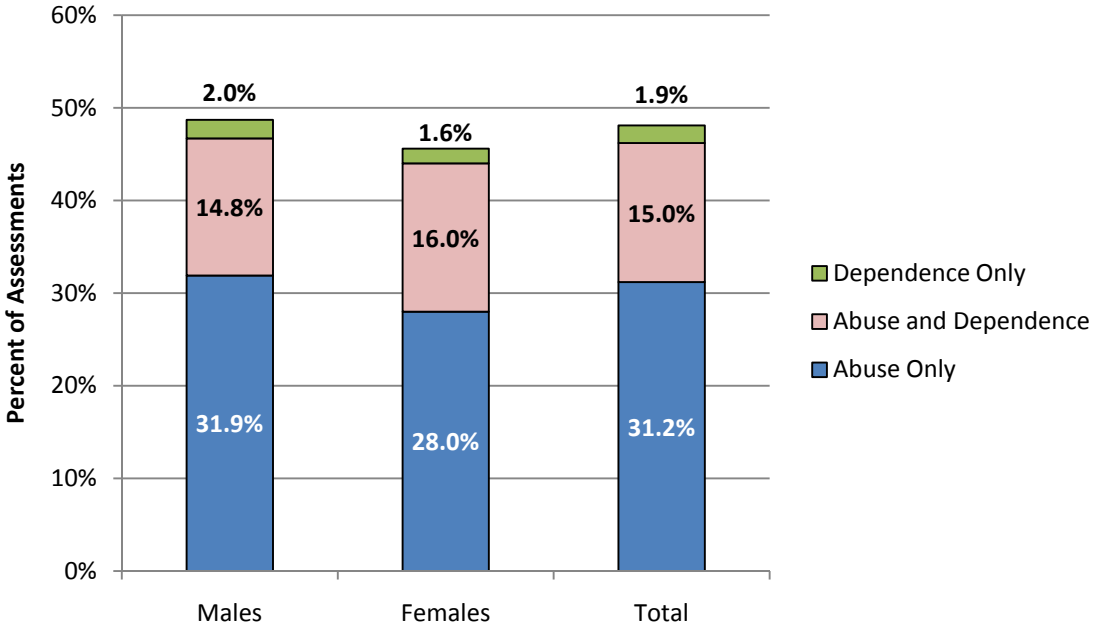


* Missing Data = 1,073 Assessments for AUDIT and 2,531 for DAST

2.4 DSM-IV-TR Abuse and Dependence Criteria

In 2006 females convicted of DUI had a higher rate of dependence (17.6%) than males convicted of DUI (16.8%). The top section of each bar in Figure 2.2 presents individuals who met three or more dependence criteria in their lifetime, but no abuse criteria. The lower section shows individuals who met abuse criteria and less than three dependence criteria. The center section shows persons who met criteria for abuse and three or more dependence criteria in the lifetime. Appendix C (page 87) presents responses for each DSM-IV-TR criteria by gender. It is important to note that these data do not present a clinical DSM-IV-TR diagnosis. Dependence in this case means that the person met at least three DSM-IV-TR dependence criteria in his/her lifetime. A clinical DSM-IV-TR dependence diagnosis requires meeting three (or more) criteria which occur within the same 12-month time frame. Abuse means that the person met self-reported DSM-IV-TR criteria for abuse in their life. Neither diagnostic category takes the possibility of remission into consideration.

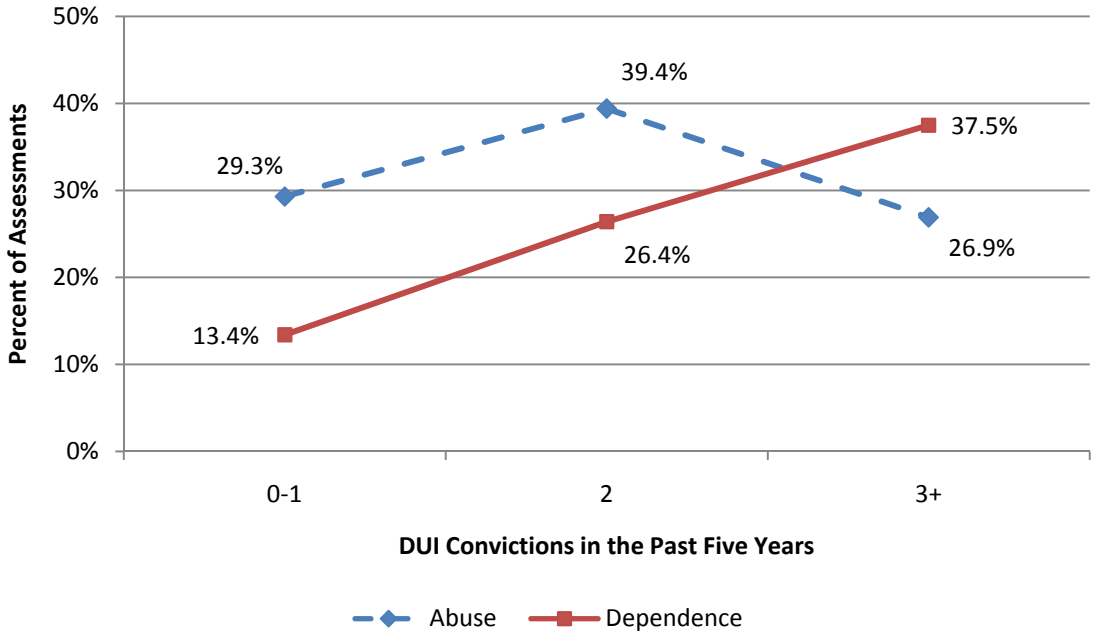
Figure 2.2: Percent of Persons Meeting DSM-IV-TR Abuse and/or Dependence Criteria by Gender*



* Missing Data = 5 Assessments

Figure 2.3 compares the percentage of persons who reported DSM-IV-TR criteria for abuse or dependence with the number of previous DUI convictions in the past five years. The percent of persons who reported three or more dependence criteria in their lifetime increases between DUI convictions in the past five years. The percent of persons reporting abuse, however, increased about 10 percentage points between 0-1 to 2 DUI convictions but then decreased about 13 percentage points between 2 to 3+ DUI convictions. This may be due to the increased number of persons reporting dependence criteria.

Figure 2.3: Percent of Persons meeting Dependence or Abuse Criteria by Number of DUI Convictions in the Past Five Years*

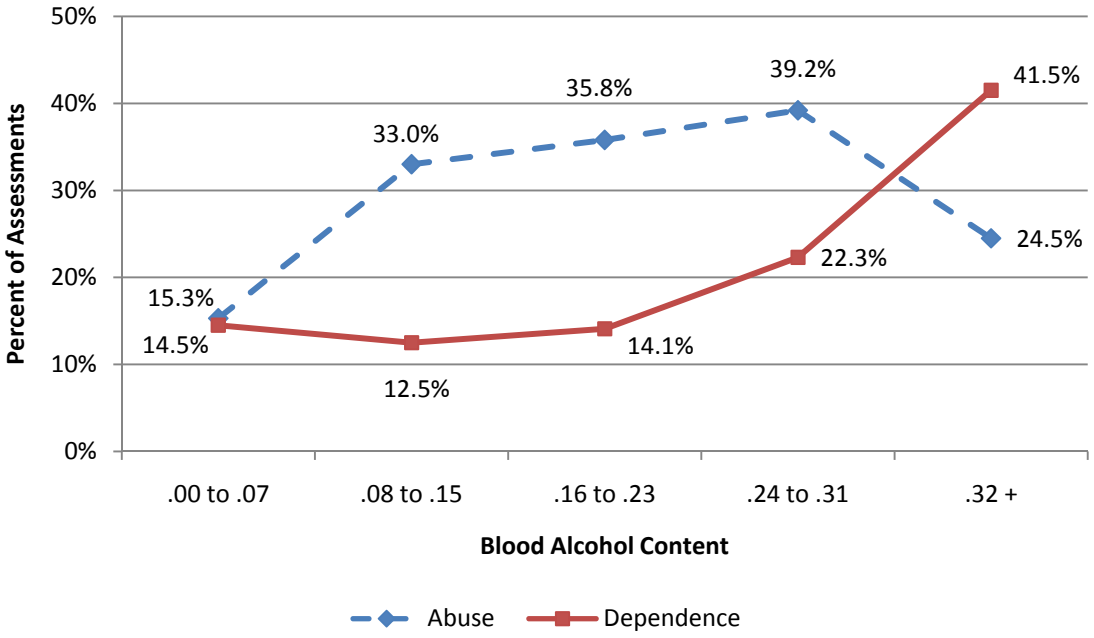


* Missing Data = none

2.5 DSM-IV-TR Criteria and Blood Alcohol Content

There was a relationship between Blood Alcohol Content (BAC) and individuals who met DSM-IV-TR abuse and/or 3 or more dependence criteria in their lifetime. Figure 2.4 presents trends for BAC and DSM-IV-TR dependence and abuse criteria. Persons who were convicted with a higher BAC were more likely to self-report DSM-IV-TR criteria for dependence. As mentioned in section 2.4, this decrease in persons reporting abuse may be due to the increased number of persons reporting dependence criteria.

Figure 2.4: Percent of Persons Meeting Abuse or Dependence Criteria by Blood Alcohol Content*



* Missing Data = 10,206 Assessments

Screening Summary

AUDIT and DAST scores, DSM-IV-TR criteria, and blood alcohol content are all closely related. Persons with multiple DUI convictions and a high BAC are more likely to meet at least three DSM-IV-TR criteria for substance dependence in their lifetime.

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SECTION THREE

TREATMENT REFERRALS

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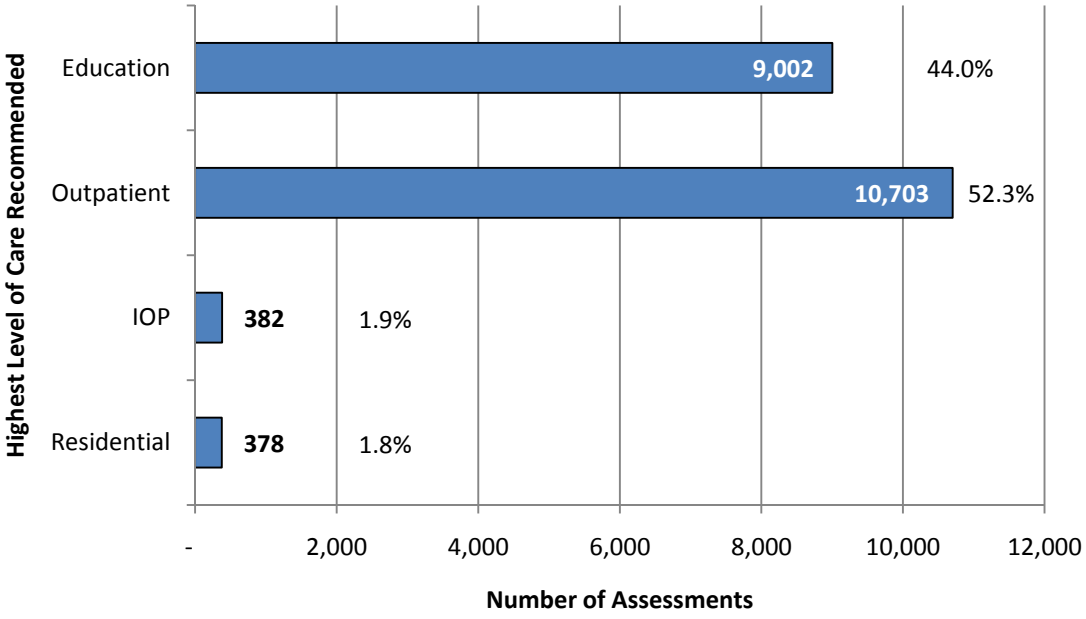
3.1 Level of Care Recommended

Figure 3.1 presents the assessors' education and treatment intervention referrals. Only the highest level of care recommended is provided. For example, if an individual was recommended for Outpatient (OP) and Intensive Outpatient (IOP), only the IOP recommendation is presented. Figure 3.1 indicates that almost everyone assessed (96.3%) was referred for Education or Outpatient treatment as their highest level of care.

Figure 3.1: Highest Level of Care Recommended*

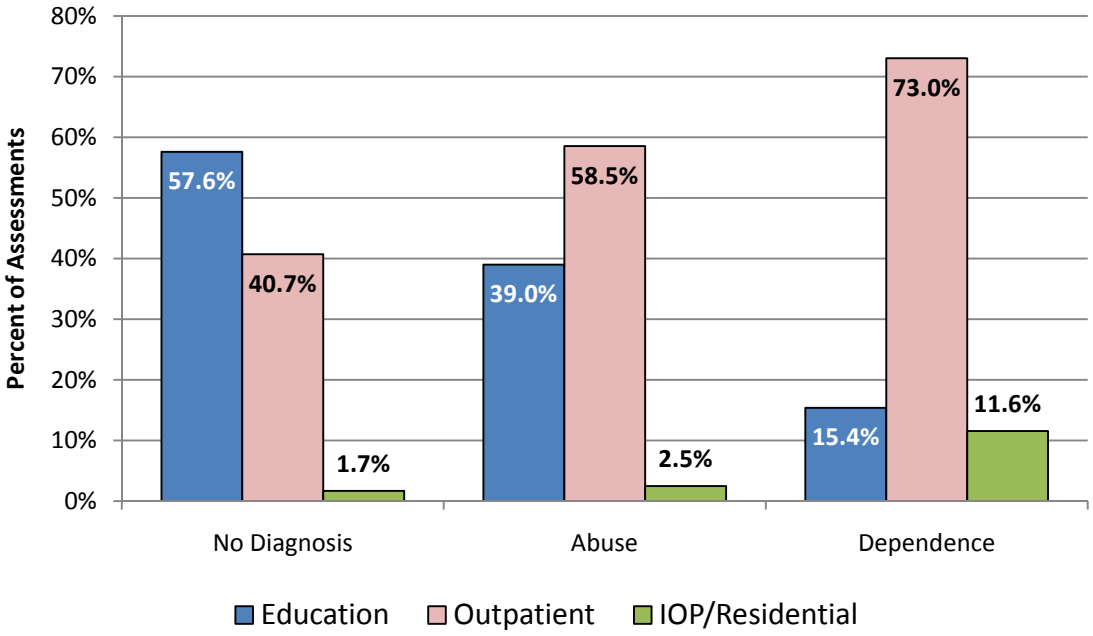


* Missing Data = 1,514 Assessments

3.2 Level of Care by DSM-IV-TR Criteria

Figure 3.2 presents the highest level of care recommended by DSM-IV-TR criteria. Treatment referrals are related to DSM-IV-TR criteria. Those persons who met three or more dependence criteria in their lifetime were more likely to have received an intensive outpatient or residential treatment recommendation. Persons who did not meet criteria for abuse or dependence were most often referred for education. Persons who met three or more dependence criteria in their lifetime were more likely to have been referred for a treatment intervention than those who met criteria for abuse who in turn were more likely to have been referred for a treatment intervention than those persons who did not meet DSM-IV-TR criteria for abuse or dependence.

Figure 3.2: Highest Level of Care by DSM-IV-TR Criteria*



* Missing Data = 1,514 Assessments

3.3 Total Referrals

Table 3.1 presents the number of referrals to each level of care, including multiple referrals. This represents the total number of intervention referrals to a specific intervention regardless of how many other levels of care were recommended.

Table 3.1: Total Referrals*†

Education	10,339
Outpatient	10,953
Intensive Outpatient	408
Residential	378

* Missing Data = 1,514 Assessments

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

Table 3.2 presents all intervention combinations. It is interesting to note that 60.8% of persons recommended for Residential services were also recommended for an additional level of care.

Table 3.2 Total Referrals by Combination*

Education	9,002
Outpatient	9,435
OP & Edu	1,268
Intensive Outpatient	235
IOP & Edu	15
IOP & OP	125
IOP & OP & Edu	7
Residential	148
Res & Edu	25
Res & OP	158
Res & OP & Edu	21
Res & IOP	14
Res & IOP & Edu	0
Res & IOP & OP	11
Res & IOP & OP & Edu	1

Key:

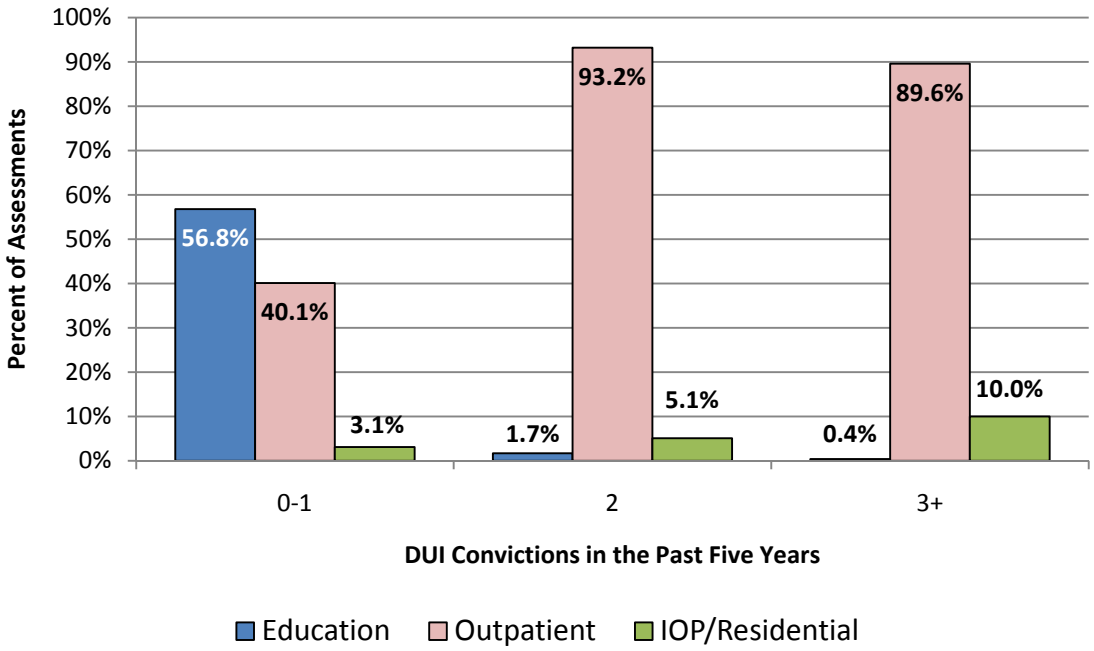
Education	Edu
Outpatient	OP
Intensive Outpatient	IOP
Residential	Res

* Missing Data = 1,514 Assessments

3.4 Highest Level of Care Recommended by the Number of DUI Convictions in the Previous Five Years

Figure 3.3 presents the type of referral an individual received compared to the total number of DUI convictions in the past five years. Only the highest level of care is presented. Persons convicted of their first DUI in five years typically received an education intervention or an outpatient treatment recommendation. Almost all persons convicted of two or more DUIs in the past five years received an outpatient treatment recommendation. It is unclear why a small percentage of persons with multiple DUI convictions (1.4%) received education as their highest level of care. This may be related to data limitations discussed in the background section of this report. There is a slight increase in the percentage of intensive outpatient and residential treatment recommendations which coincides with an increase in previous DUI convictions.

Figure 3.3: Highest Level of Care Recommended Compared to the Number of DUI Convictions*

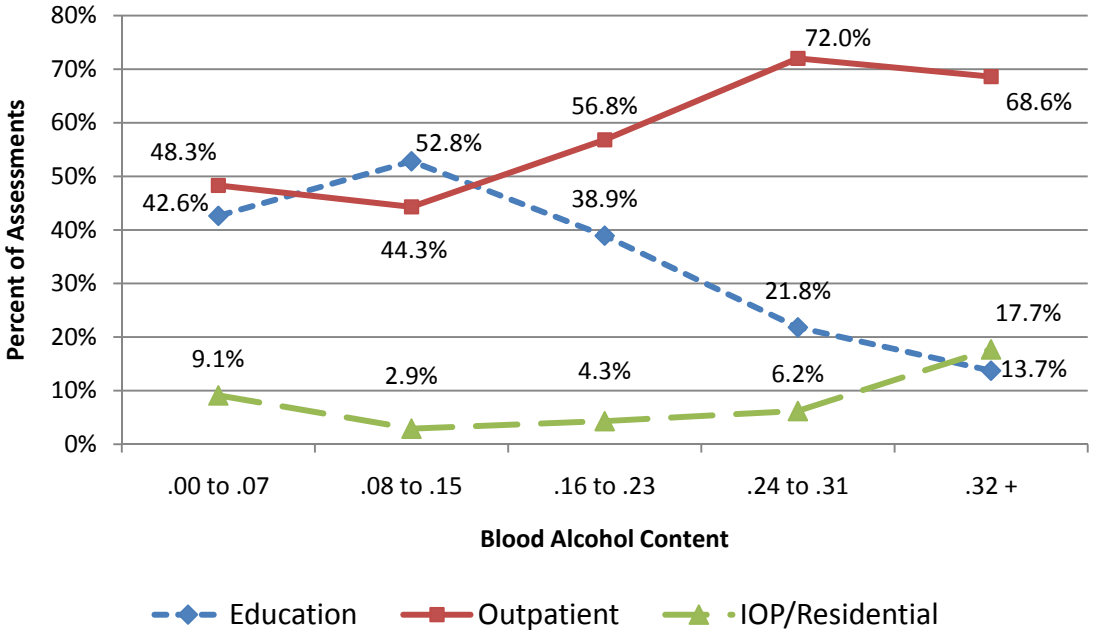


* Missing Data = 1,514 Assessments

3.5 Recommended Level of Care by Blood Alcohol Content

Figure 3.4 presents the highest level of care recommended and the Blood Alcohol Content of the most recent DUI. Persons who are under twice the legal limit (< 0.16g/dL) were more likely to receive an education intervention. Persons above 0.16g/dL were more likely to receive an outpatient recommendation. There is a trend for persons with higher BACs to be recommended for intensive outpatient or residential services.

Figure 3.4: Highest Level of Care by Blood Alcohol Content*

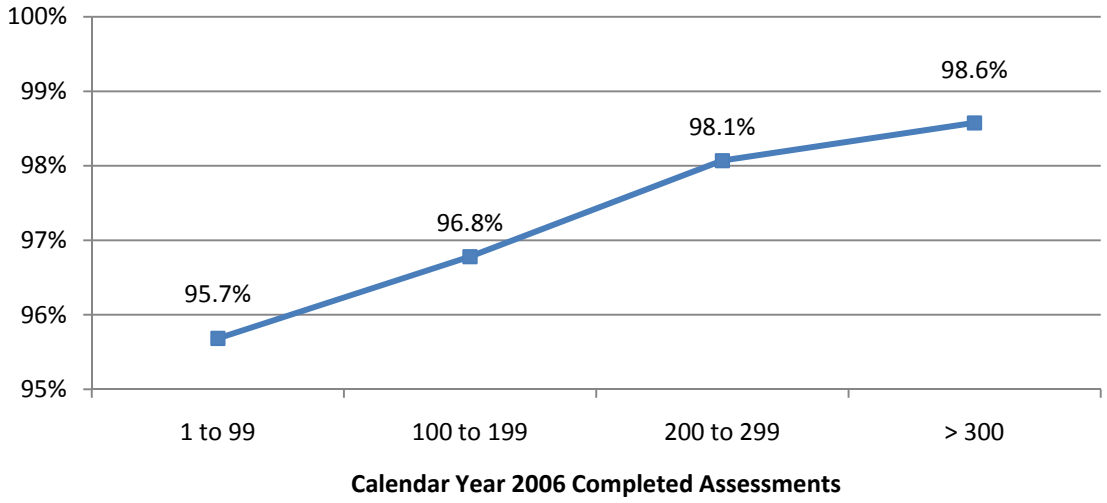


* Missing Data = 11,165 Assessments

3.6 Self-Referrals

In 2006, 97.2% of persons assessed were referred for their education or treatment recommendation to the same program that performed their assessment. There was a small but significant difference in the percent of self-referred clients when stratifying by the amount of assessments completed in 2006. Figure 3.5 presents the self-referral rate by the number of submitted assessments. Assessors who completed more assessments were more likely to self-refer clients.

Figure 3.5: Program Self-Referrals by Assessor Experience



Referral Summary

Most of the persons assessed are referred to 20-hour education or an outpatient treatment intervention. There is a relationship between the level of care recommended and DSM-IV-TR criteria. The level of care recommended and blood alcohol content are also related.

SECTION FOUR

COMPLIANCE

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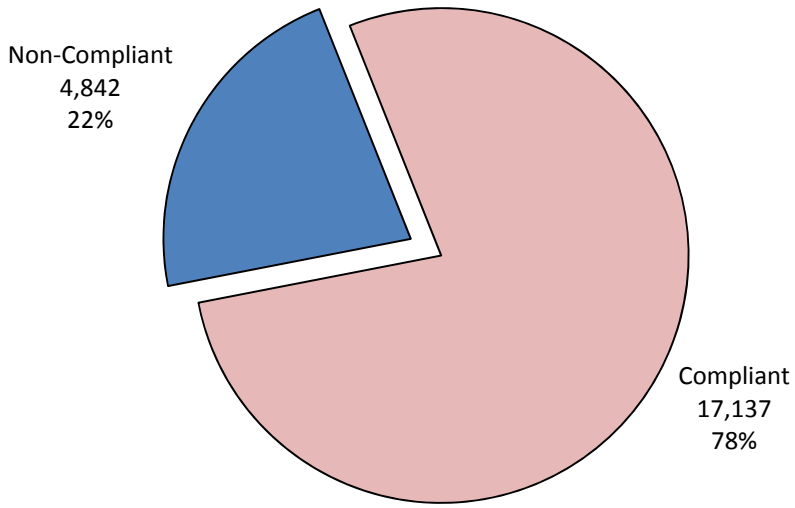
4.1 Compliant vs. Non-Compliant

Figure 4.1 presents compliance. Overall, about three-fourths (78%) of persons convicted of DUI were compliant with their assigned intervention. If a person enrolled in an education or treatment intervention drops out of the program, does not maintain satisfactory program attendance, or fails to meet other program expectations they are considered to be non-compliant. Females were more likely to be compliant than males (79.6% and 77.6% respectively).

Figure 4.1: Compliant vs. Non-Compliant*

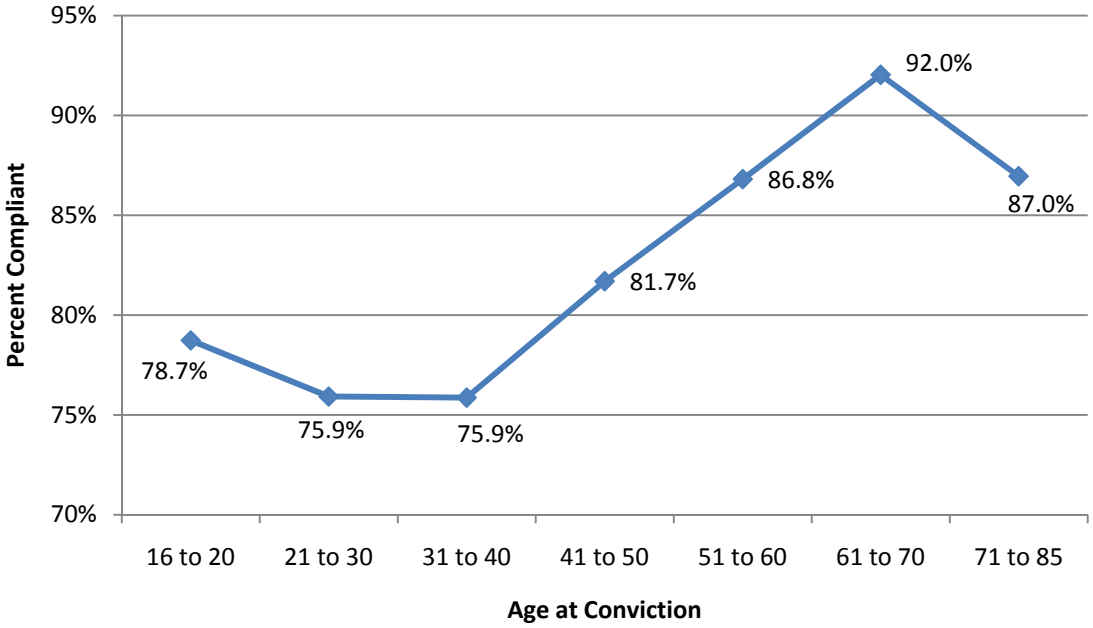


* Missing Data = none

4.2 Compliance by Age

Figure 4.2 presents compliance rates by age groups which indicate that younger persons tended to be less compliant.

Figure 4.2: Compliance by Age*

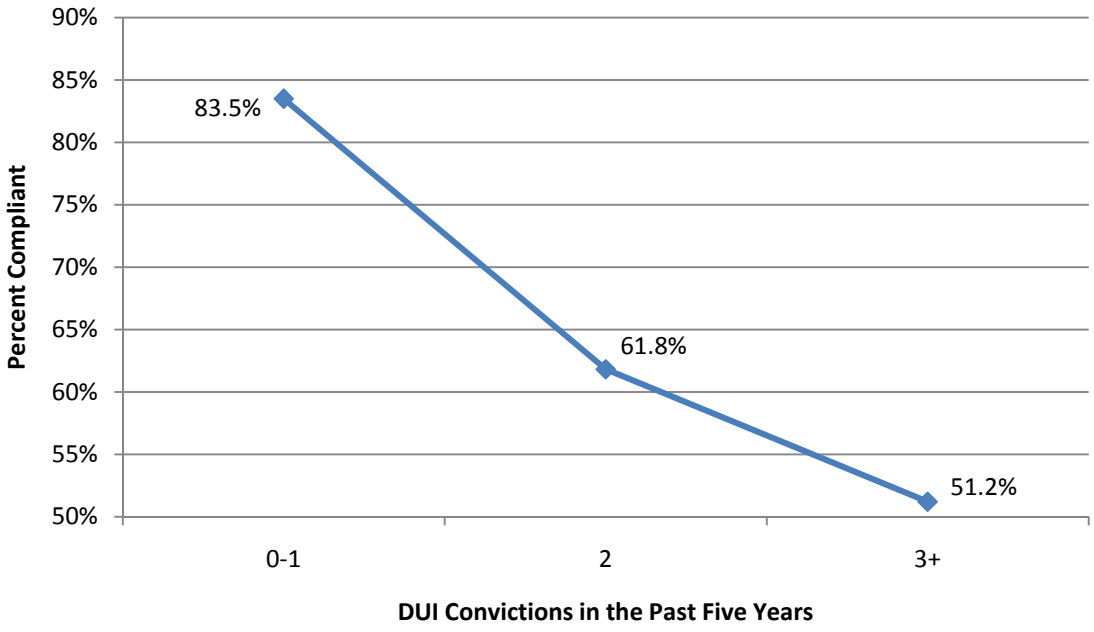


* Missing Data = 829 Assessments

4.3 Compliance by Previous DUI Convictions

Figure 4.3 presents compliance rates by DUI conviction in the past five years. Persons with multiple convictions were less likely to be compliant with their assigned intervention. Persons with two convictions were 26.0% less likely to be compliant than persons convicted of their first DUI. Persons with three or more convictions in the past five years were 38.7% less likely to be compliant than persons convicted of their first DUI.

Figure 4.3: Compliance by Number of DUI Convictions*

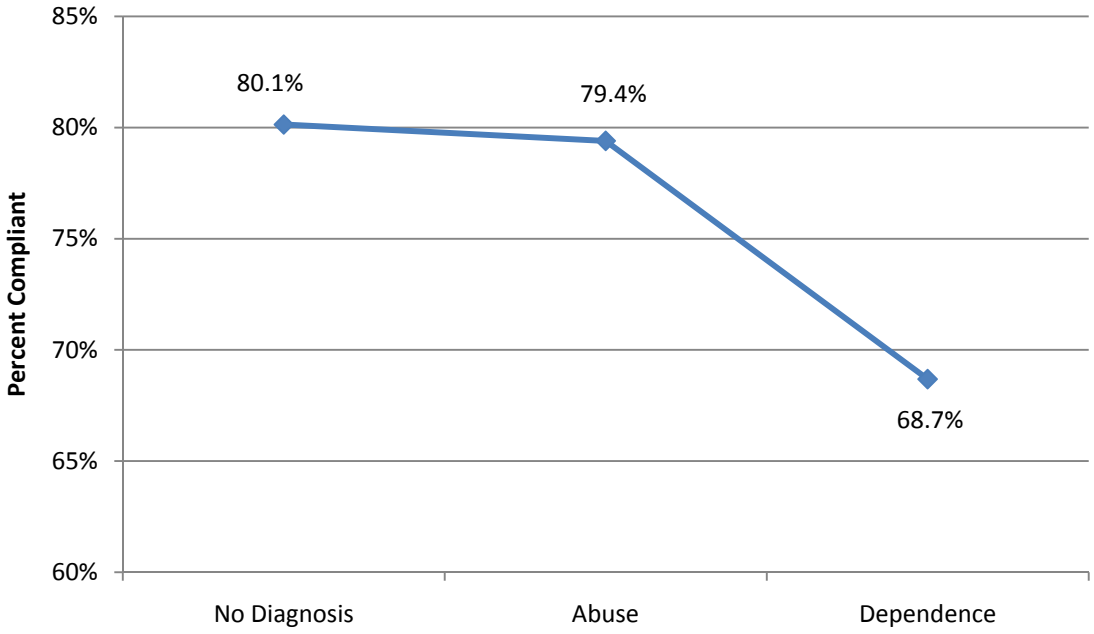


* Missing Data = none

4.4 Compliance by DSM-IV-TR Criteria

Figure 4.4 presents intervention compliance by DSM-IV-TR criteria. Persons who met three or more lifetime substance dependence criteria were less likely to be compliant with their assigned intervention.

Figure 4.4: Compliance by DSM-IV-TR Criteria*



* Missing Data = none

4.5 Compliance by County of Conviction Status

Figure 4.5 presents compliance by the Wet/Dry/Moist status of the county of conviction. The three types of counties are[6]:

- **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.

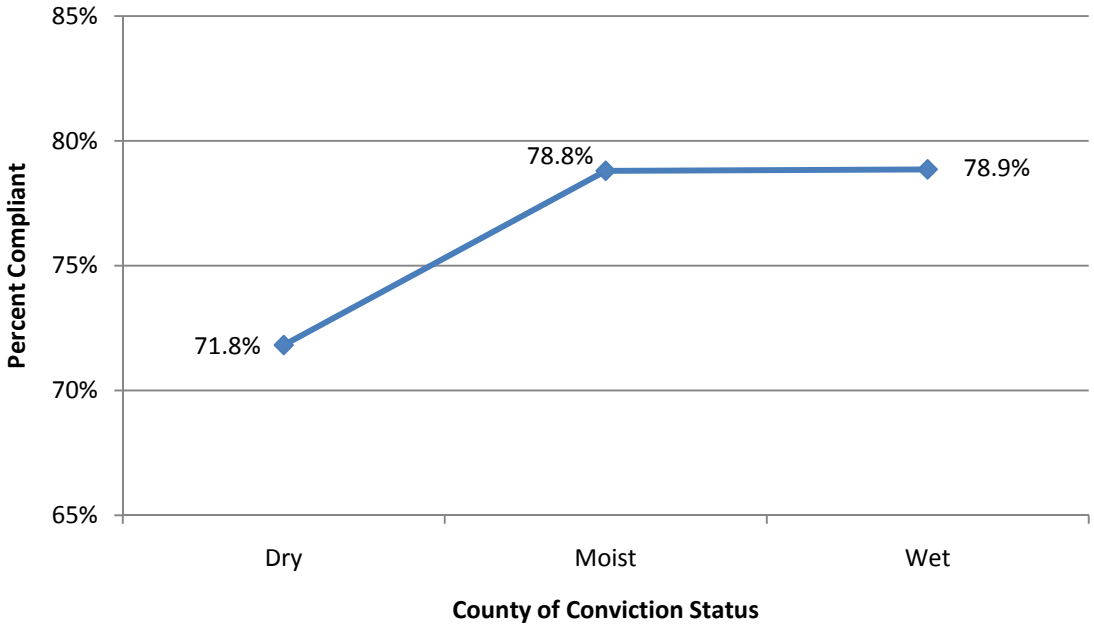
There are three exceptions to Moist and Dry counties:

- 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 report, moist counties include dry counties with limited, winery, and/or golf exceptions.

Figure 4.5 shows that persons convicted in dry counties are less likely to be compliant than those convicted in wet or moist counties. Persons convicted in wet counties are just as likely to be compliant than persons convicted in moist counties.

Figure 4.5: Compliance by County of Conviction Status*

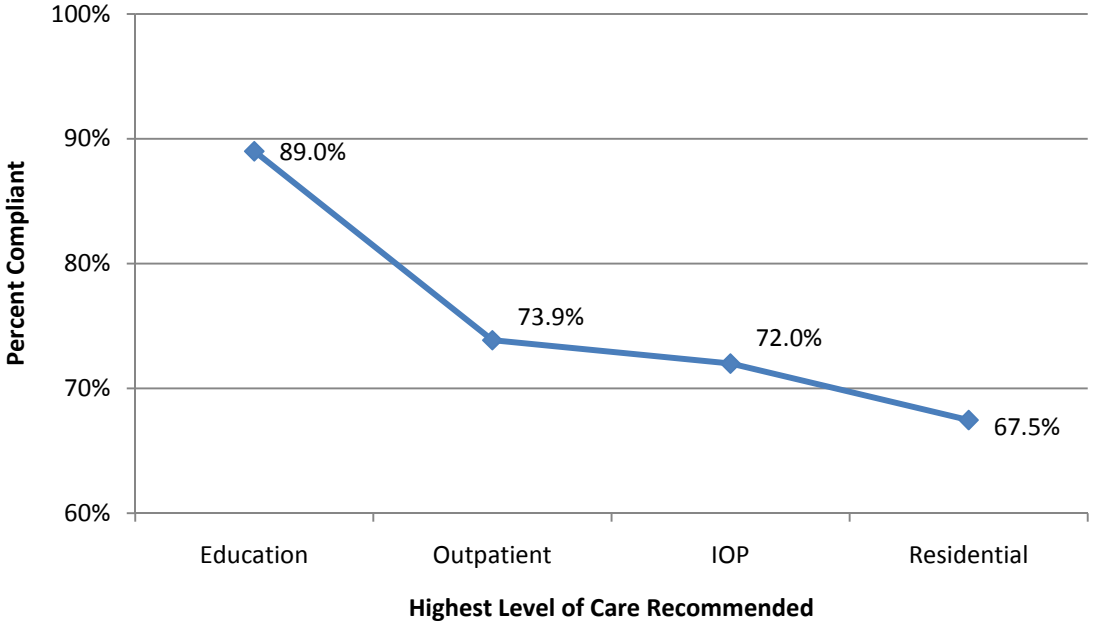


* Missing Data = 1,393 Assessments

4.6 Compliance by Highest Level of Care Recommended

Figure 4.6 presents compliance by the highest level of care recommended. Individuals referred for education were most likely to be compliant. Persons referred to outpatient or intensive outpatient were 17.0% and 19.0% less likely to be compliant with their intervention than persons referred to education. Persons referred for residential treatment were 24.2% less likely to be compliant than those referred for education. Individuals recommended for higher levels of care may have more severe drug/alcohol problems and therefore may be less likely to be compliant. Furthermore, since residential or IOP program is more rigorous and typically more costly, both can lead to decreased compliance.

Figure 4.6: Compliance by Highest Level of Care Recommended*

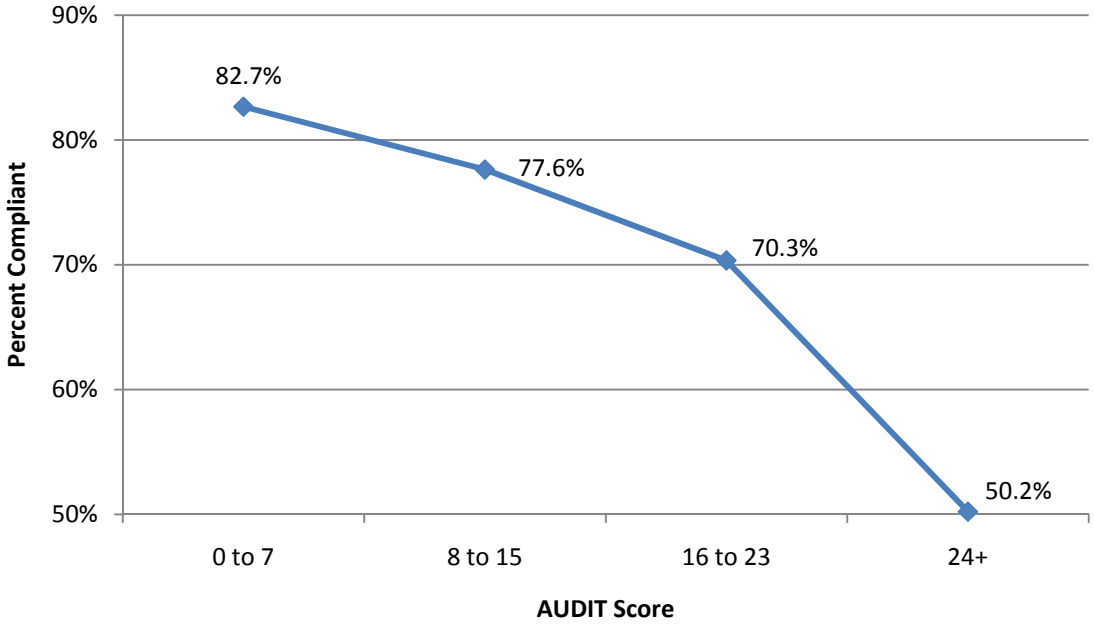


* Missing Data = 1,514 Assessments

4.7 Compliance by AUDIT and DAST Scores

Figure 4.7 presents compliance by AUDIT scores. Scores were grouped into four categories. The four groups represent Negative (persons who scored 0-7), Positive (8-15), 2x Positive (16-23), and 3x Positive (24 and higher). Higher AUDIT scores were associated with lower compliance.

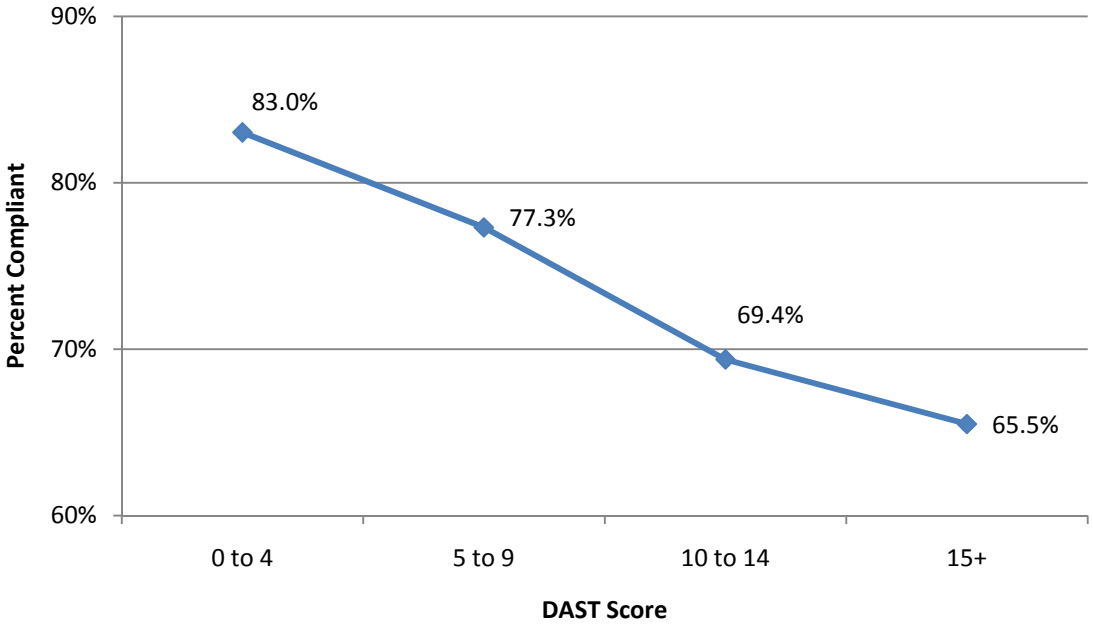
Figure 4.7: Compliance by AUDIT Score*



* Missing Data = 1,073 Assessments

Figure 4.8 presents compliance by DAST score ranges. DAST scores were also grouped into four categories. The four groups represent Negative (persons who scored 0-4), Positive (5-9), 2x Positive (10-14), and 3x Positive (15 and higher). Higher DAST scores were associated with lower compliance rates.

Figure 4.8: Compliance by DAST Scores*



* Missing Data = 2,531 Assessments

Compliance Summary

Lower compliance is related to younger age, male gender, more DUI convictions, dry county of conviction alcohol sales restrictions, higher AUDIT scores, higher DAST scores, and more intensive recommended levels of care. Consequently, multiple risk factors decrease the likelihood of compliance.

SECTION FIVE

MHMR REGIONS

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5.1 Assessments

In calendar year 2006, 92 licensed and certified programs submitted at least one DUI assessment record. There were six programs that submitted fewer than ten assessments. Table 5.1 presents the number of programs and assessment records submitted by community mental health programs (publicly funded) and private assessment programs.

Table 5.1: Community and Privately Funded Program Assessments*

	Total	Community	Private
Assessments Completed	21,979	7,315	14,444
Number of Programs	92	11	81
Average Assessments per Program	238.9	665.0	178.3
Number of Sites	234	78	156
Average Assessments per Site	93.9	93.8	92.6

* Missing Data = 220 Assessments

5.2 Mental Health/Mental Retardation (MHMR) Regions

Kentucky has 14 MHMR regions 1 through 15, region 9 no longer exists.

IMPORTANT: MHMR Regions include all programs (public and private) within that geographic region, not just the community mental health program that shares the region name. For tables 5.2 through 5.7, the highest and lowest values for a given field are in italics. Please also note that figures 5.1 through 5.6 refer to the county of conviction rather than the county of assessment or county of residence.

Table 5.2 presents demographic differences between records submitted from each region. There are very few differences between regions.

Table 5.2: MHMR Demographic Differences*

	Average Age	% Under 40 yo	% Male	Assessments
Region 1 - Four Rivers	34.6	64.3%	78.0%	904
Region 2 - Pennyroyal	34.8	***64.1%***	83.0%	1,050
Region 3 - River Valley	***35.0***	65.5%	79.7%	1,145
Region 4 - Lifeskills	33.2	70.4%	82.4%	1,178
Region 5 - Communicare	34.2	68.0%	81.9%	1,244
Region 6 - Seven Counties	34.7	66.2%	82.2%	***3,684***
Region 7 - North Key	34.4	67.9%	78.6%	1,838
Region 8 - Comprehend	33.2	71.7%	***86.4%***	1,050
Region 10 - Pathways	33.2	70.5%	80.8%	1,065
Region 11 - Mountain	32.9	***73.0%***	77.9%	967
Region 12 - Kentucky River	33.9	68.5%	***76.9%***	***845***
Region 13 - Cumberland	***32.8***	72.1%	80.4%	1,682
Region 14 - Adanta	34.3	66.5%	84.3%	1,265
Region 15 - Bluegrass	33.5	69.9%	78.0%	2,669
All Regions	**34.0**	**68.4%**	**80.8%**	**20,586**

* Missing Records: Age = 2,086, Gender = 1,397, Assessments = 1,393

5.3 DUI Convictions in the Past Five Years

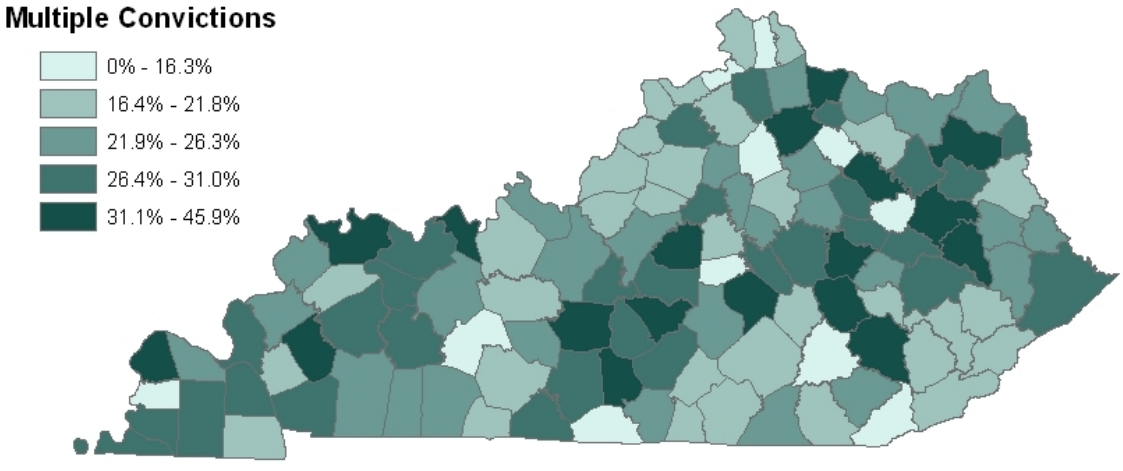
Table 5.3 presents the average number of convictions by region and the percentage of persons presenting for their first (0-1), second (2), or third or more (3+) DUI conviction in the previous five years. First offenders were a majority in all regions. River Valley had the highest level of second conviction persons (25.0%), and Pennyroyal had the highest level of persons convicted for three or more DUIs (5.6%). Figure 5.1 presents the percent of persons with multiple DUI convictions in the past five years by county.

Table 5.3: MHMR DUI Convictions in the Past Five Years

	Average	0-1	2	3+
Region 1 - Four Rivers	1.31	73.6%	21.5%	5.0%
Region 2 - Pennyroyal	1.32	73.3%	21.0%	***5.6%***
Region 3 - River Valley	***1.33***	***70.8%***	***25.0%***	4.2%
Region 4 - Lifeskills	1.29	76.0%	19.5%	4.5%
Region 5 - Communicare	1.27	76.4%	20.3%	***3.3%***
Region 6 - Seven Counties	1.25	79.2%	17.0%	3.8%
Region 7 - North Key	***1.22***	***81.1%***	***15.6%***	***3.3%***
Region 8 - Comprehend	1.30	74.3%	21.0%	4.7%
Region 10 - Pathways	***1.33***	71.5%	23.8%	4.7%
Region 11 - Mountain	1.31	73.5%	22.3%	4.1%
Region 12 - Kentucky River	1.25	78.3%	17.9%	3.8%
Region 13 - Cumberland	1.26	78.4%	17.1%	4.6%
Region 14 - Adanta	1.31	74.8%	19.8%	5.5%
Region 15 - Bluegrass	1.28	75.8%	20.7%	3.5%
All Regions	**1.28**	**76.3%**	**19.6%**	**4.2%**

* Missing Data = 1,393 Assessments

Figure 5.1: Percent of persons with Multiple DUI Convictions in the Past Five Years by County



5.4 MHMR Regions and Blood Alcohol Content

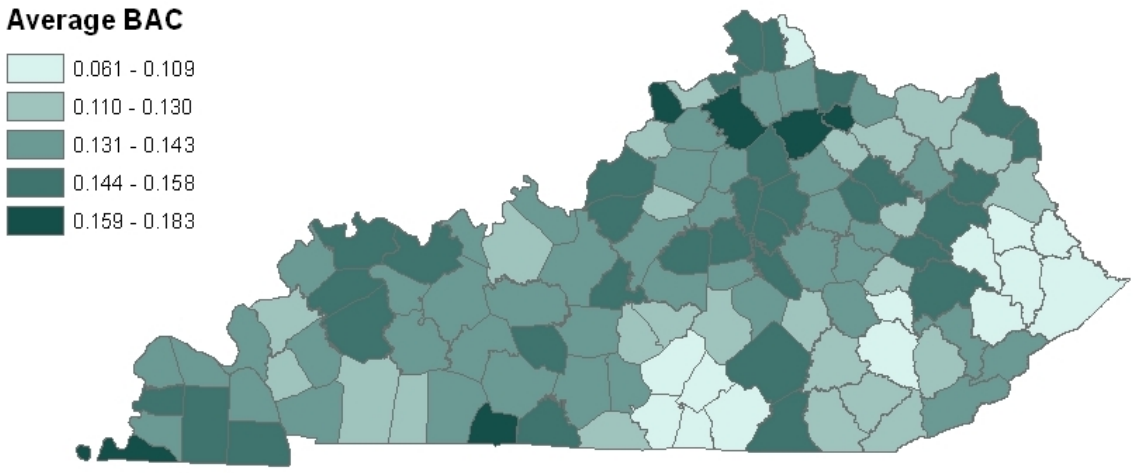
Table 5.4 presents MHMR regions and blood alcohol content (BAC). The average BAC was fairly consistent across regions. Region 11 had the lowest average BAC and region 3 had the highest average BAC. Figure 5.2 presents the average BAC by county.

Table 5.4: MHMR Regions and Blood Alcohol Content*

		BAC Ranges (g/dL)				
	Avg BAC	≤ .07	.08 - .15	.16 - .23	.24 - .31	≥ .32
Region 1 - Four Rivers	0.144	2.4%	60.2%	31.6%	4.9%	***1.0%***
Region 2 - Pennyroyal	0.136	11.2%	52.2%	30.2%	5.8%	0.5%
Region 3 - River Valley	***0.147***	1.9%	60.2%	31.6%	6.2%	0.2%
Region 4 - Lifeskills	0.141	2.6%	61.3%	30.4%	4.9%	0.8%
Region 5 - Communicare	0.135	7.2%	58.8%	29.2%	4.4%	0.4%
Region 6 - Seven Counties	0.144	6.1%	52.6%	35.7%	4.9%	0.6%
Region 7 - North Key	0.134	15.3%	***42.6%***	***36.0%***	5.8%	0.3%
Region 8 - Comprehend	0.131	16.6%	46.2%	30.4%	***6.4%***	0.4%
Region 10 - Pathways	0.141	2.9%	61.4%	30.2%	5.3%	0.2%
Region 11 - Mountain	***0.102***	***0.5%***	***96.6%***	***2.9%***	***0.0%***	***0.0%***
Region 12 - Kentucky River	0.134	4.9%	63.5%	27.8%	3.0%	0.8%
Region 13 - Cumberland	0.112	***22.8%***	49.6%	24.4%	3.1%	0.1%
Region 14 - Adanta	0.120	18.3%	50.8%	25.3%	5.0%	0.7%
Region 15 - Bluegrass	0.145	3.2%	57.5%	33.3%	5.8%	0.2%
All Regions	**0.136**	**8.6%**	**55.4%**	**30.6%**	**5.0%**	**0.4%**

* Missing Data = 10,900 Assessments

Figure 5.2: Average BAC by County



5.5 MHMR Regions and Screening Instruments

Table 5.5 presents the AUDIT and DAST average scores and percentage of assessments that were positive for each test by MHMR region. Table 5.6 presents the percentage of assessed persons who met DSM-IV-TR criteria by MHMR region. There were differences between MHMR regions which were consistent with the differences in the 2004 and 2005 data.

Table 5.5: MHMR Regions and AUDIT/DAST Scores*

	AUDIT		DAST	
	Average	% Positive	Average	% Positive
Region 1 - Four Rivers	7.3	33.9%	5.0	32.6%
Region 2 - Pennyroyal	6.7	32.5%	4.9	30.8%
Region 3 - River Valley	7.2	35.6%	4.9	28.2%
Region 4 - Lifeskills	7.1	35.2%	5.3	34.1%
Region 5 - Communicare	8.4	***43.5%***	4.5	23.7%
Region 6 - Seven Counties	8.2	41.7%	4.5	28.3%
Region 7 - North Key	6.9	32.6%	***3.8***	***19.9%***
Region 8 - Comprehend	***10.2***	40.8%	5.0	32.9%
Region 10 - Pathways	***6.4***	***32.4%***	5.9	37.4%
Region 11 - Mountain	6.9	33.7%	6.1	43.6%
Region 12 - Kentucky River	7.8	40.6%	6.6	48.5%
Region 13 - Cumberland	8.4	34.3%	***6.8***	***51.9%***
Region 14 - Adanta	7.7	36.3%	5.4	33.0%
Region 15 - Bluegrass	7.0	33.0%	5.0	30.2%
All Regions	**7.6**	**36.5%**	**5.1**	**32.7%**

*Missing Data = 2,376 AUDIT/3,778 DAST Assessments

Table 5.6: MHMR Regions and DSM-IV-TR Criteria*

	No Criteria	Abuse Only	Dependence
Region 1 - Four Rivers	54.6%	31.9%	13.5%
Region 2 - Pennyroyal	***76.0%***	***17.0%***	***7.0%***
Region 3 - River Valley	54.0%	31.7%	14.3%
Region 4 - Lifeskills	55.5%	30.8%	13.7%
Region 5 - Communicare	67.1%	22.5%	10.4%
Region 6 - Seven Counties	57.9%	29.3%	12.8%
Region 7 - North Key	53.5%	36.3%	10.2%
Region 8 - Comprehend	49.0%	24.4%	26.7%
Region 10 - Pathways	41.3%	36.5%	22.2%
Region 11 - Mountain	***21.9%***	36.5%	***41.6%***
Region 12 - Kentucky River	34.3%	34.7%	31.0%
Region 13 - Cumberland	54.5%	23.6%	21.9%
Region 14 - Adanta	43.9%	***38.8%***	17.3%
Region 15 - Bluegrass	48.1%	35.8%	16.1%
All Regions	**52.1%**	**30.9%**	**17.0%**

* Missing Data = 1,393 Assessments

Figures 5.3 through 5.5 present the percent of assessments that were positive on the AUDIT, DAST, and DSM-IV-TR criteria by county. For DSM-IV-TR, any person who met at least one abuse criteria or three dependence criteria in their lifetime was counted. Please note the difference in scale between maps.

Figure 5.3: Percent of Assessments Positive for the AUDIT by County

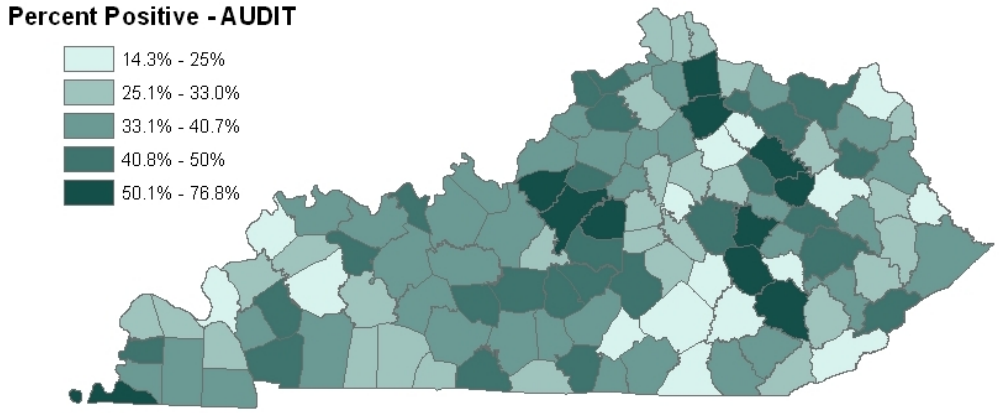


Figure 5.4: Percent of Assessments Positive for the DAST by County

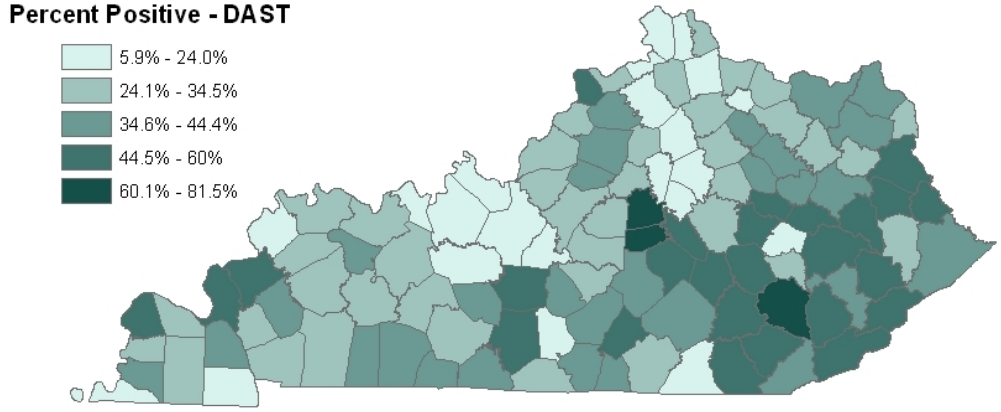
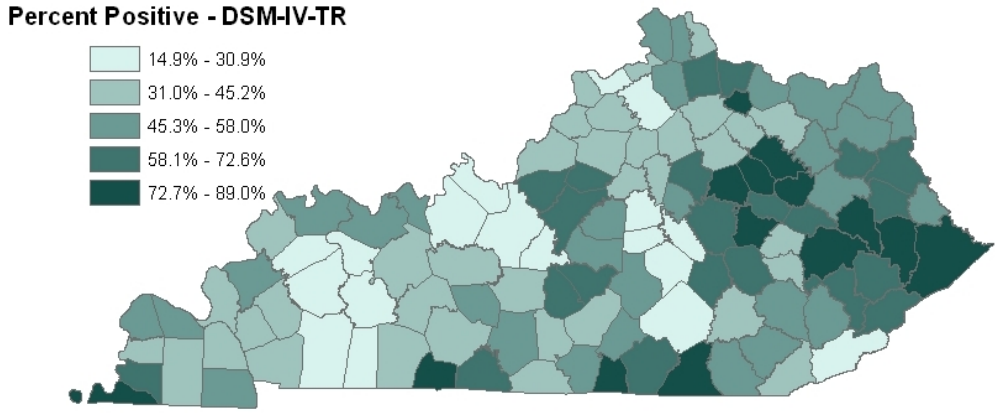


Figure 5.5: Percent of Assessments Positive for Abuse and/or Dependence by County



5.6 MHMR Regions and Level of Care

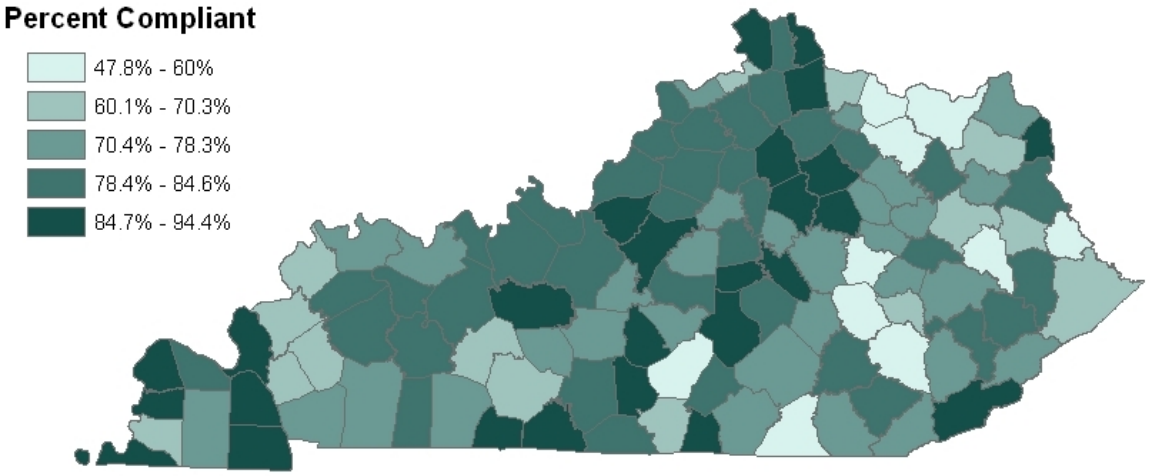
Table 5.7 presents the highest level of care assigned and overall compliance level by MHMR region. Level of care refers only to the highest level assigned for each assessment. When two or more levels of care were assigned, only the highest level is presented here. Compliance refers to the percentage of assessments that were considered compliant on completion. There were variations between MHMR regions. Figure 5.6 presents the percent of compliant assessments by county.

Table 5.7: MHMR Regions and Level of Care*

	Education	Outpatient	IOP	Residential	Compliance
Region 1 - Four Rivers	57.2%	38.5%	***0.1%***	***4.1%***	***83.7%***
Region 2 - Pennyroyal	***60.2%***	***37.7%***	0.6%	1.6%	77.9%
Region 3 - River Valley	44.3%	51.5%	1.4%	2.8%	75.9%
Region 4 - Lifeskills	50.6%	46.5%	0.9%	2.0%	74.4%
Region 5 - Communicare	59.2%	37.9%	2.1%	0.8%	83.0%
Region 6 - Seven Counties	34.1%	62.3%	2.1%	1.4%	80.8%
Region 7 - North Key	41.6%	53.6%	1.4%	3.4%	83.6%
Region 8 - Comprehend	***17.4%***	***78.1%***	3.7%	0.8%	***58.3%***
Region 10 - Pathways	30.3%	67.8%	0.8%	1.0%	77.5%
Region 11 - Mountain	58.0%	41.2%	0.3%	***0.5%***	66.4%
Region 12 - Kentucky River	26.7%	70.3%	1.0%	2.1%	78.6%
Region 13 - Cumberland	55.7%	41.0%	0.5%	2.7%	73.5%
Region 14 - Adanta	40.6%	49.1%	***8.9%***	1.5%	72.3%
Region 15 - Bluegrass	48.0%	49.7%	1.0%	1.3%	81.8%
All Regions	**43.8%**	**52.6%**	**1.8%**	**1.8%**	**77.5%**

* Missing Data = 2,831 level of care/1,393 compliance assessments

Figure 5.6: Compliance Percentages by County



Region Summary

There was variability between regions in demographics, screening instrument results, intervention referrals, and education/treatment outcomes. There variations were consistent with 2005.

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SECTION SIX

DIVISION OF MENTAL HEALTH AND SUBSTANCE ABUSE REGIONS

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6.1 Number of Assessments and Demographics by DMHSA Region

The Division of Mental Health and Substance Abuse (DMHSA) has five coordinators, each representing a single region of Kentucky. For a map of these regions, please see Appendix F (page 91). Table 6.1 presents the number of assessments, average age of persons assessed, and the percent of assessments that were for males by Division of Mental Health and Substance Abuse (DMHSA) Regions. Gender distribution and age were even across regions.

Table 6.1: Assessments by DMHSA Region

	CENTRAL	EAST	NORTH-EAST/MID-WEST	WEST	WEST-CENTRAL
Assessments*	2,669	4,759	5,197	4,277	3,684
% Male**	78.0%	80.3%	81.4%	80.9%	82.2%
Average Age***	33.5	33.4	33.9	34.4	34.7

* Missing Data = 1,393 Assessments
** Missing Data = 1,397 Assessments
*** Missing Data = 2,086 Assessments

6.2 AUDIT and DAST Scores by DMHSA Region

Table 6.2 presents AUDIT and DAST scores by DMHSA region. The West-Central region had the highest percent of persons with a positive AUDIT score. The East and West regions had the highest percent of persons with a positive DAST score. Persons from these two regions also had an average score that was positive for the DAST.

Table 6.2: AUDIT and DAST Scores by DMHSA Region

	CENTRAL	EAST	NORTH-EAST/MID-WEST	WEST	WEST-CENTRAL
AUDIT*					
Positive	33.0%	35.8%	36.7%	34.5%	41.7%
Average Score	7.04	7.79	7.77	7.08	8.19
DAST**					
Positive	30.2%	44.4%	27.2%	31.3%	28.3%
Average Score	5.02	6.24	4.68	5.02	4.48

* Missing Data = 2,376 Assessments
** Missing Data = 3,778 Assessments

6.3 Blood Alcohol Content by DMHSA Region

Table 6.3 presents the average Blood Alcohol Content and percent of assessments that were 0.08 g/dL or higher.

Table 6.3: Blood Alcohol Content by DMHSA Region*

	CENTRAL	EAST	NORTH-EAST/MID-WEST	WEST	WEST-CENTRAL
Average BAC	0.145	0.116	0.135	0.142	0.144
% 0.08 or Higher	96.8%	85.1%	88.5%	95.6%	93.9%

* Missing Data = 10,900 Assessments

6.4 DSM-IV-TR Criteria by DMHSA Region

Table 6.4 presents the percent of persons who met DSM-IV-TR criteria for substance abuse and the percent of persons who met at least three dependence criteria in their life. Persons who met three or more dependence criteria were not included as abuse.

Table 6.4: DSM-IV-TR Criteria by DMHSA Region*

	CENTRAL	EAST	NORTH-EAST/MID-WEST	WEST	WEST-CENTRAL
% Abuse	35.8%	32.2%	30.6%	27.9%	29.3%
% Dependent	16.1%	26.3%	16.0%	12.2%	12.8%

* Missing Data = 1,393 Assessments

6.5 Level of Care and Compliance by DMHSA Region

Table 6.5 presents the distribution of the highest level of care recommended by DMHSA region. The West region had the highest percent of persons recommended for education and the highest percent of persons recommended for residential. Table 6.5 also presents the percent of persons who were compliant with their assigned recommendation.

Table 6.5: Level of Care and Compliance by DMHSA Region

	CENTRAL	EAST	NORTH-EAST/MID-WEST	WEST	WEST-CENTRAL
Highest Level of Care*					
Education	48.0%	47.0%	39.0%	52.2%	34.1%
Out-Patient	49.7%	48.5%	57.3%	44.5%	62.3%
IOP	1.0%	2.7%	1.8%	0.8%	2.1%
Residential	1.3%	1.8%	1.9%	2.5%	1.4%
Compliance**	81.8%	72.6%	77.1%	77.6%	80.8%

* Missing Data = 2,831 Assessments

** Missing Data = 1,393 Assessments

DMHSA Summary

There was similarity across regions, but with two notable exceptions. The first difference was the percent of persons who met three or more DSM-IV-TR criteria for substance dependence, which had a low of 12.2% for the West region and a high of 26.3% in the East region. The second was the high percent of persons who scored 5 or higher on the DAST in the East region (44.4%) compared to the rest of Kentucky (29.1%).

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SECTION SEVEN

TRENDS 2002 TO 2006

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7.1 Assessments Received 2002 to 2006

Table 7.1 presents the number of assessments CDAR received on behalf of the DMHSA from 2002 through 2006. The average number of assessments received has been 21,819 per year.

Table 7.1: Number of Assessments 2002 to 2006

2002	2003	2004	2005	2006
21,296	21,731	23,065	21,025	21,979

7.2 Gender and Age Trends 2002 to 2006

Figure 7.1 presents the percent of assessments that were for males from 2002 through 2006. The ratio of males to females has been stable over the past five years. Figure 7.2 presents the number of assessments for underage persons. There has been an increase over the past five years.

Figure 7.1: Percent of Assessments that were for Males 2002 to 2006

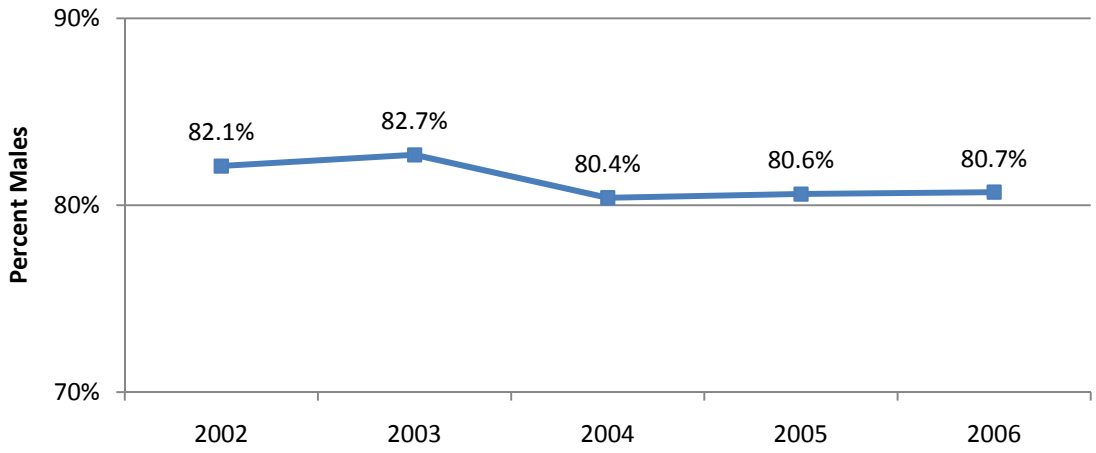
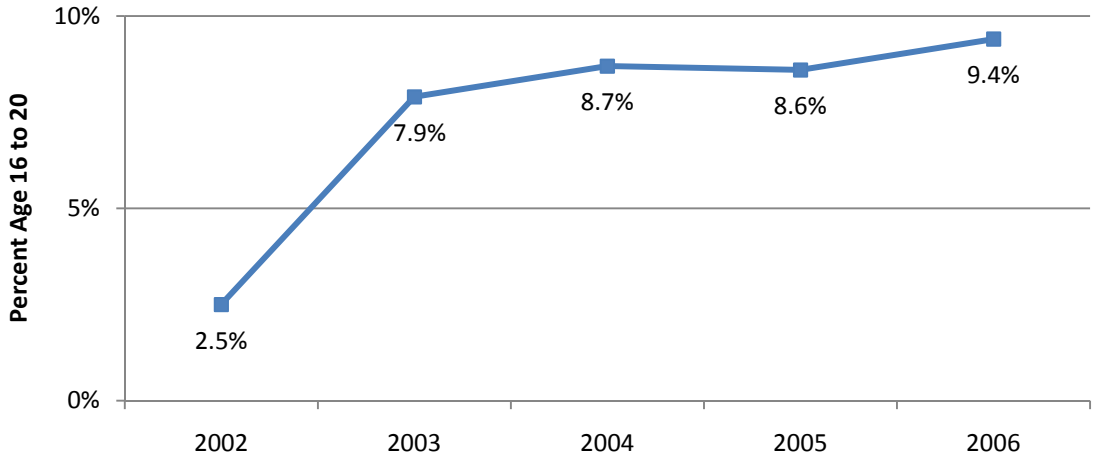


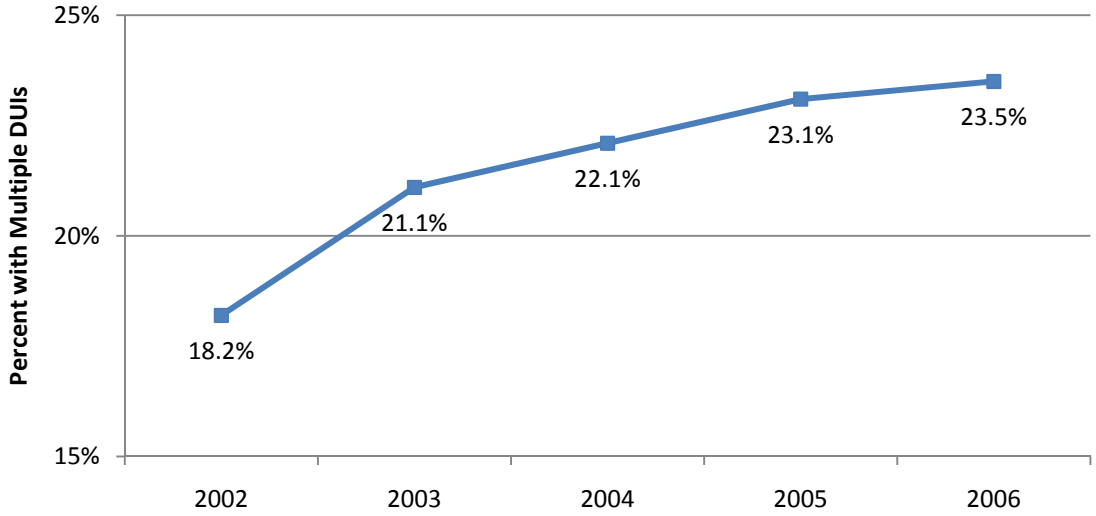
Figure 7.2: Percent of Assessments that were for Underage Persons 2002 to 2006



7.3 Multiple DUI Convictions 2002 to 2006

Figure 7.3 presents the percent of assessments that had multiple DUI convictions in the previous five years. The percent of persons convicted with multiple DUIs in the past five years has increased.

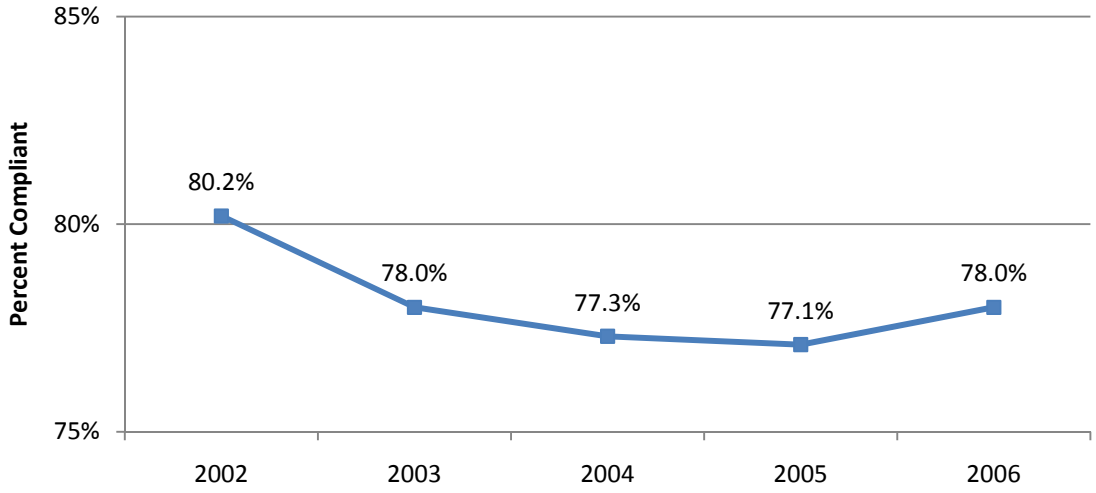
Figure 7.3: Percent of Assessments for persons who had Multiple DUI Convictions in the Previous Five Years 2002 to 2006



7.4 Education/Treatment Compliance 2002 to 2006

Figure 7.4 presents the percent of assessments that were compliant with their assigned education and/or treatment intervention. The percent of compliant persons has decreased slightly over the past five years.

Figure 7.4: Percent of Assessments that were Compliant 2002 to 2006



7.5 AUDIT and DAST Results 2002 to 2006

Figure 7.5 presents the average AUDIT and DAST scores for 2002 through 2006. There is a slight increase in both scores. Figure 7.6 presents the percent of assessments that were positive on the AUDIT and DAST. Despite the increase in average scores, the percent of assessments with a positive score has not increased.

Figure 7.5: Average AUDIT and DAST Scores 2002 to 2006

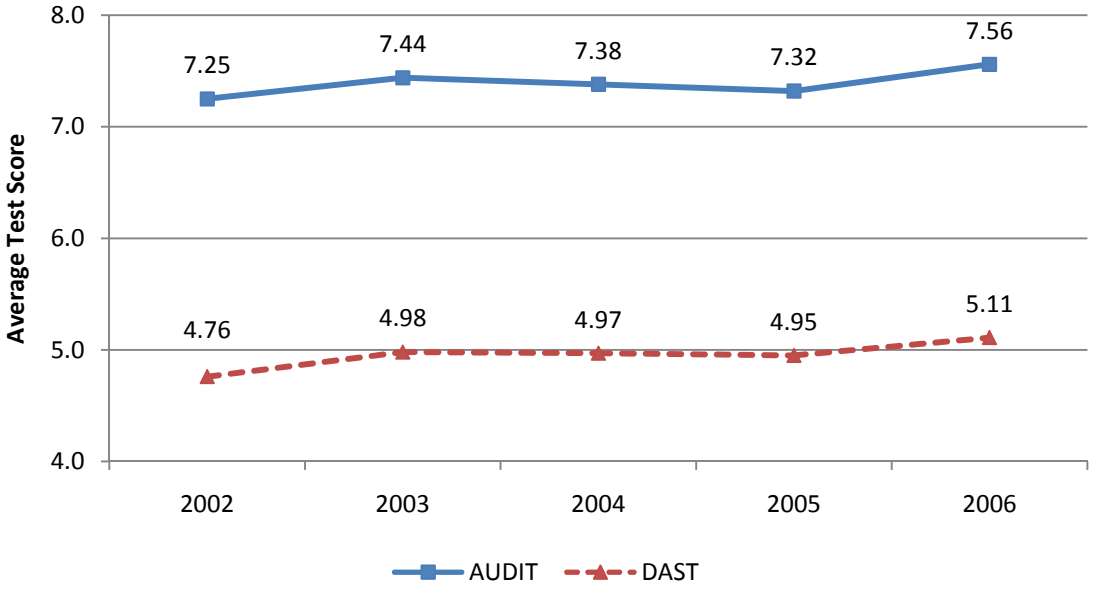
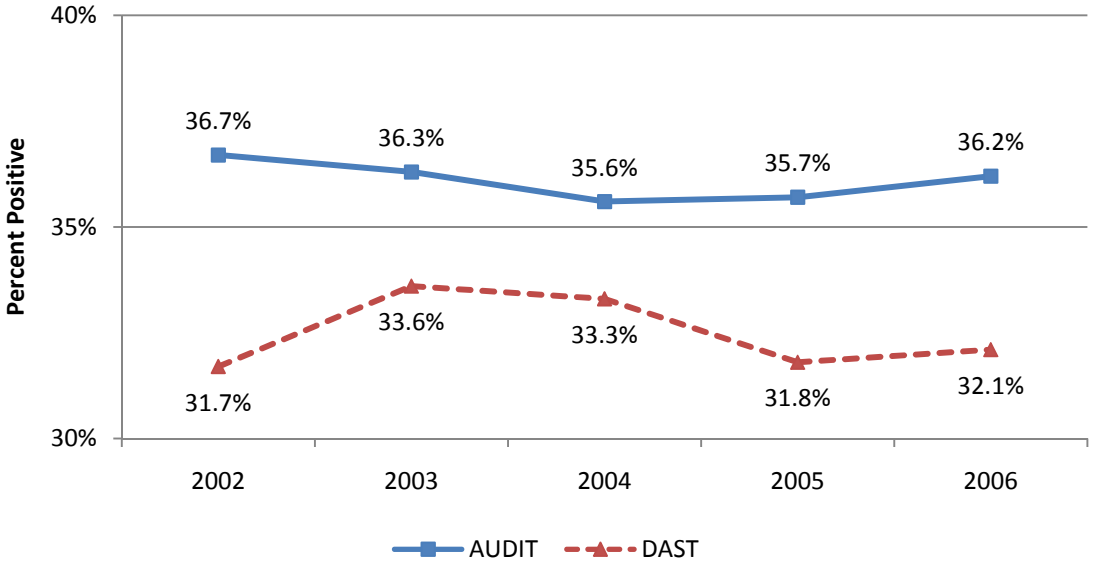


Figure 7.6: Percent of Assessments with Positive Scores on the AUDIT and DAST 2002 to 2006



7.6 Education/Treatment Recommendations 2002 to 2006

Figure 7.7 presents the percent of assessments that were referred for Education or Outpatient as the highest level of care from 2002 to 2006. There has been a shift from education to outpatient referrals over the past five years. Figure 7.8 presents the percent of assessments referred for IOP and/or residential treatment from 2002 to 2006. The percent of assessments with an IOP or residential referral has remained stable over the past five years.

Figure 7.7: Education and Outpatient Referrals 2002 to 2006

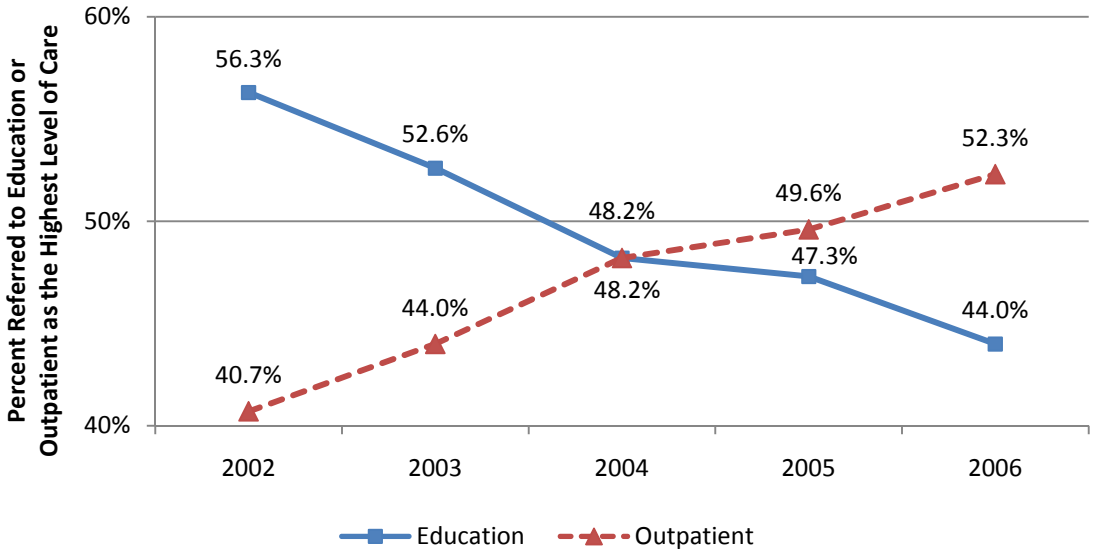
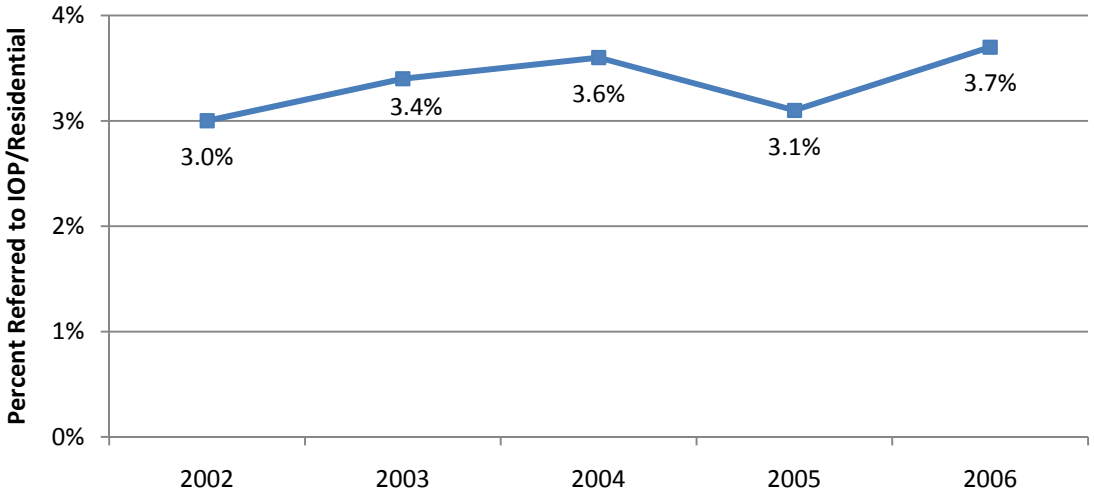


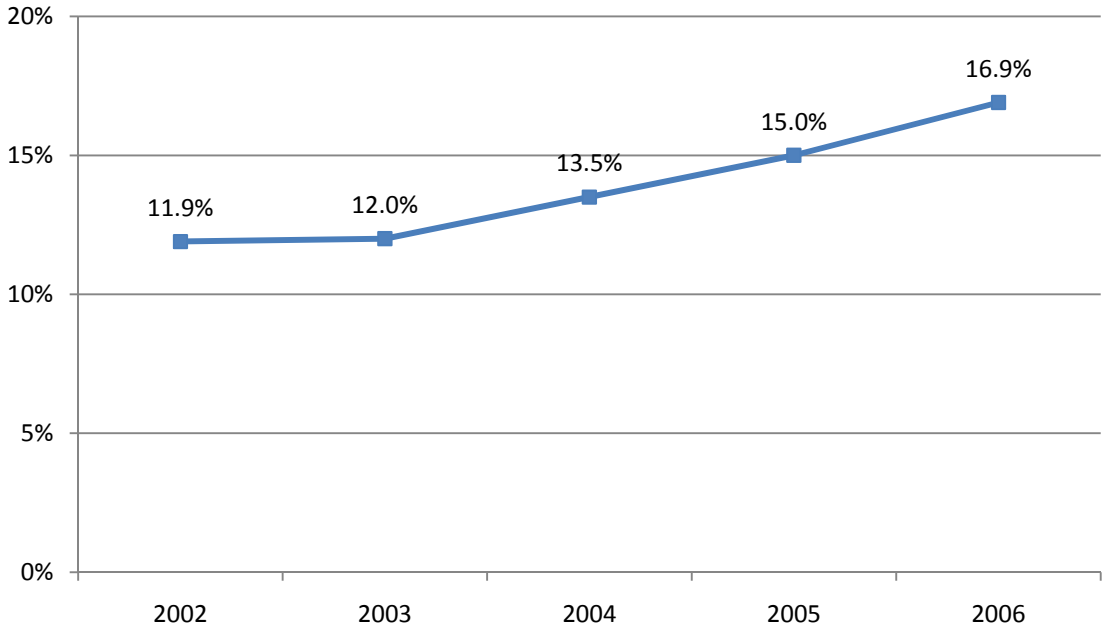
Figure 7.8: Intensive Outpatient and Residential Treatment Referrals 2002 to 2006



7.7 DSM-IV-TR Dependence 2002 to 2006

Figure 7.9 presents the percent of assessed persons who met at least three lifetime DSM-IV-TR criteria for dependence from 2002 to 2006. The percent of assessed persons who met dependence criteria has increased over the past five years.

Figure 7.9: DSM-IV-TR Dependence 2002 to 2006



Trends Summary

Overall, assessment findings for 2002 through 2006 reveal some important trends. The percent of persons with multiple DUIs and the percent of persons meeting three or more DSM-IV-TR dependence criteria are increasing. Additionally, the percent of persons receiving only an education intervention is decreasing, the percent of assessments for underage persons is increasing, and education/treatment compliance is decreasing.

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SUMMARY

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Summary

In 2006, the typical persons convicted of DUI in Kentucky assessed for Driving Under the Influence was a male in his 20's who was convicted of his first DUI, his blood alcohol content was between 0.08 and 0.15, and there was a 40% chance he met lifetime DSM-IV-TR diagnostic criteria for substance abuse or substance dependence. The typical person assessed was referred to either a 20-hour education intervention or an outpatient alcohol/drug treatment program.

Factors related to non-compliance included: younger age, male gender, more DUI convictions, dry county of conviction, higher AUDIT scores, higher DAST scores, meeting three or more DSM-IV-TR dependence criteria, and more intensive recommended levels of care.

Screening instruments were consistent. AUDIT scores, DAST scores, DSM-IV-TR criteria for abuse and dependence, and blood alcohol content were closely related. These screening instruments, in combination with face-to-face interviews, are used by assessors to make level of care referrals. Persons convicted of multiple DUIs and those arrested with elevated BACs are at most risk for meeting criteria for significant alcohol or drug problems. Persons with higher BACs also tended to be recommended for higher levels of care.

Generally, there were few differences in assessments received for the five DMHSA regions. Data received in 2006 were generally similar to previous years. However, there was a growing trend in the percent of persons with multiple DUIs and meeting three or more DSM-IV-TR lifetime dependence criteria. Additionally, there was a decrease in the percent of persons who received an education referral as their only intervention, an increase in the percent of assessments for underage persons, and a decrease in education/treatment compliance.

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APPENDICIES

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Appendix A: AUDIT Responses and Average Scores by Gender

1. How often do you have a drink containing alcohol?

	Males	Females	Total
(0) Never	14.6%	18.6%	15.4%
(1) Monthly or less	26.4%	33.4%	27.7%
(2) 2 to 4 times a month	31.6%	29.7%	31.2%
(3) 2 to 3 times a week	18.8%	12.4%	17.5%
(4) 4 or more times a week	8.7%	6.0%	8.2%
Average Score	1.81	1.54	1.75

2. How many drinks containing alcohol do you have on a typical day when you are drinking?

	Males	Females	Total
(0) 1 or 2	26.5%	38.8%	28.9%
(1) 3 or 4	27.3%	31.1%	28.0%
(2) 5 or 6	23.5%	16.7%	22.2%
(3) 7, 8, or 9	9.9%	6.2%	9.2%
(4) 10 or more	12.8%	7.2%	11.7%
Average Score	1.55	1.12	1.47

3. How often do you have six or more drinks on one occasion?

	Males	Females	Total
(0) Never	28.0%	44.2%	31.1%
(1) Less than monthly	33.5%	33.3%	33.5%
(2) Monthly	18.8%	10.9%	17.2%
(3) Weekly	15.0%	7.8%	13.6%
(4) Daily or almost daily	4.8%	3.7%	4.6%
Average Score	1.35	0.93	1.27

4. How often during the last year have you found that you were not able to stop drinking once you had started?

	Males	Females	Total
(0) Never	77.4%	79.3%	77.8%
(1) Less than monthly	11.9%	11.8%	11.9%
(2) Monthly	4.3%	3.2%	4.1%
(3) Weekly	3.3%	2.7%	3.2%
(4) Daily or almost daily	3.2%	3.0%	3.1%
Average Score	0.43	0.38	0.42

5. How often during the last year have you failed to do what was normally expected from you because of drinking?

	Males	Females	Total
(0) Never	79.5%	79.9%	79.6%
(1) Less than monthly	13.6%	13.8%	13.6%
(2) Monthly	3.1%	2.3%	2.9%
(3) Weekly	1.7%	1.7%	1.7%
(4) Daily or almost daily	2.2%	2.3%	2.2%
Average Score	0.33	0.33	0.33

6. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

	Males	Females	Total
(0) Never	92.0%	94.1%	92.4%
(1) Less than monthly	3.5%	2.5%	3.3%
(2) Monthly	1.2%	0.6%	1.1%
(3) Weekly	1.1%	0.9%	1.1%
(4) Daily or almost daily	2.1%	1.9%	2.1%
Average Score	0.18	0.14	0.17

7. How often during the last year have you needed an alcoholic drink first thing in the morning to get yourself going after a night of heavy drinking?

	Males	Females	Total
(0) Never	65.5%	63.8%	65.2%
(1) Less than monthly	23.2%	24.9%	23.5%
(2) Monthly	4.7%	3.8%	4.6%
(3) Weekly	2.8%	3.1%	2.8%
(4) Daily or almost daily	3.8%	4.4%	3.9%
Average Score	0.56	0.59	0.57

8. How often during the last year have you had a feeling of guilt or remorse after drinking?

	Males	Females	Total
(0) Never	78.7%	77.5%	78.5%
(1) Less than monthly	14.3%	15.8%	14.6%
(2) Monthly	3.5%	3.1%	3.4%
(3) Weekly	1.8%	1.6%	1.7%
(4) Daily or almost daily	1.8%	2.0%	1.9%
Average Score	0.34	0.35	0.34

9. Have you or someone else been injured as a result of your drinking?

	Males	Females	Total
(0) No	87.3%	88.3%	87.5%
(2) Yes, but not in the last year	6.9%	4.8%	6.5%
(4) Yes, during the last year	5.8%	6.9%	6.1%
Average Score	0.37	0.37	0.37

10. Has a relative, friend, doctor, or another health professional expressed concern about your drinking or suggested you cut down?

	Males	Females	Total
(0) No	71.6%	78.8%	73.0%
(2) Yes, but not in the last year	10.6%	6.9%	9.9%
(4) Yes, during the last year	17.8%	14.3%	17.1%
Average Score	0.92	0.71	0.88

Appendix B: DAST Responses by Gender.

Percentages represent those who answered “yes” to each specific question except for questions 4, 5, and 7 which are reverse scored.

1. Have you used drugs other than those required for medical reasons?

Males	Females	Total
38.5%	37.5%	38.3%

2. Have you abused prescription drugs?

Males	Females	Total
11.2%	15.5%	12.0%

3. Do you abuse more than one drug at a time?

Males	Females	Total
9.3%	12.3%	9.9%

4. Can you get through the week without using drugs (other than those required for medical reasons)?

Males	Females	Total
10.0%	9.7%	10.0%

Percent of persons who responded "no"

5. Are you always able to stop using drugs when you want to?

Males	Females	Total
13.8%	15.3%	14.1%

Percent of persons who responded "no"

6. Do you abuse drugs on a continuous basis?

Males	Females	Total
5.8%	6.9%	6.0%

7. Do you try to limit your drug use to certain situations?

Males	Females	Total
39.4%	38.7%	39.3%

Percent of persons who responded "no"

8. Have you had "blackouts" or "flashbacks" as a result of drug use?

Males	Females	Total
6.1%	9.2%	6.7%

9. Do you ever feel bad about your drug abuse?

Males	Females	Total
17.4%	22.2%	18.3%

10. Does your spouse (or parents) ever complain about your involvement with drugs?

Males	Females	Total
13.8%	15.2%	14.1%

11. Do your friends or relatives know or suspect you abuse drugs?

Males	Females	Total
17.2%	18.0%	17.3%

12. Has drug abuse ever created problems between you and your spouse?

Males	Females	Total
8.7%	12.0%	9.4%

13. Has any family member ever sought help for problems related to your drug use?

Males	Females	Total
5.0%	6.5%	5.3%

14. Have you ever lost friends because of your use of drugs?

Males	Females	Total
7.5%	9.5%	7.9%

15. Have you ever neglected your family or missed work because of your use of drugs?

Males	Females	Total
8.6%	12.7%	9.4%

16. Have you ever been in trouble at work because of drug abuse?

Males	Females	Total
4.2%	3.7%	4.1%

17. Have you ever lost a job because of drug abuse?

Males	Females	Total
4.4%	3.9%	4.3%

18. Have you gotten into fights when under the influence of drugs?

Males	Females	Total
8.0%	8.6%	8.1%

19. Have you ever been arrested because of unusual behavior while under the influence of drugs?

Males	Females	Total
12.2%	14.7%	12.7%

20. Have you ever been arrested for driving while under the influence of drugs?

Males	Females	Total
20.6%	24.2%	21.3%

21. Have you engaged in illegal activities to obtain drugs?

Males	Females	Total
9.7%	11.0%	9.9%

22. Have you ever been arrested for possession of illegal drugs?

Males	Females	Total
17.8%	13.7%	17.0%

23. Have you ever experienced withdrawal symptoms as a result of heavy drug intake?

Males	Females	Total
7.0%	11.1%	7.8%

24. Have you had medical problems as a result of your drug use?

Males	Females	Total
2.7%	4.6%	3.1%

25. Have you ever gone to anyone for help for a drug problem?

Males	Females	Total
8.6%	13.1%	9.5%

26. Have you ever been in the hospital for medical problems related to your drug use?

Males	Females	Total
3.3%	5.6%	3.7%

27. Have you ever been involved in a treatment program specifically related to drug use?

Males	Females	Total
9.4%	12.2%	9.9%

28. Have you been treated as an outpatient for problems related to drug abuse?

Males	Females	Total
7.1%	10.8%	7.8%

Appendix C: DSM-IV-TR Abuse and Dependence Criteria by Gender

Abuse Criteria

(1) Recurrent substance use resulting in a failure to fulfill major role obligations at work, school, or home

Males	Females	Total
12.1%	13.0%	12.3%

(2) Recurrent substance use in situations in which it is physically hazardous

Males	Females	Total
38.6%	36.4%	38.2%

(3) Recurrent substance-related legal problems

Males	Females	Total
26.8%	20.9%	25.6%

(4) Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance

Males	Females	Total
17.3%	16.8%	17.2%

Dependence Criteria

(1) Tolerance, as defined by either of the following:
(a) a need for markedly increased amounts of the substance to achieve Intoxication or desired effect
(b) markedly diminished effect with continued use of the same amount of the substance

Males	Females	Total
35.5%	33.1%	35.1%

(2) Withdrawal, as manifested by either of the following:
(a) the characteristic withdrawal syndrome for the substance
(b) the same (or a closely related) substance is taken to relieve or avoid withdrawal symptoms

Males	Females	Total
12.8%	13.9%	13.0%

(3) The substance is often taken in larger amounts or over a longer period than was intended

Males	Females	Total
8.6%	8.4%	8.5%

(4) There is a persistent desire or unsuccessful efforts to cut down or control substance use

Males	Females	Total
14.9%	15.4%	15.0%

(5) A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects

Males	Females	Total
11.8%	12.9%	12.0%

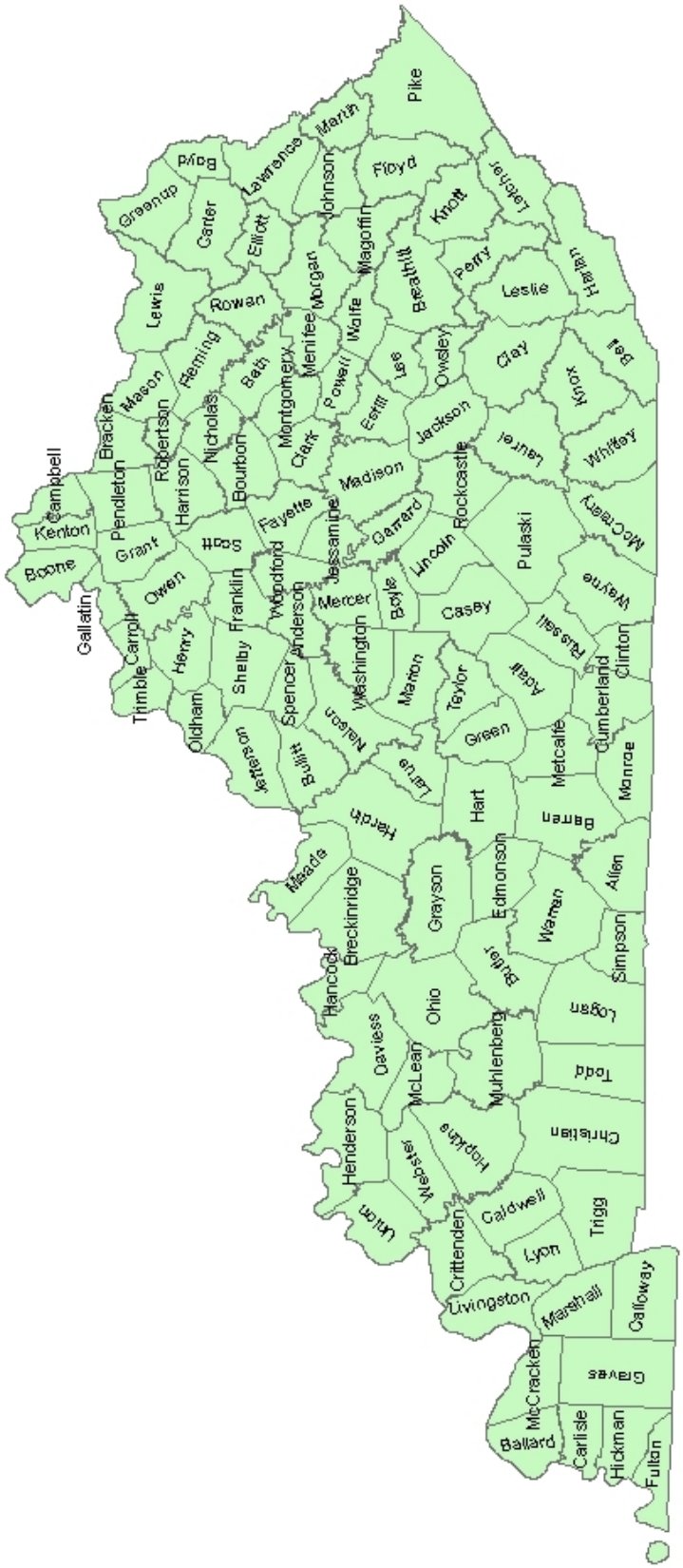
(6) Important social, occupational, or recreational activities are given up or reduced because of substance use

Males	Females	Total
12.1%	12.2%	12.1%

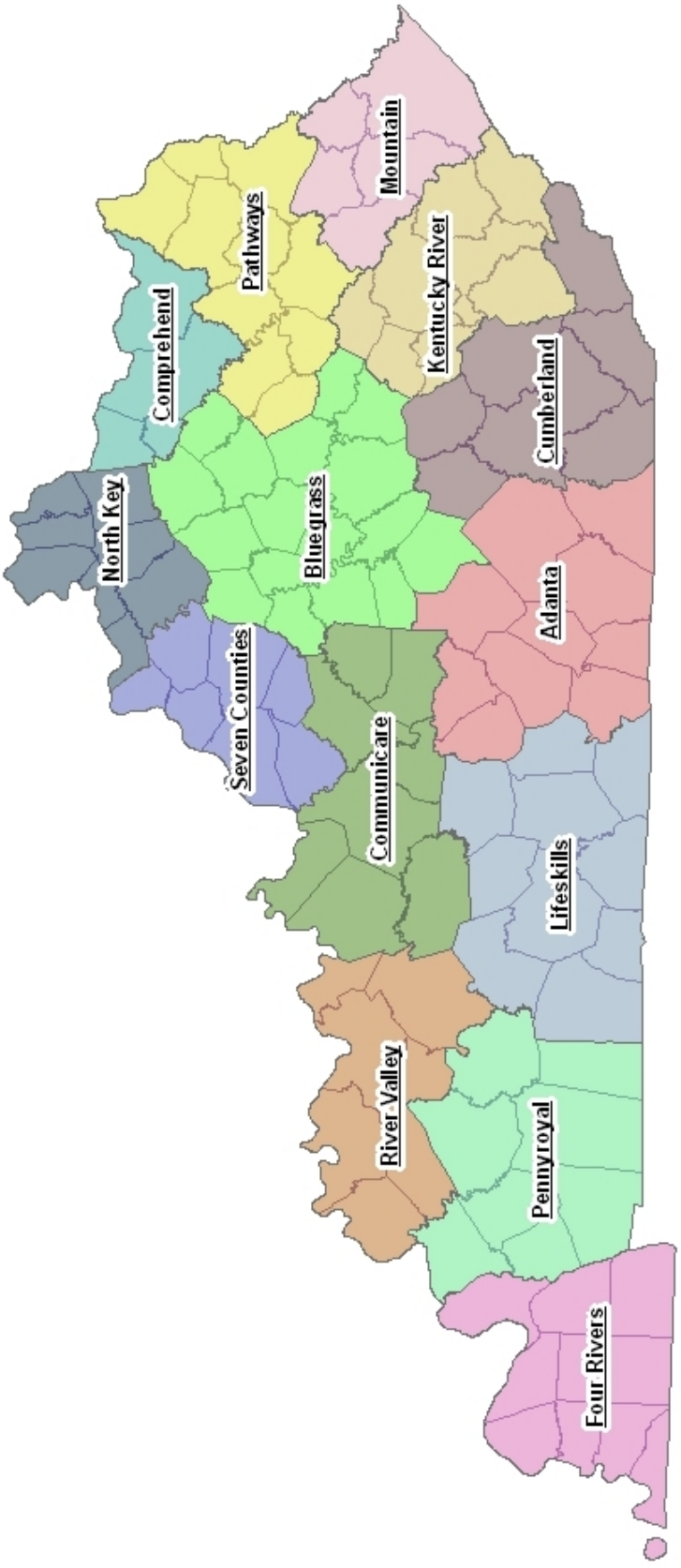
(7) The substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance

Males	Females	Total
14.3%	16.5%	14.7%

Appendix D: Map of Kentucky by County



Appendix E: Kentucky by MHMR Region



Appendix F: Kentucky by DMHSA Region