

# **Colorado Treatment Outcomes Methamphetamine vs. Other Drugs 2004**

## **Background**

In response to an inquiry by NASADAD regarding the States' experiences with treatment for methamphetamine (meth), this report addresses meth-related treatment outcomes/success rates in Colorado. It examines all discharges from all treatment modalities (excluding detox and dui) during calendar year 2004. Primary users of meth were compared to primary users in four other drug classes; alcohol, cocaine, opiates (includes heroin, non Rx methadone, and "other opiates"), and marijuana/hash. The following three categories of treatment outcomes were explored:

### **1. Treatment Success**

- Proportion of treatment dropouts
- Proportion for whom further treatment was or was not recommended
- Proportion assessed as high vs. minimal treatment goal achievement

### **2. Before/After Quality of Life Indicators**

- Proportion living independently
- Proportion employed as full or part-time
- Proportion assessed as having moderate to severe family, social, & medical issues
- Proportion assessed as having a current mental health problem in addition to substance abuse

### **3. Before/After Behaviors (in discharges from Outpatient Treatment only)**

- Drug use (mean frequency)
- Hospital visits
- Emergency room (ER) visits
- Psychiatric (Psych) hospital visits
- Psych ER visits
- DUI arrests
- Other arrests

## **Summary of Findings**

Overall, the treatment outcomes for meth look as good or better than those for other drugs (see Table 1, p.3).

1. Treatment Success. The proportion of meth users who completed treatment where no further treatment was recommended was 22%, compared to a high of 33% for alcohol users and a low of 8% for opiate users. Compared to users of other drugs, meth users ranked third for this indicator.

Further treatment was recommended for 29% of meth users compared to a high of 32% of cocaine users and a low of 15% of opiate users. For this indicator, meth users ranked fourth. Opiate users showed the smallest proportion of users recommended for no further treatment, and also had the smallest proportions of users for whom further treatment was recommended. This result is based on the finding that the most opiate users fell into other categories, such as dropouts, which comprised 45% of opiate users.

Twenty-three percent of meth users dropped out of treatment (a rank of third, again in the middle). Alcohol users had the fewest dropouts (20%), followed by marijuana/hash users (22%). Both cocaine and opiate users had higher dropout rates (24% and 45% respectively).

2. Before/After Quality of Life Indicators. In this set of indicators, meth users generally appeared to fare better than users of the other four drug classes. The proportions of users living independently at admission and discharge increased in all classes but cocaine (which decreased from 60% to 59%). Meth users increased by two percentage points (from 52% to 54%), whereas proportions of alcohol and marijuana/hashish users increased by one percentage point each. Opiate users increased by three percentage points (from 67% to 70%). These findings may be influenced somewhat by age. For instance, since marijuana/hashish users were the youngest group (median age=19 years), they were also the least likely to be living independently at admission (34%). Conversely, opiate users were the oldest (median age=38 years) and were most likely to be living independently at admission (67%).

Regarding employment status at admission and discharge, meth users appeared to perform best with an increase from 35% to 40%. Increases for the other classes ranged from one percentage point for cocaine and opiate users, two points for marijuana/hashish users and three points for alcohol users.

In assessments of family, social and educational/employment issues, meth users appeared to improve the most. However, they also had the most room to improve as they comprised the largest proportion of users with moderate to severe family (59%), social (47%), and education/employment (46%) issues at admission. Table 1 shows that the proportion of meth users having moderate to severe issues showed the largest decreases from admission to treatment (12 percentage points for family issues, 11 points for social issues, and 10 points for education/employment issues). The proportion of opiate users with moderate to severe family and social issues increased from admission to discharge by 3 and 5 points respectively.

Both meth and alcohol users seemed to show the most improvement regarding medical issues and mental health status.

3. Before/After Behaviors. The mean frequencies of various behaviors indicative of treatment success were compared at admission and discharge. Because many of these behaviors are not as likely to occur while clients are in residential treatment, they were measured only in clients discharged from outpatient treatment.

While frequency of use in all the drug classes decreased, alcohol use decreased the most (by 52%) compared to decreases in opiate (47%), marijuana (44%), meth (42%) and cocaine use (37%). Note that while meth and cocaine users show the smallest decreases in mean frequency of use, their usage overall was the lowest to begin with (3.1 and 3.5 times, respectively, during the 30 days before admission), compared to opiate (8.9 times), marijuana/hash (5.4 times), and alcohol use (4.4 times).

Table 1 (p. 4) shows that, in general, the frequency of behaviors other than drug use either decreased or remained stable from admission to discharge. However, it should be noted that these other behaviors occurred so infrequently that the examination of their before/after frequencies yields limited information.

## **Conclusions**

For the majority of indicators examined, treatment outcomes for meth users look as good or better than outcomes for users of other drugs.

However, there are at least two caveats to keep in mind when interpreting these findings. First, the measures examined were handpicked as potential indicators of treatment success and their validity as such may be influenced by various factors. This is particularly true for the quality of life indicators, independent living and employment, neither of which may be warranted for someone focusing their time and energy on getting sober. Moreover, client age is a factor that likely influences changes in living and employment situations, and these data were not broken down by age to account for the variance it may have contributed to these outcomes.

The validity of clinical assessments about the severity of family, social, educational/employment, medical, and mental health issues will always be influenced by their subjectivity. Still, the finding that most of the users examined improved in all of these indicators as expected (increased proportions in those living independently and employed and decreased proportions in those assessed with moderate to severe issues) suggests some validity.

The second caveat is that this analysis was a preliminary, cursory look at treatment outcomes, which did not utilize formal statistical tests. More in-depth analysis using tests of differences in proportions and means, and isolating the effects of age, are warranted.

**Table 1: CY 2004 Treatment Discharges, Outcome by Drug Class**

	<b>Alcohol</b>	<b>Cocaine</b>	<b>Meth</b>	<b>Opiates</b>	<b>Marijuana*</b>
<b>No further tx recom (%)</b>	33	16	22	8	29
<b>Further tx recom (%)</b>	24	32	29	15	21
<b>Treatment dropout (%)</b>	20	24	23	45	22
<b>High goal achieve (%)</b>	33	25	29	17	29
<b>Min goal achieve (%)</b>	33	40	39	47	40
 <b>Ind living at admission (%)</b>	 63	 60	 52	 67	 34
<b>Ind living at discharge (%)</b>	64	59	54	70	35
 <b>Employed at admission (%)</b>	 47	 41	 35	 37	 31
<b>Employed at discharge (%)</b>	50	42	40	38	33
 <b>Mod/Sev Family Issues-Admission (%)</b>	 47	 54	 59	 43	 46
<b>Mod/Sev Family Issues-Discharge (%)</b>	37	47	47	46	41
 <b>Mod/Sev Social Issues-Admission (%)</b>	 36	 44	 47	 37	 35
<b>Mod/Sev Social Issues-Discharge (%)</b>	29	37	36	42	30
 <b>Mod/Sev Educ/Job Issues-Admission (%)</b>	 35	 43	 46	 41	 41
<b>Mod/Sev Educ/Job Issues-Discharge (%)</b>	29	37	36	40	34
 <b>Mod/Sev Medical Issues-Admission (%)</b>	 19	 20	 17	 35	 9
<b>Mod/Sev Medical Issues-Discharge (%)</b>	15	18	14	34	9
 <b>Current Mental Health Issue-Admission (%)</b>	 28	 28	 29	 30	 32
<b>Current Mental Health Issue-Discharge (%)</b>	24	27	25	30	30

\*Includes hashish

**Table 1 Continued****\*Outpatient Treatment Only**

	<b>Alcohol</b>	<b>Cocaine</b>	<b>Meth</b>	<b>Opiates</b>	<b>Marijuana</b>
<b>Freq of use at admission (avg)</b>	4.4	3.5	3.1	8.9	5.4
<b>Freq of use at discharge (avg)</b>	2.1	2.2	1.8	4.7	3
<b>Hospital visits at admission (avg)</b>	0.2	0.2	0.1	0.3	0.1
<b>Hospital visits at discharge (avg)</b>	0.1	0.1	0.1	0.2	0.1
<b>Emergency room visits at admission (avg)</b>	0.5	0.4	0.3	0.9	0.3
<b>Emergency room visits at discharge (avg)</b>	0.4	0.2	0.2	0.4	0.1
<b>Psych hospital visits at admission (avg)</b>	0.1	0.1	0.1	0.1	0
<b>Psych hospital visits at discharge (avg)</b>	0	0.1	0.1	0.1	0
<b>Psych ER visits at admission (avg)</b>	0.1	0.1	0.1	0.1	0
<b>Psych ER visits at discharge (avg)</b>	0	0.1	0	0.1	0
<b>DUI arrests at admission (avg)</b>	0.4	0.1	0.1	0.1	0.1
<b>DUI arrests at discharge (avg)</b>	0.1	0.1	0.1	0	0
<b>Other arrests at admission (avg)</b>	0.6	1	1	0.9	1
<b>Other arrests at discharge (avg)</b>	0.2	0.6	0.4	0.4	0.4

Frequency of drug use in previous 30 days; Hospital, ER, Psych hospital, Psych ER visits in previous 6 months; DUI, other arrests in previous 24 months.

# STATE OF COLORADO



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## ALCOHOL AND DRUG ABUSE DIVISION Data Section

**Report Title:** Colorado Treatment Outcomes: Meth vs. Other Drugs - 2004  
**Report Period:** Calendar Year 2004  
**Report Type:** Ad Hoc  
**Report Date:** 5/9/05  
**Report Stored on:** I:\RATS\SPSS Reports\Nancy\ColoTxOutcomes04  
**Data Timeframe:** January 1, 2004 through December 31, 2004  
**Database Used:** DACODS  
**Data Run File Name:** "ColoTxOutcomes04"  
**Data Run Stored in (medium and locale):** Tamara's C Drive, I:\RATS, Hard Copy Report in Rm CHB2

**Statistical Measures Used:** frequency tables  
**Data Generated By:** Tamara Hoxworth, 303/866-7497  
**Data Analyzed By:** Tamara Hoxworth, 303/866-7497  
**Report Written By:** Tamara Hoxworth, 303/866-7497

**Information Requested by:** Nancy Brace  
**Date of Request:** May 5, 2005  
**Agreed Upon Due Date:** before noon, May 11, 2005  
**Date Given to Requestor:** May 9, 2005

### List of All Data Criteria/Assumptions:

Discharges occurring during timeframe  
Data includes primary users of Meth, Alcohol, Cocaine, Opiates, and Marijuana/Hashish  
Tx modalities = Res, ORT, OP, STIRRT, Day (Excludes Differ. Assess, DUI, & Detox)  
Outcomes=Before/After measures of Tx Success, Quality of Life, Drug Use, & other Tx-related behaviors