

MULTNOMAH COUNTY
METHAMPHETAMINE TREATMENT
DATA: FY00-04

JUNE 2005

A REPORT FOR THE LOCAL PUBLIC SAFETY COORDINATING COUNCIL'S
ALCOHOL AND DRUG CRIMINAL JUSTICE WORKING GROUP

REPORT #003-05

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EXECUTIVE SUMMARY

The manufacture and use of the synthetic drug methamphetamine has been a substantial and on-going issue for Multnomah County.¹ Its costs to society include related criminal activity, increased health care and addiction treatment, and environmental clean-up. Several task forces operate to review data and work to address policy issues related to this drug. This report attempts to assist in this work by examining the last five years of treatment data specifically for methamphetamine in Multnomah County. In addition, preliminary partial FY05 data is also examined.

Below is a summary of key findings from the methamphetamine treatment analyses and the recent changes:

- Overall, about 21% of the more than 89,000 A&D treatment episodes occurring between FY00 and FY04 reported methamphetamine use, either as a primary, secondary, or tertiary drug of choice.
- The 17,484 methamphetamine treatment episodes between FY00 and FY04 represented 10,732 unduplicated clients; there were an average of 1.6 treatment episodes per person.
- Primary methamphetamine use increased 3% over the five year period, from 10.5% to 13.5%.
- There has been a noticeable decline in all drug treatment episodes, including methamphetamine episodes, likely due to cuts in state funding. These funding cuts may impact the results of the data due to the population for which treatment was cut.
- 31% of methamphetamine treatment episodes in FY04 were for returning treatment clients.
- Whites, Native Americans, and youth (Hispanic and Asian) appeared overrepresented in the treatment population.
- Males accounted for 59% of the methamphetamine treatment, but females accounted for a greater proportion of underage users.
- Over 50% of treatment episodes using methamphetamine as a primary drug were referred by criminal justice and/or corrections institutions.
- Frequency or severity of methamphetamine use at treatment enrollment has been slightly, but steadily declining over the last five years, regardless of whether the drug was the primary, secondary or tertiary drug of choice.

¹ Both amphetamine and methamphetamine are potent sympathomimetic agents. Methamphetamine is the parent drug. For the purposes of this report and the data methamphetamine and amphetamine are used synonymously.

- 81% of those in methamphetamine treatment were using two or more other drugs at the time of enrollment; 48% were using three or more drugs at enrollment. Alcohol appears to be the most common secondary drug of choice.
- While 38% of methamphetamine users administered the drug intravenously (IV) overall, it has been steadily declining as smoking has become the new method of choice.
- Residential treatment has increased from 14.7% to 21.7% over the five year period, while 76% of primary methamphetamine users were enrolled in outpatient treatment overall.
- The unadjusted treatment completion rate for methamphetamine users was 33.6%, about 3% lower than the cocaine completion rate, but higher than opiates and marijuana/ hashish completion rates.
- Hispanics had the best unadjusted treatment completion rates of any racial/ ethnic group.
- Overall youth (under 18) had the best unadjusted treatment completion rates of any age group, especially Asians and Hispanics.
- While young Asians had the best unadjusted completion rates, older Asians had the worst of any race/ ethnic and age group.
- Clients who were white, homeless, unemployed, and had no household income were more associated with return for additional treatment.
- On average, the returning clients had a lower severity score and higher completion rate as compared to their first treatment.
- If preliminary partial FY05 data continue at their given rate the proportion of primary methamphetamine users will increase to 15.8%, but total numbers in treatment may decline.

This report is based on the State’s Client Process Monitoring System (CPMS) data for Multnomah County FY00 through FY04.² The CPMS data documents all clients who were treated by community-based providers supported by State treatment funds or Oregon Health Plan. For the purpose of this analysis, all methamphetamines treatment episodes, including primary, secondary, and tertiary use, were extracted from CPMS data file.³ The results of data analysis for all substance treatment episodes were provided in a separate report released in February.⁴

METHAMPHETAMINE RELATED TREATMENT EPISODES

Treatment episodes. Table 1 displays the total number of treatment episodes opened for any drug over the past five fiscal years. The total number of treatment episodes has declined since their peak in FY2002. Cuts in State treatment funding via the Oregon Health Plan (OHP) Standard occurred in March 2003 and continued the following fiscal year. Multnomah County’s temporary personal income tax (ITAX) backfilled some of the state funding cuts for treatment beginning FY04. Changing trends should be viewed with some caution, as the cuts to OHP Standard primarily affected males 18 and older rather than other groups.

A total of 17,484 methamphetamines treatment episodes occurred between FY00 and FY04. The percentage of all treatment episodes where methamphetamine was the *primary* drug of choice increased 3% over the past five years. It increased 5% for those who used it regardless of whether it was the primary drug of choice or not.

Table 1. Percent of methamphetamine use in all treatment episodes over time

| Methamphetamine As Drug of Choice | FY00 | FY01 | FY02 | FY03 | FY04 |
|--|-------------|-------------|-------------|-------------|-------------|
| All drug tx episodes | 16578 | 17475 | 17610 | 16676 | 14604 |
| Primary drug use- meth | 10.5% | 10.8% | 13.4% | 13.9% | 13.5% |
| Drug use any level- meth | 17.8% | 19.0% | 22.6% | 23.4% | 22.8% |

Methamphetamine related treatment included all treatment episodes where methamphetamine was reported as either the primary, secondary, or tertiary drug of choice. Of those, 58.9% (10,296) were primary use, 26.9% (4708) were secondary use, and 14.2% (2480) were tertiary

² The CPMS data set was recently updated in March 2005 and partial preliminary FY05 data is reported in Appendix 1. Due to methodological changes some totals presented in this report may differ from those totals reported in a recent comprehensive CPMS report; see Wu, L. & Nice, M. (2005) *Multnomah County Alcohol & Drug Treatment Data: FY00-04* (#001-05). Multnomah County Budget Office.

http://www.co.multnomah.or.us/dbcs/budget/performance/pmg_reports/cpmsfinalrpt.pdf . See Appendix 2 for methodological details.

³ State data does not distinguish between amphetamine and its derivatives (e.g., methamphetamine). It is assumed by the State that the majority of amphetamine treatment episodes are for methamphetamine. The terms are used synonymously throughout the report.

⁴ Wu, L. & Nice, M. (2005) *Multnomah County Alcohol & Drug Treatment Data: FY00-04* (#001-05). Multnomah County Budget Office.

use (see Table 2). The total number of methamphetamines related treatment episodes has declined slightly since FY02, while simultaneously the proportion of methamphetamine cases been increasing. Again, this decline is likely due to state funding cuts.

Table 2. Number of methamphetamine treatment episodes over the years

| Methamphetamine Drug of Choice Use | FY00 | FY01 | FY02 | FY03 | FY04 |
|------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Primary use | 1746 (59.0%) | 1896 (57.2%) | 2365 (59.4%) | 2320 (59.6%) | 1969 (59.0%) |
| Secondary use | 792 (26.8%) | 923 (27.8%) | 1049 (26.4%) | 1029 (26.4%) | 915 (27.4%) |
| Tertiary use | 420 (14.2%) | 496 (15.0%) | 567 (14.2%) | 546 (14.0%) | 451 (13.5%) |
| All meth related episodes | 2958 | 3315 | 3981 | 3895 | 3335 |

The data presented in Figure 1 illustrate that primary methamphetamine treatment as percentage of all substance treatment episodes—from 10.8% in FY01 to 13.5% in FY04 (blue line)—and the total number of treatment episodes for methamphetamine (yellow bar).

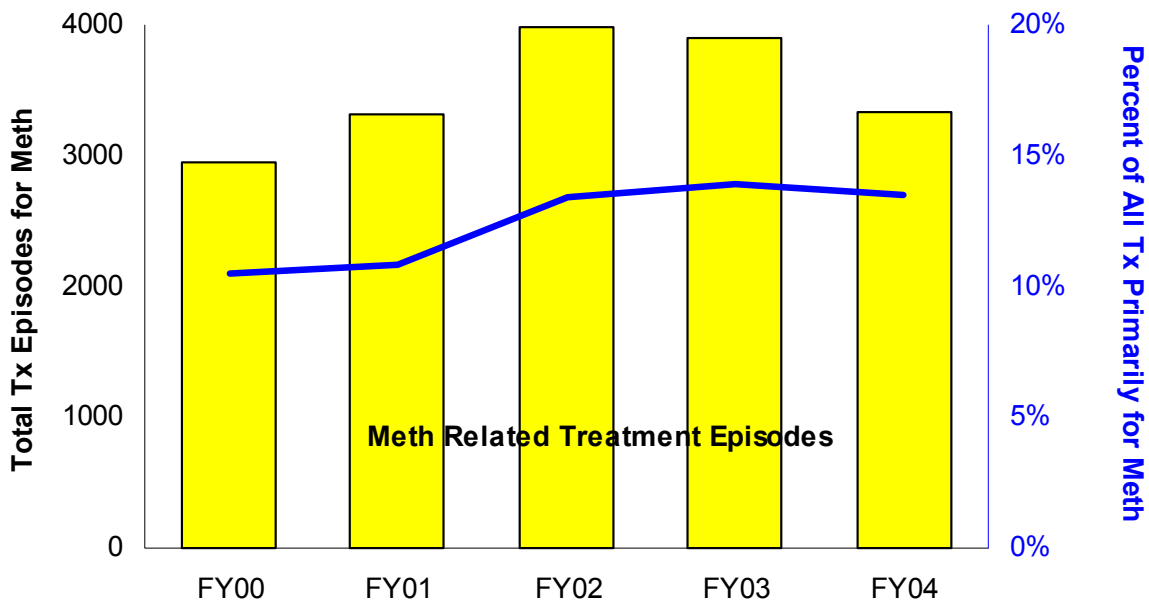


Figure 1. Percent of all treatment primarily for methamphetamine and total methamphetamine treatment episodes over time

Unduplicated clients enrolled in treatment. Drug addiction, like many other diseases, is chronic and often reoccurring.⁵ Within the 17,484 methamphetamines related treatment episodes over past five years were 10,732 unique clients. Table 3 shows that 66% of clients had received only a single treatment during the five years, while the remaining 34% returned to the system for

⁵ Belenko, S., Patapis, N., & French, M.T. (2005). *Economic benefits of drug treatment: A critical review of the evidence for policy makers*. Treatment Research Institute at the University of Pennsylvania. Pg 5.

additional treatment after their first enrollment. The average number of treatment episodes for methamphetamine clients is 1.6 which was consistent with drug treatment results in general.⁶

Table 3. Number of treatment episode for unique clients

| Number of client TX episodes | Frequency | Percent |
|------------------------------|--------------|------------|
| 1 tx episode | 7100 | 66.2 |
| 2 tx episodes | 2054 | 19.1 |
| 3 or more episodes | 1578 | 14.7 |
| Total | 10732 | 100 |

New clients vs. returning clients. The 10,732 clients enrolled in treatment in different years. The data in Table 4 shows the number of new and returning methamphetamines clients entered treatment programs during each fiscal year. The percentage of new clients in treatment is declining, suggesting more clients are returning for additional treatment. FY04 had the lowest number of new clients as well as the lowest number of total clients enrolled in treatment.

Table 4. New methamphetamine clients by fiscal year

| Clients | FY00 | FY01 | FY02 | FY03 | FY04 |
|----------------------------|-----------------|------------|------------|------------|------------|
| Meth clients | 2363 | 2531 | 3001 | 2966 | 2641 |
| New meth clients | 2363 | 2108 | 2353 | 2076 | 1832 |
| Percent new clients | Baseline | 83% | 78% | 70% | 69% |

Primary drug choice. Table 5 shows that of 10,732 unduplicated clients, about 59% reported using methamphetamines as a primary drug of choice at least once, while 41% reported using it as their secondary or tertiary drug of choice during the five years' period. For those whose secondary drug was methamphetamine, the majority identified alcohol as their primary drug of choice.

Table 5. Choice of methamphetamines use

| Drug choice | Frequency | Percent |
|-------------------------------|--------------|------------|
| At least 1 primary meth use | 6351 | 59.2 |
| At least 1 secondary meth use | 2827 | 26.3 |
| At least 1 tertiary meth use | 1554 | 14.5 |
| Total | 10132 | 100 |

⁶ This number was slightly lower than all treatment cases during the same period (average 1.69 episodes per client). see Wu, L. & Nice, M. (2005) *Multnomah County Alcohol & Drug Treatment Data: FY00-04* (#001-05). Multnomah County Budget Office. Pg.4

Age at first methamphetamine use. For episodes that primary drug choice was methamphetamine, the average age at first time using this substance was 20 years old. In comparison, the average age starting for marijuana/ hashish use was 13.9, alcohol 15.6, and cocaine was 23. The average age starting using methamphetamine varied slightly by race/ethnicity groups. Native American and Hispanic had lower starting ages.

Table 6. Age of first methamphetamines use (primary drug)

| Race/Ethnicity | Average Age | Standard Deviation |
|-----------------|-------------|--------------------|
| White | 20.1 | 7.2 |
| Black | 21.4 | 7.8 |
| Native American | 18.6 | 7.1 |
| Asian American | 20.4 | 6.5 |
| Hispanic | 18.9 | 6.8 |
| Overall | 20.0 | 7.2 |

Frequency of methamphetamine use as a primary drug. The table below shows the frequency of methamphetamine use when reported as the primary drug choice. The frequency of use varied slightly by treatment years. Overall, about 67% of methamphetamine episodes reported using methamphetamine on daily basis at enrollment.

Table 7. Frequency of methamphetamine use as a primary substance

| Frequency | FY00 | FY01 | FY02 | FY03 | FY04 | Total |
|-----------------------|-------------|-------------|-------------|-------------|-------------|--------------------|
| Less than once a week | 148 (9%) | 174 (9%) | 249 (11%) | 205 (10%) | 154 (8%) | 930 (9.5%) |
| Once a week | 60 (4%) | 87 (5%) | 111 (5%) | 112 (5%) | 79 (4%) | 449 (4.6%) |
| 2-4 times a week | 284 (17%) | 356 (20%) | 432 (19%) | 410 (19%) | 368 (20%) | 1850 (18.9%) |
| Once daily | 186 (11%) | 175 (10%) | 240 (11%) | 235 (11%) | 288 (16%) | 1124 (11.5%) |
| 2-3 times a day | 445 (26%) | 526 (29%) | 587 (26%) | 544 (25%) | 422 (23%) | 2524 (25.9%) |
| 4 or more times a day | 566 (34%) | 500 (27%) | 649 (28%) | 651 (30%) | 521 (28%) | 2887 (29.6%) |
| Total | 1689 | 1818 | 2268 | 2157 | 1832 | 9764 (100%) |

Based on frequency of use at enrollment, a severity score was created with ‘0’ for not using; ‘1’ for using methamphetamines less than once per week; ‘2’ for once per week; ‘3’ for 2-4 use per week; ‘4’ for once daily; ‘5’ for 2-3 use per day; and ‘6’ for more than three times per day. Figure 2 shows the slightly downward trends in primary, secondary, and tertiary use score over the last five fiscal years.

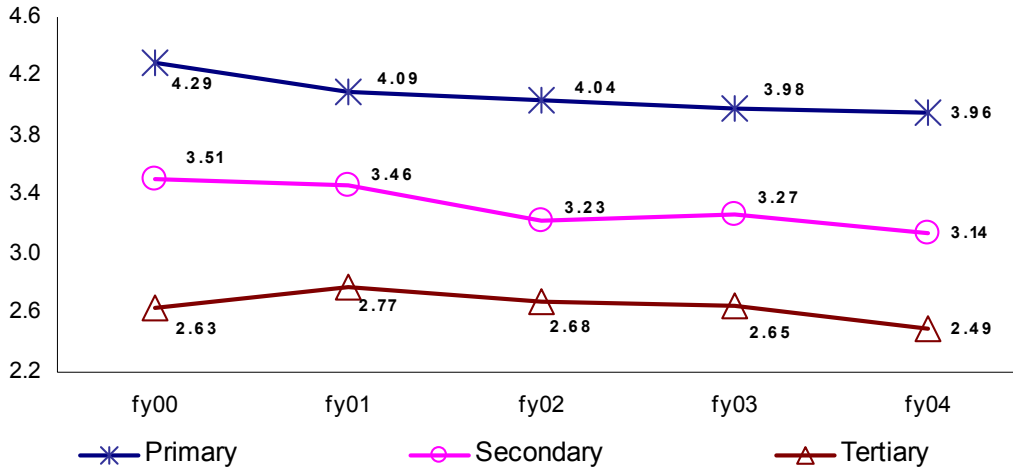


Figure 2. Methamphetamine use severity index by drug of choice over time

Number and type of drugs used at enrollment. Of 17,484 treatment episodes that reported methamphetamine use at enrollment, 18% indicated that methamphetamine was their only drug they were using. Table 8 shows that 82% reported poly-substance use, which means methamphetamine plus one or two other drugs at their enrollment.

Table 8. Number of drugs used at enrollment

| Drug choice | Frequency | Percent |
|---------------------------|--------------|------------|
| Methamphetamine only | 3178 | 18.2 |
| Meth plus 1 other A&D use | 5242 | 30.0 |
| Meth plus 2 other A&D use | 9064 | 51.8 |
| Total | 17484 | 100 |

For those where methamphetamine was not their primary substance of choice but were receiving treatment for another drug and methamphetamine, their primary substance was: alcohol (43%), marijuana/ hashish (27%), opiates (22%), and cocaine (7%). When examining all other substances for which methamphetamine users (primary or otherwise) were receiving treatment, the most common poly-substances were: alcohol (37%), marijuana/ hashish (35%), cocaine (12%), opiates (11%), and other substances (6%).

Route of admission for methamphetamines. There are several routes to administer methamphetamine. Overall, 38% of primary methamphetamine users injected the drug, either in muscle or in the vein. The second most common route of admission was smoking (35%).

Table 9. Route of admission (primary methamphetamine episodes only)

| Route of admission | Frequency | Percent |
|--------------------|--------------|------------|
| Inject: vein | 3826 | 37.2 |
| Smoke | 3643 | 35.4 |
| Inhale | 2235 | 21.7 |
| Oral | 423 | 4.1 |
| Inject: muscle | 126 | 1.2 |
| Other | 43 | 0.4 |
| Total | 10296 | 100 |

The last five years has seen a change in the route of admission. Smoking has become a more common method of use, while inhalation and injection have substantially decreased. In FY00, 44% reported injection, which dropped 33% in FY04. Figure 3 shows top three methamphetamine admission routes over the years.

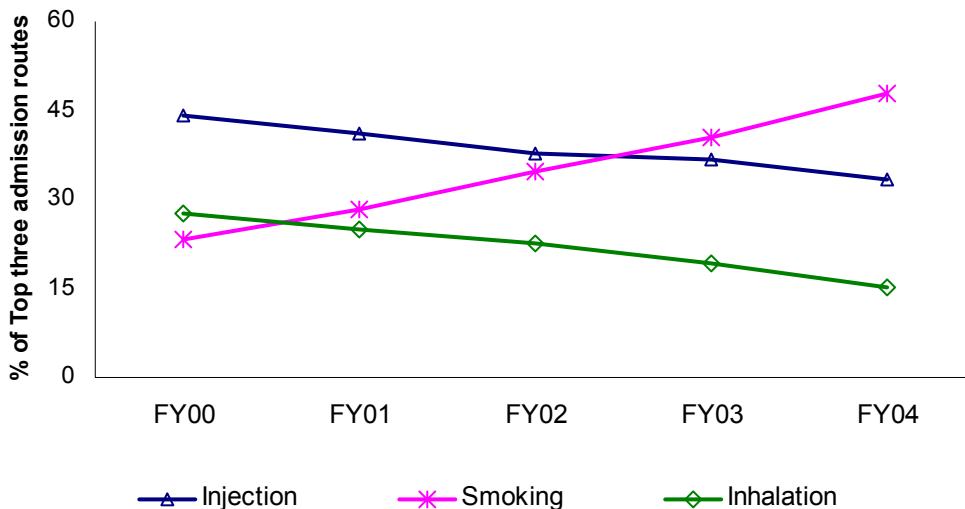


Figure 3. Changes in route of admission (top three methods)

CHARACTERISTICS OF METHAMPHETAMINE CLIENTS/EPISODES

Gender, Race/ethnicity, age, and education. Of 10,732 unique methamphetamine related treatment clients, approximately, 41% of methamphetamine treatment clients were female.⁷ The

⁷ Includes clients who report using methamphetamine either as primary, secondary, or tertiary substance. Overall, 32% of all A&D treatment episodes were females. However, 42% of treatment episodes reporting methamphetamine use were females. A higher percentage of meth episodes were females as compared to female's share in overall A&D treatment episodes.

4,400 female had a total of 7,351 treatment episodes, with 444 episodes (6%) reporting known pregnancy at the time of treatment enrollment.

Table 10. Gender distribution (unduplicated methamphetamine clients)

| Gender | Frequency | Percent |
|---------------|------------------|----------------|
| Male | 6332 | 59 |
| Female | 4400 | 41 |
| Total | 10732 | 100 |

The drug appears to be specific to certain racial and ethnic groups. The majority of clients were Whites (82.6%). Native Americans, who accounted for about 1% of the county population, appeared over-represented, accounting for nearly 9% of all treatment episodes.⁸ Both African-Americans and Hispanics appeared under-represented with 2.7 and 3.5% of all the treatment episodes, respectively (see Table 11).

Table 11. Race/ethnicity distribution (unduplicated methamphetamine clients)

| Race/Ethnicity | Frequency | Percent |
|-----------------------|------------------|----------------|
| White | 8860 | 82.6 |
| Native American | 932 | 8.7 |
| Hispanic | 373 | 3.5 |
| Black | 290 | 2.7 |
| Asian American | 123 | 1.1 |
| Other/Unknown | 154 | 1.4 |
| Total | 10732 | 100 |

The age distribution of methamphetamine use shows that the majority of methamphetamine clients were between the ages of 18 and 35, with 8.3% at age 17 or under (see Table 12). The average age of methamphetamine users was 31.6 years old, consistent with the average age of treatment in general.

Table 12. Age distribution (unduplicated methamphetamine clients)

| Age group | Frequency | Percent |
|------------------|------------------|----------------|
| Age 0-17 | 881 | 8.2 |
| Age 18-35 | 6125 | 57.1 |
| Age 36-64 | 3708 | 34.6 |
| Age 65 and up | 11 | 0.1 |
| Total | 10725 | 100 |

Table 13 shows the low level of educational achievement with 84% of methamphetamine clients having 12 or fewer years of education.

⁸ Source: Census 2000.

Table 13. Education distribution (unduplicated methamphetamine clients)

| Level of education | Frequency | Percent |
|--------------------|--------------|------------|
| No education | 28 | 0.3 |
| 1-12 years | 8963 | 83.5 |
| 13-16 years | 1610 | 15 |
| 17 years and more | 100 | 0.9 |
| Unknown | 31 | 0.3 |
| Total | 10732 | 100 |

Certain racial and ethnic youth appear overrepresented. Further examining the methamphetamine clients found that clients who were under 18 accounted for a larger percentage of methamphetamine users among Hispanics and Asians when compared to other race/ethnicity groups. Table 14 shows that less than 10% of methamphetamine clients were young Whites, African-Americans, or Native Americans. However, 27% of Hispanics and 16% of Asians in treatment were under age 18 at enrollment.⁹ Treatment episodes reporting methamphetamine use among young Hispanic 17 and under increased from 15 cases in FY00 to cases 54 in FY04 (Figure 4).

Table 14. Methamphetamine clients by age and race/ethnicity (unduplicated)

| Age | White | Black | Native American | Asian American | Hispanic | Other |
|--------------|-------------|------------|-----------------|----------------|------------|------------|
| 0-17 | 671 (8%) | 9 (3%) | 58 (6%) | 20 (16%) | 100 (27%) | 23 (15%) |
| 18-35 | 4992 (56%) | 175 (60%) | 590 (63%) | 81 (66%) | 197 (53%) | 90 (58%) |
| 36 or up | 3191 (36%) | 106 (37%) | 284 (31%) | 21 (17%) | 76 (20%) | 41 (27%) |
| Total | 8854 | 290 | 959 | 122 | 373 | 154 |

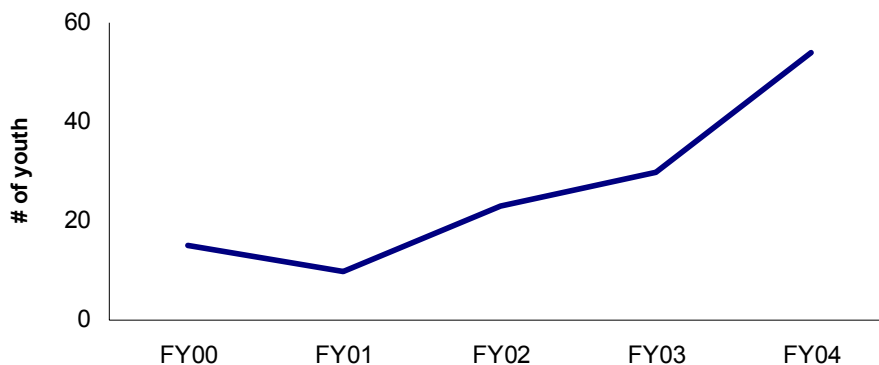


Figure 4. Increasing methamphetamine treatment among Hispanic youth 17 and under (all methamphetamine episodes)

⁹ Youth under 18 accounted for 8.5% of all Hispanic clients in overall A&D treatment clients.

A greater proportion of girls were methamphetamine users. Comparing to the gender and age distribution of overall A&D treatment clients, it was found that young females were over-represented among methamphetamine users.¹⁰ Of the 881 underage methamphetamine clients, 54% were girls, as compared to 46% of boys. These proportions reverse for older cohorts in the 18-35 age group and continue on for those 36 and older. Overall, 41% methamphetamine users involved in treatment were females and 71% of them were 35 years old or younger (Table 15).

Table 15. Methamphetamine clients by age and gender (unduplicated)

| Age | Female | Male | Total |
|--------------|-------------------|-------------------|--------------|
| 0-17 | 471 (54%) | 410 (46%) | 881 |
| 18-35 | 2657 (43%) | 3468 (57%) | 6125 |
| 36 or up | 1267 (34%) | 2452 (66%) | 3719 |
| Total | 4395 (41%) | 6330 (59%) | 10725 |

Increases in youth use. Figure 5 indicates young male and female treatment episodes have been steadily increasing since FY00. Use among females under 18 increased from 98 in FY00 to 147 in FY04, a 50% increase. The number of methamphetamine treatment episodes for boys under 18 fluctuated around 100 between FY00 to FY03 but increased substantially in FY04 (from 103 in FY03 to 160 in FY04).

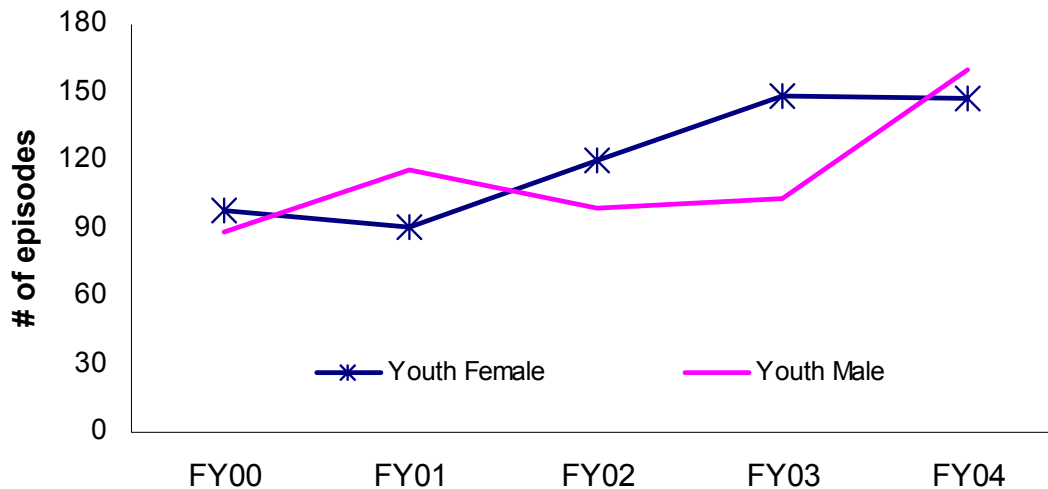


Figure 5. Increasing methamphetamine treatment among youth 17 and under (all methamphetamine episodes)

Employment status and household income. Few methamphetamine users in treatment report having a job. As shown in Table 15, only 22% of methamphetamine episodes reported having a job at time of treatment enrollment, either a full time, part time, or irregular job.

¹⁰ In all A&D treatment clients, the gender distribution for clients under 18 was 37% girls and 63% boys.

Table 16. Employment status at enrollment

| Employment status | Frequency | Percent |
|------------------------------|------------------|----------------|
| Unemployed-not seeking a job | 8353 | 47.8 |
| Unemployed-seeking a job | 5349 | 30.6 |
| Full time | 2319 | 13.3 |
| Part time | 941 | 5.4 |
| Irregular | 516 | 3 |
| Unknown | 6 | 0 |
| Total | 17484 | 100 |

Roughly 46% reported no household income at all when enrolled into treatment. Only 10% had a household income that was above \$1000 per month (Table 17).

Table 17. Household income distribution

| Monthly household income | Frequency | Percent |
|---------------------------------|------------------|----------------|
| No income | 7995 | 45.7 |
| \$1-\$500 | 1938 | 11.1 |
| \$501-\$1000 | 2080 | 11.9 |
| \$1001-\$2000 | 1296 | 7.4 |
| \$2001-\$3000 | 304 | 1.7 |
| \$3001-\$5000 | 149 | 0.9 |
| \$5001 and above | 35 | 0.2 |
| Unknown | 3687 | 21.1 |
| Total | 17484 | 100 |

For 8,353 episodes where the client was unemployed and not seeking employment, it was found that 36% were employable, while 48% were not employable due to physical or mental disabilities (Table 18).

Table 18. Reasons for the unemployed not seeking work

| Employment factors | Frequency | Percent |
|---------------------------|------------------|----------------|
| Unemployable | 4028 | 48.2 |
| Employable | 3010 | 36.0 |
| Student | 719 | 8.6 |
| Incarcerated | 389 | 4.7 |
| Homemaker | 152 | 1.8 |
| Seasonal/temp layoff | 42 | 0.5 |
| Retired | 13 | 0.2 |
| Total | 8353 | 100 |

Marital status and living arrangement. Table 19 depicts the marital status of those at treatment enrollment. ‘Never married’ accounted for 48% of all methamphetamine episodes. Only 8% were married and 5% lived as married couple at time of enrollment (see Table 18).

Table 19. Marital status at enrollment

| Marital status | Frequency | Percent |
|---------------------------|--------------|------------|
| Never married | 8443 | 48.3 |
| Widow/Divorced/Separation | 5421 | 31 |
| Married | 1434 | 8.2 |
| Live as Married | 856 | 4.9 |
| Unknown | 1330 | 7.6 |
| Total | 17484 | 100 |

Table 20 shows that there were a higher percentage of homeless (21%) and institution/foster living (14%) among methamphetamine episodes versus overall A&D treatment episodes.¹¹

Table 20. Living arrangement at enrollment

| Living arrangement | Frequency | Percent |
|--------------------|--------------|------------|
| Relative/Friend | 6252 | 35.8 |
| No other adult | 3777 | 21.6 |
| Homeless | 3685 | 21.1 |
| Institution/Foster | 2490 | 14.2 |
| Spouse/Family | 1154 | 6.6 |
| Unknown | 126 | 0.7 |
| Total | 17484 | 100 |

Insurance status. Table 21 depicts the insurance status at enrollment. Only 5% methamphetamine episodes had private insurance when enrolled in treatment. Forty-nine percent were insured by Oregon Health Plan and other public insurance consisted of 10%.¹² Thirty-six percent of methamphetamine episodes did not have any type of insurance at all. In all A&D treatment episodes, 12% had private insurance and 42% had public insurance.

Table 21. Insurance status at enrollment

| Insurance status | Frequency | Percent |
|------------------------|--------------|------------|
| OHP | 8525 | 48.8 |
| No insurance | 6319 | 36.1 |
| Other public insurance | 1753 | 10 |
| Private insurance | 887 | 5.1 |
| Total | 17484 | 100 |

¹¹ The homeless and institution/foster living were 18% and 8% respectively in all A&D treatment episodes.

¹² The OHP percentage declined significantly in FY2004. Only 38% were insured by OHP as compared to the average of 50.9% from FY00 to FY03.

The proportion of primary methamphetamine episodes entering the treatment programs without health insurance substantially increased in FY2004 (Table 22).

Table 22. Insurance status at enrollment by fiscal year

| Insurance status | FY00 | FY01 | FY02 | FY03 | FY04 |
|-------------------------|-------------|-------------|-------------|-------------|-------------|
| Public insurance | 58.5% | 56.6% | 66.1% | 66.8% | 49.2% |
| Private insurance | 3.5% | 4.4% | 4.6% | 4.1% | 3.6% |
| No insurance | 38.0% | 38.9% | 29.3% | 29.1% | 47.2% |
| Total | 1746 | 1896 | 2365 | 2320 | 1969 |

TREATMENT MODALITY AND OUTCOME

This section of analysis mainly focuses on the primary methamphetamines use episodes. As reported previously, primary methamphetamine use accounts for 58.9% of all episodes that reported using methamphetamine either as primary, secondary, or tertiary substance.

Referral sources for primary methamphetamine treatment episodes. Of 17,484 methamphetamine related episodes 10,296 reported methamphetamines as primary drug of which 51% were referred from criminal justice system and correctional institutions (Table 23). FY03 had the highest percentage of referrals coming from criminal justice (54%). Overall, treatments referred from individual/non-system, including private health professionals, client self, family friends, and employer/EAP consisted 17% of all methamphetamine referrals. The following table displays the number and proportion of episodes grouped by referral source and fiscal year.

Table 23. Referral sources for treatment

| Referral Source | FY00 | FY01 | FY02 | FY03 | FY04 |
|-------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Criminal justice system | 816 (46.7%) | 975 (51.4%) | 1218 (51.5%) | 1245 (53.7%) | 991 (50.3%) |
| Local or state agencies | 329 (18.8%) | 277 (14.6%) | 311 (13.2%) | 282 (12.2%) | 334 (17.0%) |
| Individual/Non-system | 363 (20.8%) | 313 (16.5%) | 400 (16.9%) | 358 (15.4%) | 318 (16.2%) |
| A&D agencies | 170 (9.7%) | 253 (13.3%) | 332 (14.0%) | 327 (14.1%) | 235 (11.9%) |
| Other/ No data | 68 (3.9%) | 78 (4.2%) | 104 (4.4%) | 108 (4.6%) | 91 (4.6%) |
| Total | 1746 (100%) | 1896 (100%) | 2365 (100%) | 2320 (100%) | 1969 (100%) |

Treatment modality for primary methamphetamine episodes. Of 10,296 methamphetamine treatment episodes, 76% received outpatient treatment (including DUII outpatient). Residential treatment accounted for 17%.

Table 24. Treatment modality of methamphetamine episodes

| Treatment modality | Frequency | Percent |
|-----------------------|--------------|------------|
| Outpatient treatment | 7623 | 74.0 |
| Residential treatment | 1790 | 17.4 |
| Detox & Methadone | 660 | 6.4 |
| DUII Outpatient | 223 | 2.2 |
| Total | 10296 | 100 |

Figure 6 shows that the percentage of residential treatment substantially increased between FY03 and FY04.¹³

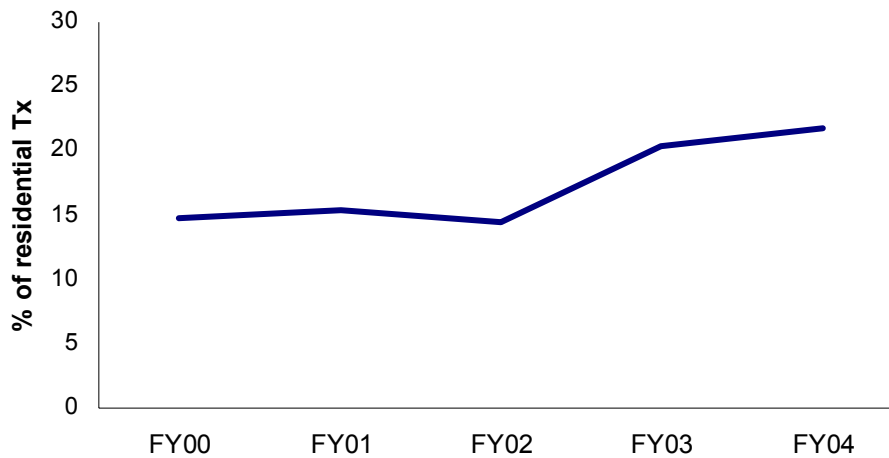


Figure 6. Percent of residential treatment admissions among primary methamphetamine episodes

Treatment duration. For treatment episodes that had been closed at time of the analysis, approximately 34% were in treatment for three months or longer and 30% closed within one week of enrollment. The average length of stay in methamphetamine residential treatment was 84 days and 88 days for outpatient treatment.¹⁴

Table 25. Treatment duration for methamphetamine episodes

| Days from open to close | Frequency | Percent |
|-------------------------|--------------|------------|
| 1-7 days | 2847 | 30.3 |
| 8-30 days | 1453 | 15.5 |
| 1-3 months | 1946 | 20.7 |
| 3-6 months | 1818 | 19.4 |
| 6 moths and 1 year | 1070 | 11.4 |
| More than 1 year | 252 | 2.7 |
| Total | 15839 | 100 |

¹³ The percentages of meth clients enrolled in residential treatment: FY00: 14.7%, FY01: 15.4%, FY02: 14.4%, FY03: 20.4%, and FY04: 21.7%.

¹⁴ The average length of stay for overall A&D treatment episodes was 76 days for residential and 98 days for outpatient treatment.

Termination type. Out of 10,296 primary methamphetamine episodes, 9,482 (92.1%) had treatment termination data. The following table shows the distribution of termination types for those that termination data were available. The treatment completion rate for methamphetamine episodes was 33.6% (see Table 26). Although methamphetamine episodes had a lower completion rate than the overall A&D treatment outcome that includes DUII, they were comparable with the completion rates of opiates (31%), Marijuana/Hash (31%), and cocaine (37%).¹⁵

Table 26. Termination type for methamphetamine tx episodes

| Exit status | Frequency | Percent |
|---------------------|------------------|----------------|
| Completed | 3111 | 33 |
| Not completed | 3510 | 37 |
| Neutral termination | 2861 | 30 |
| Total | 9482 | 100 |

The neutral termination rate (30%) for methamphetamine treatment episodes was higher than the average (21%). The reasons for the neutral termination were given in the following table. As suggested by the data, nearly 80% of neutral terminations were cited as ‘further treatment is not appropriate’.

Table 27. Reasons for neutral termination

| Type of neutral termination | Frequency | Percent |
|--------------------------------------|------------------|----------------|
| Further treatment is not appropriate | 2280 | 79.7 |
| Incarcerated/deceased/illness | 298 | 10.4 |
| Moved out of area | 98 | 3.4 |
| Program cut or reduction | 90 | 3.2 |
| Other | 95 | 3.3 |
| Total | 2861 | 100% |

Figure 7 shows the overall successful termination rates of primary methamphetamine treatment episodes over the five years. The successful completion rate varies between 31% and 35%, with the best result for clients enrolled in FY03 (35.1% completed the treatment).

¹⁵ The overall A&D treatment completion rate over the five-year period is 46%.

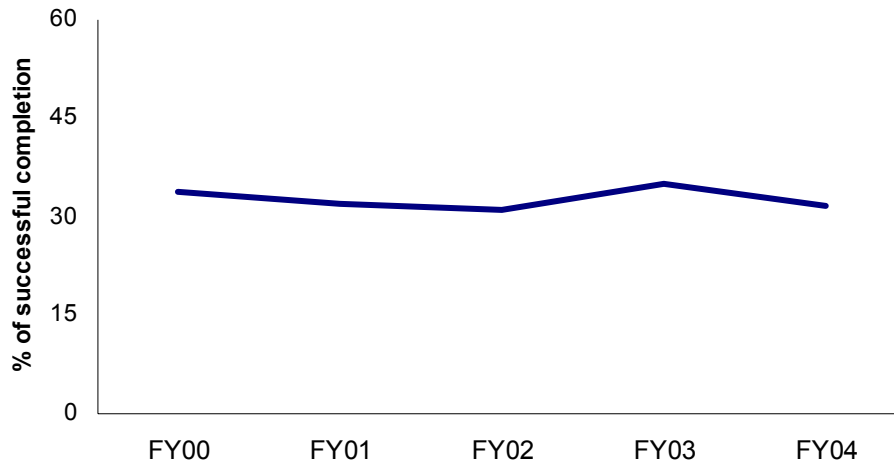


Figure 7. Percent of methamphetamine episodes successfully completed treatments

Successful treatment completion, while far from perfect is one of the better proxy indicators of long-term drug-use reduction and abstinence. Successful treatment rates have been known to vary by client demographics, such as race and ethnicity and age. Table 28 displays the unadjusted successful completion rates by race/ethnicity and age category for all primary methamphetamine treatment episodes.

Table 28. Successful treatment completion by age and race/ethnicity

| Age | White | Black | Native American | Asian American | Hispanic | Other |
|----------------|------------|------------------|-----------------|----------------|------------|------------|
| 0-17 | 38% | NA ¹⁶ | 32% | 55% | 38% | 53% |
| 18-35 | 32% | 28% | 31% | 28% | 33% | 29% |
| 36 & up | 33% | 38% | 31% | 17% | 45% | 41% |
| Overall | 33% | 31% | 31% | 30% | 37% | 36% |

Hispanics showed the best overall completion rates for any racial/ethnicity group at 37%. This was especially true for older Hispanics. In general, youth under 18 successfully completed at higher rates than older groups. This was especially true for Asian youth which showed the greatest successful completion of any group. However, Asians, especially older Asians (36 and older) ranked the lowest in terms successful completion identifying the greatest treatment variance by age group. Native Americans showed the least variance in successful treatment completion by age group.

COMPARISON OF RETURNING AND NON-RETURNING CLIENTS

Of 10,732 unduplicated methamphetamine clients in our study sample, 66% exited the treatment programs without coming back and 34% had multiple treatments documented in CPMS over past five years. This section of analysis focuses on the unduplicated clients who had at least one

¹⁶ Less than 8 cases were recorded so as to protect identity, completion rates are not listed.

treatment episode that reported methamphetamine use. It should be pointed out that the clients could have non-methamphetamine related treatment episodes that were not captured in this analysis. A complete examination of a client's all A&D treatment history in CPMS system and how a client's substance use changes from one treatment episode to another treatment episode will be given in a separate report.

Characteristics of returning and non-returning clients. Table 29 displays client profiles for those who had one, two, and three or more treatment episodes. The selected demographics, drug use severity score, treatment modality, and termination type were compared to see if there is any difference between one-episode and multiple-episode client populations.

Table 29. Methamphetamine client profile (including all primary, secondary and tertiary use of methamphetamine clients)

| Client characteristics | Clients with 1 tx episode | Clients with 2 tx episodes | Clients with 3 or more tx episodes |
|---|---------------------------|----------------------------|------------------------------------|
| | n=7100 | n=2054 | n=1578 |
| % Female | 40.1 | 41.9 | 43.8 |
| % Male | 59.9 | 58.1 | 56.2 |
| % White | 81.0 | 85.9 | 85.2 |
| % Black | 3.1 | 2.3 | 1.6 |
| % Asian | 1.4 | 0.8 | 0.4 |
| % Hispanics | 4.1 | 2.5 | 1.9 |
| % Native American | 8.9 | 7.4 | 9.5 |
| % age 18-35 | 54.9 | 58.5 | 65.1 |
| % never married* | 49.5 | 52.1 | 52.9 |
| % no household income | 38.1 | 43.3 | 48.2 |
| % 12 years of education or less | 82.7 | 85.1 | 86.9 |
| % homeless | 16.5 | 20.3 | 23.5 |
| % no insurance | 38.8 | 33.4 | 30.0 |
| % had job (full & part time, irregular) | 26.5 | 23.0 | 19.1 |
| % referred by criminal justice for tx | 49.4 | 50.9 | 45.4 |
| % at least one methamphetamine primary use | 51.2 | 70.3 | 80.5 |
| Mean severity score of primary meth use | 3.87 | 4.03 | 4.24 |
| % switched from primary to non-primary use | N/A | 8.2 | 9.3** |
| % switched from non-primary to primary use | N/A | 10.4 | 10.2** |
| % switched from residential to non-residential tx | N/A | 11.9 | 10.5** |
| % switched from non-residential to residential tx | N/A | 13.8 | 14.8** |

*For clients who were age 18 and above.

**Only the first and last treatments were compared.

The data indicate that White, Native Americans, age between 18 and 35, no household income, and homeless were more likely came back to the system for additional treatment. Being employed or without health insurance were less likely to have multiple treatments. The percentage of clients reporting methamphetamine as a primary drug choice substantially increased with the number of treatment episodes a client had.

Change in severity score (frequency). The following analyses are focusing on the primary methamphetamine clients only. For those who had 2 or more treatment episodes, their first and last severity scores were compared to see if there was any change.

On average, clients who had only one treatment episode over five years' period had slightly lower drug use severity score (calculated from the use frequency) than those who had multiple episodes when their severity scores at 1st enrollment were compared. For clients who had two treatment episodes, the mean severity score of their next episode was lower than the mean score of their first episode (3.9 vs. 4.2). For the group of clients who had 3 or more treatments, average severity score at last treatment dropped slightly as compared to score at first treatment (from 4.3 to 4.0).

Table 30. Change of average severity score

| Severity score | Clients with 1 tx episode | Clients with 2 tx episodes | Clients with 3 or more tx episodes |
|--------------------------------------|---------------------------|----------------------------|------------------------------------|
| Severity score at 1 st tx | 3.9 | 4.2 | 4.3 |
| Severity score at last tx | N/A | 3.9 | 4.0 |

Change of treatment modality. Comparing treatment modality of the initial treatment, returning clients had a slightly higher percentage of residential program enrollments than non-returning clients. This result was consistent with the finding that the returning clients had a higher average severity score to start with. Also for the returning clients, the chance of entering residential program increased when they came back to the treatment.

Table 31. Change of treatment modality

| Treatment modality | Tx episode | Clients with 1 tx episode | Clients with 2 tx episodes | Clients with 3 or more tx episodes |
|--------------------|-----------------|---------------------------|----------------------------|------------------------------------|
| % of residential | 1 st | 12 | 15 | 14 |
| | last | N/A | 18 | 19 |
| % of outpatient | 1 st | 79 | 75 | 76 |
| | last | N/A | 77 | 76 |
| % of other | 1 st | 9 | 10 | 10 |
| | last | N/A | 6 | 5 |

Change of termination status. The non-returning clients had the highest completion rate when completion rates for one-episode, two-episode, and three or more-episode clients were compared. The initial treatment completion rate was much lower for clients who had two or more episodes, mainly due to their higher percentage of neutral termination status (above 40%). The completion rates of their subsequent treatment were significantly improved for these returning clients, accompanying by a large decrease in percentage of neutral termination. The table below shows the completion rates at different treatment for different groups of client.

Table 32. Change of treatment termination type*

| Exit status | Tx episode | Clients with 1 tx episode | Clients with 2 tx episodes | Clients with 3 or more tx episodes |
|--------------------------|-----------------|---------------------------|----------------------------|------------------------------------|
| % of completion | 1 st | 35 | 27 | 22 |
| | last | N/A | 37 | 40 |
| % of not completed | 1 st | 38 | 32 | 36 |
| | last | N/A | 41 | 41 |
| % of neutral termination | 1 st | 27 | 41 | 42 |
| | last | N/A | 23 | 19 |

* Episodes that were still open or termination status unknown excluded.

DISCUSSION

Multnomah County is no stranger to methamphetamine treatment, however a number of issues appear to be changing and noteworthy. Of all treatment episodes in the county over the five year period, 21% reported using methamphetamines either as a primary, secondary, or tertiary drug choice. Primary methamphetamine use accounted for 12% of all treatment episodes. The percentage of primary methamphetamine use grew from 10.5% in FY00 to 13.5% in FY04 roughly 1% per year, even though total numbers declined due likely to state funding cuts. These cuts may have also impacted other trends such as treatment for youth and females, because cuts to OHP standard disproportionately impacted male adults.

As was previously noted, an overwhelming percentage of methamphetamine clients were White, but Native Americans appeared highly over-represented. Unlike other treatment age groups, Native Americans appeared to have little variance in their completion of treatment at 31% overall. Native Americans, like Whites, appeared somewhat more likely to return for three or more treatment episodes unlike other minority groups.

The number of Hispanic and other minority clients, while relatively small has been slowly increasing. The increase in treatment episodes over the review period was more evident among certain minority youth. Of all Hispanic methamphetamine clients, 27% were youth age 17 and under, compared to about 8.2% for youth clients in general. The proportion of Asians in treatment, while relatively small, appeared elevated for youth as well (16%). Fortunately, higher unadjusted completion rates data suggests that these sub-populations—and youth in general—appeared more responsive to meth-related treatment than older clients.

Females enrolled in alcohol and drug treatment also disproportionately reported methamphetamine use. Overall, 32.5% of total substance treatment admissions in Multnomah County were females while 42% of all treatment admissions that reported methamphetamine were female. Additionally, age and gender interactions found youth 17 and under were more likely to be girls (54%) than boys. Females clients were also somewhat more likely to be clients returning for treatment.

While two-thirds of clients received only one treatment episode during the review time, an increasing number of treatment episodes were for returning clients. The rate of new clients into treatment declined from 83% in FY01 to 69% in FY04. In addition, returning clients tended to have greater concurrent social problems. For example, those returning three or more times were more associated with no income, less education, greater homelessness and joblessness, with more frequent drug use with methamphetamine as their primary drug then when first enrolled.

Most of the clients receiving treatment were found to be poly-substance users. Clearly the most common additional substance was identified as alcohol, followed by marijuana/ hashish, and cocaine. This is important to note, because while this report was to focus on methamphetamine users, clearly a minority of those reviewed herein were only methamphetamine users.

An increasing percentage of methamphetamine clients were admitted to residential treatment program in recent years. In FY00, 14.7% of primary methamphetamine episodes were admitted in residential program. The percentage of residential enrollment substantially increased to 21.7% in FY04. There was little change in treatment completion rates from year to year. Successful completion rates for methamphetamine episodes was comparable with opiates, marijuana/ hashish, and cocaine treatment. The five years comparison shows that FY03 cohort had the best completion rate (35.1%).

Limitations

The above analysis does not identify how many people in Multnomah County use, abuse, or are addicted to methamphetamine. The data reviewed herein represent treatment information for users were admitted to the community treatment programs that were funded or assisted by public money. The number of treatment admissions and type of treatment available were highly affected by the public funding for treatment at federal, state, and local level. Thus, the change of methamphetamine treatment numbers over the years does not necessarily parallel the change of true numbers of people using meth.

Acknowledgments

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Appendix 1. CPMS Data Including Preliminary FY05 Results¹⁷

The following appendix gives preliminary partial results for FY05 and prior year's for comparison. This may help shed light as to changes which may have been recently occurring in Multnomah County's treatment system related to methamphetamine. This data is limited to March 2005, and conclusions should not be drawn. Results should be viewed with caution.

◆ The proportion of methamphetamines treatment enrollment has increased over past six years, to 15.8% in FY05. However, the total number of treatment episodes have declined. Some of this decline is related to changes in State funding. Preliminary partial FY05 data suggests another possible decline for FY05.

Table 33. Proportion of primary drug enrollment over time

| Substance | FY00 | FY01 | FY02 | FY03 | FY04 | FY05¹⁸ |
|---------------------------|--------------|--------------|--------------|--------------|--------------|--------------------------|
| Alcohol | 45.8% | 45.7% | 42.3% | 44.6% | 45.1% | 44.8% |
| Opiates/Heroin | 26.3% | 24.8% | 24.2% | 23.5% | 23.1% | 22.5% |
| Amphetamines | 10.6% | 10.9% | 13.6% | 14.1% | 13.7% | 15.8% |
| Marijuana /Hash | 9.1% | 11.1% | 11.5% | 10.5% | 11.1% | 10.3% |
| Cocaine | 8.2% | 7.5% | 8.5% | 7.3% | 7.0% | 6.7% |
| Substance Subtotal | 16414 | 17322 | 17442 | 16456 | 14416 | 7428 |
| Missing/ Other Rx | 164 | 153 | 168 | 220 | 188 | |
| Total Treatment | 16578 | 17475 | 17610 | 16676 | 14604 | |

◆ The proportions of methamphetamine treatment referral source vary from year to year. Overall, referrals from local or State agencies and criminal justice system account for two-third of methamphetamine treatment episodes. Preliminary partial FY05 data suggests a possible decline in criminal justice referral sources.

Table 34. Treatment referral source over time (primary methamphetamine)

| Referral source | FY00 | FY01 | FY02 | FY03 | FY04 | FY05 |
|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Criminal justice system | 46.7% | 51.4% | 51.5% | 53.7% | 50.3% | 47.1% |
| Local or State agencies | 18.8% | 14.6% | 13.2% | 12.2% | 17.0% | 20.9% |
| Non-system | 20.8% | 16.5% | 16.9% | 15.4% | 16.2% | 17.1% |
| A&D treatment agencies | 9.7% | 13.3% | 14.0% | 14.1% | 11.9% | 10.6% |
| Other | 3.9% | 4.0% | 4.4% | 4.6% | 4.6% | 4.3% |
| Total | 1746 | 1896 | 2365 | 2320 | 1969 | 1170 |

¹⁷ All FY 2005 figures were based on the partial data received in March 2005. Data reflects all primary drug use of methamphetamine.

¹⁸ Data as of March 2005 suggests that an annualized treatment total of 11,000-13,000 may occur in FY05, the lowest number of treatment episodes in the past six fiscal years.

- ◆ The overall demographic profile appears relatively stable since FY04.

Table 35. Racial of those enrolled in primary methamphetamine treatment

| Race/Ethnicity | FY00 | FY01 | FY02 | FY03 | FY04 | FY05 |
|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| White | 88.3% | 87.2% | 88.7% | 86.7% | 81.9% | 82.1% |
| Native American | 7.0% | 7.0% | 4.4% | 6.7% | 7.8% | 6.8% |
| Hispanic | 1.7% | 1.7% | 2.4% | 2.6% | 4.3% | 4.3% |
| Other | 0.6% | 0.6% | 1.8% | 1.1% | 2.2% | 3.2% |
| Black | 1.5% | 2.4% | 2.1% | 2.2% | 2.5% | 2.7% |
| Asian American | 0.9% | 1.1% | 0.5% | 0.6% | 1.2% | 0.9% |
| Total | 1746 | 1896 | 2365 | 2320 | 1969 | 1170 |

- ◆ A majority of methamphetamine clients entering treatment with a history of being arrested.

Table 36. Five year arrest history of primary methamphetamine enrollees

| Insurance status | FY00 | FY01 | FY02 | FY03 | FY04 | FY05 |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| No arrest | 27.1% | 22.2% | 23.5% | 23.9% | 27.5% | 26.8% |
| 1-3 arrests | 44.2% | 44.7% | 44.9% | 41.3% | 38.4% | 37.9% |
| 4-10 arrest | 22.8% | 26.5% | 26.2% | 27.7% | 26.4% | 26.5% |
| 11 or more arrests | 5.9% | 6.6% | 5.5% | 7.1% | 7.6% | 8.7% |
| Total | 1746 | 1896 | 2365 | 2320 | 1969 | 1170 |

- ◆ Recently, more methamphetamine users entered the treatment without health insurance.

Table 37. Insurance status of primary methamphetamine enrollees

| Insurance status | FY00 | FY01 | FY02 | FY03 | FY04 | FY05 |
|-------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Public insurance | 58.5% | 56.6% | 66.1% | 66.8% | 49.2% | 47.9% |
| No insurance | 38.0% | 38.9% | 29.3% | 29.1% | 47.2% | 46.8% |
| Private insurance | 3.5% | 4.4% | 4.6% | 4.1% | 3.6% | 5.4% |
| Total | 1746 | 1896 | 2365 | 2320 | 1969 | 1170 |

- ◆ Percent of IV drug use continues to drop among primary methamphetamine episodes.

Table 38. Percent of methamphetamine IV users (any user)

| IV use | FY00 | FY01 | FY02 | FY03 | FY04 | FY05 |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| IV used | 45.2% | 42.3% | 39.1% | 37.7% | 34% | 32.9% |
| No IV used | 54.8% | 57.7% | 60.9% | 62.3% | 66% | 67.1% |
| Total | 1746 | 1896 | 2365 | 2320 | 1969 | 1170 |

- ◆ The percentage of methamphetamine episodes enrolled in residential treatment increased over the years while the outpatient enrollments dropped.

Table 39. Treatment modality of primary methamphetamine users

| Tx modality | FY00 | FY01 | FY02 | FY03 | FY04 | FY05 |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Outpatient | 75.7% | 75.7% | 78.1% | 71.1% | 69.6% | 68.5% |
| Residential | 14.7% | 15.4% | 14.4% | 20.4% | 21.7% | 23.3% |
| Other | 9.6% | 8.9% | 7.6% | 8.5% | 8.7% | 8.2% |
| Total | 1746 | 1896 | 2365 | 2320 | 1969 | 1170 |

Appendix 2. Changes in Methodology

The way of counting the unduplicated treatment episodes for each fiscal year was changed in this report. To keep consistency and avoid duplications across the years, the treatment enrollment date instead of the closing date was used to determine which fiscal year in which an episode should be counted.¹⁹ Thus, the total episodes for a period equal all episodes with a treatment date within that period. The number of active treatment episodes could be significantly larger than the number of treatment episodes initiated during a period. Using this method, treatment episodes that closed or were still active between FY00 and FY04 but opened before FY00 were excluded from the analysis (they were included in the analysis previously).

This modified methodology had an impact on the episode count for the first year data (FY00) that was reported earlier but not much on the episode counts for the following fiscal years. It was tested that the method change does not alter the results and conclusions we reported from the previous CPMS data analysis.²⁰ The new approach does change how a population size is calculated for a particular period.

¹⁹ Previously, for cases that were still open or active when the data were received, an artificial close date was assigned to, which was the data receiving date.

²⁰ Wu, L. & Nice, M. (2005). *Multnomah County methamphetamine treatment data: FY00-04 (#003-05)*. Multnomah County Budget Office Evaluation.
<http://www.co.multnomah.or.us/dbcs/budget/performance/index.shtml>