

**COLLECTION AND EVALUATION
OF DATA RELATED TO
SUBSTANCE USE, ABUSE AND
ADDICTION PROGRAMS**

For Submittal to:

Members of the
Connecticut General Assembly
Office of Policy and Management
Connecticut Alcohol and Drug Policy Council

Prepared by
Department of Mental Health
and Addiction Services

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Commissioner

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Enacted in 1999, Connecticut General Statutes (CGS) Section 17a-451(o) requires the Department of Mental Health and Addiction Services (DMHAS) to establish uniform policies and procedures for collecting, standardizing, managing, and evaluating data related to substance use, abuse, and addiction programs administered by state agencies, state-funded community-based programs, and the Judicial Branch.

Furthermore, it is DMHAS' responsibility to establish and maintain a central data repository of substance abuse services and submit a report to the General Assembly, the Office of Policy and Management (OPM), and the Connecticut Alcohol and Drug Policy Council (ADPC). This report shall include: a) client and patient demographic information; b) trends and risk factors associated with alcohol and drug use, abuse, and addiction; c) effectiveness of services based on outcome measures; and d) a statewide cost analysis. In 2002, CGS Section 17a-451(o) was amended changing the submission of the report from annual to biennial.

Since the enactment of CGS 17a-451(o), the number of collaborating state agencies and scope of data sharing has grown immensely. Today nine state departments, the Office of Policy and Management, and the Judicial Branch all work together to contribute to the findings presented in the 2006 Biennial Report on the Collection and Evaluation of Data Related to Substance Use, Abuse, and Addiction Programs (2006 Biennial Report). This broad-based interagency collaboration has resulted in the submission of five previous reports (February 2000, July 2001, February 2002, December 2003, and May 2004).

Progress made over the past seven years towards achieving the legislative directive has included:

1. establishing uniform procedures and a minimum data set for substance abuse treatment and prevention services across all state agencies;
2. sharing data across state agencies to determine the interrelated service needs of those receiving substance abuse treatment; and
3. enhancing the level of interagency collaboration leading to more effective and efficient use of scarce resources.

In 2004, the first of a series of treatment outcome and effectiveness studies was initiated. Collaborating with the Department of Labor, DMHAS' Research Division and Yale University, conducted a study of earnings two years before and after receiving treatment. The Treatment Effects on Wages Study was the first in Connecticut to directly link employment wage data with substance abuse treatment records. This initiative of examining treatment effectiveness was followed by a study of treatment and its effects on recidivism as measured by re-arrest and re-incarceration. Findings from the joint DMHAS and Department of Correction (DOC) Treatment Effects on Criminal Justice Involvement Study are presented in the 2006 Biennial Report. These two studies demonstrated that cross-agency data exchange and data linkage is possible providing a unique analytic opportunity.

Again in 2006, work continued on population overlaps through the Data Sharing Project. Who in Connecticut's vast criminal justice and health and human services system also received treatment for alcohol and other drug addiction? Using a patented process known as Probabilistic Population Estimation or PPE, millions of state agency records have been analyzed over seven state fiscal years (1999 - 2005). PPE affords us a view of how well Connecticut's substance abuse treatment system is reaching critical populations (the criminally involved, welfare recipients, child protective services, etc.) and points to areas for possible improvement or collaboration. As this method provides a high degree of confidentiality, cross-agency participation has and continues to be strong. Additionally, through a federally funded initiative, similar PPE analyses were conducted with DMHAS mental health service recipients and other state agencies for the first time.

The cross-agency data repository initiative begun in September 2002, known as the Interagency Substance Abuse Treatment Information System (I-SATIS), met with challenges in recent years due to added confidentiality concerns brought about by the Health Insurance Portability and Accountability Act (HIPAA). Also technological changes in data transfer and sharing require reexamination of how a data repository is conceptualized. Due to these factors, work continues as how best to bring together in one place the various state funded and operated addiction service data across state agencies.

While much of the 2006 Biennial Report focuses on treatment related information, substantial work continues in the prevention arena. Since the 2004 Biennial Report, a Child Poverty and Prevention Council (CPPC) has been created. Essentially, the CPPC merged the Child Poverty and the State Prevention Councils into one consolidated policymaking body addressing the health and well-being of children and families. The purpose of the CPPC is to: 1) establish prevention goals and recommendations and measure prevention service outcomes, and 2) develop and promote the implementation of a ten-year plan to reduce the number of children living in poverty in the state. Plan recommendations to reduce child poverty and promote investment in prevention are organized under six major objectives including:

- ◆ Enhancing families' income and income-earning potential.
- ◆ Helping low-income families build assets.
- ◆ Promoting affordable health care, housing, child care, and early childhood education.
- ◆ Supporting safety net programs for families with multiple barriers.
- ◆ Enhancing family structure and stability.
- ◆ Providing further study of issues related to child poverty and prevention.

Specific actions taken to date to implement the goals of the CPPC include:

- ♦ Inventorying state-funded prevention programs that served children and families.
- ♦ Identifying baseline indicators to track measurable gains made toward the child poverty and prevention goals.

The Child Poverty Prevention Plan was issued in November 2006 and is available at the following link:

<http://www.opm.state.ct.us/pd4/CPC/Final%20%20State%20Agency%20Report%20November%202006.pdf>

Another interagency effort pertaining to prevention data is Connecticut's Strategic Prevention Framework (SPF). Funded by the federal Center for Substance Abuse Prevention, the SPF is meant to support the development of a data-driven resource allocation process across the state's prevention service structure. Under the SPF two comprehensive reports have been produced which can be found at:

<http://www.dmhas.state.ct.us/prevention/CTSPF/phaseoneplan.pdf> and
<http://www.dmhas.state.ct.us/prevention/CTSPF/SPFphase2.pdf>.

The 2006 Biennial Report again looks across the spectrum of state agency services for the prevention, intervention, and treatment of substance use, misuse, and abuse. A range of information is reported using various methods (trend analyses, data sharing and linkage, etc.) to provide the best overview of the current situation. Barriers to implementing a consolidated substance abuse services information system persist but advances in data sharing technology afford an opportunity for expanded collaborations.

The 2006 Biennial Report contains the culmination of years of work on some very important cross-agency projects. Among them are:

1. Treatment Service Data

Using data collected through DMHAS' SATIS (Substance Abuse Treatment Information System), a trend analysis was conducted for state fiscal years (SFY) 2004, 2005, and 2006. This comprehensive data repository contains admission and discharge information from all community-based substance abuse treatment programs licensed by the Department of Public Health (DPH). Additionally, some non-licensed, state-operated programs report to SATIS as well, including DMHAS operated state hospitals and Department of Correction prison-based services. Client-level data are routinely submitted and contain information on each admitted or discharged client.

As in past reports, trends in admissions are analyzed for primary drug reported at admission, age of first use, demographics, service utilization and other areas of interest. Major findings include:

- ◆ Admissions of young adults (18-24) increased by nearly 10%, with heroin and other opiate admissions responsible for a majority of the increase in young adults.
- ◆ The percent of primary alcohol admissions continued to decrease while after years of increases heroin admissions have begun to level off.
- ◆ Admissions due to other opiates (e.g., oxycodone, vicodin) continued to have the greatest percentage increase following a five-year trend.
- ◆ Age of first use reported at admission declined for heroin falling from 22.2 to 20.9 as well as other opiates dropping from 25.4 to 24.8.
- ◆ Overall rates for detoxification services declined while residential rehabilitation and outpatient (including methadone maintenance) rose.

2. Probabilistic Population Estimation (PPE)

The Data Sharing Project, initiated in December 2000, draws upon data from seven state agencies and the Judicial Branch. This project has been highly successful in generating statistical information over the past seven years including trends in access to treatment. Analyses conducted using PPE have been instrumental in measuring the "population overlap" of Connecticut's substance abuse treatment system with criminal justice, and health and human service systems. A series of reports have been produced which include a count of persons in each state agency population, the percent and number of persons served in both systems, and demographics such as age, race, and gender. Findings from the PPE study continue to demonstrate the need to increase outreach and access to care in Connecticut's most vulnerable populations including criminal justice and welfare.

3. Treatment Effects on Recidivism

In 2006, the Department of Correction (DOC), the Department of Public Safety (DPS), and DMHAS initiated a study to determine the effects of treatment on correctional inmates with a history of substance abuse problems. The primary question of interest was the rate of re-incarceration and re-arrest by this population in the two years following release from prison. The study was part of an ongoing initiative to link data sets across various state agency populations to determine the effectiveness of substance abuse treatment.

Of the 8,759 DOC releasees meeting the study criteria, 3,956 were matched to DMHAS' Substance Abuse Treatment Information System (SATIS). A total of 1,299 persons were included in the final "treatment" study group while 7,460 persons comprised the "no-treatment" group. Major findings included:

- ◆ Overall, persons more likely to be re-incarcerated within two years of release from prison had a history of violent offenses, had a more severe substance use disorder, were younger and non-white. A similar pattern of risk factors was evident for re-arrests rates.
- ◆ Non-whites were 33% less likely to receive treatment post release from the DOC than whites (10% vs. 14.9%).
- ◆ Inmates who successfully completed in-prison substance abuse treatment had a lower rate of re-incarceration (39.3% vs. 45.3%) than inmates not completing treatment.
- ◆ Persons released to a halfway house and receiving treatment were 42% less likely to return to prison within two years and 37.4% less likely to be re-arrested than those also released to halfway houses but not receiving treatment.

4. Prevention Service Data

DMHAS, in partnership with other state agencies, has been expanding the state's capacity for collecting, managing, and evaluating inter-agency substance abuse prevention data. Two initiatives funded through the federal Center for Substance Abuse Prevention (CSAP) have supported these efforts. First, this funding has resulted in a Prevention Data Infrastructure plan identifying strengths and weaknesses related to data collection, use, and dissemination. Second, Connecticut has begun to implement a data-driven planning process known as the Strategic Prevention Framework or SPF. In particular, the SPF process calls for aligning prevention resources to the greatest identified problem as measured by a number of objective criteria. Essential to the SPF rational resource allocation is the creation of a State Epidemiological Workgroup (SEW).

To date, the SEW has completed a comprehensive analysis of state-level substance abuse prevention needs assessment data. Applying criteria measuring the magnitude (consumption and consequences) of each substance, a profile of each drug (alcohol and other drugs) was developed. Other evaluative information was considered according to impact and how likely the consequence could be changed. In the end, alcohol consumption, and its related consequences, was seen to be the priority drug needing immediate attention and in particular underage use as the primary concern.

In the second year of the SPF grant, community leaders (school administrators, public officials) and others were asked their perception of substance use in their community. Similar to the statewide findings, the greatest percentage of key informants reported alcohol as a "significant problem" across all age groups. Tobacco and illicit drugs (tied) and prescription drug misuse were found to be the secondary and tertiary substance of concern for adults age 26-65.

Another cross-system prevention assessment is the Core Alcohol and Drug Survey or Core. Begun in 2004, the Core has assisted in understanding the nature, scope, and consequences of drug and alcohol use on individual campuses across the state. This information has allowed administrators and program directors to tailor campus-based programs to current substance use patterns and needs. The survey was conducted again in 2006. Analysis of Core survey data, while ongoing, focuses on patterns of past month alcohol and other drug (AOD) use and awareness of AOD policies and prevention efforts. These data indicate that underage drinking is on the rise, supporting the need for continued focus on prevention efforts. While the trend has been positive as to students' perceptions of AOD prevention policies and activities, none of the five measures (policies, enforcement, programs, university concern, and student involvement) of awareness reached statistical significance.

5. Statewide Cost Analysis

As in past reports, the 2006 Biennial Report contains substance abuse service expenditures from state agencies, as well as the Judicial Branch and OPM. Overall, funding for substance abuse prevention, deterrence, and treatment services has grown from SFY 1999 to SFY 2005. While the increase in total expenditures grew at about 12% (not adjusted for inflation) from SFY 2003 to 2005 most of the increase can be attributed to better expenditure reporting, cost of living adjustments, and infusion of federal funds. There were several exceptions to the overall increase in SFY 2005. For instance, Judicial and Department of Veteran Affairs (DVA) each reported slight decreases in treatment expenditures while Department of Transportation (DOT) and OPM both experienced drops in prevention expenditures. Overall deterrence expenditures slipped 35% over the two-year period (SFY 2003 to SFY 2005) with both DOT and Department of Public Safety (DPS) reporting decreased spending.

6. Conclusion and Recommendations

One finding in the 2006 Biennial Report that continues to be of significance is the rate of primary heroin admissions to treatment. Although this rate has slowed and shows signs of leveling off, it still outpaces alcohol and other illicit drug admissions. Of particular concern is the growing rate of young adults (18-24) presenting for treatment with primary heroin problems. While small in number, treatment admissions by young adults for primary heroin addiction grew by 18% from SFY 2003 to SFY 2006. This coupled with increased admissions for non-medical use of pain killers requires close monitoring over the coming years. Access to pain killers (e.g., vicodin, oxycodone), as reported in the National Survey of Drug Use and Health (NSDUH, 2006), is as close as a friend's or family member's medicine cabinet. Findings from the same survey reported that the number of persons trying pain relievers surpassed first-time marijuana users. This was the first time that the number of marijuana initiates dropped to second place for all illicit drugs. Clearly there is cause for action to stem the tide of non-medical use of prescription opiates in the form of better public awareness, earlier intervention, and more age-appropriate treatment services tailored to young adults.

Illicit (underage use) and abuse of alcohol also remains a concern. The consequences of alcohol misuse and abuse are clear and include alcohol-related vehicle fatalities and accidents, domestic violence, alcohol-related unintentional injuries, and sexual violence to name a few. Recent national studies such as Columbia University's National Center on Addiction and Substance Abuse (CASA) report: *Wasting the Best and the Brightest: Substance Abuse at America's Colleges and Universities* (March 2007) and the Surgeon General's *Call to Action To*

Prevent and Reduce Underage Drinking (2007) point to the fact that there has been no significant reduction in the proportion of college students who binge drink, who drink to get drunk or in their frequency (10 or more occasions in past month) of drinking. In Connecticut the federally funded Strategic Prevention Framework (SPF) project initiated an examination of the most pressing drug problem in the state. Their conclusion, like others, is that alcohol use disorders (AUD) have a devastating effect on our lives, communities, and institutions. Mobilizing communities and colleges to address these trends head-on has gained momentum through the SPF and other state initiatives.

In the past three years, a positive trend has been reduced utilization of acute care services, i.e. detoxification, with emphasis on better coordination of care and earlier connection to medication assisted therapies (e.g., methadone maintenance, buprenorphine), particularly for opiate-dependent persons. These changes have brought about increased treatment capacity serving more individuals with a substance use disorder and providing better outcomes for those with long-standing addictions. At the same time, with the average age of admission showing little change over the decades, improvements in age-appropriate services are critically needed to attract and retain persons with substance use disorders earlier in their addiction. This certainly includes appropriate services for young adults but also older adults as the state's baby boomer population ages. Meeting the challenge of addressing both these treatment populations will call for new methods of outreach and engagement.

Findings from the DOC/DMHAS/DPS recidivism study on the effects of treatment highlights the fact that more needs to be done to break the cycle of addiction and criminal justice involvement. As reported, those having a substance abuse history did best upon release from the DOC when provided treatment coupled with ongoing supervision and other community supports. DOC inmates released to a halfway house or transitional supervision who also received treatment had a demonstrated return on investment in the form of reduced rates of re-incarceration, re-arrest and reduction in violent offenses. Assuring adequate post-release services in the form of continued care, vocational and educational services, housing and other such supports is essential to a successful reentry into community life and ongoing recovery from addiction.

Findings on "population overlaps" or the shared responsibility of those served in Connecticut's public addiction, and health and human services system indicates only incremental change over the past seven years. Analysis using PPE (Probabilistic Population Estimate) was implemented as a means to measure the state's progress to address the needs of persons with substance use disorders. National and other state studies have shown that better access to treatment can vastly offset societal costs (welfare, child abuse/neglect, criminal justice involvement).

Overall PPE provides a method to look at access to care within specific populations and to some extent within race and gender. A finding in the 2002 Annual Report on the Collection and Evaluation of Data Related to Substance Use, Abuse and Addiction Programs indicated that non-white inmates had poorer access to treatment either prior to or upon release from prison. This finding was substantiated in the DOC/DMHAS/DPS data linkage recidivism study and the updated PPE analysis presented in this report. Overall, treatment access by non-whites was 27% to 33% less than that of whites. Based upon the two independent findings, it is suggested that further examination be conducted as to why this is so with focus on providing better access to treatment in the future.

Over the next two years work will continue on PPE analysis, identifying a data linkage study, and reporting of outcome-based findings. Additionally, analytic work will encompass youth and adolescents, something that has been missing in the two previous reports. Under discussion at this time is a data linkage study that focuses on DCF and Juvenile Justice youth as they age into the DMHAS (adult) treatment system. Of importance is how well these youth, turning into young adults, receive continued care and their interaction with DMHAS and other state agencies. On a system or community level, the SPF project will continue its collection of social indicators from various state agencies, expanding, and enhancing the scope of what is collected and analyzed. Lastly, consideration of improved methods of determining populations in need of treatment, particularly those served in the public sector will be a high priority for the 2008 Biennial Report.

ADOLESCENT SUBSTANCE ABUSE TREATMENT

INTENSIVE IN-HOME FAMILY-BASED TREATMENT SERVICES

In the past few years there has been an increased focus on service integration for mental health and substance use disorders, including co-occurring disorders, within the Department of Children and Families (DCF) system. Based upon a 1999 review of existing adolescent substance abuse treatment programs, DCF restructured its services from individual to family-based treatment approaches that consider contextual factors influencing substance use. Since then DCF has implemented evidence-based practices that emphasize the ecology of substance use. Implementation of family-based models of treatment, such as Multi-Systemic Therapy (MST) and Multi-Dimensional Family Therapy (MDFT), were initiated through federal funding of the Hartford Youth Project and other state funding of programs. These intensive in-home treatments have produced the following results:

- ◆ Improvements in client level outcomes, including reduction in or abstinence from substance use, improvement in school functioning, decreased delinquent behavior, and improvement in general and family functioning; and
- ◆ Enhancements in system-level outcomes by increasing the overall engagement and retention rates for youth and their parents.

In-home, family-based treatments also provide considerable economic and mental health benefits to families while allowing youth to receive care in their own community. In-home interventions are significantly less costly per youth and family than residential costs. Currently, DCF-funded, in-home programs serve 780 youth annually through nine contracted providers.

Major findings for MST:

- ◆ 72% of adolescents discharged from MST were living at home at the time of discharge.
- ◆ 80% of adolescents discharged from MST were enrolled in school or working at the time of discharge.
- ◆ 66% of adolescents discharged from MST had no arrests during treatment.
- ◆ Of the 467 clients with identified histories of substance use, 71% displayed a reduction in substance use 30 days prior to discharge, and 63% of them were totally abstinent.

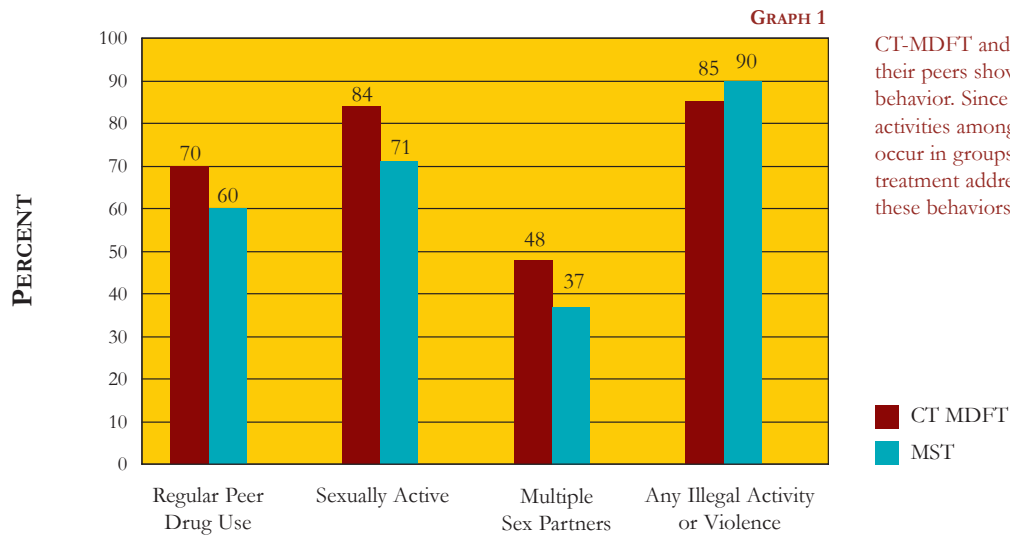
Major findings for MDFT:

- ◆ 71% of adolescents remained in the community and in their homes at discharge.
- ◆ 60% of adolescents abstained from alcohol and/or drugs 30 days prior to discharge, 12% had a significant reduction in drug use and 11% had a significant reduction in alcohol use.
- ◆ 86% of adolescents were not arrested during MDFT treatment.

Inter-agency Efforts Supporting Family-Oriented Treatment

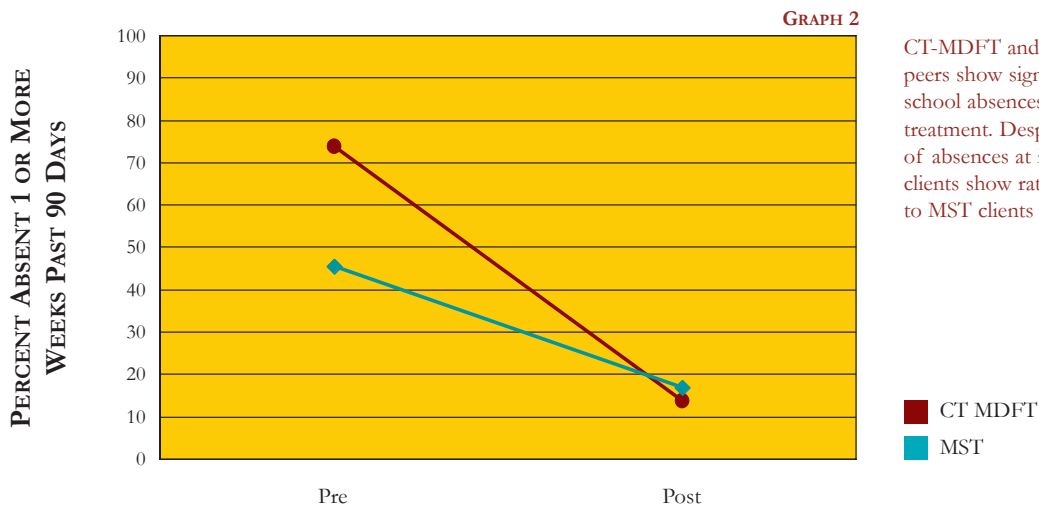
DCF and the Judicial Branch–Court Support Services Division (Judicial Branch–CSSD) have a Memorandum of Agreement that endorses a single entity to manage quality assurance and fidelity monitoring for MST. CSSD funds 15 additional MST teams for a total capacity of over 1,000 youth statewide. Advanced Behavioral Health provides statewide oversight of MST and MDFT program implementation including training, quality assurance, and data and systems program development to assure fidelity to the model.

ENVIRONMENTAL RISK PROFILE OF YOUTH IN THE HARTFORD YOUTH PROJECT



CT-MDFT and MST clients and their peers show high levels of risky behavior. Since drug use and illegal activities among adolescents often occur in groups, it is important that treatment address the context in which these behaviors are occurring.

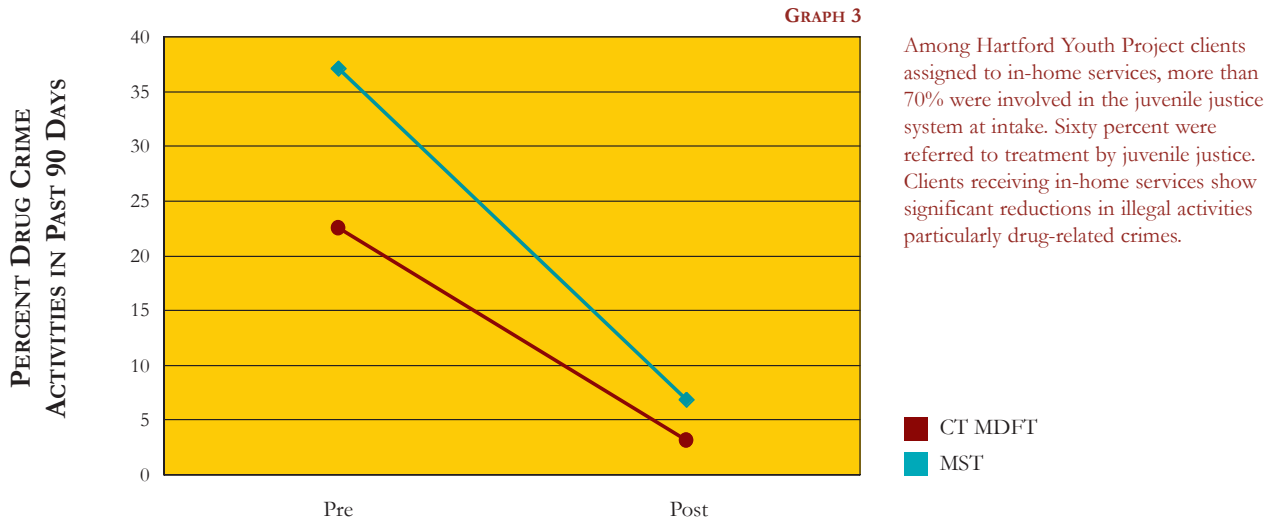
SCHOOL ABSENCES AMONG YOUTH IN THE HARTFORD YOUTH PROJECT BEFORE AND AFTER IN-HOME TREATMENT



CT-MDFT and MST clients and their peers show significant reductions in school absences after completing treatment. Despite much higher rates of absences at intake, CT-MDFT clients show rates of absence similar to MST clients post-treatment.

ADOLESCENT SUBSTANCE ABUSE TREATMENT

RATES OF DRUG CRIME AMONG YOUTH IN THE HARTFORD YOUTH PROJECT BEFORE AND AFTER IN-HOME TREATMENT



DCF has implemented a standardized assessment for outpatient and residential adolescent substance abuse treatment services called the Global Appraisal for Individual Needs (GAIN). The GAIN is used nationally by the federal Center of Substance Abuse Treatment (CSAT) for all adolescent substance abuse programs to monitor performance. The data shown above from the Hartford Youth Project used the GAIN to monitor performance. The GAIN provides assessment for co-occurring disorders including providing diagnostic information about substance abuse and dependence, and flags mental health issues needing further assessment and treatment. The GAIN provides quantitative clinical data in multiple areas to improve client and program level effectiveness, and to provide follow-up care. GAIN data across the DCF adolescent substance abuse treatment system will be available for the 2008 Biennial Report.

TREND ANALYSIS OF ADMISSIONS FOR STATE FISCAL YEARS 2004–2006

Most Connecticut substance abuse treatment programs report client information to DMHAS through its data collection system, SATIS. Client-level data are routinely submitted and contain information on each admitted or discharged client. The range of client information collected at admission includes: demographics, employment status, education level, type of drug use, frequency of drug use, living arrangements, arrest history, and other pertinent client data.

All substance abuse treatment programs licensed by the Department of Public Health (DPH) are required, by state statute, to report to SATIS. Additionally, some non-licensed, state-operated programs report as well, including DMHAS state hospitals and DOC prison-based services. This mandatory reporting system ensures that privately insured, fee-for-service, and publicly supported clients are included in the department's database. Excluded from the SATIS are those persons who receive services through the Veterans' Administration, general hospitals (if not funded by DMHAS), or private practitioners. Approximately 75% of clients reporting to DMHAS are either "public" clients, i.e., those whose treatment is paid out of public entitlement programs (e.g., Medicaid or State Administered General Assistance) or have no insurance. Specific trends over the three-year period include:

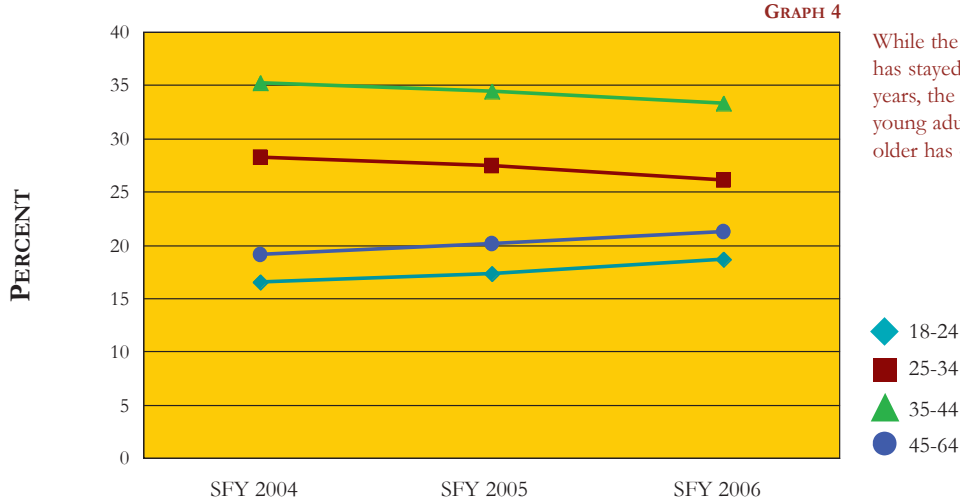
Client Demographics

- ◆ The percent of admissions by Hispanic persons continued to grow although at a more moderate pace than in the recent past.
- ◆ Whites comprised just over half of all admissions while blacks accounted for 20%.
- ◆ Males represented the vast majority of admissions (over 70%).
- ◆ The average age (35.5) at admission decreased slightly as admissions of young adults (18-24) increased by nearly 10% (778 admissions) with heroin and other opiate admissions responsible for a majority of the increase in young adults. (Graphs 4 and 6).

Patterns and Trends of Primary Problem Substance

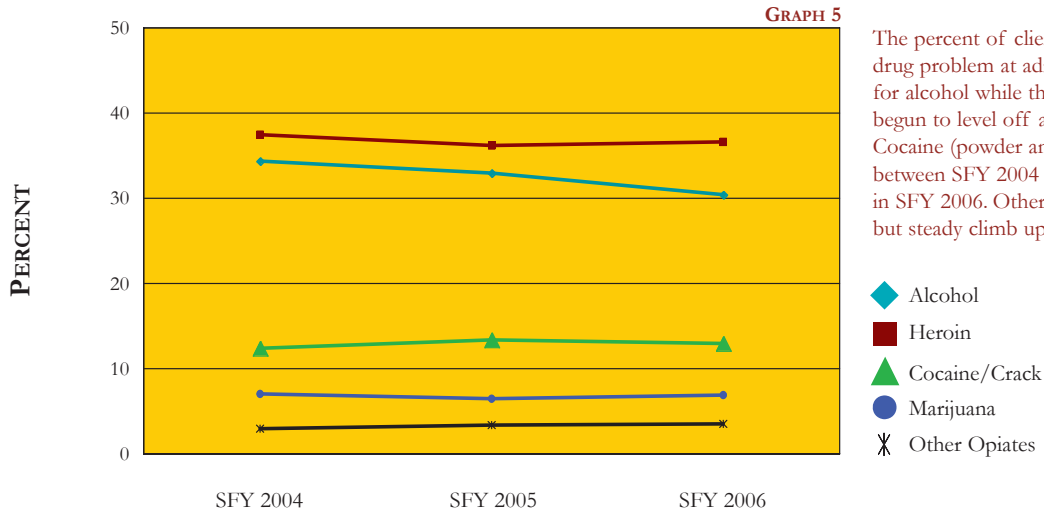
- ◆ The percent of primary alcohol admissions continued to decrease while after years of increases heroin admissions have begun to level off (Graph 5).
- ◆ Admissions due to other opiates (e.g., oxycodone, vicodin) continued to have the greatest percentage increase following a five-year trend (Graph 5).
- ◆ The pattern of primary substances reported by race or ethnicity remained similar to those in past years. Whites reported mostly alcohol followed by heroin and cocaine. Blacks reported primarily marijuana followed closely by cocaine. Latinos reported heroin followed by marijuana as their primary problem substance. (Table 1).
- ◆ Age of first use reported at admission declined for both heroin (22.2 to 20.9) and other opiates dropped (25.4 to 24.8). Other drugs had minor fluctuations in age of first use.
- ◆ Type of care received by primary problem substance followed past patterns with alcohol admissions using outpatient and detoxification; detoxification and methadone maintenance for heroin; outpatient followed by residential for cocaine; and predominately outpatient for marijuana. Overall, utilization of detoxification services dropped while residential rehabilitation and outpatient (including methadone maintenance) rose (Table 2).
- ◆ After increasing in prior years, the percent of persons who reported injecting illicit drugs at time of admission decreased slightly from 23.4% in SFY 2003 to 22.5 % in SFY 2006.

ADMISSIONS TO SUBSTANCE ABUSE TREATMENT
BY AGE AT TIME OF ADMISSION
SFYs 2004 - 2006



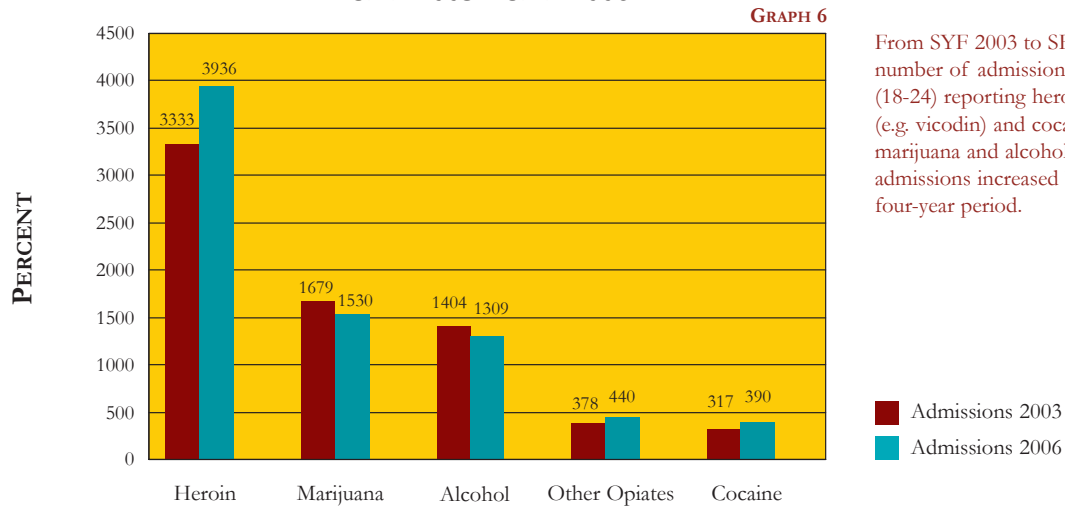
While the average age (35.5) at admission has stayed fairly constant over the three years, the percent of admissions by young adults (18-24) and those 45 and older has continued to increase.

PRIMARY PROBLEM SUBSTANCE
REPORTED AT TIME OF ADMISSION
SFYs 2004 - 2006



The percent of clients reporting their primary drug problem at admission continued to drop for alcohol while those reporting heroin has begun to level off after years of increases. Cocaine (powder and crack) increased slightly between SFY 2004 and 2005 then leveled off in SFY 2006. Other opiates continued a slow but steady climb upwards.

ADMISSIONS OF YOUNG ADULTS (18-24)
BY PRIMARY DRUG REPORTED AT ADMISSIONS
SFY 2003 - SFY 2006



From SYF 2003 to SFY 2006, the number of admissions by young adults (18-24) reporting heroin, other opiates (e.g. vicodin) and cocaine grew while marijuana and alcohol dropped. Heroin admissions increased by 18% over the four-year period.

SUBSTANCE ABUSE TREATMENT INFORMATION SYSTEM (SATIS)

CHARACTERISTICS OF SUBSTANCE ABUSE TREATMENT CLIENTS BY PRIMARY PROBLEM SUBSTANCE AT ADMISSION - SFY 2006

TABLE 1

	Alcohol	Heroin	Cocaine	Marijuana
% Female	25.9	26.3	36.8	21.4
Mean age (years)	39.7	34.3	36.2	26.9
Race				
% White	69.0	57.9	46.5	39.3
% Black	18.7	11.9	36.9	38.4
% Other *	12.4	30.2	16.6	22.3
Ethnicity				
% Hispanic	19.9	39.1	24.0	33.5
% Non-Hispanic	80.1	60.9	76.0	66.5

* Note: Other race is comprised of persons mostly reporting one of the four Hispanic ethnic groups.

Types of primary substances reported at admission vary by gender, age, race, and ethnicity. Those who enter treatment for marijuana are generally younger and male while those reporting cocaine are disproportionately female and black. Hispanics continue to enter treatment for a primary heroin problem at rates (4 out of 10 admissions) disproportionate to their overall admission rate (1 out of 4). Those entering treatment reporting an alcohol use disorder continue to have the highest mean age and are predominately white and male.

LEVEL OF SERVICE BY PRIMARY SUBSTANCE AMONG SUBSTANCE ABUSE TREATMENT ADMISSIONS - SFY 2006

TABLE 2

	Alcohol	Heroin	Cocaine	Marijuana
% Residential Detoxification	31.1	37.3	5.4	0.0
% Residential Rehabilitation	19.4	17.2	32.6	11.5
% Outpatient Services	49.3	15.9	61.5	88.5
% Methadone Services	0.0	24.5	0.0	0.0
% Ambulatory Detoxification	0.2	5.1	0.5	0.0

Treatment received varies by type of substance and severity. Persons reporting heroin mainly use detoxification services followed by methadone. In recent years emphasis has been placed on connecting opiate detox clients to residential and outpatient services. This has resulted in a decrease (from SFY 2003) in use of costly detox services. This pattern was somewhat similar for those with alcohol use disorders. Persons seeking treatment for cocaine addiction continued to use mostly residential services while the vast majority of those reporting marijuana as their primary problem substance received outpatient services.

PROBABILISTIC POPULATION ESTIMATION (PPE)

The Data Sharing Project, initiated in December 2000, draws upon data from seven state agencies and the Judicial Branch. This project has been highly successful in generating statistical information including trends for the past seven years. Analyses conducted using PPE have been instrumental in measuring the "population overlap" of Connecticut's substance abuse treatment system with criminal justice, and health and human service systems. PPE uses only date of birth and gender to calculate population or caseload overlaps, limiting concern about confidentiality. Since the start of the project, participating state agencies have shared over three million records. A series of reports have been produced which include: an unduplicated count of persons in each state agency population; the percent and number of overlap (i.e., those receiving treatment and arrested, incarcerated, on probation, receiving welfare benefits, etc.); and demographics such as age, race and gender.

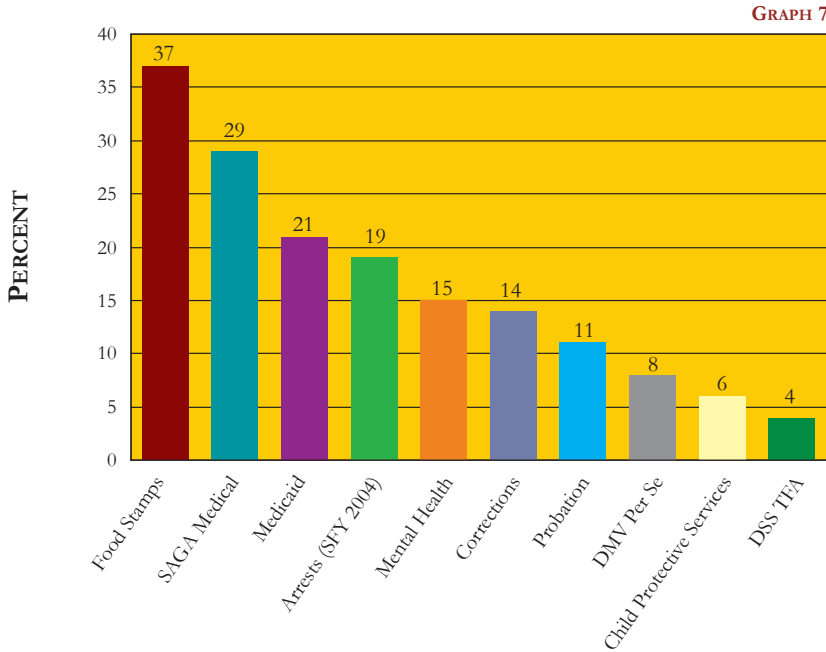
In the past, results of PPE overlaps have been used to determine the rate at which various populations in need of treatment access care. For instance, two studies conducted by Yale University for DMHAS have indicated that those involved with the criminal justice system have a substance treatment need rate of between 50% and 60%. Comparing the rate of treatment need to PPE overlap rates of treatment access (with a range of about 10% for arrestees and 20% for correctional admissions and releasees) it has been clear to see that less than half those needing treatment services are getting them. Additionally, PPE analysis provides a simple way to evaluate system outcomes and access to care. For instance, an analysis of the effect of treatment on re-arrest showed an overall 12% reduction one year post treatment as measured against one year prior to treatment admission. Non-whites had the greatest reduction in re-arrests (23%).

Major findings were:

- ◆ Of those persons receiving treatment (as reported to SATIS) in SFY 2005, Food Stamps (new this year) recipients comprised the greatest percent of all persons treated followed by State Administered General Assistance (SAGA) and Medicaid recipients (Graph 7).
- ◆ When looking within state agency populations and rates of treatment access, SAGA recipients had the highest access rate at 28% in SFY 2005. The next highest rates were for DOC admissions and releases (20%), DMHAS mental health clients (15%) and Judicial-CSSD probationers (14%) (Graph 8).
- ◆ Access to substance abuse treatment by persons involved with the criminal justice system (arrests, incarceration, or probation) has remained steady for the last four state fiscal years (2002 - 2005). The only noticeable trend has been a slight downward dip in the access rate for DOC admissions and releases from 22% in SFY 2001 to 20% in SFY 2003 (Graph 9).
- ◆ The percent of the Department of Social Services' (DSS) Temporary Family Assistance (TFA) population accessing substance abuse treatment has remained mostly unchanged for the past four years, holding at about six percent. In a Yale University study using face-to-face interviews, it was determined that 12% of TFA recipients have a substance use disorder (abuse or dependence). Therefore half of those welfare recipients needing treatment receive it.
- ◆ Rates of treatment access can vary by race as can be seen in the criminal justice population. Non-white Judicial-CSSD probationers and DOC admissions/releasees were about one-third less likely to receive substance abuse treatment than whites (Graph 10).

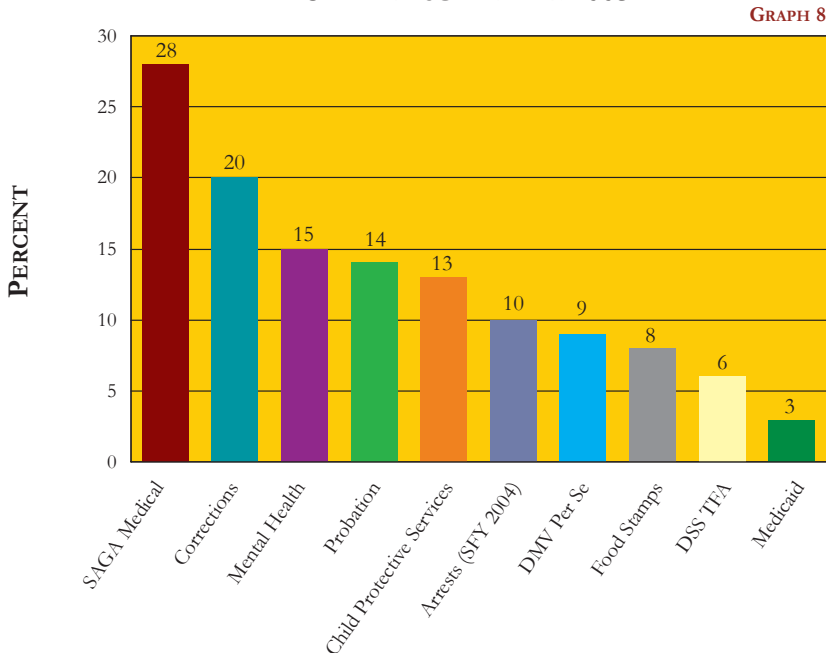
PROBABILISTIC POPULATION ESTIMATION (PPE)

PERCENT OF PERSONS RECEIVING SUBSTANCE ABUSE TREATMENT SERVED BY STATE AGENCIES STATE FISCAL YEAR 2005



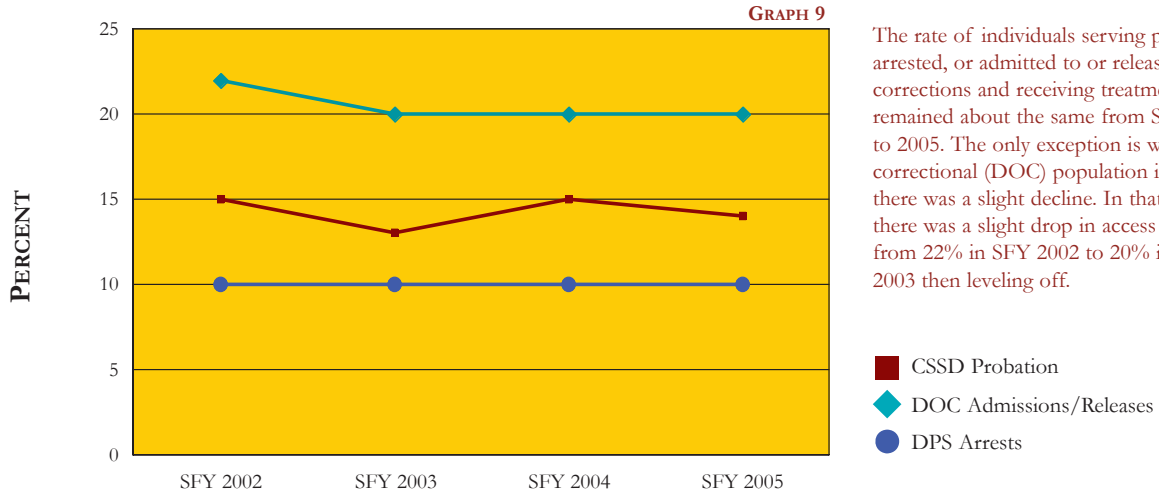
Of all persons receiving substance abuse treatment in SFY 2005, as reported to DMHAS, many had contact with state agencies before, during, or after treatment. The greatest proportion of those in treatment and also served by a state agency included DSS - (Food Stamps, SAGA Medical and Medicaid); DPS (arrested); DOC (incarcerated) and Judicial-CSSD (probation).

PERCENT OF PERSONS SERVED BY STATE AGENCIES RECEIVING SUBSTANCE ABUSE TREATMENT STATE FISCAL YEAR 2005



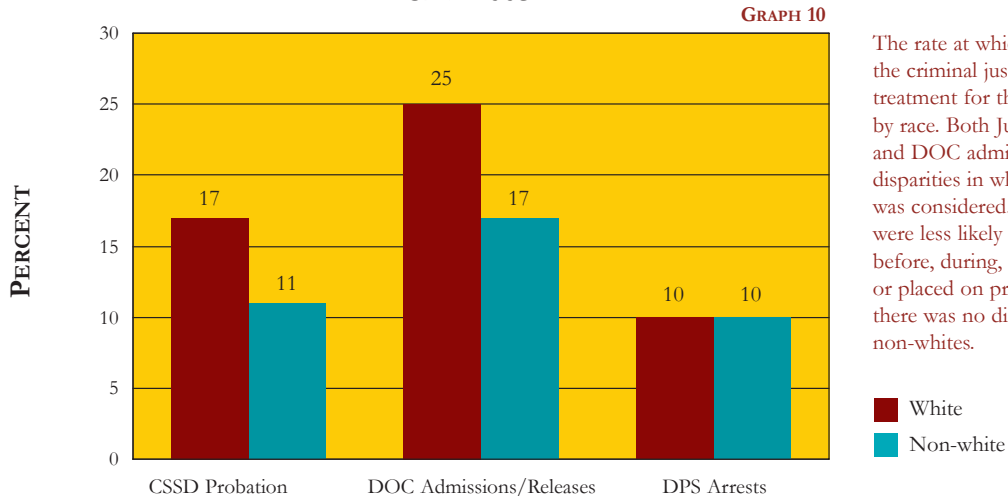
Looking at who entered treatment from other state agency populations, SAGA clients had the greatest access rate with close to one-third of all recipients receiving treatment in SFY 2005. This was followed by DOC admissions or releases (20%), DMHAS mental health clients (15%), Judicial-CSSD probationers (14%) and DCF substantiated child abuse or neglect cases (13%). Based upon needs assessment studies, many of these populations are currently underserved.

PERCENT OF CRIMINAL JUSTICE INVOLVED PERSONS RECEIVING SUBSTANCE ABUSE TREATMENT SFYs 2002 - 2005



The rate of individuals serving probation, arrested, or admitted to or released from corrections and receiving treatment has remained about the same from SFY 2002 to 2005. The only exception is within the correctional (DOC) population in which there was a slight decline. In that case, there was a slight drop in access to care from 22% in SFY 2002 to 20% in SFY 2003 then leveling off.

PERCENT OF CRIMINAL JUSTICE INVOLVED PERSONS RECEIVING SUBSTANCE ABUSE TREATMENT BY RACE SFY 2005



The rate at which persons involved in the criminal justice system receive treatment for their addiction differed by race. Both Judicial-CSSD probationers and DOC admissions and releases showed disparities in who accessed care when race was considered. In both cases, non-whites were less likely to access treatment either before, during, or after being incarcerated or placed on probation. For those arrested, there was no difference between whites and non-whites.

TREATMENT EFFECTS ON CRIMINAL JUSTICE INVOLVEMENT

In 2006, the Department of Correction (DOC), the Department of Public Safety, and DMHAS initiated a study to determine the effects of treatment on correctional inmates with a history of substance abuse problems. The primary question of interest was the rate of re-incarceration and re-arrest by this population in the two years following release from prison. The study was part of an ongoing initiative to link data sets across various state agency populations to determine the effectiveness of substance abuse treatment. Study objectives included: 1) determining rates of treatment access within the correctional population; 2) estimating the rate of treatment need within those involved in the criminal justice system; 3) determining the effectiveness of treatment in reducing criminal justice involvement; 4) informing policy and decision making regarding priority setting; and 5) enhancing the overall understanding of persons in recovery as they transition from prison to community life.

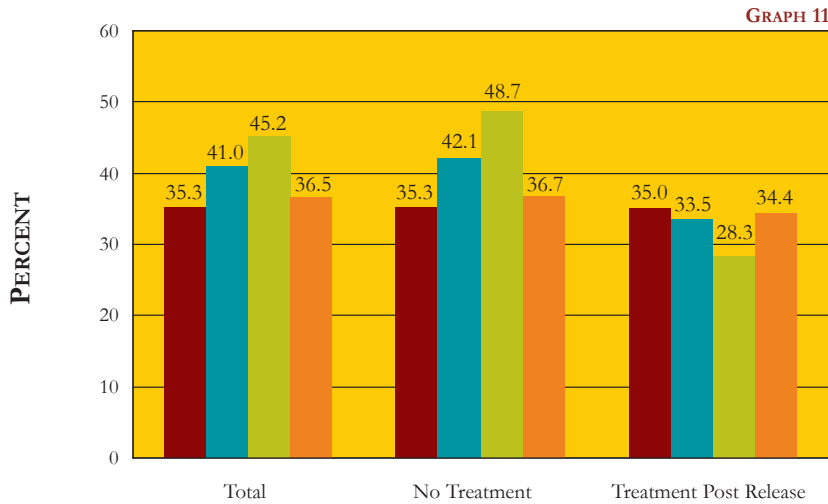
The study included DOC sentenced inmates released during State Fiscal Year 2003. This included those released for time served or who were placed on transitional supervision (TS) or in a halfway house program (HH). Only those having a DOC evaluation indicating a need for substance abuse treatment were included. The "treatment" group comprised those persons receiving substance abuse treatment within five months of their release from incarceration across residential and outpatient care. Persons receiving only detoxification services or treatment later than five months post release were included in the "no treatment" group. Of the eligible 8,759 DOC releasees meeting the study criteria, 3,956 were matched to DMHAS' Substance Abuse Treatment Information System (SATIS). A total of 1,299 persons were included in the final "treatment" study group while 7,460 persons comprised the "no-treatment" group.

Major findings were:

- ◆ Overall, persons more likely to be re-incarcerated within two years of release from prison had a history of violent offenses, had a more severe substance use disorder (as measured by past treatments, in particular detoxification), were younger and non-white. A similar pattern of risk factors was evident for re-arrests rates.
- ◆ Non-whites were 33% less likely to receive treatment post release from the DOC than whites (10% vs. 14.9%).
- ◆ On average, 36.5% of study subjects were re-incarcerated within two years of being released with an average time to re-incarceration of 567 days (about 1.5 years).
- ◆ Inmates who successfully completed in-prison substance abuse treatment had a lower rate of re-incarceration (39.3% vs. 45.3%) than inmates not completing treatment (Graph 12).
- ◆ Overall, those in the treated group had a lower rate of re-incarceration (34.4%) than those not receiving treatment (36.7%) within five months of being released. This held true for re-arrest rates as well, 46.9% vs. 52.1% (Graphs 11 and 13).
- ◆ Persons released to a halfway house and receiving treatment were 42% less likely to return to prison within two years and 37.4% less likely to be arrested than those also released to halfway houses but not receiving treatment (Graphs 11 and 13).
- ◆ When controlling for all risks for re-arrest (i.e., age, race, past criminal justice involvement, past violence, and substance abuse severity) receiving treatment significantly increased the length of time to felony re-arrest across all treatment groups (in-prison, post release, and in-prison/post) when compared to those not receiving treatment (Graph 14).

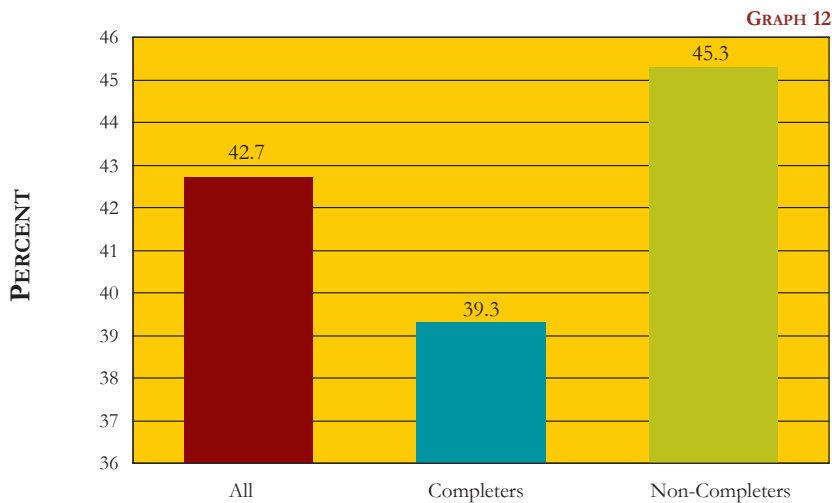
TREATMENT EFFECTS ON CRIMINAL JUSTICE INVOLVEMENT

RE-INCARCERATION RATES BY TREATMENT AND RELEASE TYPES



Persons released under DOC supervision (Transitional Supervision or Halfway House) and receiving treatment in the community had the lowest rates of re-incarceration.

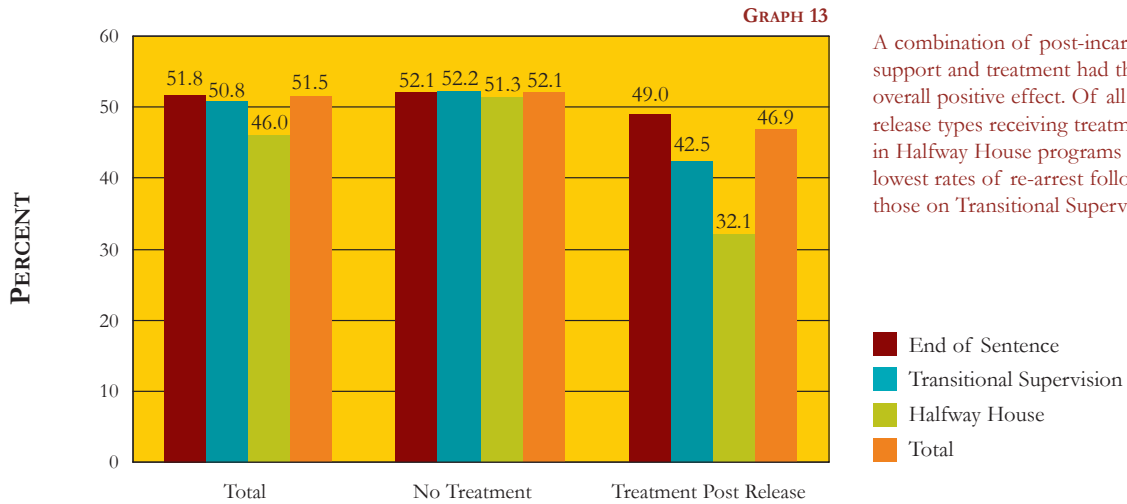
RE-INCARCERATION RATES BY IN-PRISON TREATMENT COMPLETION



Persons successfully completing in-prison treatment were 15% less likely to return to prison within two years after release from prison than treatment non-completers.

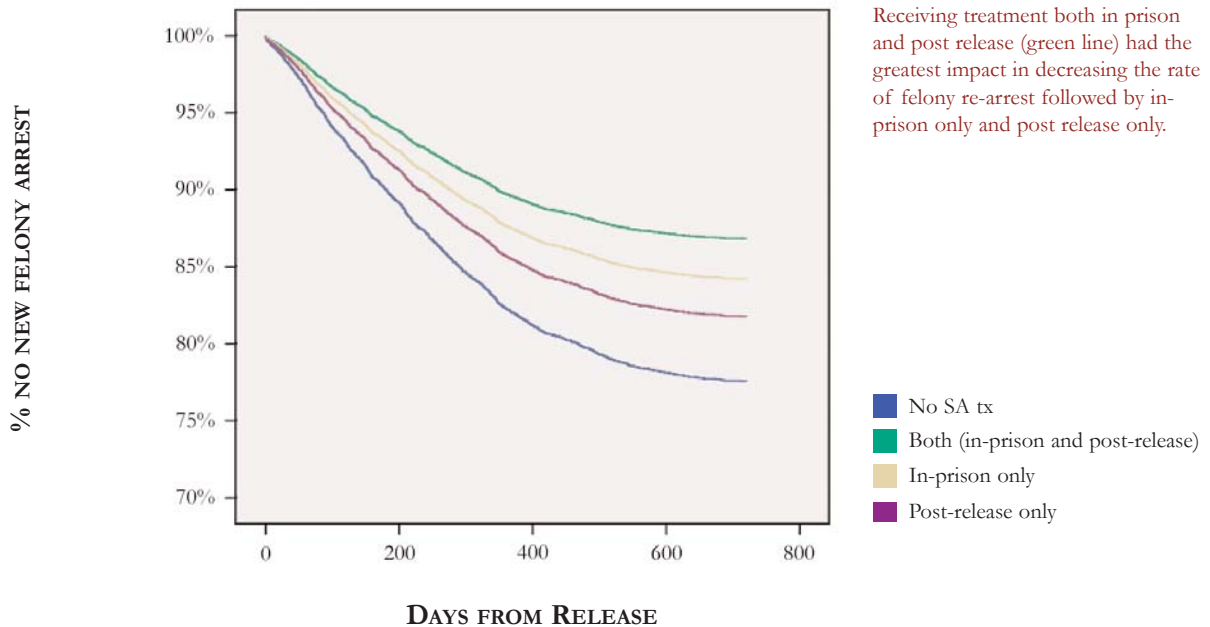
TREATMENT EFFECTS ON CRIMINAL JUSTICE INVOLVEMENT

RE-ARREST RATES BY TREATMENT AND RELEASE TYPES



A combination of post-incarceration support and treatment had the greatest overall positive effect. Of all DOC release types receiving treatment, those in Halfway House programs had the lowest rates of re-arrest followed by those on Transitional Supervision.

TIME TO FELONY RE-ARREST BY TREATMENT TYPES



Receiving treatment both in prison and post release (green line) had the greatest impact in decreasing the rate of felony re-arrest followed by in-prison only and post release only.

PREVENTION DATA

DMHAS, in partnership with other state agencies, has been expanding the state's capacity for collecting, managing, and evaluating interagency substance abuse prevention data. Through federal funding acquired from the Center for Substance Abuse Prevention's (CSAP), a Prevention Data Infrastructure plan was developed identifying strengths and weaknesses relating to data collection, use, and dissemination. Again with federal funding Connecticut is implementing CSAP's Strategic Prevention Framework (SPF) - a data-driven planning process. The SPF process calls for focusing resources directed at the greatest identified problem as measured by a number of objective criteria. Essential to the SPF was the creation of a State Epidemiological Workgroup (SEW).

State, Sub-Regional, and Local Epidemiological Profiles

In the first phase of the SPF, the SEW completed a comprehensive analysis of state-level substance abuse prevention needs assessment data. Applying criteria meant to measure the magnitude (consumption and consequences) of substance use and abuse, a profile of each drug was developed. Other information was considered according to impact and changeability. Graph 15 displays the results from the SPF Advisory Council and SEW ranking. Alcohol consumption and its related consequences were seen by far to be the priority drug needing attention and in particular underage use as the primary concern.

In the second phase, community leaders (e.g., school administrators, public officials) and others were also asked their perception of substance use in their town. Similar to the statewide findings, the largest percentage of key informants reported that alcohol is a "significant problem" across all age groups (Graph 16). Although alcohol was the highest rated problem of significance across the lifespan, respondents noted marijuana and tobacco use as the second and third highest problem substance for adolescents. This was true for young adults as well, with the exception that other illicit drugs tied tobacco as the third greatest problem substance. Tobacco and other illicit drugs tied as the secondary substance of concern for adults age 26-65 with misuse of prescription drugs third.

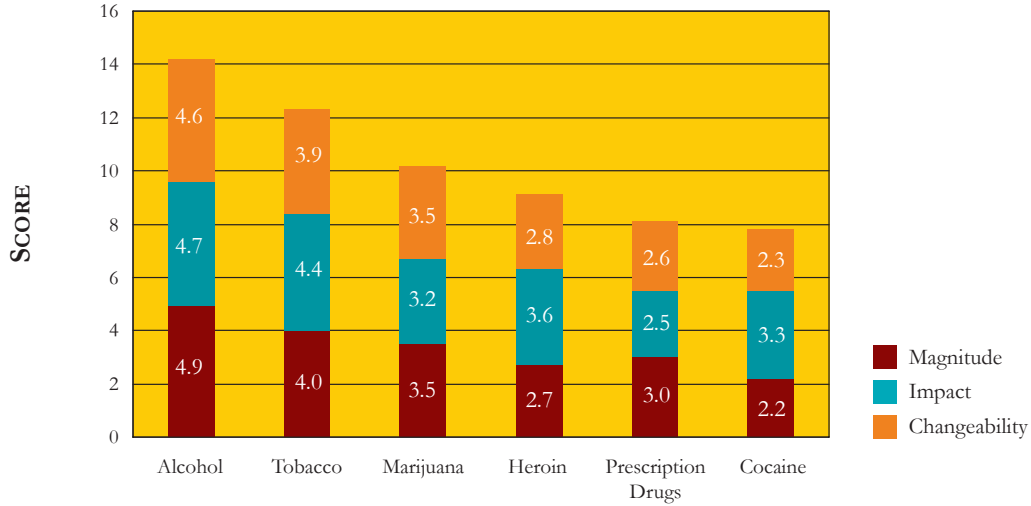
Survey of Alcohol and Drug Use on College Campuses

DMHAS, in collaboration with four Connecticut State Universities, has collected a variety of data on substance use and prevention services at the individual, campus, and campus community level. The Core Alcohol and Drug Survey or Core, facilitates investigation into the nature, scope, and consequences of drug and alcohol use on individual campuses. This information in turn assists administrators and program directors in making sound programmatic decisions based upon specific campus substance use patterns and needs. This survey was conducted in 2004 and 2006.

Analysis of Core Survey data, while ongoing, focused on patterns of past month alcohol and other drug (AOD) use and awareness of AOD policies and prevention efforts. Table 3 shows the change in the AOD profile between 2004 and 2006 as compared to the national profile. These data indicate that underage drinking is on the rise, supporting the need for continued focus on prevention across Connecticut's campuses. Students' perceptions of AOD prevention policies and activities on campus trended upward although none of the five measures of awareness reached statistical significance (Table 4).

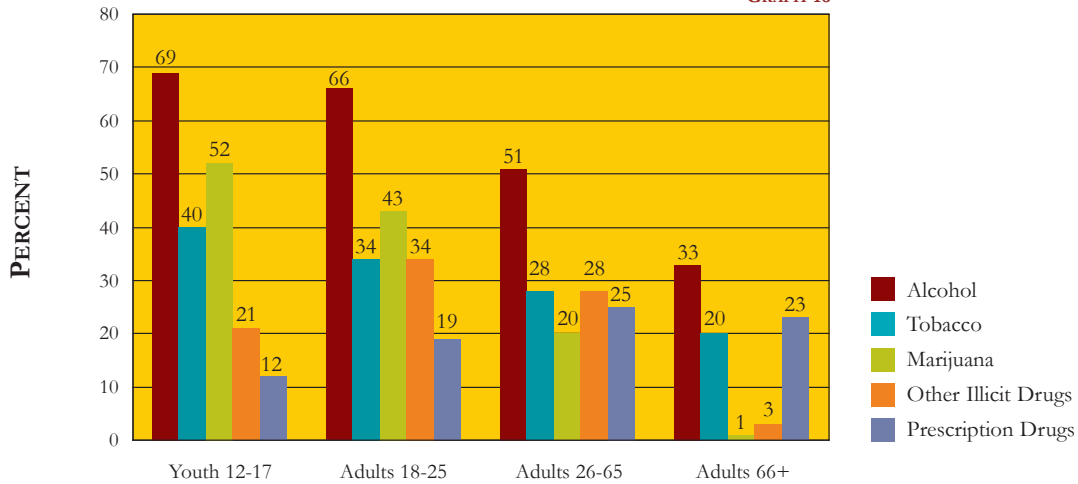
CONNECTICUT
SPF SUBSTANCE PROBLEM RANKING

GRAPH 15



PERCEIVED COMMUNITY ATTITUDE THAT
A SUBSTANCE IS A “SIGNIFICANT PROBLEM” IN
DIFFERENT AGE GROUPS IN THE COMMUNITY

GRAPH 16



**CORE SURVEY: 2004 AND 2006
STATE AND NATIONAL**

TABLE 3

Substance Use Profile:	2004	2006	National
Smoke daily in past month	13%	11%	28%
Current drinker	78%	80%	73%
5 or more drinks/sitting in the past 2 weeks	49%	56%	30%
Drank and drove a car in past year	42%	41%	26%
Weekly marijuana user in past year	16%	17%	17%
Percent reporting illicit drug use in the past 30 days:			
Cocaine	3%	4%	2.1%
Amphetamines	4%	3%	3.3%
Sedatives	3%	3%	2.0%
Hallucinogens	1%	1%	1.0%
Opiates	1%	1%	0.7%
Inhalants	1%	1%	0.5%
Designer Drugs	1%	1%	0.8%
Steroids	1%	1%	0.4%
Other Illegal Drugs	1%	1%	0.8%

**COMPARISON OF STATE UNIVERSITY STUDENTS' PERCEPTIONS OF
ALCOHOL AND OTHER DRUG USE PREVENTION ON CAMPUS
CORE SURVEY: 2004 AND 2006**

TABLE 4

Percent reporting	2004	2006
Campus has AOD policies	79%	83%
Campus AOD policies are enforced	49%	52%
Campus has an AOD prevention program	36%	41%
University concerned about preventing AOD use	67%	68%
Student involved in AOD prevention efforts	4%	5%

STATEWIDE COST ANALYSIS

Information regarding the funding, directly or indirectly, of substance abuse services was gathered from ten state agencies, the Judicial Branch and OPM. Expenditures reported include all funding sources – state, federal, or other. Clearly, the most easily defined service is substance abuse treatment. Treatment dollars, for the most part, are readily identified and reported. Less clearly defined are intervention activities, as the range of services in this category often overlap into prevention services. Therefore, intervention funds are included within prevention expenditures. While CGS Section 17a-451(o) speaks about prevention and education services separately, for purposes of expenditure reporting, these two activities have been combined, as education is one segment of the prevention continuum. The category "deterrence", also a component of prevention services, was added in the 2001 Annual Report but is reported separately as law enforcement activities. A summary of statewide service expenditures by state fiscal years is shown in Table 5, while substance abuse service expenditures by agency for SFY 2005 are included in Table 6.

Overall funding for substance abuse services has grown from SFY 1999 to SFY 2005. The increase in total expenditures between SFYs 2000 and 2001 is partially due to the identification and inclusion of additional state agencies not previously reporting (e.g., DSS Medicaid). While the increase in total expenditures from SFY 2003 to 2005 appears to be substantial (11.7%, not adjusted for inflation), in reality, most of the increase can be attributed to better expenditure reporting, cost of living adjustments, and infusion of federal funds. There were some exceptions to the overall increases in SFY 2005. Judicial-CSSD and Department of Veterans' Affairs (DVA) each reported slight decreases in treatment expenditures while Department of Transportation (DOT) and OPM both experienced drops in prevention expenditures. Overall deterrence expenditures slipped 35% over the two-year period with both DOT and DPS reporting decreased spending.

TABLE 5
SUBSTANCE ABUSE SERVICE EXPENDITURES
BY STATE FISCAL YEARS
(DOLLARS IN MILLIONS)

Services	Prevention*	Deterrence	Treatment	Total
SFY 1999**	\$53.70	N/A	\$136.80	\$190.50
SFY 2000***	\$54.80	\$6.80	\$152.40	\$214.00
SFY 2001	\$55.90	\$8.50	\$153.20	\$217.60
SFY 2002****	\$53.60	\$7.60	\$175.00	\$236.20
SFY 2003	\$47.25	\$8.93	\$182.94	\$239.12
SFY 2005	\$59.21	\$5.76	\$202.04	\$267.01

* Includes substance abuse education, prevention, and intervention expenditures.

** Expenditures for SFY 1999 updated to include Board of Pardons and Paroles and Department of Veterans' Affairs, but missing Department of Public Health.

*** Expenditures for SFY 2000 updated to include Department of Veterans' Affairs' treatment expenditures.

**** Department of Social Services treatment expenditures, omitted in previous SFYs, is reported for SFY 2002 forward.

TABLE 6
SUBSTANCE ABUSE SERVICE EXPENDITURES
BY AGENCY - STATE FISCAL YEAR 2005

Agency	Prevention	Deterrence	Treatment	Total
DMHAS	\$22,495,835	\$0	\$128,862,295	\$151,358,130
JUDICIAL-CSSD ¹	\$16,284,160	\$0	\$10,856,107	\$27,140,267
DCF	\$3,212,678	\$0	\$14,128,612	\$17,341,290
DOC ²	\$0	\$0	\$10,616,883	\$10,616,883
SDE	\$13,040,000	\$0	\$0	\$13,040,000
DMV ³	\$0	\$0	\$0	\$0
DOT ⁴	\$1,111,192	\$2,822,297	\$0	\$3,933,489
DPH ⁵	\$969,522	\$0	\$0	\$969,522
DPS	\$84,000	\$2,936,582	\$0	\$3,020,582
DSS ⁶	\$0	\$0	\$37,175,576	37,175,576
DVA	\$0	\$0	\$397,873	397,873
OPM	\$2,016,082	\$0	\$0	\$2,016,082
PAROLE ⁷	\$0	\$0	\$0	\$0
TOTAL	\$59,213,469	\$5,758,879	\$202,037,346	\$267,009,694

1. Increase in prevention expenditures and non-clinical treatment related interventions include legislatively funded probation transition and technical violation unit programs and services. General enhancements to the current continuum of non-clinical treatment related interventions in the statewide alternative to incarceration network were also made during this period and there was a realignment of expenditures following the collaborative contracting process which resulted in some expenditures being reidentified as prevention/intervention rather than treatment.
2. Treatment expenditures include services provided to offenders in Parole & Community Services. Also unused VOITTS funds were returned to OPM. Increased expenditures are due to a rise in personnel expenditures and an increase in Substance Abuse beds from 154 to 184.
3. Clients pay for retraining/education and required substance abuse treatment programs.
4. All figures are based on Federal Fiscal Year, (October 1 through September 30). Prevention costs from Transportation Safety Section staff salaries, public information and education initiatives and media. Deterrence costs from law enforcement initiatives.
5. The expenditures reflect expanded program activities including smoking cessation and tobacco prevention programs.
6. Medicaid expenditures for substance abuse treatment are based on HEDIS diagnoses, using all ICD-9 codes that start with 291, 292, 303, 304, and 305. This excludes pharmacy, transportation, and Medicare crossover claims, none of which has a diagnosis on the claim. It may exclude claims that were not paid when the data was requested.
7. All Board of Parole outpatient and residential drug treatment expenditures are transferred to, and captured in, the Department of Correction expenditures.

CONCLUSION AND RECOMMENDATIONS

Some of the findings in the 2006 Biennial Report are not astounding and, in fact, may be somewhat predictable given past trends. For instance, heroin continues to be the most frequently reported primary problem substance at time of treatment admission. This follows a four-year trend which saw alcohol drop to second place (SFY 2003) as heroin admissions grew. The encouraging news is that the rate of primary heroin treatment admissions has begun to slow. On the other hand, the alarming news is that heroin admissions for young adults (18-24) are increasing. Some of the growth may be attributable to earlier initiation of non-medical use of pain relievers or other synthetic opiates. According to the National Survey of Drug Use and Health (NSDUH, 2006), persons 12 and older who abuse prescription pain relievers report obtaining them mostly (70% of the time) from friends or relatives. Findings from the same survey reported that the number of persons trying pain relievers for their first time surpassed those trying marijuana. This was the first time that the number of marijuana initiates dropped to second place for all illicit drugs. Clearly there is cause for action to stem the tide of non-medical use of prescription opiates in the form of better public awareness, earlier intervention, and more age-appropriate treatment services tailored to young adults.

While the rate of primary admissions for alcohol has dropped, concern over the consequences (alcohol-related vehicle fatalities and accidents, domestic violence, alcohol-related unintentional injuries, sexual violence, etc.) of this drug persists. Recent national studies such as Columbia University's National Center on Addiction and Substance Abuse (CASA) report: *Wasting the Best and the Brightest: Substance Abuse at America's Colleges and Universities* (March 2007) and the Surgeon General's *Call to Action To Prevent and Reduce Underage Drinking* (2007) point to the fact that there has been no significant reduction in the proportion of college students who binge drink, who drink to get drunk or in their frequency (10 or more occasions in past month) of drinking. In fact most of those indicators have gone up between 1993 and 2005. Many (66%) of these college students began drinking in high school. In addition to alcohol abuse, use of prescription pain relievers by students has increased 300% from the early 1990s (CASA, 2007). In Connecticut the federally funded Strategic Prevention Framework (SPF) project initiated an examination of the most pressing drug problem in the state. Their conclusion, like others, is that alcohol use disorders (AUD) have a devastating effect on our lives, communities, and institutions. The SPF State Advisory Council fully endorsed alcohol as the most pressing problem substance facing Connecticut and, in particular, underage use.

Over the past three years, a positive trend has been reduced utilization of acute care services, i.e. detoxification, with emphasis on better coordination of care and earlier connection to medication assisted therapies (e.g., methadone maintenance, buprenorphine), particularly for opiate-dependent persons. These changes have brought about increased service capacity serving more individuals with a substance use disorder and providing better outcomes for those with long-standing addictions. At the same time, with the average age of admission showing little change over the decades, improvements in age-appropriate services are critically needed to attract and retain persons with substance use disorders earlier in their addiction. As noted above, this certainly includes appropriate services for young adults but also older adults as the state's baby boomer population ages. Older adults face different substance abuse issues such as late onset of alcoholism and misuse of prescription drugs. This will call for new methods of treatment outreach and engagement. Other demographic changes also will challenge Connecticut's addiction services system such as a growing and culturally diverse population, and the need to respond with specific culturally competent services.

CONCLUSION AND RECOMMENDATIONS

Based upon findings from the DOC/DMHAS/DPS recidivism study more needs to be done to break the cycle of addiction and criminal justice involvement. As reported, DOC inmates released to a half-way house or transitional supervision who also received treatment had a demonstrated return on investment in the form of reduced rates of re-incarceration, re-arrest and reduction in violent offenses. Assuring adequate post-release services in the form of continuing care in the community, vocational and educational services, housing and other such supports is essential to a successful reentry into community life and ongoing recovery from addiction. Further analysis of the DOC/DMHAS/DPS linked data sets to determine the benefit/cost ratio related to receiving treatment post-release from the DOC is needed to inform decisions about the expansion of such services.

Reporting of "population overlaps" or the shared responsibility of those served in Connecticut's public addiction, and health and human services system indicates only incremental change over the past seven years. Analysis using PPE (Probabilistic Population Estimation) was implemented as a means to measure the state's progress to address the needs of persons with substance use disorders. National and other state studies have shown that better access to treatment can vastly offset societal costs (welfare, child abuse/neglect, criminal justice involvement). Overall PPE provides a method to look at access to care within specific populations and to some extent within race and gender. A finding in the 2002 Annual Report on the Collection and Evaluation of Data Related to Substance Use, Abuse and Addiction Programs indicated that non-white inmates had poorer access to treatment either prior to, or upon release from prison. This finding was substantiated in the DOC/DMHAS/DPS data linkage recidivism study and the updated PPE analysis presented in this report. Overall, treatment access by non-whites was 27% to 33% less than that of whites. Based upon the two independent findings, it is suggested that further examination be conducted as to why this is so, with focus on providing better treatment access for non-white populations in the future.

Over the next two years work will continue on PPE analysis, identifying a data linkage study, and reporting of outcome-based findings. Additionally, analytic work will encompass youth and adolescents, something that has been missing or limitedly reported in the two previous reports. Under discussion at this time is a data linkage study focusing on DCF and Juvenile Justice youth as they age into the DMHAS (adult) treatment system. Of importance is how well these youth, turning into young adults, receive continued care and their interaction with DMHAS and other state agencies. On a system or community level, the SPF project will continue its collection of social indicators from various state agencies, expanding and enhancing the scope of what is collected and analyzed. Lastly, consideration of improved methods of determining populations in need of treatment, particularly those served in the public sector, will be a high priority for the 2008 Biennial Report.