

**Final Report to the  
MA Treatment Study Committee  
of the  
Nebraska Community Corrections Council:**

**MOVING PAST THE ERA OF GOOD INTENTIONS:  
METHAMPHETAMINE TREATMENT STUDY**

**State of Nebraska Contract No. 12969-04**



University of Nebraska at Omaha  
Omaha, NE 68182  
(402) 554-3794

May 2006

Principle Investigator: T. Hank Robinson, Ph.D.  
College of Public Affairs and Community Service

# MOVING PAST THE ERA OF GOOD INTENTIONS: METHAMPHETAMINE TREATMENT STUDY

May 2006

Principle Investigator: T. Hank Robinson  
College of Public Affairs and Community Service

## Research Team:

### UNO Juvenile Justice Institute

Esperanza Camargo  
Shannon Crowley  
Harold J. Geistman, Jr.  
Nicole Kennedy  
T. Hank Robinson  
Ruth Zhao

### UNO School of Social Work

Theresa Barron-McKeagney  
Gwen Weber

### UNO School of Public Administration

Samuel L. Brown

### UNO Center for Public Affairs Research

Jerome A. Deichert  
R. K. Piper

### UNO Department of Criminal Justice

Lisa L. Sample

### Consultant

Joan Frances

### The Russell Center, LLC

Valerie Russell

## **Acknowledgments Page**

The Methamphetamine Treatment Study Team thanks everyone whose contributions in time, information and resources made the preparation of this report possible. We especially appreciate the extra effort of Linda Krutz and Julie Rogers whose vigilance over the past nine months helped the team to remain on track and on time.

Special appreciation is also expressed for the hospitality and cooperation we invariably received from the administrators and staff at the Hastings Regional Center, Work Ethic Camp, and Norfolk Regional Center.

Finally, we send our gratitude to the administrators and staff of HHSS, DCS, Probation, and the Nebraska Crime Commission. Without your data, time, insight and feedback, the Initial Report could never have been completed.

# Table of Contents

<b>ACKNOWLEDGMENTS PAGE .....</b>	<b>1</b>
<b>TABLE OF CONTENTS.....</b>	<b>2</b>
<b>LIST OF FIGURES.....</b>	<b>4</b>
<b>LIST OF TABLES .....</b>	<b>4</b>
<b>LIST OF ACRONYMS &amp; ABBREVIATIONS .....</b>	<b>6</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>7</b>
<b>INTRODUCTION.....</b>	<b>13</b>
Fact or Myth: The accuracy of common ideas about methamphetamine .....	13
The Methamphetamine Treatment Study .....	28
Methodology.....	28
Research Context.....	30
Continuum of Care.....	31
<b>METHAMPHETAMINE ADDICTION IN NEBRASKA.....</b>	<b>34</b>
How many Nebraskans use MA? .....	34
How many Nebraskans need MA treatment? .....	36
How long does treatment last?.....	39
How many treatment facilities are there in Nebraska? .....	39
How does MA impact the Nebraska state budget? .....	45
How does MA impact the Criminal Justice and Social Service Systems? .....	47
<b>BEST PRACTICES .....</b>	<b>51</b>
Review of Treatment Methods and Best Practices Literature.....	51
Best Practices Roundtable Discussions .....	73

<b>OVERVIEW OF RECOMMENDATIONS.....</b>	<b>103</b>
<b>IMPLEMENTATION PLAN .....</b>	<b>105</b>
Voucher Fund .....	105
Day Reporting Centers.....	106
Database .....	112
Scarcity of Treatment Providers .....	113
Case Management.....	115
Referral Services.....	117
Assessment.....	117
Relapse Prevention .....	119
Work Ethic Camp.....	119
Department of Correctional Services Treatment Facility.....	121
Centralized Coordination of Implementation Plan .....	123
<b>COST STUDY: THE BENEFITS OF TREATING METHAMPHETAMINE .....</b>	<b>124</b>
Treatment vs. Incarceration .....	124
Sensitivity Analysis .....	125
Cost Estimates of Implementation Plan.....	126
<b>UNFINISHED BUSINESS .....</b>	<b>128</b>
<b>BIBLIOGRAPHY .....</b>	<b>131</b>
<b>APPENDICES .....</b>	<b>137</b>
Appendix A: Crosswalk of Substance Abuse Services .....	138
Appendix B: Attendance List for Best Practice Roundtable Discussions .....	146
Appendix C: Tables on State SA Spending for Nebraska and 6 Surrounding States.....	148
Appendix D. Drug Dependence-Abuse Estimates.....	156
Appendix E: Explanation of the TEDS and NSSATS .....	167

**List of Figures**

*Figure 1. Percentage of Adult Arrestees Testing Positive for Illegal Substances. Source: Arrestee Abuse Monitoring Program-ADAM. .... 35*

*Figure 2. Adult Male Arrestees Testing Positive for Methamphetamine. Source: Arrestee Abuse Monitoring Program-ADAM. .... 36*

*Figure 3. Substance Abuse Treatment Admissions Comparing Amphetamines to All Substances. .... 39*

*Figure 4. Nebraska Substance Abuse (SA) Treatment (Tx) Facilities by Region. .... 40*

*Figure 5. Nebraska Substance Abuse Treatment Admissions. Source: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode. .... 42*

*Figure 6. Professional Capacity in Nebraska. Source: Nebraska Health and Human Services System. 43*

*Figure 7. Summary of Nebraska State Spending on Substance Abuse (1998). .... 46*

*Figure 8. Distribution of MA Arrestees by Offense Category. ADAM Data. .... 47*

*Figure 9. Flow of Offenders through Nebraska's Justice System. .... 49*

*Figure 10. Intersection between Parent or Offender and HHSS/Justice Agencies. .... 50*

**List of Tables**

*Table 1. Breakdown by Profession of 2005 MA Treatment Best Practice Roundtable Discussions. .... 28*

*Table 2. Methamphetamine Treatment-Facility Cost Research Questions and Data Sources/Published Reports Consulted ..... 30*

*Table 4. Staffing needs at each level of care for substance abusers in Nebraska. .... 33*

*Table 5. Drug Abuse and Treatment Admission Estimates in Nebraska, 2003. .... 35*

*Table 6. Illicit Drug-Related Dependent/Abusers Needing But Not Receiving Treatment in Nebraska and Behavioral Health Regions (2003). .... 36*

*Table 7. Estimated Need for Treatment in Nebraska Based on MA-related Offenders. .... 38*

*Table 8. Durations by level of care comparing residential and outpatient programs. .... 39*

*Table 9. Nebraska Substance Abuse Treatment Facilities and Clients in Treatment on March 31, 2003, by Type of Care. .... 41*

*Table 10. Nebraska Substance Abuse Recovery Homes. Source: Nebraska Health and Human Services System, Nebraska Substance Abuse Recovery Homes, updated 6/16/05 ..... 41*

*Table 11. Mental Health Practitioners & Alcohol and Drug Counselors by Nebraska Behavioral Health Region. .... 43*

*Table 12. Locations of Psychologists, C/LADAC, and LMHP's by Nebraska Region; UNMC Health Professions Tracking Center. (2003) ..... 44*

*Table 13. Locations of Mental Health Professionals by Nebraska Region; UNMC Health Professions Tracking Center. (2003) ..... 44*

*Table 14. FY06 Funding Allocations for Substance Abuse & Addiction Services, as provided by Nebraska Health & Human Services. .... 47*

*Table 15. Distribution of MA Arrestees by Offense Category for Three Cities-ADAM. .... 48*

*Table 16. Barriers to Implementing Best Practices in Maximizing Treatment Engagement, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005. .... 79*

*Table 17. Barriers to Implementing Best Practices in Assessments and Orientations, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005. .... 81*

*Table 18. Barriers to Implementing Best Practices in Planning Treatment, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005. .... 82*

*Table 19. Barriers to Implementing Best Practices in Initiating Treatment, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005. .... 85*

<i>Table 20. Barriers to Implementing Best Practices in Initiating Abstinence, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.</i>	86
<i>Table 21. Barriers to Implementing Best Practices in Maintaining Abstinence, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.</i>	87
<i>Table 22. Barriers to Implementing Best Practices in Relapse Prevention, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.</i>	89
<i>Table 23. . Barriers to Implementing Best Practices in Medical Aspects, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.</i>	91
<i>Table 24. Barriers to Implementing Best Practices for Special Groups and Settings, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.</i>	94
<i>Table 25. Barriers to Implementing Best Practices for Education, Training &amp; Staffing, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.</i>	100
<i>Table 26. Barriers to Implementing Best Practices for Community Support, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.</i>	102
<i>Table 27. Sensitivity Analysis of Cost-Benefit Ratios of Prior Studies-Brown</i>	125
<i>Table 28. Hypothetical Treatment Case-Study I</i>	126
<i>Table 29. Hypothetical Case Study II</i>	127

## List of Acronyms & Abbreviations

<b>ASI</b>	Addiction Severity Index
<b>Ax</b>	Assessment
<b>CADAC</b>	Certified Alcohol/Drug Abuse Counselor
<b>CASA</b>	National Center on Addiction and Substance Abuse at Columbia University
<b>CASI</b>	Comprehensive Adolescent Severity Inventory
<b>COMET</b>	Co-occurring Methamphetamine Expanded Treatment
<b>CSAT</b>	Center for Substance Abuse Treatment
<b>DARE</b>	Drug Abuse Resistance Education
<b>DATCAP</b>	Drug Abuse Treatment Cost Analysis Program
<b>DCS</b>	Department of Correctional Services
<b>HCC</b>	Hastings Correctional Center
<b>HHSS</b>	Nebraska Health and Human Services System
<b>HRC</b>	Hastings Regional Center
<b>JCAHO</b>	Joint Commission on Accreditation of Health Care Organizations
<b>JSAT</b>	Justice Substance Abuse Subcommittee
<b>LADAC</b>	Licensed Alcohol and Drug Abuse Counselor
<b>LMHP</b>	Licensed Mental Health Professionals
<b>LOC</b>	Levels of Care
<b>MA</b>	Methamphetamine
<b>NIDA</b>	National Institute on Drug Abuse
<b>N-SSATA</b>	National Survey of Substance Abuse Treatment Services
<b>PSI</b>	Pre-Sentence Investigation
<b>PTSD</b>	Post Traumatic Stress Disorder
<b>SAMHSA</b>	Substance Abuse and Mental Health Services Administration
<b>SAO</b>	Substance Abuse Officer
<b>SICA</b>	State Incentive Cooperative Agreement
<b>STD</b>	Sexually Transmitted Diseases
<b>TASC</b>	Treatment Accountability and Safer Communities
<b>TEDS</b>	Treatment Episode Data Set
<b>TIP</b>	Treatment Improvement Protocol
<b>Tx</b>	Treatment
<b>WEC</b>	Work Ethic Camp
<b>WIC</b>	Women, Infants and Children Program



## Executive Summary

In the crush of anticipation surrounding the release of the *Initial Report* in December, 2005, much attention was focused on specific recommendations for policy makers to consider during Nebraska's 99<sup>th</sup> Legislature. The *Final Report* retains recommendations for adjusting Nebraska's substance abuse treatment system, however, it is hoped that with the urgency of the legislative session relieved, more consideration will be given to the specific research findings reported here.

The first irony of any research project is that good reports provide a foundation of information from which more questions are generated. That was certainly the case with the *Initial Report*. In response to the Community Corrections Councils' close scrutiny and analysis, the research team was challenged to use the *Final Report* to: 1) re-emphasize the nature of the methamphetamine ("MA") problem in Nebraska, 2) extend the original findings to reflect comments and concerns raised about the *Initial Report*, and 3) establish a base-line from which future program design, policy debates, and scholarly research could proceed without having to start from scratch.

The second irony of this type of project is that comprehensive research prompts collateral inquiries into topics which were not expected to fall within the original scope of the research effort. The research team could not have anticipated how much work remains to be done before the MA problem can be fully understood. For example, it has only been in the last month and a half that we began to comprehend the global dynamics of large-scale MA production. Although tentative findings are reported in this *Final Report*, a supplemental report is being prepared to detail what many will consider the most exciting discovery of the entire project: the potential eradication of MA.

Finally, this report provides the research team with the opportunity to clarify issues and make corrections resulting from the *Initial Report*. The body of the *Final Report* addresses the bulk of these, but we would like to immediately clarify a use of terms which may have caused some confusion in the *Initial Report*. When the reports refer to Nebraska's "substance abuse treatment system" without capitalization, they refer to the State's entire, general substance abuse treatment system, not, the Department of Health and Human Services System. The Behavioral Health Services (BHS) division has a strong record of innovation, advocacy, and leadership in the areas of substance abuse treatment and mental health. Criticisms, observations, and recommendations for Nebraska's "substance abuse treatment system" are not aimed at BHS specifically, but are addressed, instead, to that web of providers, agencies and administrative systems which make up the whole integrated complex.

## Methamphetamine Only Treatment

The MA problem is often discussed in ways which imply that a substantial number of addicts are singularly dependent on methamphetamine. In truth, such persons occur so rarely, that focusing on this archetype can lead policy makers to mistakenly conclude that methamphetamine-specific responses will produce meaningful results.

Instead of this clear-cut, narrowly targeted population, the State must develop treatment response strategies for a more difficult, insidious pattern of addiction. The majority of methamphetamine users can be best classified as general substance abusers. While the debilitating physical and psychological consequences of their methamphetamine use are

frequently the extreme symptoms which draw the attention of social service and justice professionals, these addicts are equally dependent on other drugs. Misuse of alcohol and other drugs almost inevitably precedes the experimentation which produced the addict's eventual dependency on methamphetamine. As the highs and cravings of the methamphetamine habit gradually monopolize the user's attention and resources, the desire for some drugs may diminish, but the pharmacological effects of others, especially alcohol, simply complement the experience. Studies show that as addicts receive treatment for their "primary" dependency on methamphetamine, many compensate by increasing their use of alcohol and marijuana. If treatment services fail to address the methamphetamine addict's struggle to abstain from all legal and illegal alternatives, then the user has been set up to simply swap one substance for another. Worse, in an inadequate system of recovery and relapse prevention services, it places the user at risk of gravitating back to methamphetamine when alternative drug use eventually proves unsatisfying.

From a clinical treatment perspective, methamphetamine use clearly indicates a need for a specialized case-plan which accounts for how methamphetamine factors into the overall constellation of an addict's recovery. From the standpoint of justice and social service systems, however, the broad array of chemical dependency services required to promote long-term abstinence do not support the creation of a unique treatment infrastructure particularized for methamphetamine. In other words, the most effective treatment model for alcoholism may differ substantially from the most effective treatment model for methamphetamine, but both require the same types of treatment services.

The first step to resolving the methamphetamine problem demands that policy makers and government officials understand this critical distinction. Methamphetamine use determines the *individualized treatment* plan of an addict, but bears little on *society's response* to methamphetamine addiction. The crisis of methamphetamine abuse certainly signals a shortage of effective methamphetamine treatment, but it also reveals the inadequacies of Nebraska's overall substance abuse system. The methamphetamine treatment needs of the criminal justice and health and human services systems cannot be distinguished from the alcohol, cocaine, marijuana, or other drug abuse treatment needs of those systems: they are one and the same.

## **The Continuum of Assessment, Treatment and Recovery**

The recipe for recovery from methamphetamine addiction does not require Nebraska to develop innovative strategies. Put plainly, the continuum of successful drug and alcohol treatment services is as follows:

1. A standardized, validated assessment of the nature and severity of a person's chemical dependency;
2. The design of a case-plan which accounts for the person's substance abuse factors within the context of their individual lives and legal constraints;
3. The provision of treatment services matching the person's short-term, individualized treatment needs; and,
4. The provision of recovery and relapse prevention services which support the person's life-long effort to remain clean and sober.

The challenge facing Nebraska lies not in the complexity of the response needed to combat methamphetamine addiction, but in manifesting the will to establish a complete continuum of assessment, treatment and recovery. Alcoholics are taught that recovery is a life-long process. As a state, however, Nebraska has been slow to accept that not only is it a long-

term process for the individual, it also demands a long-term commitment from society. Once the sobriety of an addict has been stabilized through initial treatment, their continued abstinence will always depend on the accessibility of recovery support and relapse prevention services.

## **Nebraska's Existing Capacity**

Ultimately, the recommendations for the State turn not on the prevalence of methamphetamine users in any given justice or social service system, but on the State's ability to establish the continuum of assessment, treatment and recovery as needed beneath all substance abusers. Perhaps one of the most surprising findings from the research reveal that Nebraska cannot buy its way out the biggest obstacle to substance abuse reform, at least not very quickly. Nebraska presently faces such a severe shortage of substance abuse clinicians and treatment professionals that every level of service within the continuum of care has a waiting list. Justice and treatment professionals from all over Nebraska report that regardless of an individual's personal financial resources, obtaining even the initial assessment on which so many critical legal and treatment decisions depend can be delayed for weeks. Similarly, once an assessment has been obtained, the addict faces more delay as they wait for admission to the most appropriate level of treatment, if it exists at all.

The ramifications of this shortage are fairly obvious in terms of treatment for methamphetamine abuse. The impact on the justice and social service process is equally profound, though more subtle. The primary mission for justice and social services is to hold substance abusing offenders accountable for their crimes and/or the family crises they have caused as a result of abuse or neglect. When criminal rehabilitation and the restoration of parental responsibility turn on the elimination of a person's substance abuse problem, these waiting lists and gaps in the continuum of assessment, treatment and recovery become part of the transactional calculus offenders and neglectful parents use to avoid the compelled surrender of addiction. Addicts play justice professionals, social service workers, and treatment providers against each other by exploiting these gaps and shortages as excuses for their lack of recovery progress.

It would seem that the solution to this dilemma turns on the State's ability to quickly develop a cadre of clinicians and treatment specialists to fill these gaps. Increasing reimbursement levels might motivate more people to complete the rigorous education and training requirements to become treatment professionals and possibly improve Nebraska's ability to recruit and retain them from other states. As other Nebraska studies have shown, however, this strategy provides only a partial remedy. While the State must seriously consider the incentives it can create to grow the number of treatment specialists, the payoffs from this effort are likely to be years in the making.

## **Intersecting Treatment Needs with Justice/Social Service Process**

When one considers the specific missions, separate budgets and differing philosophies of Nebraska's social service and justice systems, it is easy to see how these agencies are viewed as silos of command rather than an integrated network. At the same time, the State's response to the methamphetamine and substance abuse problem requires it to recognize that all of these agencies are actually points within the flow of the justice and legal process. Viewed as a stream of decisions and response, rather than administrative units, one sees the vast potential of this stream to quickly and dramatically alter the course of substance abuse for individual offenders/parents and the State as a whole. When earlier stages of the justice and social service

process successfully intervene in the offender/parent's substance abuse problem, more expensive, intensive levels of supervision or incarceration are avoided.

The trick, of course, is to develop levels of service and treatment beneath all points of the HHSS and justice systems which are appropriate to their statutory authority and inherent structure. These strategies must seal the gaps, shorten the delays, and remove the explicit barriers to recovery now found in Nebraska's present substance abuse system. To reduce methamphetamine abuse, an infrastructure must be laid which enforces a state-wide response to the problem and channels addicts into a fast-flowing stream of recovery in which it is easier to succumb than escape.

The main recommendations for changing or expanding the infrastructure for Nebraska's methamphetamine response system include:

- *Developing more substance abuse treatment professionals state-wide;*
- *Increasing awareness of methamphetamine-specific treatment models among professionals throughout the state;*
- *Incentives for treatment providers to expand and develop localized methamphetamine abuse treatment programs;*
- *Funding and legislative action to establish and staff day/night reporting centers across Nebraska in support of Probation, Parole, drug courts, and diversion programs;*
- *An increased utilization of the WEC as a methamphetamine treatment facility for those offenders whose crimes and risk to others do not warrant incarceration by DCS;*
- *A centralized substance abuse treatment facility for offenders sentenced to prison;*
- *Expanding the use of ASI/CASI evaluations and the standardized reporting format throughout all of justice and HHSS;*
- *A centralized database where substance abuse evaluation results and treatment summaries are kept and accessed by social service, justice, and treatment providers;*
- *Ongoing research to drive targeted capacity expansion for treatment and recovery services;*
- *Ongoing research to monitor the effectiveness of treatment programs; and*
- *Creating an office which can coordinate the implementation of any recommendations which may be adopted and report to the Governor, Legislature, and Supreme Court on the progress being made.*

Of these recommendations, the proposal from the *Initial Report* which caused the most controversy was the call for a centralized substance abuse facility for offenders sentenced to prison. Setting aside disagreements to the facility being developed in Norfolk, the main objection to the facility related to a misunderstanding about the population it is intended to serve. Following the press reports about the *Initial Report*, the public response revealed that the research team had failed to adequately explain the reasoning and goal of this recommendation.

Nebraska's justice and social service agencies must address the MA and substance abuse treatment needs of two distinct groups. The first group includes approximately 8,000 offenders a year who will be processed within the criminal justice system, but who will not be sentenced to prison. In general, the offenders in this group will enter diversion programs, drug courts, and sentenced to Probation. With appropriate community-based, out-patient treatment and recovery support services, *these offenders will not require treatment at a centralized facility.* To

effectively treat this group, Nebraska must develop a state-wide network of localized services which enables these offenders to beat back their addiction in their home communities. Many of these services will overlap with the community-based mental health programs being developed as a result of mental health reform. This recommendation is in absolute agreement with the State's philosophy of moving away from centralized treatment facilities for mental health.

The second group is made up of approximately 530 MA users per year who will be committed to the custody of the Department of Correction Services or, in other words, 530 men and women sentenced to prison. Since these offenders will be forcibly removed from their home communities and incarcerated in DCS correctional facilities, it will be impossible for them to access the community-based treatment network. Research shows that the most effective way to treat the substance abuse problems of prisoners is to separate them from the general population of a correctional facility in what is generally referred to as a "therapeutic community". This allows treatment staff and prisoners to focus on recovery away from the distraction of the typical issues surrounding prison life. There are basically two ways that therapeutic communities can be arranged: 1) separate wings or living units within a larger prison which are restricted to inmates undergoing treatment, or 2) an entirely separate facility populated only by inmates who are undergoing treatment. Over the years, Nebraska has used both methods, but at the present time, DCS does not have a correctional facility which operates solely as a treatment facility. *The recommendation for a centralized MA and substance abuse treatment facility was strictly for the treatment of prison inmates.* The Legislature has charged the Community Corrections Council with the task of reducing the State's reliance on incarceration as a response to criminal offending. There are two ways in which the State can attempt to reduce its reliance on incarceration for offenders who use MA or other substance abuse problems. First, it can develop effective community-based treatment services for offenders who have not yet earned a prison sentence. This was the basis for recommending that localized recovery services be developed for the 8,000+ offenders each year who have not yet earned a prison sentence. Hopefully, offenders who succeed in community-based substance abuse services will not recidivate and thereby avoid an eventual prison sentence.

The second way the State can reduce its reliance on prisons is to expand effective treatment programs for inmates. In Nebraska's present system, many inmates are denied parole each year because they have not completed substance abuse treatment. This leads the State's prison population to be artificially inflated because inmates who would otherwise be paroled and out of prison cannot be released because they have not completed substance abuse treatment. After considering the long-term expense, and comparing the relative benefits of building a separate treatment facility versus expanding treatment capacity within Nebraska's existing correctional facilities, the MTS research team recommended that the State build a separate, centralized treatment facility dedicated solely to the MA and substance abuse treatment needs of the 530 offenders sentenced to prison each year.

Contrary to some people's impression following the *Initial Report*, the MTS research team has repeatedly, consistently, rejected the idea that Nebraska should develop a centralized treatment facility for the typical MA user.

## **Conclusion**

There used to be a public service announcement which ended with "No one wants to be a drug addict when they grow up." If that is true, then it is only natural that we wonder, "why do people become drug addicts?"

Researchers have published libraries full of journal articles arguing over the causes of drug addiction. Those leaning toward individual choice contend that the use of drugs and alcohol reflect a life-time of deliberate decisions some people make in search of excitement or in rebellion against authority. At the other extreme, social theorists argue that the lingering effects of trauma from divorce, parental neglect, parental example, low achievement in school, inequities in economic opportunity, social ostracism, or peer pressure lay a foundation of pain and discontent which drives people to find some escape or relief through the use of drugs and alcohol.

Ideally, research into the causes of addiction could lead the State to develop iron-clad prevention programs which keep every juvenile and adult from using MA or any other drug or alcohol. For the time being, however, it appears researchers are no closer to identifying the “cause(s)” of addiction than they were fifty years ago. This is not to imply that prevention programs are wholly ineffective, but they provide no help in addressing the pressing needs of the tens of thousands of substance abusers with which Nebraska’s justice and social service systems must immediately contend.

In his keynote address to the Nebraska Juvenile Justice Association’s Annual Conference in May 2006, psychologist Stanton Samenow said that researchers and treatment providers cannot help a person surrender a substance abuse problem by worrying over the root causes of their addiction. Instead, he urged conference attendees to think of a substance abuse problem like a scratch on a table. The measures required to fix the table depend on the properties of the table and finish, not the way in which the table was damaged. Many may disagree with Samenow’s particular strategy for treating addiction (in fact, much of the research related to the effectiveness of coerced treatment directly contradicts his therapeutic philosophy), but his metaphor of the scratched table holds a great deal of merit.

The strategies contained in the *Initial* and *Final Reports of the Methamphetamine Treatment Study* reflect the prevailing best practices for MA and substance abuse treatment. The recommendations include all the tools needed to provide MA users with effective treatment programs and recovery support services. By adopting systematic, standardized assessments and relying on those treatment techniques for which positive outcome results can be proven, Nebraska will greatly increase its success in this battle—no matter what propelled a particular user down the road of addiction.

## Introduction

The purpose of the *Initial Report* of the Methamphetamine Treatment Study (December 2005) was to provide the Community Corrections Council sufficient information and recommendations that it could develop programming plans and funding requests which were likely to have an immediate and short-term effect on Nebraska's MA problem. The purpose of this *Final Report* is somewhat different. As the 99<sup>th</sup> Unicameral adjourned on April 3, 2006, policy debates about the very specific recommendations from the *Initial Report* have largely concluded, at least for now. The function of this report is to encapsulate the research findings of the MTS and serve as a detailed reference for understanding the many dimensions of MA's impact on the State's social service and justice systems.

A report covering a problem as complex as MA abuse inevitably runs afoul of many ideas people have come to accept as given information on the subject. Even as the MTS research team was forced to gradually abandon misperceptions it held at the beginning of the study, the public and press challenged, chided and criticized the *Initial Report* based on a collection of popular ideas about MA. Few of those ideas are completely wrong, but few are as conveniently straight-forward as they might initially appear.

The following section explores many of the most common ideas expressed to the MTS research team members during the study. Most of these are discussed in detail later in the report, but it was hoped that this brief aside might prove useful in helping everyone gain a more uniform perspective on MA.

### ***Fact or Myth: The accuracy of common ideas about methamphetamine***

#### **“Anyone can make MA” or “Meth is easy to make”**

**Short Answer: Without precursor ingredients such as ephedrine or pseudoephedrine, MA is impossible to make. If the precursors are available, then little expertise is required to make methamphetamine, but purity levels will vary widely depending on the production method.**

Unlike cocaine or heroin which is derived from plants, MA is a synthetic drug which requires a man-made ingredient such as ephedrine or pseudoephedrine. There are only nine production facilities in the world that make pseudoephedrine. It is a complicated process requiring technological capacity that is well beyond the means of the most sophisticated MA makers.

Given a supply of pseudoephedrine or its related cold-medicines, however, MA can be made produced using common household items such as battery acid, iodine, anhydrous ammonia, lye, lantern fuel, and anti-freeze. At one time, recipes for cooking MA could be found on the internet, but much of this is being gradually eliminated. When ingredients and instructions were easily obtainable, people throughout the county cobbled together kitchen and container labs and brewed up batches of MA. The production of MA requires no particular expertise, just access to the precursor chemicals and the ability to follow instructions.

Over the past two years, state and local governments, enacted legislation regulating the sale of over-the-counter medications containing pseudoephedrine. As a result, law enforcement reports a dramatic decline in the number of clandestine MA labs being discovered or seized. These recent successes, and some historical instances in which the illegal supply of pseudoephedrine was greatly reduced, show that restricting access to these necessary precursor chemicals directly reduces MA production.

MA is easy to make only when one has access to necessary precursor chemicals. When a drug-maker's access to pseudoephedrine or substitute ingredients is disrupted, it becomes impossible to make MA. Recent federal legislation which adds restrictions to cold-medicine retail sales will be helpful in states' struggles with MA, but an outright ban of pseudoephedrine-based cold and allergy medicines would eliminate the world-wide problem of MA.

**“Most MA used in Nebraska comes from small, clandestine labs.”**

**Short Answer: Most of the MA used and seized in Nebraska is produced in sophisticated, mega-labs in Mexico, the Southwestern US or central California.**

Although the existence of small clandestine MA labs has received much publicity, research suggests that they account for an ever-decreasing percentage of the MA consumed within the state. Small clandestine labs adversely impact the communities in which they operate. In addition to producing a debilitating drug, these labs produce toxic waste and render structures uninhabitable until expensive clean-up procedures are completed. Clandestine labs pose health hazards for those individuals who come in contact with them, often putting children and first responders at risk. While none of these negative impacts can be overlooked, small, clandestine labs contribute only minimally to the actual production of the MA consumed in Nebraska.

State law enforcement officials report a decline in the number of clandestine labs in Nebraska. As discussed above, the regulation of the precursor chemicals necessary for operating the labs accounts for part of the decline. Unfortunately, as law enforcement and new regulations suppress locally produced MA, users simply turn to other sources.

Nebraska users have always acquired MA from drug networks distributing MA produced in mega-labs located in Mexico, central California and the Southwest United States by Mexican drug cartels. These mega-labs acquire large quantities of precursor chemicals and produce vast quantities of MA at an astonishing rate. The mega-labs are able to produce a much purer form of MA than could ordinarily be found in a small kitchen or container lab. Accordingly, as the street-seized purity of MA increases in Nebraska, officials can be more certain that imported MA is filling the supply void left by eliminating clandestine labs.

**“MA creates environmental hazards.”**

**Short Answer: Cooking MA produces dangerous fumes and by-products; the resulting chemical waste is toxic and requires special disposal procedures.**

The production of MA creates toxic bi-products that contaminate the sites where the drug is made. Buildings, their contents, and any containers used to produce MA are contaminated. The production process generates hazardous waste that is dumped around the lab sites and surrounding areas. These dump sites often include chemical containers, coolers, plastic jugs and other garbage. A clandestine lab and dump site not only poses environmental hazards, they can be instantly hazardous to the health of anyone who comes in contact with one.



Individuals who come in contact with a clandestine lab or dump site should not touch anything. If you enter a building that you suspect has been used as a MA lab, you should leave the building immediately. Report any clandestine labs or dump sites to local law enforcement officers who are trained how to safely deal with the situation. When cleaning up a lab or dump site, law enforcement officers wear protective clothing to prevent contact with the hazardous materials or ingestion of methamphetamine. A modest MA lab or dump-site costs thousands of dollars to close and clean up. State and county budgets are strained to pay for the necessary clean up associated with these sites. Professionals at the Western Nebraska roundtable discussion expressed concerns about the clean-up expenses associated with buildings that have been used as methamphetamine labs.

As the number of clandestine MA labs in Nebraska declines, the health and environmental hazards posed by labs and dumps sites similarly decreases. Nebraska has such a large, rural landscape, though, abandoned labs and dump sites may lay undiscovered for years. The public must remain vigilant to the danger of MA dumpsites and particularly mindful of the risks they pose to livestock and children that might come into contact with one.

**“MA is instantly addictive”, “Everyone who tries MA becomes addicted”, or “Trying MA, even once, produces an insatiable craving for the drug for the rest of your life”**

**Short Answer: MA triggers an extreme reaction within the brain. Whether one becomes addicted by one, two or a dozen exposures to MA depends on individual vulnerabilities to addiction, the potency of the MA, and future use patterns.**

Except for possibly crack cocaine or heroine, people become addicted to MA more easily than any other drug. Research indicates this rapid addiction relates to the extreme chemical reaction MA produces and the euphoria associated with it. However, research also shows that very few people use MA as their first drug. The vast majority of MA users come to the drug after already developing heavy drinking habits and using marijuana or other illegal drugs. Research shows that MA users often transition from occasional use to a binge period. Once a user has gone through one of these binge periods, the desire to use MA gradually overpowers all other personal needs, responsibilities and relationships.

Taken together, these findings suggest that some people become addicted to MA faster than others. While the neuro-chemical reaction to MA is extreme, researchers cannot say that a single use causes irreversible, life-long damage to the brain. Like any other extreme metabolic event, different people possess different capacities for recovery. In terms of physiological dependency, it is unlikely that most people are damned to a life-long need for MA after only one use. On the other hand, the extraordinary euphoria associated with MA use presents an extraordinary temptation that few users appear capable of resisting. There is no research available which says how many people become addicted to MA after only one use. The only users science knows anything about are those users who developed serious or fatal addictions to the drug.

The bottom line is that MA in general, and the potent MA imported to Nebraska in particular, is a terribly dangerous drug with which to flirt. Prevention advocates have good reason to warn against trying MA even one time.

***That said, it must also be made clear to anyone who has ever experimented with MA that the hellish descent into MA addiction is not inevitable.*** The quicker someone seeks help

with their drug and alcohol problems, the easier it will be to fight back an addiction to MA or any other drug. For someone who has used MA a few times, it may take awhile to forget the lure of the MA high, but the brain and organ damage associated with prolonged use and bingeing may be avoided altogether. More importantly, the personal degradation and loss of family, friends, and careers can be prevented. Experimenting with MA may not fit the clinical definition for “addiction”, but it reflects such a profound disregard for risk and personal well-being that anyone who has tried MA even once would be well-advised to seek counseling help. Securing early help may be all that stands between a long, normal life and one beset by one of the most vicious addictions that exist.

**“There is no effective recovery strategy for MA addiction.”**

**Short Answer: With proper treatment and recovery plans, MA addicts have achieved higher abstinence rates than alcoholics and marijuana users. As with any other chemical dependency, recovery from MA use depends, in part, on society’s commitment to maintaining recovery support on which addicts can rely for the rest of their lives.**

MA addiction responds well to treatment strategies that identify the individual’s particular treatment needs and establishes long-term recovery support. Part of that planning demands that providers recognize MA addiction requires different therapeutic strategies than most other drugs, but especially alcohol. Treatment providers and justice professionals throughout the state report alcohol treatment therapies are largely ineffective against MA addiction and that putting MA addicts and alcoholics in the same treatment group can produce a volatile mix.

The National Institute on Drug Abuse has found cognitive behavioral interventions effectively treat MA addiction and SAMHSA recommends the Matrix Model, in particular (Rawson R A 2004). A comprehensive study funded by SAMHSA and CSAT, found that MA-dependent individuals responded positively to the Matrix Model’s treatment protocols (Rawson R A 2004) (2005). Research has also shown that MA must include integrated treatment for co-occurring conditions, including mental health concerns and dependence on other substances such as alcohol or marijuana (Zweben J 2004) (Maxwell 2005).

MA users require an array of support services to successfully complete treatment. Research has found that structure is vital to a MA addict’s recovery. Recovery from MA requires long-term support services. A MA addict cannot be discharged from his treatment program and left to fend for himself. The addict must have access to a network of support services specifically designed to support him in his continued recovery.

Although MA addicts may not receive effective treatment in existing programs designed for alcohol or other substances, MA users can recover from their addiction through the implementation of MA specific treatment and support services.

**“Children exposed to MA will become drug addicts, alcoholics, and/or delinquents.”**

**Short Answer: The factors which contribute to a youth’s eventual substance use habits and delinquent behavior vary widely. Genetic predisposition, ingesting addictive drugs at an early age, life experiences within a dysfunctional family, trauma from victimization and neglect, and exposure to drug and criminal behaviors place any child at risk of undesired**

**behaviors as they grow older. Concerted interventions which mitigate these influences greatly aid a child’s ability to avoid the trap of addiction and offending.**

Children whose parents use MA are exposed to it in different ways. MA use causes medical complications on developing fetuses (Maxwell 2005). Newborns whose mothers have used MA are born with the drug in their systems. When law enforcement officers enter homes of MA users, they often find MA, other drugs and alcohol put within reach of children. Children watch their parents take drugs. Parents leave their children unsupervised while high on MA or sleeping off its effects. Neglected children can ingest MA and alcohol that is lying around the home. Older children who are experimenting with drugs have easier access to MA and other substances when their parents use it in the home.

The research is unclear whether anything less than the ingestion of MA leads children to become addicts. What research does show, however, is that parental substance abuse increases the chances of their children abusing drugs. While this research is not specific to MA, children tend to emulate parents’ habits regarding all types of substance abuse including drinking, smoking, or illegal drug use (Chassin et al. 1993; Conger et al. 1994b; Conger and Rueter 1995; Hawkins et al. 1992; Melby et al. 1993). Research also shows that not just substance abuse, but other anti-social behaviors exhibited by MA addicted parents, such as neglect and violence, place children at risk for becoming substance abusers. “In Iowa, a look at suspected child abuse cases in 16 counties showed that one in three was due to parental association with MA.” (Kraman, Pilar. March 2004; Drug Abuse in America – Rural Meth. The Council of State Governments. Lexington, KY.)

While it is over-reaching to say that all children of MA addicts will become addicts themselves, exposure to MA, a childhood of neglect and abuse, and trying to grow up in an uninterrupted stream of chaos all increase a child’s propensity to engage in such behaviors. The degree to which one factor or the other is more or less responsible hardly warrants the attention that could be better spent trying to help such a child overcome the difficult circumstances in which they have been embroiled.

**“MA causes medical and dental problems.”**

**Short Answer: Prolonged MA use inevitably leads to a wide range of medical and dental problems.**

MA users display a wide array of medical problems. Even small amounts of MA damage the central nervous system, causing increased wakefulness, irritability, insomnia, confusion, tremors, convulsions, anxiety, paranoia, and aggressiveness. (NIDA InfoFacts. May 2005. National Institutes of Health – U.S. Department of Health and Human Services.) Other common medical conditions among MA users include increased heart rate, high blood pressure, respiratory problems, and an irregular heartbeat. (NIDA InfoFacts. May 2005. National Institutes of Health – U.S. Department of Health and Human Services.) MA can cause long term damage to internal organs, including the heart. In extreme cases, death can result from death from hyperthermia, convulsions and cardio collapse. (NIDA InfoFacts. May 2005. National Institutes of Health – U.S. Department of Health and Human Services.)

Poor circulation, poor diets, and obsessive scratching cause sores to develop on the skin of MA users. Treatment providers throughout the state reported difficulty in treating substance abuse problems until medical concerns were addressed. They reported that severe back pain and

eating disorders were common among MA users and had to be dealt with in addition to providing treatment.

Dental complications arising from MA abuse also hinder treatment. As one treatment provider explained, it is hard to address treatment needs when a user's "teeth are rotting out of their head." Many MA users develop what is commonly known as "meth mouth." Constriction of blood vessels that feed the teeth, lack of saliva production and horrible nutrition contribute to the severe tooth decay. Additionally, bruxism, or grinding of the teeth often results from MA use. (Maxwell 2005) (See S 2003).

### **"More women use MA."**

**Short Answer: Women account for a disproportionate number of MA users.**

Last year DCS admitted 418 men and 109 women who were confirmed methamphetamine users. When one looks at arrestees and the results from drug use surveys, women represent as much as half of all MA users. This ratio differs considerably from other drugs and alcohol where women may represent a third or less of all users.

The high rate of women users indicates a compelling need for some degree of gender-specific MA treatment. While some treatment providers report that both men and women appear to benefit from coed treatment groups, women frequently experience high rates of sexually related diseases, risk estrangement from their children, and self-medicate to escape unresolved issues related to earlier life trauma.

### **"MA is a white person's drug."**

**Short Answer: MA does not discriminate. Drug preferences may vary between different races and ethnicities, but once a person begins to regularly use MA, their craving for MA gradually dominates their drug seeking/using behaviors.**

People rarely start out with MA as their primary drug. This is due to a number of factors including, easier access to other substances such as alcohol, marijuana or cocaine, local drug use patterns which have established distribution networks that do not include MA, and pre-existing addictions which pre-occupy a user from searching out or being exposed to MA. As MA gradually works its way into a community, its effectiveness as an intoxicant strengthens its competitive penetration in the drug distribution network. The drug trade is like any other market and grows according the laws of supply and demand. Once a threshold demand for MA exists, it becomes a more profitable risk for traffickers who increase the available supply and actively promote the expansion of the MA market.

The MA epidemic has spread eastward from the West Coast. The states through which it has passed are predominantly white with large numbers of Latinos and comparatively lower numbers of Blacks than are found along the East Coast and in the South. The national data on MA usage appears to reflect these disparities:

- During FY 2001, 3,404 federal drug offenders were convicted of committing an offense involving MA. Of those convicted of a Federal drug offense for MA, 59% were white, 35.2% were Hispanic, 4.2% were of another race, and 1.6% was black. (Lloyd, Jennifer. Nov. 2003. Methamphetamine - Factsheet. ONDCP Drug Policy Information Clearinghouse. Rockville, MD.)

Over the course of this study, the following findings for Nebraska have been made:

- In some communities near Lexington, Western Nebraska officials have estimated that 75-80% of probation contacts related to MA are non-English speaking.
- Eastern Nebraska Treatment Providers report a high need to fund interpreters for Spanish and Sudanese MA users.
- Western Nebraska Justice Professionals report that many Native Americans have a MA problem but cannot afford treatment. The system is also overloaded, making it impossible to send an estimated 400 Native American MA users for treatment.
- Eastern Nebraska Justice Professionals report recent increases in African American MA users and offenders.

These findings point to Nebraska's critical need to develop more minority substance abuse treatment providers and technicians. As with the gender-specific issues noted above for MA users who are women, the State cannot realistically expect to curtail substance abuse among racial, ethnic and language minority groups until sufficient resources have been placed to provide culturally competent recovery support.

### **“Coerced treatment does not work” or “Forcing addicts to go through treatment in the justice system is a waste of time and money”**

**Short Answer: MA may be the tip of an addict's substance abuse problem, but it is particularly vulnerable to forced treatment. Until an addict has been liberated from the lingering cognitive and psychological effects of MA use, it may be impossible to develop the individualized treatment strategies necessary to promote long-term recovery. Few addicts muster the motivation to quit MA until forced to do so. Effective treatment, even if initially forced upon an addict, can reduce future drug use and criminal behavior.**

Research from the *Principles of Drug Addiction Treatment (1999)* demonstrates that individuals entering treatment under pressure achieve outcomes as positive as those who enter treatment without pressure. In a study by Brecht et al. (Brecht M 2005), 350 Los Angeles County MA users were evaluated, comparing background and treatment characteristics and selected treatment outcomes across groups defined by existence of coerced treatment for MA. The pressured and non-pressured MA users saw no statically significant difference in outcome successes.

Farabee et al. (Farabee 1998) observed that just because clients enter treatment under pressure, the treatment may not be involuntary. In fact, several studies suggest that criminal justice coercion may increase patients' internal motivation to produce more successful treatment outcomes (De Leon 1994) (Joe 1999) (Simpson 1993). Coerced treatment research points to positive results for criminal offenders in general, with specific studies exhibiting success with heroin abusers (McGlothlin WH 1977; Brecht M 1993; Prendergast M 1995; Anglin MD 1998; Hiller M 1998; Miller N 2000). A study of inmates enrolled in a therapeutic treatment program in the Delaware State Prison that continued to receive treatment in a work-release program after prison were shown to be 70% less likely than non-participants to experience a drug relapse and incur rearrest. (1999)

In addition to strong recovery results, research also shows that coerced treatment can have a positive effect on criminal recidivism. The *Iowa Adult Methamphetamine Treatment Project – Final Report, 2003* indicated that 90.4% of MA clients had not been arrested 6 months

after treatment and 95.7% of MA clients interviewed one year after treatment had not been arrested during the previous 6 months (Roth 2003). The Year Six Report of the *Iowa Project Outcomes Monitoring System* 2004 recidivism numbers indicated no arrests in the six months after treatment for 86% of MA users; 90.7% of alcohol users; 79.2% of cocaine users; and 86.8% of marijuana users. These rates are compared to 30.9% of clients who had not been arrested in the 12 months prior to treatment. (Johnson A 2004)

### **“MA use increases sexual activity.”**

**Short Answer: MA use is strongly associated with sexual acting out.**

One of the ways in which MA recovery can be distinguished from other drug and alcohol addictions is the out-of-control sexual activity which appears to be a key element of MA use. MA users report a loss of control over their sexual expression, describing sex as ‘compulsive’ and ‘obsessive’ (Maxwell 2005) (Reback C 2004). *TIP #33* (Rawson 1999) lists compulsive sexual behaviors for MA abusers as promiscuous sex, AIDS-risky behaviors, compulsive masturbation, compulsive pornographic viewing, and homosexual behavior for otherwise heterosexual individuals.

The medical treatment consequences of MA use include a full range of disease and disorders resulting from risk sexual activity. The disinhibitory affects of MA (and Ice in particular) have been strongly associated with sexual behaviors that put men at high risk of sexually transmitted and blood-borne disease, including HIV infection (Maxwell 2005) (Kurtz S 2003). Studies have confirmed some of the medical complications arising from MA abuse. In HIV-infected patients complications include hypertension, hyperthermia, rhabdomyolysis, stroke, and some researchers believe that dopaminergic systems are vulnerable to the combined neurotoxicity of HIV infection and methamphetamine (Maxwell 2005) (Urbina 2004).

During this study, Eastern Nebraska Treatment Providers expressed concern over the sexual addiction associated with MA use and the spread of HIV. Treatment Providers from around the State would like to require a nursing assessment to test for STD’s at the time of referral. Eastern Nebraska Treatment Providers also report that many MA users are infected with Hepatitis C.

Hardly a romantic aphrodisiac, MA saddles its users with sexually-related health complications which will require years of medical treatment and much state-funded care to address.

### **“MA affects your mental health” or “MA makes users psychotic”**

**Short Answer: As with individual susceptibilities to the physical consequences of MA, people vary in their psychological response to MA. However, prolonged use of MA consistently manifests psychological and emotional symptoms which were not apparent prior to use. Treatment providers may not be able to accurately assess an addict’s “true” mental state until the user has abstained from MA for at least 45 to 60 days.**

Psychiatric disorders arising from MA abuse were confirmed in a study of 405 methamphetamine users in Taipei. MA users with pre-morbid schizoid/schizotypal personality were found to be predisposed to developing psychoses (Maxwell 2005) (C. Chen 2003). A study among MA psychotic patients in a multi-country study involving Australia, Japan, the

Philippines and Thailand indicated that persecutory delusion was the most common lifetime psychotic symptom, followed by auditory hallucinations, strange or unusual beliefs, and fear of thought reading (Maxwell 2005) (M. Srisurapanont 2003).

The key psychological side-effects of MA use as it relates to treatment, however, are those connected with detoxification. One of the ways in which MA differs from many other drugs is that users often manifest significant psychological and/or emotional symptoms up to 60 days or more after their last ingestion of MA. A psychologist from the Norfolk Regional Center reports observing a number of MA addicts committed as mental health patients who eventually recovered from their psychoses once they abstained from MA for a few months. Conversely, the research literature also reports MA patients who initially presented few mental health problems suddenly developed paranoia and uncontrollable rage as they hit "The Wall" 45 to 60 days after they quit using MA.

The consistency with which this phenomenon has been observed across MA users shows that individualized recovery strategies may be difficult, if not impossible to nail down during the first couple of months that an addict abstains from MA. For these reasons, general treatment approaches which emphasize structure, abstinence, and non-confrontational accountability seem to offer the best course for addressing the early stage of a MA's recovery program. Once providers can be reasonably assured that sufficient time has elapsed for the MA addict's psychological condition to stabilize, they can proceed with more individualized assessments and recovery planning.

### **"MA eventually leads to Alzheimer's Disease in recovered addicts."**

**Short Answer: Much research remains to be done before the long-term effect of MA on recovered addicts can be stated.**

MA appears to damage brain cells that contain the neurotransmitters dopamine and serotonin. Without sufficient dopamine, the brain develops symptoms like those of Parkinson's disease. (NIDA InfoFacts. May 2005; National Institutes of Health – U.S. Department of Health and Human Services.) Other research shows that people who use MA risk long-term damage to their brain cells similar to that caused by strokes or Alzheimer's disease. In an article published in the March 28, 2000, issue of *Neurology*, scientists at the Harbor-UCLA Medical Center in Torrance, California, used magnetic resonance spectroscopy to take measurements of three parts of the brains of 26 participants who had used methamphetamine and then compared them with measurements of the same regions in the brains of 24 people who had no history of drug abuse. In their study, Dr. Linda Chang and Dr. Thomas Ernst measured levels of brain chemicals that indicate whether brain cells are healthy or are diseased or damaged. "While the meth users in this study hadn't used the drug for some time--anywhere from two weeks to 21 months, this research strongly suggests that methamphetamine abuse causes harmful physical changes in the brain that can last for many months and perhaps longer after drug use has stopped," said Dr. Alan I. Leshner, Director, National Institute on Drug Abuse (NIDA).

### **"MA is Nebraska's biggest substance abuse problem"**

**Short Answer: Substance abuse is Nebraska's biggest substance abuse problem. Methamphetamine use is merely the most prominent indicator of the State's need to respond more effectively to all forms of chemical dependency.**

Data from the Arrestee Drug Abuse Monitoring Program (“ADAM”) shows that Omaha arrestees’ positive tests for all types of drugs increased from 2000 to 2003. In 2003 75% of all arrestees tested positive for some type of drug at the time of their arrest: marijuana-51%, multiple drugs-31%, MA and Cocaine tied at-21%, and Opiates-5%.

Except for alcohol, however, MA reigns supreme for the profound effect it has exerted on so many communities across Nebraska. When its pervasiveness is combined with the devastating speed by which it destroys families, careers, and lives, MA has certainly reached crisis proportions in Nebraska.

If one accepts that nearly all MA users are also addicted to alcohol and use other drugs, it can be seen that Nebraska’s response to this crisis demands that all substance abuse services be strengthened. Anything less leaves the door open for other drugs to quickly fill MA’s place.

### **“MA is mainly a problem for people older than 18.”**

**Short Answer: Substance abuse does not wait for adulthood. A foundation of alcohol consumption and experimentation with other drugs is typically laid between the ages of 12 to 18 years of age. Failing to provide effective substance abuse treatment to juveniles greatly increases the risk that they will eventually graduate to MA or some other addiction as an adult.**

A school administrator from southeastern Nebraska recently said, “they get boys going on beer and marijuana first, then give them MA. Girls—they just give them MA”. Western Nebraska justice professionals report that juveniles start using MA between 12-15 years of age with many learning from their siblings. Eastern Nebraska treatment providers noted that MA use among 16-19 year olds is diminishing juveniles’ cognitive abilities and placing a burden on school districts.

The average age of first use among new methamphetamine users was 18.9 years in 2002, 20.4 years in 2003, and 22.1 years of age in 2004. (This Short Report, The NSDUH Report: Methamphetamine Use, Abuse, and Dependence: 2002, 2003, and 2004, is based on SAMHSA's National Survey on Drug Use and Health (NSDUH), formerly called the National Household Survey on Drug Abuse conducted by SAMHSA's Office of Applied Studies (OAS) in the Substance Abuse and Mental Health Services Administration (SAMHSA). According to the 2003 National Survey on Drug Use and Health (SAMHSA, 2005), 12.3 million Americans age 12 and older had tried methamphetamine at least once in their lifetimes (5.2 percent of the population), with the majority of past-year users between 18 and 34 years of age.

### **“The State of Nebraska can effectively treat the methamphetamine problem by focusing on felony drug offenders.”**

**Short Answer: Felony drug offenders are at the peak of the substance abusing pyramid in Nebraska. Many offenders whose crimes are related to substance abuse are convicted of less serious crimes. To reduce the number of crimes either directly or indirectly tied to substance abuse, the justice system must broaden its focus to include testing and evaluations of as many offenders as possible, without regard for the formal charges which bring them within the influence of the courts, probation, and corrections.**



Nebraska does not have unlimited resources to address its substance abuse problems. One can certainly understand that focusing on felony drug offenders is a reasonable way to prioritize funding and treatment capacity. At the same time, only about 500 MA using offenders were sentenced to prison in 2005. Given the number of arrestees who tested positive for MA in 2003, it is estimated that approximately 19,000 offenders would have probably tested positive for MA if every arrestee had been subjected to a drug test. ***This means that 97% of all of Nebraska's offenders who use MA were not sent to prison in 2005.***

For Nebraska to appreciably reduce the number of crimes related to MA use, it must commit to long-term strategies aimed at addressing the substance abuse treatment needs of all offenders no matter how their crime is classified. A solid step in the right direction can be seen in the Unicameral's recent appropriation of 4.3 million dollars to fund testing, treatment and increased justice capacity for all offenders (LB1060). Through these funds, the Community Corrections Council has resources with which it can pro-actively encourage all offenders to discard their substance abuse problems. While sobriety offers no guarantee that a person will cease offending, an addicts' recovery increases his or her chances of maintaining a job, family and the normal responsibilities and benefits which insulate all of us from committing crimes.

### **“The State of Nebraska can quantify the need for methamphetamine treatment within the state.”**

**Short Answer: Due to the lack of standardized data, Nebraska cannot accurately quantify the need for MA treatment.**

State agencies throughout the state keep internal records indicating the number of MA related cases that they receive and justice professionals screen arrestees and probationers for drug use. But, there is no standardized method for assessing drug use within the state. Attempts at quantifying the scope of the MA problem are dependent on piecing together data that is gathered from various sources throughout the state. Identifying gaps and overlap in data is challenging. A standardized data collection process and a centralized database are essential to accurately determining the number of MA users in Nebraska. Until Nebraska can accurately quantify the need for MA treatment, it cannot efficiently allocate funding and develop treatment resources.

### **“Children face a decrease risk of harm now that clan labs have been shut down across the state.”**

**Short Answer: The reduction in clan labs lessens, but does not eliminate the harm children face as a result of MA.**

To support their MA habits, parents cook MA in their homes. The presence of toxic chemicals and possibility of explosions inherent in this activity creates an obvious danger for children in those homes. As regulation of precursor medications forces a decrease in clandestine labs, it would be easy to assume that the harm to children as a result of MA has subsided.

In-home MA labs are not the only danger facing children in MA affected homes. Parents seeking the next high do not care for their children's basic needs. Obtaining and using MA becomes the parents' sole preoccupation. House care and meal preparation fall by the way side. Homes are filthy and children go without regular meals. Schedules are forgotten and children are responsible for getting themselves to school. Parents' moods and behaviors hinge on where

they are at in their cycle of drug use. Parents can exhibit psychotic paranoia or sleep for days at a time.

This type of neglect can become abuse. Violence and weapons are commonplace in MA affected homes. Children of MA addicted parents are exposed to overt sexual behavior and are at a high risk for sexual abuse. These dangers exist even when parents are not producing MA in their homes.

Eliminating clandestine MA labs reduces only one of the dangers children face as a result of MA. Over the past two years, there has been a crackdown on MA labs in southwest Iowa. In spite of this effort by law enforcement, the percentage of child neglect cases involving MA using parents has remained at approximately 49%. Children in MA affected homes continue to suffer from abuse and neglect as a result of their parents drug use.

### **“A parent that has used MA will never regain custody of their child.”**

**Short Answer: With treatment and recovery services, parent can regain custody of their children.**

Family-oriented, community-based treatment prevents parents from having to choose between treatment and their children. As a parent emerges from the clouded thinking caused by MA use, their love for a child and the desire to make up for time lost to MA can become powerful motivations for maintaining sobriety. When treated parents resume their place in a family, far from being treated soft-heartedly, they are being held accountable for their acts in the most appropriate way society can design: they are being forced to daily assume responsibility for repairing the damage left in the wake of their substance abuse and offending. With sufficient recovery support and relapse prevention services in place, MA addicted parents can resume their role as a contributing member of society and the web of social involvement which keeps them from succumbing to old habits becomes even stronger.

Sadly, MA using parents who escape coerced recovery through cracks in the criminal justice and social service systems, or those parents who lack the social support network required to maintain a stable recovery, must be recognized for the ongoing danger they present to a child's well-being and development. The termination of parental rights may be one of the most severe consequences an addict faces. Cutting a child's connection to even the most dysfunctional parent generates a powerful grief no child should endure. For these reasons, the social service system needs to develop strong treatment and recovery plans which provide MA using parents every opportunity to avoid termination. ***Such treatment plans must include access to vouchers for evaluation and therapy, medical care, counseling, job-training, housing assistance, relapse response services, and peer-support groups.***

Case workers must understand their central role in compelling parents to succeed in treatment. At certain stages of the recovery process, case workers will need to monitor MA using parents' progress on a daily basis. When case-workers become active partners in a parent's recovery, the likelihood of reunification substantially increases. However, in those cases where a parent cannot meet fair treatment expectations, comply with regular drug and alcohol testing, or demonstrate compelling evidence of concern for their children outside a juvenile court hearing, the State must move swiftly to end the limbo in which children hang while waiting for their parents to abandon drugs.

If the child welfare system delivers prompt treatment planning and the comprehensive array of services on which MA recovery depends, parents who continue to choose addiction have

discarded their children as clearly as they have rejected recovery. At that point, the State can only be faulted for the delay in which it acts to restore a child's sense of permanency.

Recovery may be a life-long process for addicted parents, but childhood, adolescence, and the transition into young adulthood are not. The developmental needs of children cannot be subordinated to the pace of a parent's recovery. Failure to prioritize the child's long-term well-being over a parent's addiction risks surrendering two victims to MA: the parent and the child.

### **“Funding support for substance abuse treatment diminishes community-based mental health capacity.”**

**Short Answer: Substance abuse and mental health must work together to provide comprehensive, community-based treatment.**

The Criminal Justice/Mental Health Consensus Project released in 2002 by the Council of State Governments detailed the extent to which U.S. prisons have become a repository for the mentally ill. As states move from institutionalized care to community-based mental health services, prisons across the country report an increase in the number of mentally ill inmates in their custody.

About 16% of the prison/jail population has serious mental illness in contrast to 5% of the general U.S. population. Men with mental illness are 5 times as likely to be incarcerated as the general population. As institutions close, mentally ill patients are unable to secure housing or access mental health services. Instead of shifting to community-based services, the mentally ill are shuffled into the prison system. Prison populations rise and the incarcerated mentally ill are unlikely to access the intensive mental health care that they need. Increased reliance on incarceration is contradictory to the Community Correction Council's aim to reduce incarceration and calls into question the development of necessary community-based mental health services.

Approximately 75% of inmates with serious mental illness have a co-occurring substance abuse disorder. Neither substance abuse nor mental health treatment will be successful without addressing the co-occurring condition. This underscores the need for mental health and substance professionals to work together in creating sufficient community-based services for both conditions. Funding substance abuse treatment does not usurp mental health support. In an environment of limited funding, it is critical that mental health and substance abuse professionals work in tandem to ensure community-based services reduce the State's reliance on prisons as receptacles for the addicted and mentally ill.

### **“Methamphetamine detoxification requires residential treatment in a drug rehab center.”**

**Short Answer: Effective MA detoxification can be accomplished without residential treatment. Out-patient detoxification requires intense supervision, frequent drug screens and accountability to be successful.**

The detoxification process for MA lasts longer than for other drugs. The effects of MA may persist for 45-60 days. Treatment providers have observed dramatic changes in personality once detoxification is complete. Often, users are mentally unable to focus on treatment until MA is completely gone from their systems.

The key to MA detoxification is ensuring that an addict does not use during the 45-60 day detoxification period. In most cases, research consistently shows that residential treatment is not required to prevent use. For example, day reporting centers can be designed to deliver the supervision and structure that MA users need to maintain sobriety. These resources include daily, personal contact with case-workers, frequent drug screens and individual and group therapy.

Occasional episodes of relapse are to be expected, especially during the early stages of recovery from MA addictions. However, in those cases where an addict repeatedly proves incapable of avoiding MA use for 45 to 60 days, or when a user suffers from psychotic symptoms that put her, or the community, at risk, residential *placement* may be needed. The confines of a controlled environment should finally deprive a user of MA long enough for detoxification to be completed. Removing a MA addict from their home-based community setting should be considered a last resort. Successful long-term recovery heavily depends on the addict developing strategies and life-skills which enable them to avoid the environmental triggers and relationships associated with their past use. The improper application of expensive residential placement in the name of “treatment”, wastes precious funding and is more likely to delay recovery than obtain it.

### **“Recovery from MA demands a complete abstinence from MA and all other drugs and alcohol.”**

**Short Answer: The treatment community generally views the use of alternative drugs and alcohol as incomplete recovery, even if an addict discontinues MA use. During the early stages of MA treatment, breaking the cycle of MA use may represent a critical step forward in addressing a user’s overall addiction problem.**

The research surrounding MA treatment does not provide answers to this statement which prove universally satisfying to treatment professionals.

Many therapists trained in traditional drug abuse treatment models, especially those derived from alcohol treatment, strenuously disagree with the notion that recovery from MA use is fundamentally different from any other addiction. “Clean and sober” means a complete abstinence from everything.

Except nicotine. And, except caffeine.

The obvious point is that even the strictest treatment models frequently make allowances for substances known to be addictive and even harmful, provided the tolerated dependencies relate to substances with less destructive potential than the primary addiction.

Some MA treatment specialists have come to see the recovery process as a prioritized spectrum. One provider said that once an addict stops using MA, she focuses on alcohol, marijuana, and finally other drugs; the order dictated by the risk of personal and community harm she perceives to be associated with each class of drugs. For such treatment providers, sustained abstinence from MA is the critical goal. Once an addict’s recovery from MA addiction has stabilized, discharge from treatment, *MA treatment*, is appropriate. Even though the addict may persist in the use of alcohol or marijuana, the dependency on MA has been broken. These providers are not denying the risks associated with continued alcohol and marijuana use, they simply believe that the first success in the recovery process has been reached. Freed from the

mental and emotional distortions of MA, the groundwork has been laid for real work to begin on the remainder of the addiction problem.

From a practical standpoint, any MA addict who uses alcohol or, especially marijuana, remains dangerously poised to relapse for MA. Not only do these substances interfere with the clear-eyed thinking on which long-term recovery relies, but access to marijuana supplies is likely to eventually present an addict with potential access to MA. A single re-exposure to MA may be all that is required to drop the addict right back into the patterns of use from which they have worked so hard to escape.

Based on the research and treatment providers' comments reviewed for this report, prioritizing MA abstinence above all other addictions appears to be a reasonable way for MA treatment strategies to be compartmentalized. Given that most addicts possessed alcohol and other drug dependencies before becoming MA users, however, these residual addictions seriously jeopardize long-term resistance to MA use. Whether changing focus from MA to other drugs and alcohol constitutes a "discharge" is not a trivial question of semantics. Genuine, substantive issues related to payment and assessing treatment success revolve around the partial versus complete resolution of a patient's overall addiction.

The justice and social service systems will have to grapple with the best way to resolve this conflict as they refine their measurements of recovery progress within treatment planning. Is the all or nothing approach the best way to guarantee long-term recovery? Are programs which gradually dismantle a composite addiction, brick by brick, more likely to retain patients in the long-run? Until research data comparing the relative outcomes of both approaches have been collected and analyzed, we lack the evidence required to declare one philosophy therapeutically superior to the other.

# The Methamphetamine Treatment Study

## Methodology

The MA Treatment Study Research Team's first step toward identifying the policy and implementation issues linked to creating a coordinated system for the treatment of MA dependency was to scour the related literature, including treatment methods and best practices nationwide. The literature review provided a foundation for developing interview questions asked at four site visits and discussion points utilized at two round table discussions.

Early in the study, two Roundtable Discussions were held to develop a picture of practitioners' views of best practices for MA treatment in Nebraska. The first session was held on August 29, 2005 in Bridgeport and the second session was held on September 16, 2005 in Lincoln. Researchers invited representatives from the justice professionals, treatment providers and community support providers. While community support providers were invited to the Lincoln meeting, none attended. *Table 1* below illustrates the breakdown by profession of the attendees. A list of attendees is included in *Appendix B*.

	Community Support Providers	Treatment Providers	Justice Professionals
Bridgeport	10	10	5
Lincoln	0	20	21
Totals	10	30	16

**Table 1. Breakdown by Profession of 2005 MA Treatment Best Practice Roundtable Discussions.**

Because the existing circumstances surrounding MA use and treatment in Nebraska dictate the parameters for construction of a best practices model for MA treatment that meet the specific needs of Nebraskans, researchers presented a snapshot of Nebraska's current state of affairs regarding MA use to participants in the Best Practices Roundtable Discussions. Prior to forming breakout groups, participants considered a series of contributing factors with statewide implications, including the impact of substance abuse on the Nebraska state budget, admissions rates linked to MA abuse, and Nebraska's treatment capacity, as well as a generic treatment response model. The researchers drew from their review of the literature regarding best practices for MA treatment to develop a generic treatment model to serve as the foundation for the Round Table Discussions. The generic treatment model, drawing liberally from the Substance Abuse and Mental Health Services Administration (SAMHSA) *Treatment Improvement Protocol, Series 33 (TIP #33)* (Rawson 1999), was presented to the discussion participants. Topics included treatment engagement, assessment and orientation, treatment plan, treatment initiation, abstinence initiation and maintenance, and medical aspects. Upon conclusion of the researchers' presentation, the participants divided into smaller breakout groups according to profession. The Bridgeport session broke into three small groups: the Western Nebraska Justice Professionals, Treatment Providers and Community Support Providers. Due to the lack of Community Support Providers, the Lincoln session supported only two groups: the Eastern Nebraska Justice Professionals and Treatment Providers. Following the breakout sessions, the participants reconvened as a large group to review findings. The *Best Practices Roundtable Discussions* section represents the data gathered at the Eastern and Western Nebraska sessions, organized by the generic treatment model headings. Responses to the *Best Practices Roundtable Discussions* are included in this report.

Researchers conducted four site visits at existing state facilities. They toured Hastings Regional Center and Hastings Correctional Center on September 27, 2005, the McCook Work Ethic Camp on September 28, 2005 and the Norfolk Regional Center on October 5, 2005. The site visits were conducted to determine what would be necessary from an organizational, financial, and cultural standpoint to provide MA treatment at each facility. While at each site, researchers met with staff and administration, toured each facility and evaluated whether the site was a potential MA treatment facility. Researchers did not interview staff at the Hastings Correctional Center because the facility closed earlier in 2005 and no staff were employed there.

In evaluating whether the site could be utilized for MA treatment, researchers considered a number of factors including the capacity of each facility, whether each facility was operating at full capacity, the types of people currently being treated and/or incarcerated at each facility and what types of people qualified for treatment and/or incarceration at each facility. Researchers also reviewed the number of staff working at each facility, the facilities ability to attract new staff and the impact of staff recruitment to each facility on the locality’s community-based services. Researchers identified the obstacles and benefits to MA treatment at each of the facilities.

Research to identify Nebraska’s existing capacity for MA treatment drew heavily from three sources: the SAMHSA March 31, 2003 *National Survey of Substance Abuse Treatment Services*, the *Roster of Substance Abuse Treatment Center Roster* (updated October 11, 2005) by the Nebraska Health and Human Services System (HHSS), and *Substance Abuse Treatment Facility Locator Lists* (updated April, 2005) by SAMHSA. By combining and cross-referencing these sources, researchers were able to draw a picture of the number of beds and facilities, as well as mental health practitioners and drug and alcohol counselors available in each of Nebraska’s Behavioral Health Regions.

The cost study was been guided from the outset by a series of research questions developed to systematically identify existing unmet needs in methamphetamine/amphetamine-related treatment services in Nebraska and to provide cost estimates for programs and facilities to meet identified needs. *Table 2* summarizes the major research questions, as well as the data sources and published reports consulted in their investigation.

Major Study Areas	Research Questions	Published/Internal Reports & Data Sources (National/States)
<b>Substance- Abuse Treatment Needs and Costs</b>	<ol style="list-style-type: none"> <li>1. What is the total prevalence (population) of illicit-drug, stimulant-related and meth-amphetamine related substance abusers in NE?               <ol style="list-style-type: none"> <li>a. Of these, how many are receiving treatment (met demand)?</li> <li>b. How many need but are not in treatment?</li> <li>c. How many want or would seek treatment if it was available (unmet demand)?</li> </ol> </li> <li>2. What are the average costs for drug treatment by level of treatment (e.g., for residential and outpatient levels)?</li> </ol>	<ol style="list-style-type: none"> <li>1. “State Estimates of Substance Use from the 2002-2003 National Surveys on Drug Use and Health,” SAMHSA (2004). [Figure 5, Appendix D: Tables VIII-XVII]</li> <li>“Substance Abuse Treatment Admissions by State and Primary Substance of Abuse,” SAMHSA (2003). [Figure 5, Appendix D: Tables VIII-XVII]</li> <li>“Analysis of Substance Abuse Prevalence, Treatment Resources and Gaps in Colorado,” State of Colorado (2002). [Figure 5, Appendix D: Tables VIII-XVII]</li> <li>2. DATStats: Results from 85 studies using the Drug Abuse Treatment Cost Program Analysis (DATCAP), by M.C. Roebuck et al, Journal of Drug Abuse Treatment (2003). [Table 24]</li> <li>“The Cost and Benefits of Substance Abuse Treatment: National Treatment Improvement Study,” by Lane Koenig et al. (1999).</li> </ol>

	<p>3. What levels/types of treatment are most cost-effective for high-, moderate- and low-need/risk stimulant- and meth/amphetamine-related substance abusers/dependent?</p> <p>What are the estimated costs of a comprehensive program to meet the unmet demand of those who are not receiving treatment, but want or would seek treatment?</p>	<p>3. "Economic Benefits of Drug Treatment: A Critical Review of the Evidence for Policy Makes," by Steven Belenko et al. (2005).</p> <p>"Wyoming Methamphetamine Treatment Initiative," State of Wyoming (1998), Office of Justice Programs (2001), and Citizens Education Project (2004)</p>
<b>Substance-Abuse Treatment Facility Costs</b>	<p>1. What types and how many facilities currently provide substance abuse treatment in NE?</p> <p>a. What are the fixed costs for these types of treatment facilities?</p> <p>b. What are the combined fixed and variable (treatment program) costs for each type?</p>	<p>1. "National Survey of Substance Abuse Treatment Services (N-SSATS) State Profile Nebraska," SAMHSA (2003).</p> <p>a. (Pending master budgets, audited facility, performance reports to be provided by the State of Nebraska.)</p> <p>b. "DATStats: Results from 85 studies using the Drug Abuse Treatment Cost Program Analysis (DATCAP), by M.C. Roebuck et al, Journal of Drug Abuse Treatment (2003).</p>
<b>Impacts of Substance-Abuse Treatment on State Budgets</b>	<p>1. What portion of the Nebraska State Budget is currently devoted to dealing with the impacts of substance abuse?</p> <p>a. What are the major areas of state spending that are most impacted by substance abuse?</p> <p>b. What portion of state spending is devoted to substance abuse treatment and prevention?</p> <p>c. How does this compare to surrounding states?</p> <p>d. How does this compare to the national average?</p> <p>2. What levels of treatment (and associated costs) are available at Nebraska Department of Corrections facilities?</p>	<p>1. "Shoveling Up: The Impact of Substance Abuse on State Budgets," National Center on Addiction and Substance Abuse at Columbia (CASA), (2001). [Appendix C: Tables I-VII]</p> <p>2. "Nebraska Department of Correctional Services (DCS) FY-2004 Annual Report and Statistical Summary."</p>

**Table 2. Methamphetamine Treatment-Facility Cost Research Questions and Data Sources/Published Reports Consulted**

On February 1, 2006, the research team visited a MA specific treatment program at Blue Valley Mental Health in Nebraska City, Nebraska. Researchers met with the program's substance abuse counselor and investigated how the program operated, who it served and how the program's format could be applied in other settings.

On March 9, 2006 representatives from Probation, the Department of Corrections, Behavioral Health Services and Drug Court met with members of the research team to discuss long-term MA treatment in Nebraska. This working group identified barriers to MA treatment that were not identified in the initial report and discussed potential implementation solutions.

### **Research Context**

In recent years, justice and treatment professionals throughout Nebraska have seen substance abuse treatment and mental health care shift to community-based services. The Legislature affected this shift in several ways: the creation of the Substance Abuse Task Force and subsequent implementation of the Best Practices Model (LB 685), the creation of the Community Corrections Council (LB 46) and Behavioral Health Reform (LB 1083). All of the research and analysis completed in furtherance of this project was conducted in light of this shift



in treatment methods. All policy and implementation recommendations are designed to support community-based services.

## ***Continuum of Care***

To determine the best practices for treating methamphetamine addiction, one must base the findings upon a continuum of care. A hallmark of community-based services is the practice of basing an individual's treatment on his or her unique treatment needs. A one-size-fits-all approach does not effectively treat methamphetamine addiction. Therefore, it is necessary to consider all of the potential treatment options, or the continuum of care, when assessing the best treatment practices. The continuum of care is comprised of levels of care (LOC) ranging from assessment to treatment to recovery support.

Unfortunately, review of the literature and community practices revealed that LOC were inconsistently defined and varied depending upon the source. To the state's treatment needs, it was necessary to first establish what LOC comprise the continuum of care. Researchers reviewed several groups' definitions of LOC including the Nebraska Standardized Model for Assessing Substance Abusing Offender updated January 2005 which is included as *Appendix A* of this report, and the American Society of Addiction Medicine Patient Placement Criteria, but struggled to find a consistent definition for each LOC.

The difficulty in identifying standardized LOC underscored why treatment for methamphetamine addiction is at times ineffective. Before the continuum of care can be utilized, treatment and justice professionals must understand it. Ultimately, LOC are driven by treatment requirements and staffing concerns, not reimbursement guidelines or any other method that currently defines LOC. To illustrate this idea, the research team generated a standardized continuum of care based upon the state of Nebraska's current LOC. This continuum of care defines the LOC and shows the particular staffing needs of each LOC as illustrated in *Tables 3* and *4* below.

In *Table 3* below, The LOC are divided into four broad types of services. The specific LOC are listed below each type of service. The LOC are listed in chronological order from the most intensive to the least intensive within each category of services. The following Assessment Services should not be confused with the current standardized assessment currently required by justice professionals.

It was difficult, if not impossible, to categorize all Resident Services into a single category. The continuum of care divides Residential Services into two categories; Residential and Transitional Residential. For both, the individual lives and receives treatment at a treatment facility. The goal of the treatment provided at each distinguishes the two. Residential facilities treat the substance abuse problem while Transitional Residential facilities equip the individual to re-enter the community. None of the Residential Services provide medical treatment. They all require the individual to be medically and psychiatrically stable. Services are provided by addiction specialists instead of medical professionals.

The continuum of care also divides Non-Residential Services into two categories; Outpatient Services and Recovery Support and Relapse Prevention. Outpatient Services are provided through day treatment, therapy groups or other similar means. Recovery Support and Relapse Prevention do not focus on treatment, but rather on sobriety maintenance.

Level of Care	Definition of Level of Care
<b>Emergency Services</b>	
Emergency Protective Custody (EPC)	Involuntary commitment of one in a SA or MH crisis who is dangerous to self or others. Located in a medical facility where the individual can receive tx to meet immediate needs.
Civil Protective Custody (CPC)	Involuntary commitment lasting only 24 hours. Allows individual to detox. Located in a residential setting, not a medical facility.
Medical Detox	Medically supervised. Available 24 hours a day to address needs of individuals going through detox.
Social Detox	Located in a residential setting where there is limited nursing coverage. Unable to address medical needs of the individual.
MA Detox	Located in a residential setting. Provides services necessary to keep a person abstinent for 45-60 days.
Emergency Stabilization and Tx	Stabilizes one intoxicated or in withdrawal and then returns him to the community. Primary tx can be started at this LOC. Limited nursing care is available.
Emergency Community Support	Provides services once an individual is stabilized. Services are on-call 24 hours a day.
SA Emergency Shelter or Respite	Provides short-term placement for individuals in crisis. Individual must be medically stable because there is limited or on-call nursing coverage.
Mobile Crisis Response Team	Provides in-home screenings when an individual is in crisis. Makes referrals to appropriate services.
Crisis Phone Line	Provides 24 hour a day, 7 day a week intervention and referral services.
Public Safety Response	Provided by law enforcement, firemen, social workers, etc. Encourages MA users to access treatment before they are court order to do so. Provides information regarding access to tx services.
Referral to Services	Referral to tx services made before a user is court ordered to do so. Provided by professionals other than first responders.
<b>Assessment Services</b>	
Emergency SA Evaluation	An in-depth evaluation of the individual's substance abuse history and treatment needs. Completed within 24 hours of request. Evaluates the use of illicit drugs and alcohol in addition to MA. Clinician begins formulating a tx plan based on the individuals specific needs.
SA Evaluation	Same as Emergency SA Evaluation except it is not completed within 24 hours.
Screening	Identifies substance abuse, mental health and gambling problems. Serves as a referral for more comprehensive evaluation.
UA and Intoxilyser Testing	Administers random UA and/or intoxilyser testing to ensure abstinence.
<b>Residential Services</b>	
<b>Dual Residential</b>	
Dual Residential	Simultaneously treats SA and MH issues in dual diagnosis individuals. Requires accredited clinician.
<b>Transitional Residential</b>	
Therapeutic Community	Utilizes highly structured, peer-oriented activities. Focuses on building psychosocial skills. Staff secure.
Halfway House	Assists individuals in moving from more intensive tx to independent living. Least restrictive type of Residential Services.
<b>Non-Residential Services</b>	
<b>Outpatient Services</b>	
Partial Care	A very intensive tx program run by licensed clinicians. Medical back-up is provided. Services generally provided 5 days a week for 6-8 hour a day.
Intensive Outpatient Counseling	Offers groups and individual counseling averaging 10-15 hours per week.
Community Support	Provides a 1 to 1 client staff ratio. Focuses on rehabilitating social and relational skills. Includes voc. rehab, finances, housing and recreational skills. Provides 24 hour a day, 7 day a week on-call availability. Often works in conjunction with other Non-Residential Services.
Outpatient Counseling	Provides individual and group therapy designed to develop the skills to prevent relapse. Less intensive than Intensive Outpatient Counseling.
<b>Recovery Support &amp; Relapse Prevention</b>	
Relapse Crisis Response	Provides short-term, intensive services to addicts with significant recovery history. Helps users in recovery to restabilize abstinence and sobriety.
Care Monitoring	For individuals who have made significant progress in recovery and community living. Monitors the individual's success in the community. Plans to prevent relapse.
Crisis Respite	Provides assistance if relapse occurs, so that user does not have to start the continuum of care at the beginning again.
Recovery Support Group	Group meetings designed to maintain abstinence and sobriety. Meets frequently enough to provide the structure needed to prevent relapse.

**Table 3. Definitions of Levels of Care.**

All of the LOC have specific staffing needs based on the specific intents of each LOC. These needs are illustrated in *Table 4* below. Each column of the Continuum of Care represents a type of professional staff. The “X’s” found in each column represents the necessary staffing for each area of expertise or training. Please be aware that the “X’s” are not an exact ratio for the actual number of staff needed, but illustrate the approximate number staff needed in relation to one another and the other LOC.

LEVEL OF CARE	STAFF												
	Physician	Nurses	Med. Tech	Psyc. Tech	Psychology	Mental Health	Substance Abuse	Case Mgmt	Probation/ Corrections	Transportation	Community Support	Compulsory	Voc. Rehab
<b>Assessment Services</b> Emergency Substance Abuse Evaluation Substance Abuse Evaluation Screening						XX	XXX	XXX					
<b>Emergency Services</b> Crisis Phone Line Mobile Crisis Response Team Emergency Protective Custody (EPC) Civil Protective Custody(CPC) Medical Detox Emergency Stabilization and Treatment Substance Abuse Emergency Shelter or Respite Social Detox Emergency Community Support	XXXX	XXX	XXX	XXX		XXX	XXX	XXX		XXX			
<b>Residential Services</b> <b>Residential</b> Methamphetamine Detox Short Term Residential Extended Residential Dual Residential <b>Transitional Residential</b> Therapeutic Community Halfway House	XX	XX	XX	XXX	XXX	XXX	XXX	XXX	as needed	XX		X	
	as needed	as needed	as needed	XX	as needed	X	X	X	X	XX	XXX	X	X
<b>Non-Residential Services</b> <b>Out-Patient</b> Partial Care Intensive Outpatient Counseling Community Support Outpatient Counseling <b>Recovery Support and Relapse Prevention</b> Care Monitoring Methadone Maintenance	as needed	X	?	?	X	XXX	XXX	XX	XX	X	X	X	
	as needed		as needed	XX	as needed	XX	X	XX	X	XX			

**Table 4. Staffing needs at each level of care for substance abusers in Nebraska.**

## **Methamphetamine Addiction in Nebraska**

To fully understand the scope of the MA problem and its impact on Nebraska, we must acknowledge that MA and MA treatment cannot be separated from other substance abuse issues. MA is rarely the first substance that users try. Most MA users have a history of drug and alcohol abuse before trying MA. Research shows that alcohol abuse in teens is often a precursor to MA use. Use of other substances does not stop once a user begins taking MA. Instead, MA users rely on substances such as alcohol and marijuana to heighten their high or allow them to sleep. MA users are poly-drug users. Therefore when determining the prevalence of MA addiction and assessing the existing resources available to address MA needs in Nebraska, we must do so in the context of poly-drug use.

### ***How many Nebraskans use MA?***

The lack of standardized data collection and a centralized data base greatly inhibits the state's ability to comprehend the exact magnitude of substance abuse, particularly MA's, impact on Nebraska citizens. Much of the information available regarding the use of MA in Nebraska is found in federal reports and studies. A review and analysis of the SAMHSA report "State Estimates of Substance Use from the 2002-2003 National Surveys on Drug Use and Health"<sup>1</sup> and of 2003 SAMHSA substance abuse treatment admissions data for Nebraska<sup>2</sup> revealed the findings illustrated in *Table 5*. In 2003, 12.71% or 180,412 of the people 12 years of age and older in Nebraska were estimated to be dependent on or abused alcohol or illicit drugs.<sup>3</sup> To determine how many of these people were impacted by substances other than alcohol, researchers focused on the people that used primary substances other than alcohol or alcohol as a primary substance in combination with a secondary illicit drug. Researchers broke this population into three categories, illicit drug users, stimulant drug users<sup>4</sup> and MA or amphetamine users. This data begins to reveal the extent of substance abuse problem within the state.

---

<sup>1</sup> This SAMHSA report presents state estimates on substance use based on the combined findings of the 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs), formerly called the National Household Survey on Drug Abuse (NHSDA).

<sup>2</sup> See *Appendix F* for a description of the Treatment Episode Data Set (TEDS) and the National Survey of Substance Abuse Treatment Services (N-SSATS) data and their limitations.

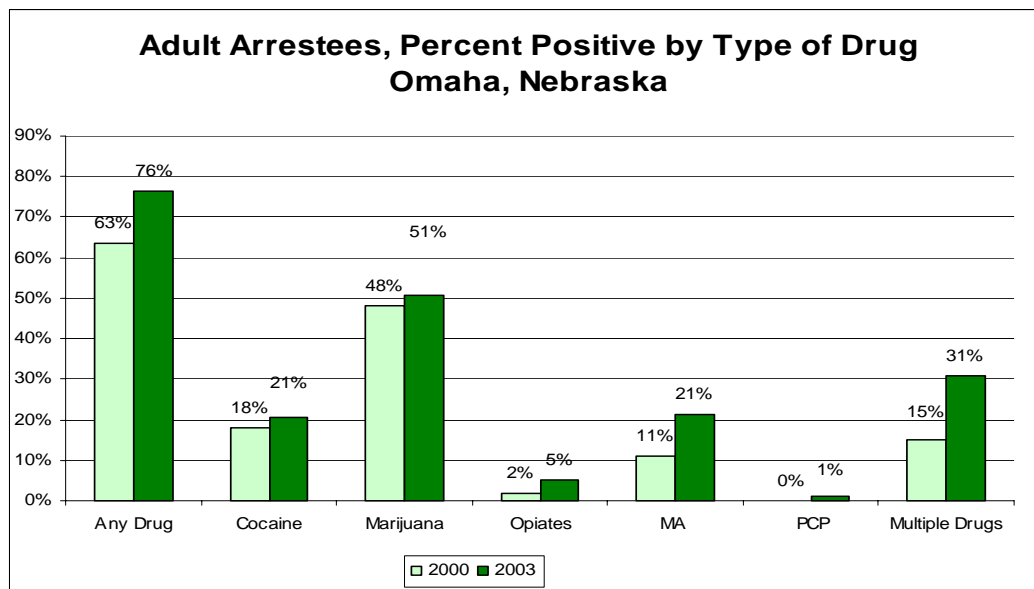
<sup>3</sup> This estimate uses 2002-2003 survey results rates applied to 2000 U.S. Census data. Appendix D, Tables VIII-XVI show the estimated ranges of drug dependence and treatment needs in Nebraska and the state's Behavioral Health region.

<sup>4</sup> Survey findings were further refined by using SAMHSA treatment admissions data for Nebraska including estimates of the proportions of "alcohol w/secondary drug" and "other/unknown" classifications that were stimulant- and methamphetamine/amphetamine-related. This total includes estimates of the number of "alcohol w/secondary drug" and "other/unknown" classifications which were stimulant-related (cocaine, amphetamines and other stimulants). Alcohol w/secondary drug estimates were based on the proportion of primary drug admissions which were stimulant-related (70.5%), while a somewhat more conservative estimate of 50% stimulant-related was used for "other/unknown" classifications.

	Total Number of Persons Age 12 or Older Using Illicit Drugs and/or Alcohol	Number of Illicit Drug Users	Number of Stimulant Related Users	Number of MA/Amphetamine Users
Substance Dependence or Abuse	180,412	49,113	32,709	22,396
Admitted for Substance Abuse Treatment	10,609	6,289	4,188	2,869

**Table 5. Drug Abuse and Treatment Admission Estimates in Nebraska, 2003.**

Another indicator of Nebraska’s substance abuse problem is the number of arrestees who tested positive for drugs at the time of their arrest. *Figure 2* below shows that presence of all types of drugs in arrestees in Omaha, Nebraska increased from 2000 to 2003.<sup>5</sup> In 2003 75% of all arrestees tested positive for some type of drug at the time of their arrest and 21% tested positive for MA. The increase in the percentage of arrestees testing positive for drugs suggests an increase in drug use including MA.



**Figure 1. Percentage of Adult Arrestees Testing Positive for Illegal Substances. Source: Arrestee Abuse Monitoring Program-ADAM.**

*Figure 3* below illustrates that when arrestees were divided according to age, MA use among arrestees increased in every age group. The greatest increase in MA positive drug tests was seen in arrestees under the age of 21, indicating MA use by younger Nebraskans is on the rise. MA use is not limited to a single age group and MA use is rising among Nebraskans of all ages.

<sup>5</sup> *Figure 2* only looks at illicit drug use. It does not include arrestees who tested had used alcohol.

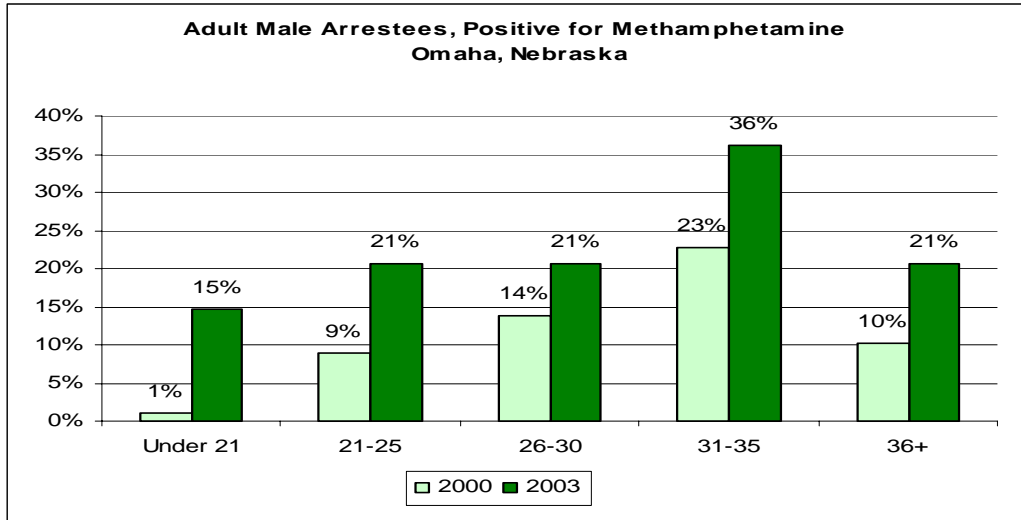


Figure 2. Adult Male Arrestees Testing Positive for Methamphetamine. Source: Arrestee Abuse Monitoring Program-ADAM.

**How many Nebraskans need MA treatment?**

Table 5 above shows that less than 6% of all Nebraskans with substance abuse problems actually enter into treatment. This results from several factors including lack of treatment capacity and unwillingness to seek treatment. When determining how many Nebraskans need treatment, it is necessary to distinguish between treatment need and treatment demand. Arguably, every person with a substance abuse problem needs treatment, therefore, “treatment need” refers to all MA users who are classified as drug dependent users or abusers.<sup>6</sup> “Unmet treatment need” refers to all MA users who are classified as drug dependent users or abusers **and** who are not receiving treatment.<sup>7</sup> Table 6 shows the treatment need estimates for Nebraskans using MA in 2003.<sup>8</sup>

	Treatment Need	Unmet Treatment Need
Nebraska	22,396	20,972
Region I	1,200	1,124
Region II	1,344	1,259
Region III	2,937	2,750
Region IV	2,817	2,638
Region V	5,502	5,152
Region VI	8,595	8,049

Table 6. Illicit Drug-Related Dependent/Abusers Needing But Not Receiving Treatment in Nebraska and Behavioral Health Regions (2003).

Unmet treatment need does not consider whether the individual actually wants or is ready for treatment. In contrast, “treatment demand” refers to those users who want or are ready for treatment. It is obvious that this category includes those individuals who voluntarily seek

<sup>6</sup> Classification as drug dependent or abuser is based on the criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* (American Psychiatric Association, 1994).

<sup>7</sup> Those “not receiving treatment” did not receive any during the past 12 months.

<sup>8</sup> Information was taken from Table XVI in Appendix D. Appendix D also contains treatment need estimates for illicit drug and stimulant users.

treatment. Less apparent, are those users who become “ready” for treatment due to involvement with the justice or social service systems. Although these individuals might not have sought treatment on their own, they are ready for treatment because they are required to seek it as a condition of their case plan or probation. Therefore, this category includes those who voluntarily seek treatment as well as those who involuntarily seek treatment as a condition of probation, drug court or HHSS requirements. “Unmet treatment demand” refers to those drug dependent users or abusers who are ready for treatment and would seek treatment if it were available. Unmet treatment demand cannot be discussed until treatment demand is accurately determined.

Treatment demand includes those users who have already sought treatment as well as those users who want treatment but are not receiving it. Therefore, based on the above data, there was a minimum estimated treatment demand of 1,424 people, the number of people who sought treatment.<sup>9</sup> To determine the total treatment demand we must know how many more people would seek treatment if it were available. This information is not easily estimated. A State of Colorado model (see “Analysis of Substance Abuse Prevalence, Treatment Resources and Treatment Gaps in Colorado,” by Bruce Mendelson, 2002) used integrated survey findings to determine that 2.7% of problem users who did not receive treatment, wanted or would seek treatment if it were available. Data in correctional settings reveals relatively low levels of inmate “readiness,” with about 10-13% of inmates (70-85% classified as needing treatment) involved in any form of treatment, despite such services being available in 90% of the facilities studies (U.S. Dept. of Justice, Office of National Drug Control Policy, 1998; Camp and Camp, 1997).

Application of the Colorado model in Nebraska finds 566 additional users who would seek treatment if it were available,<sup>10</sup> boosting Nebraska’s total treatment demand to 1,990 users. However, it is uncertain the extent to which models from other states accurately portray conditions in Nebraska, calling into question the reliability of this estimate. Although this estimate may not be a reliable determination of the treatment demand, it does provide us with pertinent information regarding the number of users who seek treatment. A very small percentage of the people who need treatment actually seek it. Relying on MA users to demand treatment will limit the number of users who will receive treatment.

In light of this, it is logical to approach treatment demand from another perspective. Although it would be ideal to provide every MA user with treatment, it is evident the majority will not seek treatment without coercion. The literature review and the best practice meetings both indicate that users often seek treatment once they have become involved with the justice or social service systems. Research also shows that coerced MA treatment resulting from involvement with the justice system is highly effective. Since users involved with the justice and social service systems are often motivated to seek treatment and receptive to receiving it, there is utility in considering this population when determining treatment demand. .

*Table 7* below reflects the estimated treatment demand in the State based strictly on those who have become involved with the justice system through a conviction for MA-related charges or testing positive for MA at the time of their arrest.

---

<sup>9</sup> The estimated number of people receiving treatment was calculated by subtracting the Unmet Treatment Demand from the Treatment Demand.

<sup>10</sup> This amount was calculated by multiplying the unmet treatment need by 2.7%, the percentage determined in the Colorado study.

	Number of MA-related Offenders	Source
DCS-Men	418	Nebraska Dept. of Corrections (2004)
DCS-Women	109	
Probation	1,250	Nebraska State Probation (2004)
Arrestees	17,269	Estimated from 2003 Arrestee Drug Abuse Monitoring Program results for Nebraska
Total	19,046	

**Table 7. Estimated Need for Treatment in Nebraska Based on MA-related Offenders.**

In 2004, HHSS reported that 88 abuse/neglect cases were opened involving allegations that parents had chemical dependency problems. When treatment demand is based upon involvement with justice and social services systems, we find that over 19,100 users in Nebraska need for treatment.

Basing treatment demand on involvement with the justice and social service systems, does not negate the need to provide access to treatment before users become involved with the justice or social service systems. Rather, basing treatment demand on those who are ready for treatment, even if coerced, provides a more accurate estimate of the number of MA users who are seeking treatment in Nebraska.

Based on admissions data, *Figure 4* below shows that the demand for MA treatment in Nebraska has steadily climbed since 1999, eclipsing all other substances in 2000. This admissions data reports the number of people who were admitted to treatment each year. Because the number of admissions reported is limited by the number of treatment spaces available, it is not the most accurate way to determine actual treatment demand. For example, if a treatment facility can only provide treatment to 10 people at a time and their slots are full, we know that there was at least a treatment demand of 10 people. What we are unable to tell from that information is how many people could have been treated had more treatment space been available. While it is more accurate to base treatment demand on involvement with the justice and social service systems, admissions data does show the shift in the types of treatment that people demanded. The sharp increase in MA related admissions demonstrates that the demand for MA treatment has risen in the past seven years.



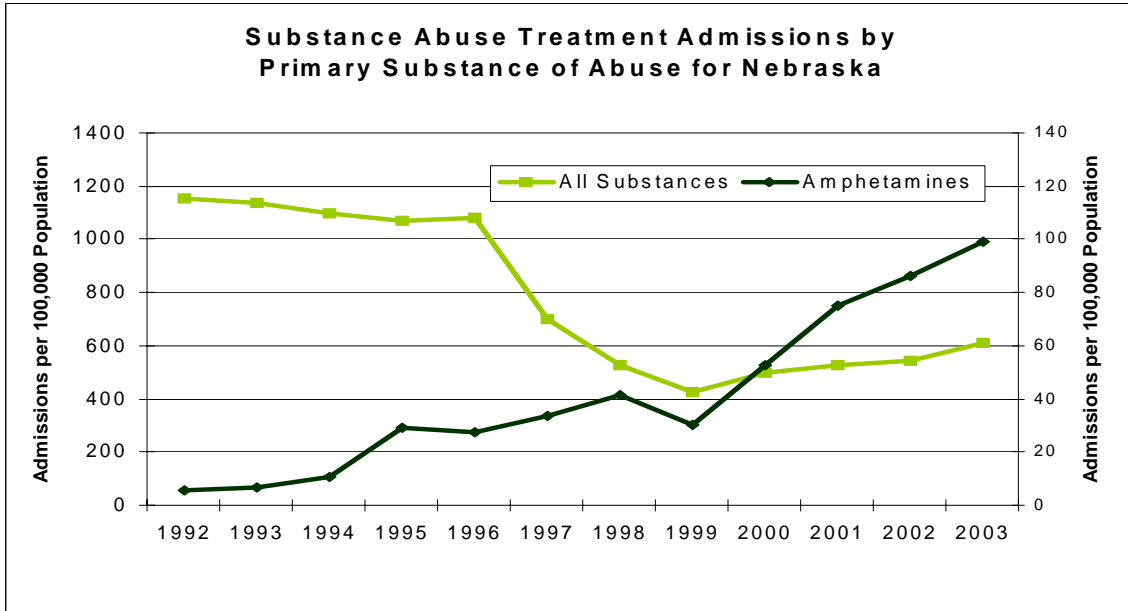


Figure 3. Substance Abuse Treatment Admissions Comparing Amphetamines to All Substances.

**How long does treatment last?**

The length of MA treatment reflects the unique effects that this drug has on the body. It can take 45 to 60 days for a MA user to detoxification and reaching the point that the MA has no physiological affect on the user. MA treatment therefore often last longer than typical substance abuse treatment, underscoring the need for MA specific treatment.

The average duration for each level of care was determined by a review of the cost findings in the study, “Results from 85 studies using the Drug Abuse Treatment Cost Analysis Program (DATCAP),” by M.C. Roebuck and other economists supported by the National Institute on Drug Abuse (NIDA). Table 8 below illustrates average durations by level of care with breakdowns to compare residential and outpatient programs.

LEVEL OF TREATMENT	PROGRAM TYPE	AVERAGE DURATION
<b>RESIDENTIAL</b>	Therapeutic Community	33 weeks
	Therapeutic Community (Prison)	28 weeks
<b>OUTPATIENT</b>	Standard Adult Outpatient	17 weeks
	Intensive Outpatient	7 weeks
	Drug Court	46 weeks

Table 8. Durations by level of care comparing residential and outpatient programs.

**How many treatment facilities are there in Nebraska?**

**Number of Facilities**

To determine the number of treatment facilities within the state, researchers relied on two sources, the *Roster of Substance Abuse Treatment Center Roster* (updated October 11, 2005) by the Nebraska HHSS and the *Substance Abuse Treatment Facility Locator Lists* (updated April,

2005) by SAMHSA. Because these sources listed different facilities<sup>11</sup>, researchers combined the two to compile the most comprehensive list of treatment facilities possible. Researchers identified a total of 111 treatment facilities throughout the state. Forty-six (46) of these facilities appeared on both lists, 40 appeared only on the SAMHSA list and 25 appeared only on the HHSS list.

Figure 5 below combines the two lists to show the 111 facilities statewide broken down by region. Based on this information roughly one-third (33) of Nebraska’s counties had a substance abuse treatment facility.

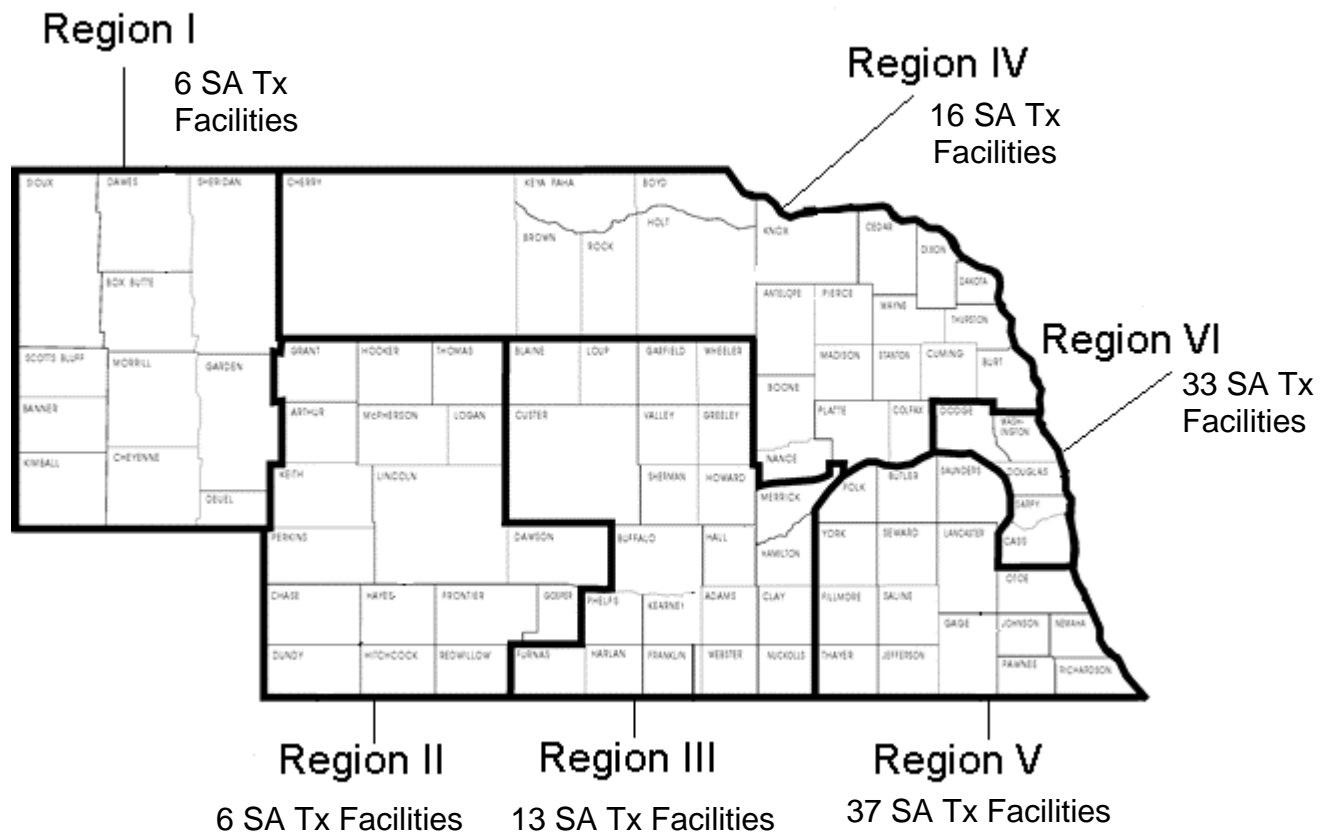


Figure 4. Nebraska Substance Abuse (SA) Treatment (Tx) Facilities by Region.

The most comprehensive description of substance abuse treatment facilities is the National Survey of Substance Abuse Treatment Services(N-SSATA) conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA). This survey takes a “snap-shot” approach, reporting the number of facilities and clients as of a specific date. The most recent reported information is for March 31, 2003. One-hundred and seven (107) substance abuse treatment facilities responded to the survey and reported there were 4,573 clients in treatment. Table 9 shows the distribution of the facilities and clients by type of care.

<sup>11</sup> The HHSS source listed 71 facilities while the SAMHSA source listed 86 facilities.

	Number of Facilities*	Number of Clients in Treatment on March 31, 2003	Median no. of clients per facility
<b>Outpatient</b>	<b>84</b>	<b>3,879</b>	<b>31</b>
Regular outpatient	82	3,081	24
Intensive outpatient	37	541	12
Day treatment/partial hospitalization	11	46	--
Detoxification	5	30	1
Methadone/LAAM maintenance	2	181	91
<b>Residential</b>	<b>35</b>	<b>634</b>	<b>16</b>
Short term	16	216	10
Long term	26	378	13
Detoxification	8	40	4
<b>Hospital inpatient</b>	<b>5</b>	<b>60</b>	<b>2</b>
Rehabilitation	3	58	10
Detoxification	3	2	--
<b>Total</b>	<b>107</b>	<b>4,573</b>	<b>29</b>

\*Facilities may be included in more than one category.

Source: SAMHSA, "National Survey of Substance Abuse Treatment Services," March 31, 2003.

**Table 9. Nebraska Substance Abuse Treatment Facilities and Clients in Treatment on March 31, 2003, by Type of Care.**

A relatively new type of treatment facility is the Substance Abuse Recovery Home. These homes are communal-living, mutual-help settings for persons in recovery of alcohol and substance abuse. Currently these homes exist in three of Nebraska's counties: Hall, Lancaster, and Douglas. *Table 10* shows the distribution of these homes and the number of beds by gender and county.

	Facilities	Beds		
		Men	Women	Women and children
Hall	4	12	6	7
Lancaster	9	58	12	0
Douglas	29	174	24	24
<b>Total</b>	<b>42</b>	<b>244</b>	<b>42</b>	<b>31</b>

**Table 10. Nebraska Substance Abuse Recovery Homes. Source: Nebraska Health and Human Services System, Nebraska Substance Abuse Recovery Homes, updated 6/16/05**

The data above shows that there are only 111 treatment facilities within the state to provide treatment to the estimated 22,396 MA users who need treatment. The analysis also shows that only 37 facilities provide the type of treatment most effective in treating MA addiction, intensive outpatient treatment. The *Best Practices Roundtable Discussions* confirmed this facility shortage. Treatment providers reported that the lengthy waiting list for all levels of treatment was a primary barrier to implementing a best practices model for MA treatment in Nebraska and that greater accessibility is needed to treatment facilities across Greater Nebraska.

It is important to emphasize that although this report focuses on MA, MA specific treatment facilities are a rarity within Nebraska. The treatment facilities counted above must provide treatment to **all** substance abusers throughout the state, regardless of whether they use alcohol or illicit drugs. Treatment providers throughout the state reported difficulty transitioning and/or combining MA treatment with the alcohol treatment they previously provided. This difficulty raises concerns about the effectiveness of the treatment MA users are receiving. Although treatment space is being made available to MA users, treatment may be ineffective because based on alcohol treatment.

Additionally, unless overall treatment capacity is increased, every treatment space given to a MA user reduces the amount of treatment space available to alcoholics and other illicit drug users. *Figure 6* below illustrates how the allocation of treatment space has shifted over time. The percentage of treatment space being occupied by MA users has increased while the percentage of treatment space occupied by alcoholics has declined. The state of Nebraska must be careful not to trade one treatment shortage problem for another. By shifting the allocation of treatment space to MA users, treatment for alcohol and other illicit substances decreases. This shift is particularly troubling in light of the previous observation that it is ineffective to treat MA in the same manner as alcohol. Nebraska does not want to trade effective alcohol treatment capacity for ineffective MA treatment capacity.

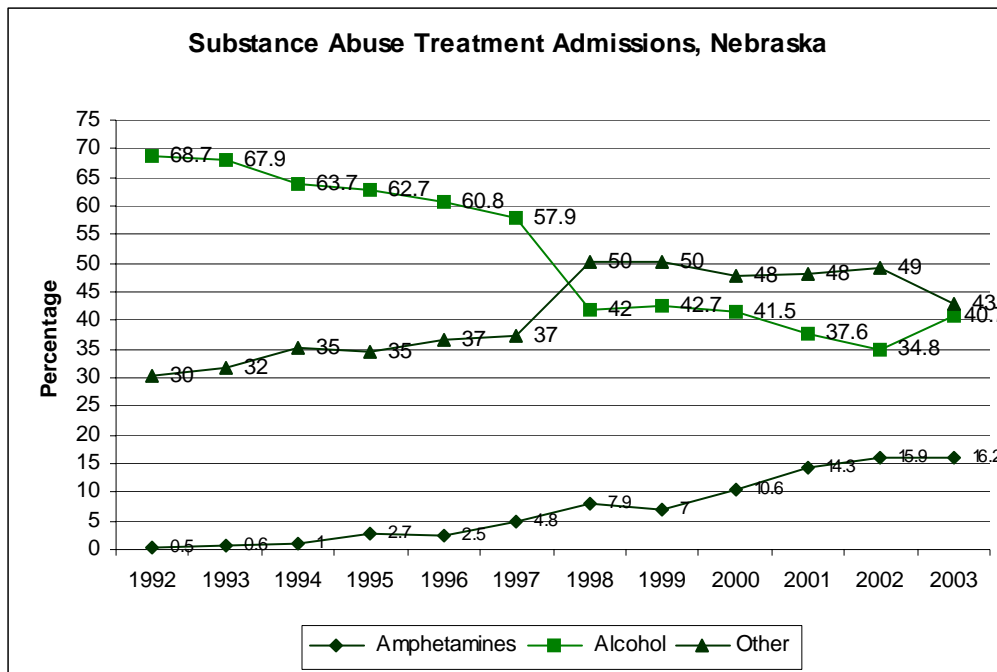
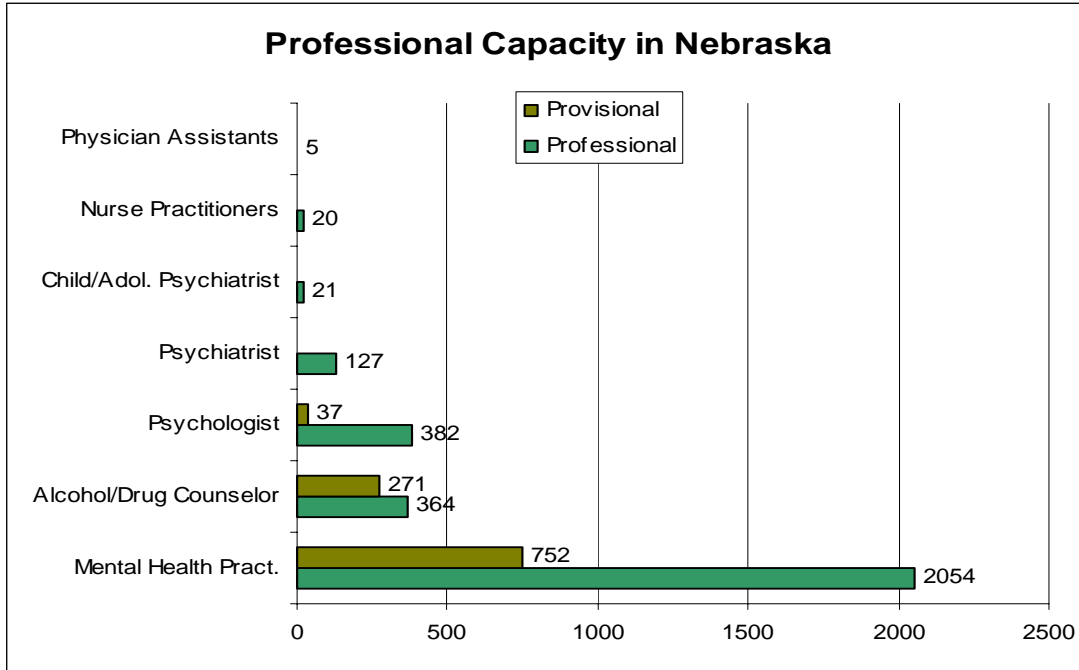


Figure 5. Nebraska Substance Abuse Treatment Admissions. Source: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode.

### Professional Capacity

Further complicating that lack of treatment capacity in Nebraska is the shortage of qualified treatment professionals. The lack of professional capacity precludes the state from simply redirecting resources to create more treatment facilities because it would be unable to staff them. *Figure 7* below illustrates the number of treatment professionals within the state.



**Figure 6. Professional Capacity in Nebraska. Source: Nebraska Health and Human Services System.**

*Table 11* shows the number of treatment professionals according to the region in which they practice. Over 2,000 treatment professionals were distributed throughout the state, but 18 counties lacked a mental health practitioner, and 48 counties did not have an alcohol and drug counselor.

	Mental Health Practitioners	Alcohol and Drug Counselors
Region 1	64	19
Region 2	70	11
Region 3	247	56
Region 4	122	37
Region 5	536	99
Region 6	910	126
<b>Total<sup>12</sup></b>	<b>1,949</b>	<b>348</b>

**Table 11. Mental Health Practitioners & Alcohol and Drug Counselors by Nebraska Behavioral Health Region.**

In *The Nebraska Academic Health Centers Plan for Excellence in Behavioral Health*, the University of Nebraska Medical Center, Creighton University and the State of Nebraska

<sup>12</sup> The map from which these numbers were derived list the total number of mental health practitioners as 1,953 and alcohol and drug counselors as 346. The numbers in the table are summarized from the county numbers listed in the map. Source: State of Nebraska, Credentialing Division. Data updated 3/30/05

(working together as the Behavioral Health Reform Academic Support Work Group) determined that:

*People with substance abuse and mental illness should have access to needed services within their communities or as close to home as possible (2003).*

A survey of the workforce supply in Nebraska, however, does not support this possibility. In fact, the lack of behavioral health care professionals in Nebraska has reached crisis proportions, reflecting a scarcity of mental health and substance abuse professionals particularly in rural Nebraska. The Nebraska Office of Rural Health and Primary Care has designated Regions 1 through 5 as mental health professional shortage areas.

Compared to the national average of 31.2 psychologists per 100,000 people, in 1998 Nebraska had only 26.5 psychologists per 100,000 population. Nebraska was also below the national 1998 average for social workers, with only 205.3 social workers per 100,000 population, compared to the national average of 216.0 (2003). *Table 12* below reflects the number and location of psychologists, substance abuse counselors (C/LADAC), and Licensed Mental Health Professionals (LMHP) certified by HHSS.

	C/LADAC	Provisional C/LADAC	LMHP	Provisional LMHP	Psychologists	TOTALS
Region 1	21	8	64	22	8	123
Region 2	11	7	65	17	5	105
Region 3	60	21	213	63	28	385
Region 4	20	22	114	61	21	249
Region 5	89	59	493	183	129	963
Region 6	110	63	815	329	137	1454
Multi-Region	24	5	152	9	20	210
Total	346	185	1916	684	348	3479

**Table 12. Locations of Psychologists, C/LADAC, and LMHP's by Nebraska Region; UNMC Health Professions Tracking Center. (2003)**

Nebraska ranked 27<sup>th</sup> among states in psychiatrists per capita in 1998, with 6.7 psychiatrists per 100,000 population, compared to the national average of 11.1. (2003). Of Nebraska's 93 counties, 21 have no licensed psychiatrists, psychologists, social workers, counselors, or marriage and family therapists; while only one mental health professional is reflected in 24 Nebraska counties (2003). *Table 13* below illustrates the locations of these mental health professionals.

	Psychiatrists		Child/Adol. Psychiatrists		Nurse Practitioners		Physician Assistants		TOTALS	
	#	%	#	%	#	%	#	%	#	%
Region 1	5	4%	1	5%	1	5%	0	0%	7	4%
Region 2	4	3%	1	5%	0	0%	0	0%	5	3%
Region 3	16	13%	3	14%	3	15%	0	0%	22	13%
Region 4	7	6%	0	0%	0	0%	2	40%	9	5%
Region 5	23	18%	3	14%	4	20%	1	20%	31	18%
Region 6	72	57%	13	62%	12	60%	2	40%	99	57%
Totals										

**Table 13. Locations of Mental Health Professionals by Nebraska Region; UNMC Health Professions Tracking Center. (2003)**

Developing Nebraska's capacity of behavioral health professionals plays a pivotal role in the success of any statewide response to the MA problem. The addition of new treatment facilities will be ineffective without adequate staff to provide corresponding services.

Unfortunately, the *Best Practices Roundtable Discussions* revealed that creating beds is less difficult than attracting qualified staff.

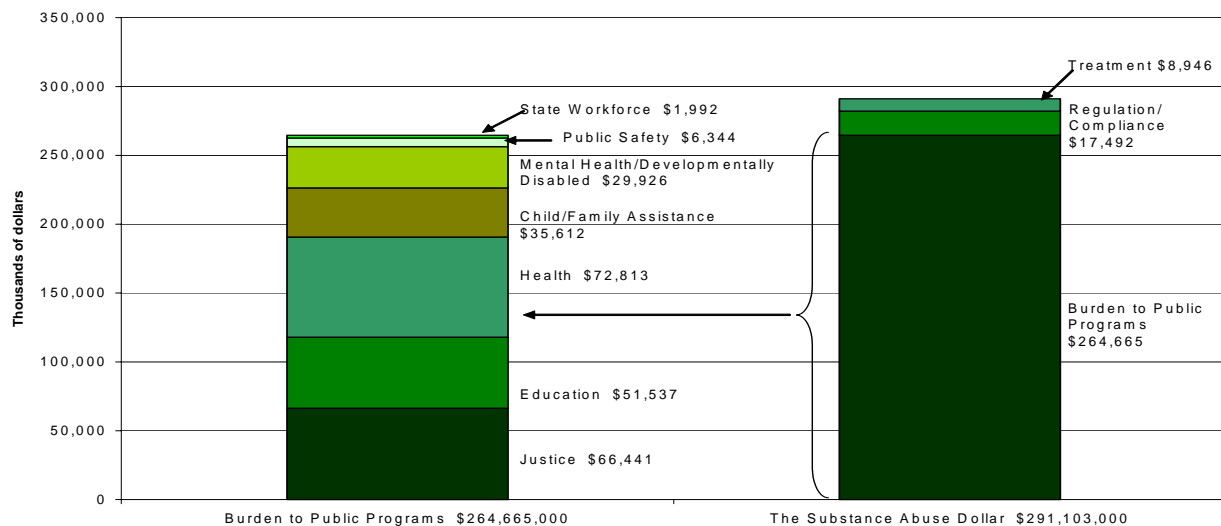
### **How does MA impact the Nebraska state budget?**

A review and analysis of Nebraska state budget information conducted in 2001 by the National Center on Addiction and Substance Abuse at Columbia University (CASA)<sup>13</sup> revealed that the state government spent about \$291 million or 8.2% of the entire annual state budget (\$3.5 billion) dealing with the impacts, regulation/compliance functions and problems of substance abuse. Of this amount, only about \$9 million or .3% was spent by the state on substance abuse treatment, prevention and research.<sup>14</sup> This spending does not include any local or federal money.

Figure 8 below uses two columns to summarize Nebraska’s state spending on substance abuse in 1998. The taller column represents the total substance abuse dollars spent (\$291 million), highlighting \$8,946,000 directed toward treatment, \$17,492,000 directed to regulation/compliance, and \$264,665,000 burdening public programs. The shorter column represents only those expenses burdening public programs, illustrating the areas of state spending in Nebraska most heavily impacted by substance abuse.

- The \$66.4 million spent on the criminal justice system breaks down to \$57.6 million for adult corrections and \$8.8 million for juvenile justice.
- The \$51.5 million spent on education includes both elementary and secondary levels.
- \$72.8 million was spent on health.
- \$35.6 million was spent on child/family assistance.
- \$29.9 million was spent on mental health/developmental disability.
- \$6.3 million was spent on public safety.

**Summary of Nebraska State Spending on Substance Abuse (1998)**  
CPACS - University of Nebraska at Omaha, December 2005



<sup>13</sup> “Shoveling Up: The Impact of Substance Abuse on State Budgets,” by the National Center on Addiction and Substance Abuse at Columbia (2001) is based on detailed budget data for 1998 submitted by Nebraska and 46 other state budget officials.

<sup>14</sup> See Tables I-VII in Appendix C for Nebraska and six surrounding states.

**Figure 7. Summary of Nebraska State Spending on Substance Abuse (1998).**

For every dollar the state of Nebraska spent on substance abuse related programs in 1998 the following allocations were made:

- 91 cents of each dollar paid for the burden substance abuse places on public programs.
- 3.1 cents of each dollar were spent on prevention, treatment and research programs aimed at reducing the incidence and consequences of substance abuse.
- 5.8 cents of each dollar paid for regulation/compliance of alcohol and tobacco licensing, control and collection of taxes. The national average for regulation/compliance expenditures was only .5 cents per dollar. Nebraska’s proportion equaled .5% of the state total budget and was the highest of all reporting states, matched only by Alabama and Washington.<sup>15</sup>

Even though state spending on substance abuse cannot be disaggregated by type of drug (e.g., methamphetamines), nationwide results show that 78.2% of substance abuse spending is related to a combination of both illicit drugs and alcohol and 1.4% is related to illicit drugs only. Based on these findings, the estimated amount of Nebraska state spending linked to illicit drugs (in combination with alcohol or alone) in 1998 was about \$232 million (79.6% of \$291 million). Of this amount, approximately \$225 million was spent cleaning up the wreckage of illicit drug abuse, while about \$7 million was applied to prevention and treatment.<sup>16</sup>

According to *Table 14* below, provided by Nebraska Behavior Health Services, total state spending on substance abuse prevention and treatment has increased since 1998. In 1998 approximately \$9 million was spent. This figure increased to approximately \$28 million in 2006. While this reflects an increase in the actual dollars spent for prevention and treatment, it does not indicate whether the proportion of the state budget spent for direct services increased. One of the concerning aspects of the 1998 SA expenditures was the small amount spent on treatment and prevention in proportion to the amounts spent on clean-up and regulation. Without data indicating the total amount of substance abuse related expenditures, it is difficult to determine if Nebraska is truly making progress in funding substance abuse treatment.

<b>FY06 Funding Allocations for Substance Abuse &amp; Addiction Services</b>	
<b>Contract program</b>	<b>Funding</b>
<b>SA Programs/Services Funded through BH Division (Program 038)</b>	
Regions 1-6 (SA services include treatment, recovery and prevention services.)	\$22,329,017
Statewide Prevention Programs (includes Youth Service Development and Federal Clearinghouse)	\$371,393
Tribes (Sioux, Ponca, Winnebago, Omaha) SA Services	\$502,907
Residential Treatment Services for Native Americans (Northeast Panhandle SA Center)	\$408,491
Problem Gambling Assistance Services	\$1,286,619
SA Statewide Training	\$62,745
Sa Counselor Training	\$137,325
Peer Review for SA Providers	\$5,000
Women’s BH Coalition Assessment and Trauma Services	\$13,000
Safe & Drug Free Schools Grants to Communities	\$427,006

<sup>15</sup> Appendix C: Table I shows the total spending in each category in Nebraska, the amount and percentage related to substance abuse and the per capita amount spent for each person in the state.

<sup>16</sup> As all regulation and compliance substance abuse spending is alcohol and tobacco only, the breakdown of the \$232 million illicit-drug (in combination with and without alcohol) spending estimate is based on the total substance abuse spending ratio of 97:3 affected-program spending to treatment, prevention and research spending.



SA SICA Prevention Grants to Community Coalitions	\$2,480,007
SA Consumer/Family Support Project	\$43,245
State General Funds Match for SA Waiver Medicaid Services	\$515,070
<b>SUBTOTAL</b>	<b>\$28,581,825</b>
<i>SA Waiver Services Funded through Medicaid (Program 348)</i>	
Federal Funds for SA Waiver Services	\$709,035
<b>Total FY06 SA Funding</b>	<b>\$29,290,860</b>

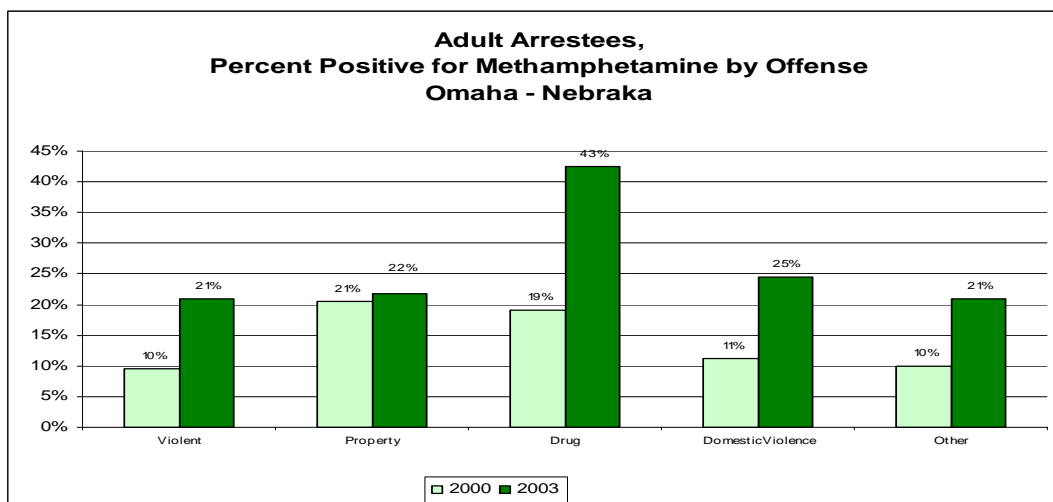
**Table 14. FY06 Funding Allocations for Substance Abuse & Addiction Services, as provided by Nebraska Health & Human Services.**

## **How does MA impact the Criminal Justice and Social Service Systems?**

### **Methamphetamine and Offending**

Figure 2 showed that the percentage of arrestees testing positive for drugs, including MA, increased from 2000 to 2003. By 2003 76% of arrestees in Douglas County tested positive for some type of drug and 21% tested positive for MA. While researchers disagree on the relationship between drug use and offending, it cannot be denied that addiction impacts the justice system. Even if it cannot be proven to the satisfaction of some social scientists that intoxicants lower the inhibitions of people so that they commit crimes, or that crimes are the means by which addicts obtain the funding needed for their habit, every point of the justice system is burdened by an offender's need for substance abuse treatment and the medical/emotional conditions resulting from drug abuse.

The following figures illustrate the types of crimes for which MA users are arrested. Figure 8, below, shows the type of offense for which MA using arrestees were booked.



**Figure 8. Distribution of MA Arrestees by Offense Category. ADAM Data**

Figure 8 shows that with slight variations between 2002 and 2003, the rank-ordering of offenses for Omaha offenders who tested positive for MA, from highest to lowest are: drug, domestic violence, property, violent, and non-specified offenses.

This information can be compared to similar data obtained in Omaha, Des Moines, and Denver in 2000. Table 15, below, shows the relative ranking of the different offense categories for arrestees who tested positive for MA use. While one would ordinarily expect some variation between the cities based on differential charging and enforcement practices, the data is most remarkable for the degree to which there appears to be almost no common pattern of offending between the cities.

Offense Category	Omaha	Des Moines	Denver
Violent	5	4	5
DWI	--	5	1
Domestic Violence	3	6	2
Drug	2	1	3
Property	1	3	6
Other	4	2	4

**Table 15. Distribution of MA Arrestees by Offense Category for Three Cities-ADAM**

The results reflected in Figure 8 and Table 15 aptly demonstrate the difficulty in ascribing particular crime costs to MA use.

### **Methamphetamine and Abuse and Neglect**

Just as MA is affecting the justice system, it is also having an impact on the social service system as well. The 2005 Kids Count report completed by Voices for Children in Nebraska found that 36% of child abuse-neglect cases in Douglas County involved MA. The study examined 94 cases of abuse-neglect in Douglas County, the only county keeping statistics on abuse-neglect cases involving MA. Parents or guardians were using MA in 34 of the cases examined by Voices for Children. The study looked at cases where there was physical abuse, truancy, dirty houses, a parent selling MA, abandonment, family violence and the overdose or death of a parent on MA. Thirteen of the 34 cases involved a baby born with MA in its system.

A more comprehensive study was recently completed by a social work administrator in western Iowa. This study found that 49% of child welfare cases in the past two years involved parental MA use, a rate that has stayed the same despite the state's crackdown on illegal labs. In 2005, MA use was a factor in 781 out of 1,605 child welfare cases. This amount included parents who were arrested for MA, tested positive for MA or children who were born with MA in their system. In addition to considering cases where the parent manufactured or possessed MA in the presence of a child and case where MA was present in a newborn's system, the Iowa study considered cases where parents left their children uncared for while doing drugs, and element that also appeared to be absent in the Nebraska study.

### **User Involvement with These Systems**

As discussed above, many MA users initially pursue treatment as a result of their involvement with the justice or social service systems. Because of an arrest, an allegation of neglecting their children or mental illness, a large number of MA users are forced into treatment as a condition their sentencing or case plan with HHSS. Therefore, it is not enough for the State

of Nebraska to provide treatment at each level of care. It must understand how the LOC interact with the varying status of individuals within the justice and social service systems.

To aid in this understanding, *Figure 11* illustrates the movement of a MA user through the justice system. At each level of the system a MA user has the opportunity to avail himself to the services provided at that level. If the MA user fails to utilize those services, he will progress to the next level of the justice system. For example, a MA user sentenced to probation may fulfill the conditions of his probation, one of which is likely to be some type of substance abuse treatment. The MA user would then be released from the justice system and, ideally, pursue treatment in the community. In contrast, an individual who violates the conditions of his probation will be remanded to the custody of the Department of Corrections, continuing to the next level of services within the justice system. The practical application of this phenomenon is that MA treatment must be available at all levels of the justice system because there will continue to be a residual number of MA users who volitionally or non-volitionally do not avail themselves to the treatment services provided at the previous level. MA users involved with HHSS may not have contact with the justice system. It is equally necessary for treatment options to be available to MA users in that setting as well.

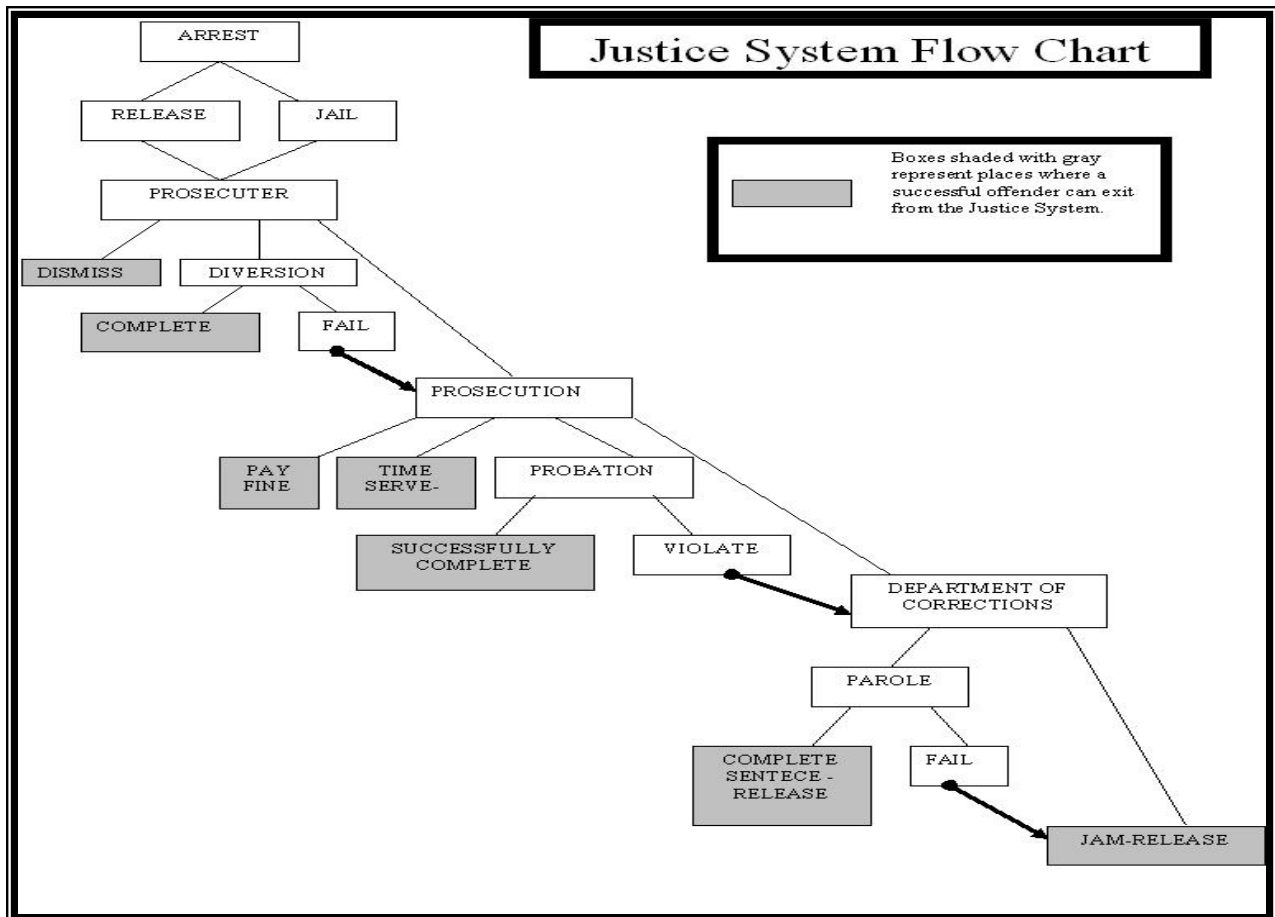
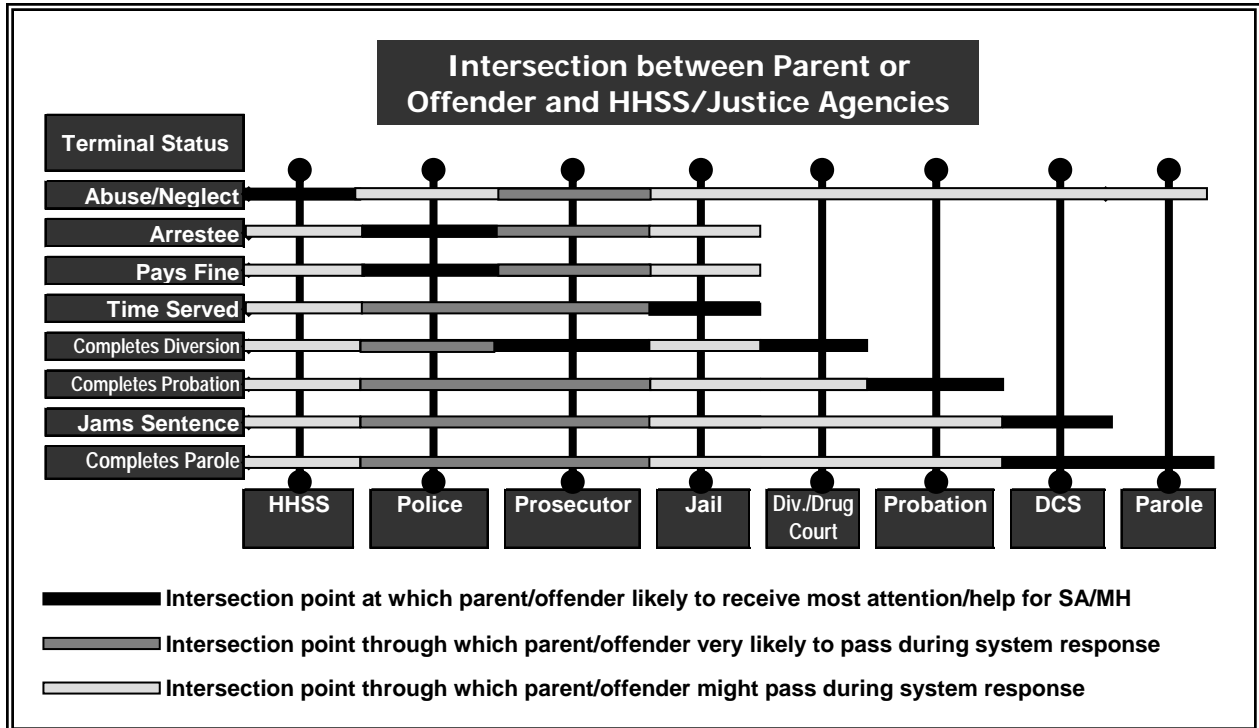


Figure 9. Flow of Offenders through Nebraska's Justice System.

Once we begin to understand the natural progression through the justice and social service systems, we can identify at what terminal status a particular level of care can be

maximized. Terminal status describes the last point that a MA user has contact with the justice or social service systems. *Figure 12* demonstrates the point in the progression through the system a particular service entity would have the most contact with a user. For example, the police will have the most contact with an arrestee.



**Figure 10. Intersection between Parent or Offender and HHSS/Justice Agencies.**

Understanding the interaction between MA users and the justice and social service systems enables the state to capitalize on this contact and ensure that adequate treatment is provided to those who need it, minimizing future contact with these systems.

## **Best Practices**

### ***Review of Treatment Methods and Best Practices Literature***

#### **Review of Treatment Methods Literature**

Methamphetamine (MA) abuse has reached epidemic proportions in the Midwest and continues to spread (Maxwell 2005) (Caulkins 2003). The Substance Abuse and Mental Health Services Administration (SAMHSA) study of national amphetamine treatment admissions from 1992-1999, ranked Iowa as the third highest state in the nation for admission for treatment of MA abuse at 118 per 100,000 population. In 1996, Iowa's rate of MA admissions was 250% times higher than that of the next highest state, California, which showed 92 admissions per 100,000 (2001). The Iowa Department of Public Health's *Iowa Substance Abuse Report* (1998) documents admissions to Iowa treatment facilities for MA abuse escalating from 1% of admissions in 1992 to 12% in 1998 – an increase of 1,100%. A report submitted to the Iowa Governor's Alliance on Substance Abuse (Havel 1997) affirms MA's infiltration of the Midwest, with the incidence of MA use among incarcerated Iowa adults rising from 4% to 30% from 1994 to 1997. The same report also reflects a shift from inhalation to intravenous use of MA among this population.

A review of the literature on treatment for methamphetamine dependence reflects the resourcefulness of drug abuse professionals as they strive to respond to the constant fluctuation of trends in substance abuse. Limited by severe budget constraints, scarce community resources, the blink-of-an-eye shifts of abusers' drugs of choice and preferred intake methods, and the geographic migrations of methamphetamine abuse, researchers and clinicians turn to the existing methodologies considered successful for stimulant use disorders.

Treatment methods dominating the literature include psychosocial and behavioral approaches adapted from experience with treatment of cocaine dependence, efforts to develop effective medication therapies, emergence of replacement pharmacotherapies, supplementation of treatment interventions with comprehensive case management outreach, and application of aversion therapy using both chemical aversion and electrical stimuli. The abundance of research devoted to the Matrix Model merits an in-depth discussion of this particular psychosocial and behavioral approach. Other programs are reviewed as the literature permits. Evaluations of treatment programs are presented, with particular attention to the Matrix Model. Finally, literature regarding development of treatments for MA users involved in the criminal justice system is reviewed.

#### **Psychosocial and Behavioral Approaches**

At this time psychosocial and behavioral interventions demonstrate the most empirical support for treatment of MA dependence (1998) (Rawson R A 2002) (Rawson R A 2000) (Huber A 1997). The cognitive-behavioral approach focuses on how thought affects feelings and actions, preparing patients for lifelong recovery by coaching them to identify and plan for triggers associated with substance abuse. The National Institute on Drug Abuse calls cognitive behavioral interventions "the most effective treatments for methamphetamine addiction" in their *Principles of Drug Addiction Treatment, A Research-based Guide* (1999), singling out the Matrix Model as the only specific treatment featured. The Matrix Model is an example of a cognitive-behavioral protocol adapted for stimulant use disorders in general, and MA

dependence specifically, from interventions successfully treating cocaine abusers in the early eighties (Obert J 2000). This application of cognitive-behavioral therapy is consistent with evidence suggesting that cocaine and MA users respond similarly to such strategies (Huber A 1997) (Rawson R A 2000) (Rawson R A 2002) . Huber et al. (Huber A 1997) reviewed the charts of 500 MA- and 224 cocaine-abusing patients treated at the Matrix Clinic in Rancho Cucamonga, CA between 1988 and 1995 to compare the two groups' responses to the Matrix Model treatment. With cocaine users remaining in treatment an average of 18.0 weeks compared to 17.1 weeks for MA-users and with 13.3% of cocaine users showing positive urinalyses compared to 19.3% for MA users (this difference was not significant), the Matrix model was concluded to be equally well-received by cocaine and MA users.

## **Matrix Model**

### Introduction

In 1986, with funding from a Small Business Innovative Research grant through the National Institute on Drug Abuse (NIDA), the Matrix Institute in Los Angeles instituted an outpatient treatment model for stimulant abusers. The developers integrated techniques and materials from numerous disciplines including the cognitive behavioral therapy models, relapse prevention and skill training into treatment protocols (Rawson R A 2004) (Obert J 2000). The result was a manualized, intensive 16-week outpatient treatment program, grounded in “user friendly” practical utility (Obert J 2005). The model has been continuously revised over the years to incorporate the most recent evidence-based practices pointing to long-term recovery from drug and alcohol dependence (2005). In 1999 SAMHSA commenced an effort to expand and evaluate the Matrix Model, and in 2003 the Center for Substance Abuse Treatment (CSAT), a division of SAMHSA, tested the Matrix Model through the *Methamphetamine Treatment Project*, the largest randomized clinical trial of treatments for methamphetamine dependence to date (Rawson R A 2004). Results of the *Methamphetamine Treatment Project* are presented below under the *Evaluations of the Matrix Model* section.

### Empirically-Based Behavioral Change

To equip patients with daily skills and structures leading to a long-term drug-free recovery, the Matrix Model focuses on behavior change, rather than underlying causes or presumed psychopathology. Empirical support in scientific literature and application provide the foundation for the program's elements and schedule (Obert J 2000). The *National Institute on Drug Abuse* identifies several tested treatment approaches utilized in developing Matrix Model treatment materials, including relapse prevention and relapse analysis, drug education, 12-step programs, urine testing, and a number of specialized therapy groups (family education, early recovery skills, relapse prevention, social support, et al.) (1999). Each therapy session is topic-focused, guided by a user-friendly patient handout that is bound into a notebook for each client (Obert J 2005). Simple exercises, materials, and psychoeducational lectures are purposefully delivered in terms appropriate for the patient's stage of recovery, since in-depth concepts cannot be understood or tolerated during the first few days of MA abstinence (Obert J 2000).

### The Therapist as Coach and Teacher

The Matrix Model very explicitly defines the therapist's role to function as teacher and coach. In this role, the therapist cultivates a positive relationship with the patient, using encouragement and a nonjudgmental demeanor to reinforce positive behavior change. Particular

attention is given to training the therapist in client-centered, motivational interviewing style to that builds the patient's self-esteem, self-worth and dignity. The model calls for therapist-patient interaction that is realistic and direct, cautioning against falling into confrontational or parental tones. Literature evaluating the Matrix Model attributes the relationship between the patient and therapist as being a vital component in determining engagement and retention success (Obert J 2000) (1999).

### Patient Goals

Rawlins et al. (2002) describes the Matrix Model as a comprehensive approach, relying on cognitive-behavioral principles and five basic goals:

1. *stop drug use*
2. *learn issues critical to addiction and relapse*
3. *receive education for family members affected by addiction and recovery*
4. *become familiar with self-help programs*
5. *receive weekly monitoring by urine toxicology and breathalyzer alcohol testing*

Obert et al. (2000) point to the importance of time scheduling in creating structure in recovering addicts' lives. The Matrix Model teaches patients to use a paper schedule to chronicle their plans for each portion of their day, but never for more than 2-3 days at a time. The structuring concept is based on the notion that stressful or dangerous periods can be weathered more successfully when patients don't find themselves with idle chunks of time. Therapists use the schedule to enhance treatment by teaching patients to evaluate the proposed activities in terms of their potential for triggering relapse and their contribution to a safe, balanced lifestyle. By following up, therapists determine whether the patient could abide by the plan. The schedule also gives therapists a picture of the individual's day-to-day life.

### Group Therapy Modality

Patients attend therapy sessions three times a week for at least four months. The Matrix Model reduces the cost of treatment by limiting individual sessions to three 45-minute sessions in the 16-week engagement. If an individual experiences a time of crisis, the patient may attend an additional individual session(s) to conduct relapse analysis, a specific exercise in the Matrix protocol assisting the therapist and patient to identify issues and events that preceded the relapse (Obert J 2000).

Obert et al. (2000) describes the specialized group settings wherein the majority of treatment is conducted. During Weeks 1-4 patients participate in Early Recovery Groups twice a week to learn craving deterrence, time scheduling techniques, secondary substance abuse avoidance, and community support utilization. Individuals attend Relapse Prevention Groups at the beginning and end of each week for all 16 weeks of treatment, covering the 32 manualized topics of the protocol. Weeks 5-13 feature Family Education Sessions where patients and their families engage in a group setting to address topics pertaining to substance abuse through slide presentations, videotapes, panels and group discussions. Patients enter Social Support Groups during the last month of treatment, to establish new nondrug-related friends and activities. Matrix model protocols require patients to attend "Introduction to 12-Step Meetings" held on site one night each week, to familiarize newcomers to the meetings in a more comfortable environment. Patients are encouraged to attend outside 12-Step meetings throughout the 16

weeks of treatment and to continue to access this community resource for support after graduating from the Matrix program.

### Urinalysis/Breath Testing

The nonjudgmental character of the Matrix Model offers no consequences for positive results from urine tests that are conducted randomly on a weekly basis. Rawson (Rawson 1999) emphasizes the role that urinalysis plays in establishing accountability for slips and relapses, but warns therapists to respond without incrimination, as this may lead to full-blown relapse. Obert et al. (Obert J 2000) suggest that positive urine tests be viewed as sign posts for adjusting the treatment plan and an opportunity to discuss coping strategies to prevent a complete relapse. Both Rawson and Obert recommend additional testing (e.g. Breathalyzer®) in light of the fact that stimulant users tend to struggle with secondary alcohol or marijuana use. Negative drug tests provide tangible proof for the patient, family and therapist that the patient is clean and sober (Obert J 2000).

### Evaluations of the Matrix Model

A number of projects have demonstrated statistically significant reductions in drug and alcohol use by subjects treated with the Matrix Model(1999). The CSAT *Methamphetamine Treatment Project* represents the largest trial to date on treatments for MA dependence (Huber A 2000) (2005). Funded by SAMHSA and CSAT, researchers from the Matrix Institute on Addictions and the UCLA Integrated Substance Abuse Programs implemented and evaluated the Matrix Model in comparison to the “treatments as usual” implemented at the seven study sites in three western states (CA, MT, and HI) (Huber A 2000) (Herrell J 2000). Each site recruited 150 MA-dependent patients who were randomly assigned to receive either the Matrix Model or the “treatment as usual” for each individual site (Huber A 2000). Findings demonstrated that MA-dependent individuals responded positively to the Matrix Model’s treatment protocols (Rawson R A 2004) (2005). The study indicated that patients assigned to the Matrix treatment were 38% more likely to stay in treatment, 27% more likely to complete treatment, and 31% more likely to have negative MA urine test results, compared to patients participating in the “treatment as usual” protocols (Rawson R A 2004). Rawson et al. (Rawson R A 2004) observed that the significantly improved in-treatment performance of Matrix clients represents an advancement in the field, although discharge and follow-up outcomes did not demonstrably differ from those of the control group. Zweben suggests that the *Methamphetamine Treatment Project* findings support the value of integrated treatment for co-occurring conditions, emphasizing the vital role that training counseling staff to handle psychotic symptoms plays in successful treatment for MA dependence (Zweben J 2004) (Maxwell 2005).

Further study of the *Methamphetamine Treatment Project* has been devoted to address the gap between substance abuse research and practice, with particular attention to issues pertaining to the effective transfer of a new comprehensive treatment protocol into the community drug treatment system. Approximately half-way through the *Methamphetamine Treatment Project*, Brown conducted individual interviews at all 7 sites of all principal investigators, evaluators, clinical supervisors, Coordinating Center personnel, agency directors and CSAT personnel (n = 35), and conducted 15 focus groups to interview the clinical and research staffs (n = 50) (Brown 2004). Participants were asked about research-to-practice issues that they encountered during the project. Brown (Brown 2004) reports the participants’ suggestions for integrating research and practice in community-based treatment organizations:



- *Continue to have a bridging mechanism or third party like the Coordinating Center;*
- *Address recruitment early and hire personnel specifically for recruitment purposes*
- *Conduct a more extensive initial investigation of sites, perhaps even before the sites are selected to receive the grant monies;*
- *Make efforts to build relationships and establish roles early in the research project by having retreats and similar, relationship-building activities*

Using Brown's qualitative study (Brown 2004), Obert et al. (Obert J 2005) analyzed *Methamphetamine Treatment Project* counselors' responses to the practitioner concerns regarding manual-based psychotherapies compiled by Addis (Addis M 1999). Counselors did not indicate that the Matrix Model's manual-based treatment protocols interfered with their ability to develop a therapeutic bond. Obert et al. (Obert J 2005) suggested possible Matrix protocols that may have contributed to stronger therapeutic alliances, including the frequency of visits (3x per week), the philosophy of nonjudgmental counselor as coach and teacher, and the consistency of having a single counselor.

Initial concerns regarding the manual-based Matrix Model were recorded. Clinical supervisors observed that new counselors and counselors trained in standard treatment modalities that used techniques involving confrontation, labeling, and the client's need to "bottom out", reported difficulty adjusting to the Matrix Model. Many counselors objected to the Matrix Model's lack of consequences for clients who were not compliant, doubting that the treatment would work with their populations. Counselors also reported trouble concentrating on their client while concentrating on the presentation of the manual-based material. After the project was underway, counselors reported becoming more and more at ease with the material with each successive 16-week rotation, allowing them to refocus on their nonjudgmental relationship with the client. The qualitative interviews conducted a year and a half into the project reflected counselors' appreciation for how "empowering", "client-driven" and "respectful to clients" the Matrix Model proved to be (Obert J 2005).

Personnel at six out of seven study sites criticized the Matrix Model for being inattentive to mental health issues and co-occurring disorders. Personnel at four out of seven study sites criticized the Matrix Model for giving inadequate attention to cultural, socioeconomic, and gender issues such as domestic violence and sexual abuse. (Obert J 2005) These complaints are consistent with the three problems that Addis et al. (1999) identified in relation to clients' needs: (1) manual-based treatments ignore individual client differences; (2) manual-based treatments cannot meet the needs of multi-problem clients; and (3) manual-based treatments ignore clients' emotions. Addis et al. (1999) suggest that researchers and trainers give special attention to personalizing manual-based approaches and methods for dealing with emotional issues within the framework of structured therapy.

Counselors reported greatly increased job satisfaction during the course of the study. The Matrix Model's easy to learn format was credited for increasing counselors' sense of competence. The supervision component of the study was also recognized as a factor contributing to job satisfaction. Supervisors with strong backgrounds in both the Matrix Model and clinical supervision consciously worked to promote feelings of self-efficacy within the therapist group, using tools like weekly teleconferences to deliver frequent supervision. Obert et al. (Obert J 2005) concluded that a manualized treatment program will increase its chance of succeeding by requiring concerted supervision efforts, at least at the introduction of the problem.

Counselors from three sites reported that they felt free to improvise when components of the model did not fit their client population. Counselors from two sites felt restricted by the Matrix Model. These two sites also had more negative attitudes toward the model, the clinical training and oversight (Obert J 2005). Counselors and researchers from four sites found that the manual and lessons were written at a level beyond comprehension for their obviously impaired clients, detracting from therapy sessions with translations, interpretations and explanations. Counselors from two sites reported difficulty implementing the manualized sessions with “clients who had little or no clean time” (Obert J 2005).

Below is a list of “lessons learned” about delivering manual-based treatment in community drug treatment settings, derived from Obert et al.’s study of implementation of the Matrix Model during the *Methamphetamine Treatment Project* (Obert J 2005):

- *Importance of strong, frequent supervision*
- *Longer learning curve required to achieve proficiency in delivering a manual-based protocol*
- *New ways to shorten the training required to master the materials are needed*
- *Research on personalization and individuation of a manual-based treatment approach*
- *Understanding the culture of a clinic before new methodologies are introduced*
- *Get buy-in of personnel at all levels of the organization before the project commences*

## **Relapse Prevention**

Relapse Prevention is another example of a cognitive-behavioral therapy that has evolved to address multiple populations of substance abusers. Originally developed as a treatment for alcoholism, the model was later tailored for cocaine abuse. Relapse prevention techniques are adapted for MA addiction and incorporated into the Matrix Model (1999).

The National Institute on Drug Abuse’s *Principles of Drug Addiction* (1999) identifies a collection of cognitive-behavioral strategies designed to teach individuals to identify and correct problematic behaviors:

- *Exploring the positive and negative consequences of continued use*
- *Self-monitoring to recognize drug cravings early on and to identify high-risk situations for use*
- *Developing strategies for coping with and avoiding high-risk situations and the desire to use*
- *Central element is anticipating the problems patients are likely to meet and helping them develop effective coping strategies*

Studies show that individuals retain the skills they learn through relapse prevention therapy after treatment. One unidentified research study listed in *Principles* (1999) reported that throughout the year following treatment most individuals participating in relapse prevention therapy still maintained the progress gained.

## **Co-Occurring Methamphetamine Expanded Treatment (COMET)**

SAMHSA recently announced funding of a program for 2004-2007 to reduce MA abuse among seriously mentally ill individuals in Clark County, WA. The Co-Occurring Methamphetamine Expanded Treatment (COMET) Program targets individuals dually diagnosed with MA addiction and serious mental illness by integrating two best practice models of treatment. The Matrix Model will address stimulant abuse and Assertive Community Treatment

will provide intensive case management services. The Regional Research Institute of Portland State University is conducting the 3-year evaluation (Herinch 2004).

## Medication Therapy

Rawson et al. observes that research to develop medications to treat MA-related disorders is in its infancy (Rawson R A 2002). The literature is in agreement that there are currently no pharmacological treatments with demonstrated value for MA dependence (Rawson R A 2002) (1998). The National Institute on Drug Abuse's *Principles of Drug Addiction* (1999) notes that the current pharmacological approach, adapted from treatments for cocaine abuse, has not been successful. Clinical studies have yet to isolate a single agent that proves to be efficacious.

Rawson and Brethen state that no medications exist for quick, safe reversal of life-threatening MA overdoses (Rawson R A 2002). *Principles* (1998) reports that the established protocols used by emergency room physicians for potentially fatal complications of MA overdoses focus on the immediate physical symptoms, commonly relying on ice baths to treat hyperthermia and anticonvulsant drugs for convulsions (1998).

Rawson and Brethen also state that there are no drugs that reliably reduce the paranoia and psychotic symptoms (Rawson R A 2002). *Principles* (1998), however, recommends anti-anxiety agents such as benzodiazepines as helpful in cases of extreme excitement or panic, and short-term use of neuroleptics for MA-induced psychoses. *Principles* also reports that antidepressant medications can be helpful in reducing depressive symptoms for recently abstinent MA-users (1998).

Hopeful that antidepressant medication could improve retention in drug treatment and lead to better outcomes, Galloway and colleagues hypothesized that imipramine, a tricyclic antidepressant, would reverse the possible dampening affect that repeated exposure to cocaine may have on the brain's reward systems (Galloway G 1994). Their study administered either 10 or 150 mg/day of imipramine to 183 male and female volunteers who were cocaine or MA abusers resulted in subjects treated with the larger amount of imipramine staying in treatment longer, averaging 34 days compared with 17 days for those in the control group. The imipramine therapy was supplemented with access to psychiatric and medical care, along with intensive drug abuse group counseling. The common body of research suggests that more treatment is tied to better outcomes; this is in opposition to this study's results, wherein subjects that received the larger dose stayed in treatment longer. Therefore, the use of imipramine for MA abuse is not supported by the data.

Shoptaw et al. (Shoptaw S 2005) recently reported significant reductions in MA use and sexual risk behaviors in a randomized controlled trial of MA-dependent gay and bisexual males. These promising results indicate that drug treatment may serve as an HIV prevention strategy for these populations.

## Replacement Pharmacotherapies

Rawson et al. (Rawson R A 2002) also report that there are currently no pharmacotherapies that are reliably successful in treating MA dependence. To further research in this area, the Methamphetamine Clinical Trials Group (established by NIDA) is conducting double-blind, placebo-controlled trials of promising pharmacotherapies at sites in geographic areas where MA use has been deemed a major health problem. A coordinating center at UCLA manages a network of sites in San Diego and Costa Mesa, CA, Honolulu, HI, Des Moines, IA, and Kansas City, MO. (Rawson R A 2002)

Maxwell (Maxwell 2005) identifies replacement/agonist-like pharmacotherapy as an emerging treatment for stimulant dependence. Researchers are working to adapt treatments from successful experiences with nicotine and opioid dependence. *Principles of Drug Addiction (1999)* describes opiate addicts stabilized on sustained dosages of long-acting synthetic opiate medication as being able to function normally, engaging more readily in counseling and other behavioral interventions. *Principles* recommends supplementation of opiate agonist maintenance programs with individual and/or group counseling, along with medical, psychological and social services as needed.

Maxwell (Maxwell 2005) envisions an MA agonist-type pharmacotherapy combined with behavioral therapy components. Volkow et al. call for therapeutic approaches that include both pharmacological and behavioral interventions. They support a model combining pharmacological and behavioral treatments to increase sensitivity to natural reinforcers and establish alternative reinforcing behaviors, essentially increasing the value of the nondrug reinforcers. (Maxwell 2005) \*\* (Volkow N 2003). Obert et al. (Obert J 2000) express hope for the combination of a soon-to-be-determined medication with psychosocial therapy for MA dependence, anticipating improved retention in the Matrix model thanks to the therapy's effects on cognitive function, mood elevation, and craving reduction. In an examination of the status of preclinical agonist pharmacotherapy strategies pertaining to the use of stimulant medications in cocaine dependence and amphetamine replacement strategies for amphetamine dependence, Grabowski et al. (Grabowski J 2004) reinforces the integration strategy, recommending integration of a potent stimulant with quality behavioral therapy and appropriate monitoring procedures.

## **Comprehensive Case Management**

Maxwell observed that comprehensive case management was found to be an effective intervention for MA abusers (Maxwell 2005), with Cretzmeyer et al. (Cretzmeyer CM 2003) specifically noting comprehensive case management's success in improving employment status and lowering the incidence of depression.

In the Iowa Case Management Project, treatment interventions were supplemented with outreach activities, including visiting clients in their homes, assisting with transportation to and from services, and providing limited emergency funds. Cretzmeyer (Cretzmeyer CM 2003) identified five functions as broad clinical guidelines for service delivery:

1. *contracting and negotiating;*
2. *assessment and monitoring;*
3. *brief solution-based counseling;*
4. *planning and referral;*
5. *evaluation of process and outcomes.*

To determine the effectiveness of case management in improving outcomes of substance abuse treatment, Hall et al. (1999) investigated a sample of 422 clients admitted to the Midwestern Council on Chemical Abuse, a facility in rural Iowa. Of these 422 subjects, 41 reported amphetamines as their primary addiction. 90% (36) of the 41 amphetamine abusers participated in a residential program and the remaining 5 amphetamine abusers participated in an outpatient program. Through random assignment, three-fourths of the 422 clients received case management through one of three conditions, all following the Iowa Case Management model. The remaining one-fourth served as the control group, receiving standard substance abuse

treatment services. Hall et al. interviewed participants on their status in several life domains for a period of 12 months. Overall, clients who received Iowa Case Management saw employment increase from a mean of 6.3 days at baseline to 18.5 days at the 12 month follow-up, while the clients in the control group saw an increase in employment from a mean of 5.6 days to 13.4 days. At follow-up interviews, the amphetamine abusers receiving Iowa Case Management reported a nearly significant lower incidence of depression than clients in the control group ( $p=.07$ ). Clients in all 4 conditions, including the control group, saw a significant decrease in drug use. Iowa Case Management was not deemed to impact drug use or other key outcomes beyond that provided by standard treatment. Hall et al. concluded that MA abusers did not respond differently to comprehensive case management from the subjects reporting primary abuse of other drugs.

## **Aversion Therapy**

Volkow et al. suggest interventions to decrease the rewarding value of drugs, such as pharmacological treatments that interfere with the drug's reinforcing effects / treatments that make the effects unpleasant (Volkow N 2003) (Maxwell 2005). An earlier study by Frawley and Smith (1992) integrated aversion therapy into a multi-modal treatment program. Patients received therapeutic counseling in educational groups, individual sessions, family sessions and aftercare planning. The researchers obtained follow-up data on 156 of 214 patients who had completed the initial inpatient treatment program at one of four hospitals. 58% of the subjects tested positive for cocaine use, 38% were positive for marijuana, and 6% ( $n = 9$ ) tested positive for amphetamines on admission into treatment. The program attempted to pair an aversive stimulus with the act of using a particular stimulus. Nausea caused by oral emetine was associated with the act of snorting the substance (chemical aversion), while irritating, but not painful electric shocks on the forearm were associated with the act of using cocaine or MA (faradic/electrical aversion). According to data from phone interviews, 53% of patients who abused either or both cocaine or MA remained abstinent 12 months after treatment. The study was marred by a lack of standardized assessment procedures for outcomes (i.e., drug use) and the lack of a comparison group or random assignment to research conditions. Researchers, however, considered their results promising (Cretzmeyer CM 2003) (Frawley P 1992).

## **Outpatient Drug-Free Treatment**

*Principles of Drug Addiction Treatment* identifies Outpatient Drug-Free Treatment as a less expensive alternative to residential or inpatient treatment, particularly applicable for employed individuals or individuals with extensive social supports. The patient's characteristics and needs dictate the best choice of programs ranging from low-intensity treatment (offering drug education and admonition) to high-intensity day treatment (comparable to residential programs). Group counseling is emphasized by many outpatient programs. Some outpatient programs treat patients with medical or mental health problems co-existing with their drug disorder (1999).

## **Coerced Treatment Research**

The literature reflects a public outcry for policymakers, legal officials, and service providers to address the personal and societal effects of MA abuse (Rawson 1999). One response is the Comprehensive Methamphetamine Control Act of 1996, which strengthens law enforcement initiatives, tightens regulatory powers, and mandates research initiatives (Rawson

1999). Cretzmeyer observes the severe legal sanctions that MA users can now incur, citing Iowa's \$1 million fine and up to life in prison for MA users (Cretzmeyer CM 2003).

One example of severe legal sanctions is habitual offender laws such as the "three strikes laws." The effect of habitual offender laws on prison admissions and populations is relatively unknown. Some research suggests that habitual offender laws have increased prison admissions at the state level, yet other research has not. These mixed findings most likely result from one key issue, the degree to which habitual offender laws are used by criminal justice professionals. The most consistent finding across the literature is that habitual offender laws are rarely used for charging offenders thereby making them mostly symbolic in nature. They appear to be a way for politicians to demonstrate a "get tough" stance on crime, while at the same time not actually affecting criminal justice operations. To the degree that these laws become popular among prosecutors, they do appear to have the ability to increase prison admissions. More importantly, to the degree that offenders are aware of habitual offender statutes, some research suggests that these laws may actually promote violent crime and exacerbate a state's homicide rate. At the very least, most scholars suggest that these laws will have very little or no impact on crime.

The increasing cost of incarceration and the demonstrated link between crime and substance abuse have led to the development of strategies using criminal justice system sanctions to require offenders to enter substance abuse programs (Brecht M 2005). Rawson et al. (Rawson R A 2002) observes the critical importance of developing treatments for MA users involved in the criminal justice system (Rawson R A 2002) (Maxwell 2005). The quest to explore what role the criminal justice system can play in the treatment of drug addiction makes the topic of coerced treatment of particular interest in the literature.

### Outcomes and Concerns

There has been much conjecture regarding whether individuals under legal coercion can achieve positive outcomes to MA treatments similar to those enjoyed by individuals not under legal pressure. Wild attributes the controversy surrounding coerced treatment to its potential conflicts with the psychological processes involved in treatment (i.e., motivation, engagement, and compliance). Other researchers refer to the belief that lack of internal motivation may obstruct successful outcomes (Brecht M 2005) (Rosenthal 1988) (Platt 1994).

*Principles of Drug Addiction Treatment (1999)*, however, counters these objections with research demonstrating that individuals entering treatment under pressure achieve outcomes as positive as those who enter treatment without pressure. In a study by Brecht et al. (Brecht M 2005), 350 Los Angeles County MA users were evaluated, comparing background and treatment characteristics and selected treatment outcomes across groups defined by existence of coerced treatment for MA. The pressured and nonpressured MA users saw no statically significant difference in outcome successes. The chief difference observed was a greater percentage of pressured respondents relapsing within 6 months of treatment (59% vs. 49% for non-pressured. p = 8).

Farabee et al. (Farabee 1998) observed that just because clients enter treatment under pressure, the treatment may not be involuntary. In fact, several studies suggest that criminal justice coercion may increase patients' internal motivation to produce more successful treatment outcomes (De Leon 1994) (Joe 1999) (Simpson 1993). Coerced Treatment research points to positive results for criminal offenders in general, with specific studies exhibiting success with heroin abusers (McGlothlin WH 1977; Brecht M 1993; Prendergast M 1995; Anglin MD 1998; Hiller M 1998; Miller N 2000).

## Benefits

*Principles of Drug Addiction Treatment* (1999) makes a compelling case for integration of substance abuse treatment with the criminal justice system. Research indicates that combining criminal justice sanctions with drug treatment during, after or in lieu of incarceration can interrupt or shorten a career of drug use, since drug users often encounter the criminal justice system at an earlier stage than other health or social systems; encourage drug abusers to stay in treatment for a longer period of time; and reduce the risk of recidivism to drug-related criminal behavior.

A number of studies support the idea that coerced treatment helps recovering MA addicts stay out of jail:

- A study of inmates enrolled in a therapeutic treatment program in the Delaware State Prison that continued to receive treatment in a work-release program after prison were shown to be 70% less likely than non-participants to experience a drug relapse and incur rearrest. (1999)
- Recidivism numbers from the *Iowa Adult Methamphetamine Treatment Project – Final Report, 2003* indicated that 90.4% of MA clients had not been arrested 6 months after treatment and 95.7% of MA clients interviewed one year after treatment had not been arrested during the previous 6 months (Roth 2003).
- The Year Six Report of the *Iowa Project Outcomes Monitoring System 2004* recidivism numbers indicated no arrests in the six months after treatment for 86% of MA users; 90.7% of alcohol users; 79.2% of cocaine users; and 86.8% of marijuana users. These rates are compared to 30.9% of clients who had not been arrested in the 12 months prior to treatment. (Johnson A 2004)

## Models

A number of community-based treatment programs for criminal justice populations offer offenders with substance abuse dependencies alternatives to incarceration. Examples listed in *Principles* include limited diversion programs, pretrial release conditional on entry into treatment, and conditional probation with sanctions. (1999)

### Treatment Accountability and Safer Communities Model

Treatment Accountability and Safer Communities (TASC) offers offenders one such alternative to prison. The TASC model represents a comprehensive approach to address the needs of drug-addicted offenders in an outpatient, community setting. By providing drug treatment in tandem with the criminal justice system, personnel can identify drug-involved offenders at an earlier stage, conduct assessments and refer the addicts to appropriate community services. Offenders may be monitored for drug use through mandatory drug testing and legal sanctions are used as inducement for offenders to remain in treatment.

## Drug Court Model

The Drug Court model is proving effective in decreasing costs, improving treatment program retention, and decreasing recidivism for drug-addicted offenders (Belenko 1998; 1999; Terry 1999; Guydish 2001; 2002). In the Drug Court model, participants undergo long-term treatment, counseling, sanctions, incentives and frequent court appearances. Participants exhibiting the desired behaviors, as monitored through treatment attendance and mandatory urine tests, can earn rewards of reduced sentences and even dismissal of charges (Rawson R A 2002). To date, however, the literature reflects little but anecdotal data on drug outcomes pertaining to offenders who abuse MA (Zweben 1999).

## Therapeutic Community Model

The therapeutic community, commonly referred to as *TC*, has emerged as the most viable form of treatment for drug-involved offenders, particularly for those incarcerated (Inciardi, Martin, and Butzin, 2004; Inciardi and Martin, 1997; Messina, Wish, and Nemes, 2001). Therapeutic communities for substance abuse were first established in the late 1950s as a self-help alternative to existing treatments (McCusker et. al., 1995). This treatment modality spread quickly, and by 1998, therapeutic communities for drug-involved offenders could be found in prisons across the United States and in 11 of 15 countries in the European Union.

“The *TC* model is designed as a total milieu therapy approach that promotes the development of prosocial values, attitudes, and behaviors through the use of a positive peer culture (Taxman and Bouffard, 2002: 190).” Basically, the *TC* is a total treatment environment in which offenders are isolated from the general prison population in order to minimize their exposure to drugs, violence, and other negative aspects of prison life (Inciardi and Martin, 1997). Generally, the treatment perspective is that drug abuse is a disorder of the whole person; the problem is the person, not the drug, and addiction is merely a symptom of the disorder. The primary goal of the treatment is to change the negative patterns of behavior and thought processes that bring about drug use (Inciardi and Martin, 1997).

Although specific programming components may vary across different therapeutic communities, a few common statements can be made about *TC*'s (Kennard, 2004):

- The *TC* is a “living-learning” environment in which everything that happens between members (offenders and staff) in the course of living and working together is used as a learning opportunity in order to further treatment.
- The environment provides a wide range of life-like situations in which the difficulties encountered in offenders’ lives and relationships outside of the institution are re-lived and re-examined.
- The institution’s total resources, including staff, offenders, and their relatives, are self-consciously pooled in order to further treatment.
- All members of the *TC* should tolerate from one another a wide range of behaviors that might even be distressing but should be used as a way to learn coping skills in order to further treatment.

Therapeutic communities can be modified to treat a variety of disorders and people. Currently, they are being used to treatment the mentally ill, criminal offenders, juvenile delinquents,



children with mental disorders, and substance abusers (Kennard, 2004). Despite any modifications made to these communities to adapt to specific clientele, they all share certain core elements. Most commonly, *TC*'s should be seen as multi-stage programs (Martin, and Butzin, 2004). Within each of the phases below, certain core programming elements apply.

- Primary Phase: Entry, Assessment, Evaluation, Orientation, and Treatment
- Secondary Phase: Transition to a Work Release Setting
- Tertiary Phase: Reentry into the Community

During the primary phase, offenders are assessed for risk and needs and oriented to the rules and principles of the *TC*. They are introduced to the rules of treatment, such as regular drug testing and work requirements, assigned a primary counselor, and introduced to group therapy, so they may become familiar with group norms and processes. As offenders progress through this phase, they become more actively involved in morning meetings, group therapy, individual counseling, one-on-one interactions with other community members, and confrontation with other members who are not motivated toward recovery. Offenders are assigned work duties within the institution, so they may begin to take some responsibility and learn acceptable work habits.

In the secondary phase, offenders continue elements of the earlier phase, but role-modeling becomes an emphasis in programming. Offenders are transitioned to work detail and release where they begin working in the community and are expected to assume responsibility for themselves, their attitudes, and behaviors. They often take on additional responsibility by assuming supervisory roles in their jobs and in the group, which transforms them into role models for newer members. Offenders also begin preparing for reentry into the community by encouraging them to seek additional educational experiences and often participating in additional seminars and group sessions discussing topics such as finding housing, permanent employment, etc.

In the last phase of the *TC*, offenders are further prepared to reenter society by focusing on independent living skills. Seminars on opening a bank account, learning how to budget finances, and learning how to balance work and social responsibilities are often introduced. After offenders are released into the community, they often continue to participate in group therapy and individual counseling as part of their aftercare. Aftercare is stressed as a critical component of the *TC*, and often work release centers remains open to offenders for visits to group meetings and for role modeling activities.

It is important to note that therapeutic communities will vary across different populations and settings (i.e., within institutions versus within community centers); however, the elements listed above appear to be fundamental requirements across all communities studied. Moreover, it is also important to note that these core elements of *TC*'s can be easily adapted to populations with co-occurring disorders, such as mental illness and drug addiction. With increasing frequency, scholars have noted that drug-related offenders are often diagnosed with a mental disorder (Edens, Peters, and Hill, 1997; Peters, LaVasseur, and Chandler, 2004). By adding mental health assessment and diagnosis, access to medication, and access to mental health professionals in addition to substance abuse counselors, therapeutic communities can easily accommodate offenders with co-occurring disorders. Clinicians also recommend reducing confrontational interactions among members and adding seminars on medication compliance as part of the curriculum (Peters, LaVasseur, and Chandler, 2004).

In sum, despite any modifications made to therapeutic communities, common elements can be identified. Whether *TC*'s exist in prison or in a private residential facility in the community, all promote isolating their members from the general population for a period of time. All seem to rely on group therapy and interaction as a means of informal social control as opposed to more formal mechanisms for compliance. All require individual counseling, drug testing, and work duties to teach clients responsibility and accountability, and all stress a multi-stage approach that assesses clients, orients them to the program, treats their disorders, and prepares them for returning to the community.

This multi-stage treatment approach of therapeutic communities appears to be effective, for independent evaluations of many of these communities show some level of success at rehabilitating offenders, even those incarcerated, (Inciardi, Martin, and Butzin, 2004; Inciardi and Martin, 1997; Messina, Wish, and Nemes, 2001; Taxman and Bouffard, 2002). Most studies find that those offenders who have completed treatment in *TC*'s have lower rates of criminal re-offending and are less likely to use drugs in the future than offenders who do not start or complete the treatment (Inciardi, Martin, and Butzin, 2004; Taxman and Bouffard, 2002). One common finding across all evaluations of *TC*'s is that the longer offenders participate in the *TC*, the higher the likelihood they have for success.

In regard to incarcerated offenders, a debate emerged among scholars concerning the effectiveness of coerced treatment (Day, Tucker, and Howells, 2004). Incarcerated offenders are often strongly persuaded or possibly coerced into therapeutic communities in order to make parole. Given that personal motivation to change is strongly correlated with treatment success (Rosen et. al., 2004), some questioned the merits of treatment if offenders' enrollment was coerced rather than voluntary (Melnick, Hawke, and Wexler, 2004). Day, Tucker, and Howells (2004) recently found, however, that even when offenders perceived themselves as being coerced into a *TC*, their anti-treatment attitudes could be changed and risk reduction for re-offending and future drug use could be gained. In other terms, even when offenders initially felt forced into *TC*'s, they learned something about themselves that translated into a change in behavior.

Therapeutic communities have become a "best practice" for residential treatment for a variety of disorders. They have also become a standard form of treatment for drug-involved offenders in prison, with good reason. They have been found to be at least somewhat successful at reducing re-offending and drug use. Their multi-stage approach preparing offenders for the reentry into society may be the reason. Although few scholars have researched exactly which aspects or program components of the *TC* produce the greatest results, taken as a whole *TC*'s show promise for the future treatment of incarcerated offenders.

### Prison-Based Treatment Program Model

The Prison-Based Treatment Program model delivers treatment based on the Therapeutic Community or Residential Milieu Therapy models and includes didactic drug education classes and self-help programming. *Principles of Drug Addiction Treatment* describes the most effective Prison-Based Treatment Program models as those that integrate criminal justice and drug treatment systems and services. Counselors work together with criminal justice personnel to create a system of sanctions and rewards for inmates receiving drug rehabilitation treatment. The treatment and criminal justice personnel also combine their efforts to develop and implement screening, placement, testing, monitoring, and supervision plans. Like the Therapeutic Community model, the Prison-Based Treatment Program extends beyond release

from prison with continuing care, monitoring, and supervision during parole and reentry into the community (1999).

### **Review of Best Practices Literature**

*Principles of Drug Addiction Treatment (1999)* outlines a set of overarching principles for effective substance abuse treatment:

- No single treatment is appropriate for all individuals
- Treatment needs to be readily available
- Effective treatment attends to multiple needs of the individual, not just his or her drug use
- An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that the plan meets the person's changing needs
- Remaining in treatment for an adequate period of time is critical for treatment effectiveness
- Counseling (individual and/or group) and other behavioral therapies are critical components of effective treatment for addiction
- Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies
- Addicted or drug-abusing individuals with coexisting mental disorders should have both disorders treated in an integrated way
- Medical detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug use
- Treatment does not need to be voluntary to be effective
- Possible drug use during treatment must be monitored continuously
- Treatment programs should provide assessment for HIV/AIDS, Hepatitis B and C, tuberculosis and other infectious diseases, and counseling to help patients modify or change behaviors that place themselves or others at risk of infection
- Recovery from drug addiction can be a long-term process and frequently requires multiple episodes of treatment

Keeping these recommendations in mind, careful attention must be given to understanding the MA addict's needs when developing a set of Best Practice recommendations for treatment of MA abuse. Simon and colleagues (Simon S 2002) found startling differences in the patterns of abuse for MA and cocaine. Although both substances are considered stimulants, typical use patterns for MA reflected habits more closely resembling administering medication than using a drug for pleasure, with the MA typically using the drug upon waking each morning, and taking doses every 2-4 hours throughout the day. However, cocaine abusers reported that they would begin taking the drug in the evening and continue binging until all supplies were exhausted. The study, conducted through the Los Angeles Addiction Research Consortium, examined the typical use patterns of 120 MA and 63 cocaine users by means of self-report measures. Simon et al. expressed their hope that understanding of the patterns of use for MA and cocaine will help treatment providers and drug users identify triggers, times and places when the recovering abuser is most vulnerable to relapse (Simon S 2002).

In the November/December 1996 edition of NIDA Notes, recommendations were given to improve the focus on MA abuse by evaluating current NIDA programs to identify existing research that can be supplemented or adapted, rather than becoming dependent upon new research initiatives (Lukas 1996). To this effect, a best practice recommendation should be built

firmly on experience and knowledge of clinicians, researchers, and administrative experts specializing in the MA abuse treatment field. The most credible guidelines dominating the MA abuse literature are in SAMHSA's *Treatment Improvement Protocols* (TIP) series. SAMHSA's *TIP #33* describes approaches that are effective and appropriate for treating stimulant use disorders, including recommendations on practical application of treatment strategies specific to cocaine and MA dependence problems (2005). For the purposes of this best practice recommendation, *TIP #33* (Rawson 1999) will serve as the framework.

## **Maximizing Treatment Engagement**

*Tip #33* (Rawson 1999) prescribes the following to maximize treatment engagement:

### Make Treatment Accessible

- *Having treatment programs in areas convenient to clients is associated with lower attrition rates*
- *Provided on hours and days convenient for clients*
- *Located near public transportation*
- *Safe part of town for evening visits*

### Provide Support for Treatment Participation

- *Address clients' concrete needs (transportation, housing, finances)*
- *Address logistical barriers with onsite services (onsite child care services, referrals to temporary shelters, vouchers for lunches, targeted financial assistance, assistance with paperwork regarding insurance, or filing for disability benefits)*

### Respond Quickly and Positively to Initial Telephone Inquiries

- *Ambivalence about treatment is common among treatment-seeking stimulant users*
- *Initial interview scheduled within 24 hours after the client initially contacts the program*

## **Assessments and Orientations**

*Tip #33* (Rawson 1999) prescribes the following for assessments and orientations:

### Keep Initial Assessments Brief

- *Initial assessments should be brief, focused, and non-repetitive*

### Provide Clear Orientations

- *Clear, thorough, realistic orientation about stimulant use disorder treatment*
- *Clients acquire good understanding about the treatment process, rules of the treatment program, expectations about their participation, and what they can expect the program to do for them and in what time frame.*

### Offer Client Options

- *Addiction treatment is more effective when a client chooses it from among alternatives than when it is assigned as the only option.*
- *Negotiate with clients regarding treatment approaches and strategies that are the most acceptable and promising.*

### Convey Empathetic Concern

- *Counselors should be warm, friendly, engaging, empathetic, straightforward, and non-judgmental.*
- *Authoritarian and confrontational behavior by the staff can substantially increase the potential for violence.*

### Involve Significant Others

- *Family and significant others who support the treatment goals should be involved in the treatment process whenever possible.*

Obert et al. (Obert J 2000) echo the importance of family involvement in the treatment process, noting that assessing the attitudes and involvement of the patient's significant friends and family members will help the therapist determine whether their influence will enhance or interfere with the therapy. When family members are engaged and understand the addiction recovery process, their attitudes and expectations will be more realistic. Obert et al. (Obert J 2000) state that therapists can optimize the chance of a successful recovery by integrating the family in appropriate parts of the treatment program.

## **Planning Treatment**

*TIP #33* (Rawson 1999) recommends treatment for 12 to 24 weeks followed by some type of support group participation. A written schedule should be given to clients so they are aware of expected attendance and may share the schedule with family members to encourage their involvement in treatment.

*TIP #33* (Rawson 1999) organizes the treatment process into four phases:

- *Treatment initiation period*
- *Abstinence attainment period*
- *Abstinence maintenance phase*
- *Long-term abstinence support plan*

## **Initiating Treatment**

*TIP #33* (Rawson 1999) sets the following priorities for the first several weeks of treatment:

- *Establish treatment attendance (multiple weekly visits are best during the first 2-3 weeks, even if only limited to 30 minutes or less)*
- *Discontinue use of psychoactive substances and initiate urinalysis schedule (mandatory urine samples taken every 3-4 days, but not to exceed the sensitivity limits of standard laboratory testing)*
- *Encourage participation in self-help groups (not required)*
- *Assess psychiatric comorbidity and initiate appropriate treatment*
- *Assess stimulant-associated compulsive sexual behaviors*
- *Remediate stimulant "withdrawal" symptoms*

*TIP #33* (Rawson 1999) characterizes the initial period of stimulant abstinence with symptoms of depression, difficulty concentrating, poor memory, irritability, fatigue, craving for

MA, and paranoia. The duration of these symptoms are generally 10-15 days for MA-users, but vary from case to case. During MA use, addicts often do not associate their feelings of paranoia, anger, impulsiveness, hostility, sexual compulsiveness or cognitive impairment with the drug use, so the therapist's role in disseminating information can provide enlightenment. This information may be particularly welcome, as the cravings usually result in patients feeling completely out of control of their lives (Obert J 2000). *TIP #33* advises therapists to encourage proper sleep and nutrition, to allow the neurology of the brain to "recover" (Rawson 1999).

*TIP #33* (Rawson 1999) emphasizes the importance at this treatment initiation stage of discussing issues regarding compulsive sexual behaviors in an open, nonjudgmental manner. MA users report a loss of control over their sexual expression, describing sex as 'compulsive' and 'obsessive' (Maxwell 2005) (Reback C 2004). *TIP #33* (Rawson 1999) lists compulsive sexual behaviors for MA abusers as promiscuous sex, AIDS-risky behaviors, compulsive masturbation, compulsive pornographic viewing, and homosexual behavior for otherwise heterosexual individuals. The disinhibitory affects of MA (and Ice in particular) have been strongly associated with sexual behaviors that put men at high risk of sexually transmitted and blood-borne disease, including HIV infection (Maxwell 2005) (Kurtz S 2003). The need to connect addicts with these diseases to medical resources makes the assessment of stimulant-associated compulsive sexual behaviors a critical activity in the initial treatment phase. Therapists must take care to build a nurturing, open rapport with patients to encourage disclosure of these behaviors.

## **Initiating Abstinence**

*Tip #33* (Rawson 1999) notes that there is no clear distinction between clients who are initiating abstinence and clients who are *maintaining* abstinence, estimating that the initiating abstinence period occurs roughly from 2-6 weeks into treatment.

*Tip #33* (Rawson 1999) prescribes the following goals and objectives for initiating abstinence:

### Establish Structure and Support

- *Immediately set short-term goals that are reasonably achievable*
- *Reinforce short-term goal of immediate abstinence with brief, frequent counseling sessions*
- *Establish therapeutic alliance between the client and counselor, reviewing events of the past 24 hours each session and recommendations for navigating the next 24 hours.*
- *Enlist family participation*
- *Establish social support systems*

### Address Secondary Drug Use

- *Help clients identify the connections between the use of other substances and their stimulant addiction.*
- *Clients throw out all substance-related items; family members, sober friends of 12-Step sponsors help*

### Initiate Avoidance Strategies

- *Clients develop specific action plans to break contacts with dealers and other stimulant users, and to avoid high-risk places that are strongly associated with stimulant use.*
- *Identify cues and triggers*
- *Develop action plan for cues and triggers*

#### Provide Client Education

- *Educate clients about learning and conditioning factors associated with stimulant abuse*
- *Educate clients about the impact of stimulants and other substances on the brain and behavior*

#### Respond to Early Slips

- *Treat early slips as simple mistakes*
- *Counselors respond by making a verbal or behavioral contract with clients with short-term achievable goals.*

Simon et al. (Simon S 2004) suggest that during the first 3 months of abstinence MA users may benefit from strategies to compensate for cognitive problems, as during this initial abstinence period neuro-cognitive performance drops, often affecting attention/psychomotor speed, gross and fine motor skills, short-term memory, and fluency (Simon S 2004).

### **Maintaining Abstinence**

*Tip #33* (Rawson 1999) prescribes the following goals and objectives for maintaining abstinence:

#### Teach Functional Analysis of Stimulant Use

- *Teach clients to examine the types of circumstances, situations, thoughts and feelings that increase the likelihood that they will use stimulants*
- *Counsel clients to examine the positive, immediate, but short-term consequences of their stimulant use*
- *Encourage clients to review the negative and often delayed consequences of their stimulant use*

#### Teach Relapse Prevention Techniques

- *Psychoeducation about the relapse process and how to interrupt it*
- *Identification of high-risk situations and relapse warning signs*
- *Developing coping and stress management skills*
- *Enhancing self-efficacy in dealing with potential relapse situations*
- *Counteracting euphoric recall and the desire to test control over use*
- *Developing a balanced lifestyle including healthy leisure and recreation activities*
- *Responding safely to slips to avoid escalation into full-blown relapse*
- *Establishing behavioral accountability for slips and relapse via urine monitoring and/or Breathalyzer® testing*

#### Enhance Self-Efficacy Regarding High-Risk Situations

- *Role-playing and other therapeutic techniques*

### Counteract Euphoric Recall and Desire to Test Control

- *Discourage selective memory and “war stories” in recovery groups*
- *Stories can be powerful relapse triggers*

## **Relapse Prevention**

Research shows that recovering MA addicts require a longer and more intense outpatient program, with the most effective programs lasting at least 3 months to a year in duration. (<http://www.ag.state.il.us/methnet/subpages/treatment.html>). Brecht and colleague’s study of predictors for relapse in 98 MA abusers in Los Angeles County identified shorter length of treatment as one of the predictors of shorter time to relapse (Brecht M 2000).

MA addicts experience physiological changes that often lead to relapse around 45-120 days into MA treatment. This compulsion to return to old behaviors, known as “The Wall” is a critical consideration when developing strategies for relapse prevention for MA addicts (Obert 2004).

*TIP #33* (Rawson 1999) recommends the following approach for use with stimulant users:

*Relapse prevention systemically teaching clients:*

- *How to cope with substance craving*
- *Substance refusal assertiveness skills*
- *How seemingly irrelevant decisions may affect the probability of later substance use*
- *General coping and problem solving skills*
- *How to apply strategies to prevent a full-blown relapse should an episode of substance use occur*

## **Medical Aspects**

*TIP #33* (Rawson 1999) includes recommendations for medical personnel, including the broad categories bulleted below:

- *Management of stimulant intoxication*
- *Management of potentially lethal overdose*
- *Management of stimulant withdrawal*
- *Management for medical and psychiatric disorders that frequently accompany stimulant abuse and dependence*

Studies have confirmed some of the medical complications arising from MA abuse. In HIV-infected patients complications include hypertension, hyperthermia, rhabdomyolysis, and stroke, and some researchers suggested that dopaminergic systems are vulnerable to the combined neurotoxicity of HIV infection and methamphetamine (Maxwell 2005) (Urbina 2004).

Psychiatric disorders arising from MA abuse were confirmed in a study of 405 methamphetamine users in Taipei. MA users with pre-morbid schizoid/schizotypal personality were found to be predisposed to developing psychoses (Maxwell 2005) (C. Chen 2003). A study among MA psychotic patients in a multi-country study involving Australia, Japan, the



Philippines and Thailand indicated that persecutory delusion was the most common lifetime psychotic symptom, followed by auditory hallucinations, strange or unusual beliefs, and thought reading (Maxwell 2005) (M. Srisurapanont 2003).

Additional medical complications include the affects of MA use on the developing fetus, as well as children and adults exposed to toxic chemicals at laboratory sites (Maxwell 2005).

Dental complications also arise from MA abuse, with studies showing patients taking amphetamines at increased risk of gingival enlargement (Maxwell 2005) (Hasan A 2004), and studies revealing chewing and grinding movements associated with MA abuse (bruxism) (Maxwell 2005) (See S 2003).

*TIP #33* (Rawson 1999) also recommends preparations for violence associated with MA abuse:

#### Reducing the risk of violence

- *Keep the client in touch with reality by identifying him/her, using the client's name, and anticipating his/her concerns*
- *Place the client in a quiet, subdued environment with only moderate stimuli; ensure sufficient space so that the client does not feel confined. Have the door readily accessible to both the client and the interviewer, but do not let the client get between the interviewer and the door*
- *Acknowledge agitation and potential for escalation into violence by reassuring the client that they are aware of his distress; asking clear, simple questions; tolerating repetitive replies; and remaining nonconfrontational.*
- *Foster confidence by listening carefully, remaining nonjudgmental, and reinforcing any progress made.*
- *Reduce risk by removing objects from the room that could be used as weapons and discreetly ensuring that the client has no weapons*
- *Be prepared to show force if necessary by having a backup plan for help and having chemical and physical restraints immediately available.*
- *Train all medical or emergency staff to work as a team in managing volatile clients.*

A body of empirical research ties the MA user with violence, both as a victim and as a perpetrator (Cretzmeyer CM 2003). Cohen et al. found that the majority of MA addicts pursuing treatment reported past and current interpersonal violence as a characteristic of their lifestyles (Maxwell 2005) (J. Cohen 2004). In the *Methamphetamine Treatment Project*, 80% of the women and 26% of the men reported abuse or violence from their partner, with men more likely than women to report experiencing violence from friends and others. (Maxwell 2005) (Cohen J 2004).

*TIP #33* (Rawson 1999) notes the association of stimulant use with paranoia, aggression, and violence, and is supported by substantial evidence found in the literature that amphetamine use is associated with violence (Maxwell 2005) (Boles S 2003). Maxwell points out the increase in presentations of MA-associated aggression and violence in emergency rooms (Maxwell 2005). The importance of training counseling staff to handle psychotic symptoms is demonstrated by Zweben et al. (Zweben J 2004) in a study of the *Methamphetamine Treatment Project* where MA abusers reported high levels of difficulty with controlling anger and violent behavior, combined with a correspondingly high frequency of assault and weapons charges. Participants were found to have anxiety, psychotic symptoms, depression and attempted suicide.

## Special Groups and Settings

*TIP #33* (Rawson 1999) recommends the following in regard to cultural sensitivity:

- *Understanding the mores of groups bound together by gender, age, geography, sexual preferences, criminal activity, substance use, and medical and mental illnesses*
- *Training counselors in cultural sensitivity and cultural competency issues*
- *Educating counselors working with gay men about the sexual and social behaviors that are common among this population (including the widespread use of MA), as well as the stigma associated with substance abuse in the gay community*
- *Implementing contingency management approaches for addressing clients in narcotic replacement treatment when cocaine use is a major clinical problem*
- *Implementing close coordination of psychiatric and stimulant use disorder treatments for clients with co-occurring psychiatric disorders*
- *Requiring longer stays under medical/psychiatric supervision and ongoing treatment with antipsychotic medications for patients whose psychiatric symptomatology is not quickly resolved*
- *Expanding treatment for individuals in the criminal justice system, since stimulant users represent a substantial portion of the individuals in the court and prison treatment population.*
- *Forming linkages for rural populations between social service agencies, providing flexible treatment services and using nontraditional outreach sites (such as mobile or satellite offices)*
- *Making counselors aware of the special needs of women and adolescents including domestic issues, medical problems, child care needs, academic performance, and so on. Gender-specific treatment groups and school-based clinics can be helpful in reaching these particular groups.*

In a later study, Rawson (Rawson R A 2002) notes that discussion in mixed patient groups with heterosexuals frequently results in very poor treatment engagement and early treatment dropout.

## ***Best Practices Roundtable Discussions***

Following is an examination of the Best Practices Roundtable Discussions. Topics are organized according to the Best Practices Model (*TIP #33*) (Rawson 1999). The discussions are analyzed for barriers to implementing best practices, with obstacles rank ordered in charts following each topic.

### **Maximizing Treatment Engagement**

#### **Treatment Accessibility**

*TIP #33* (Rawson 1999) emphasizes the vital role that accessibility plays in maximizing treatment engagement. Research supports the premise that Nebraska can reduce attrition rates by locating MA treatment programs in convenient places (Rawson 1999). Participants in both the Eastern and Western Nebraska roundtable discussions agreed that the treatment facilities scattered geographically across Greater Nebraska need to be more accessible to the people living in the surrounding communities.

#### **Centralized Treatment Services**

All roundtable discussion groups addressed the question of whether centralized treatment services would be effective in Nebraska. Treatment Providers from both Eastern and Western Nebraska alluded to the field of evidence supporting a move from centralized to community-based treatment for MA users. Concerns were voiced that use of a central treatment center for MA treatment would reverse the progress that communities have been making towards community-based care. Treatment Providers were particularly concerned that clients receiving treatment in a centralized location would be isolated from their community and the associated support systems awaiting them upon release, including access for family treatment, mechanisms appropriate for the local continuum of care, and resources for long-term support. Currently, Lincoln and Omaha have long-term abstinence support; such services are lacking in a number of other communities. Smaller regional facilities that can develop community-based treatment were proposed. At the very least, participants agreed that there needed to be transition centers to help eliminate the concerns raised regarding a central treatment center.

The Western Nebraska Treatment Providers were overwhelmingly opposed to a centralized treatment center, cataloging the following objections:

- Transportation to and from a central location is burdensome for both the patient and treatment provider, who is usually responsible for transporting the user to and from the treatment center. MA users cannot be put on public transportation when going through withdrawal.
- The Western Nebraska Treatment Providers discussed the challenges in holding “family days” at centralized facilities when family members must travel from 200-300 miles away. Because of time, transportation or other issues, the family members do not attend.
- Treatment providers have observed a higher rate of relapse during the 2-4 week acclimation period that recovered MA addicts experience when returning to their communities after having been away at a treatment facility. Absence from the community forces the patient to reestablish relationships with family, counselors and primary care providers. Much of the treatment provider’s time is monopolized with handling the case management aspect of this

transition process, detracting from the time that the treatment provider could be delivering direct services to other clients.

- By the time a MA user is sent to a central location, he has often exhausted all of the resources available to him in the community. When he reenters that community he cannot get help because there is no program that is willing to work with him. Treatment providers find that local providers are more often willing to work with one another and allow users a second chance.
- A central location provides an artificial environment. When the user returns to his community, he finds that he has not developed the skills necessary for dealing with his addiction in the environment where he will be living and maintaining sobriety. If a user is not sent to a central treatment facility, then treatment providers are able to attach the recovery process to the community, and hopefully alleviate any inability to function in the community after leaving treatment. The MA user needs to learn how to function in his home community.
- By sending a user to a central location for treatment, the possibility of involving the user's family in the treatment process is eliminated. This adversely affects both the user and the family: The user does not benefit from having the support of his family, and the family suffers because there is no support for the family in their community if the treatment is being provided at a central location. This is especially important for single parents with children. The treatment providers reported that parents, especially mothers, who were able to see their children, were more likely to enter into treatment.
- Moving treatment out of the local community and into a central location would interfere with interactions with the legal system. Interactions with local law enforcement provide a higher degree of accountability. MA users do well in the more structured environment this creates. Locally there is a better rapport with parole and the legal system. The MA user sees all of the treatment providers and law enforcement working together towards the same goal.
- Cultural sensitivity, especially with Native American customs such as sweats and journaling, would not be present at a central location.
- The individualized treatment at the local level is very important. The size of the treatment groups are smaller, so the user is unable to blend into group of 30 people as he might be able to do at a central location.
- Western Nebraska Justice Professionals also objected to a centralized facility, questioning whether centralized care would effectively impact the offender population on a long-term basis, beyond initial stabilization.

### **Community-Based Treatment Services**

The Eastern Nebraska Treatment Providers pinpointed the barrier to community-based treatment to be funding. They pointed out the difficulty in obtaining reimbursement for community programs. Instead, treatment providers are forced to follow the money, shipping MA users to where the services are and estranging them from their families. Setting aside the funding issues, the Eastern Nebraska Treatment Providers identified a number of benefits supporting a community-based model for MA treatment:

- It is easier to move a MA user up and down through the continuum of care.
- Community-based services reduce travel time and cost for the MA users and families getting to treatment. Windshield time is reduced, freeing up more time for treatment providers to spend on direct services.

- Community-based services allow the MA user to access a support system within his community. Otherwise, MA users have difficulty coping within their community upon their return from treatment.
- Community-based services increase the likelihood of family involvement which increases the chances of successful recovery. Educating the family about the recovery process helps change the family's behavior to support the MA user's recovery. Since there is often more than one addict in family, community-based services facilitate access to treatment for family members, as well.
- The MA user is exposed to risk factors within the home environment while in treatment and is better prepared to deal with them.
- Because community-based treatment is not a one-time service, the MA user is more likely to access services throughout the continuum of treatment.
- Community-based services allow the community to be responsible for the recovery of its citizens.
- Because the user's employer is in the community, the treatment provider can work with the employer, increases the likelihood of the employer in rehiring the employee.

With the majority of urban offenders receiving treatment within their own cities, the Eastern Nebraska Treatment Providers stressed the importance of locating assessment facilities in the communities where people who need them can access them. The group was apprehensive about relying on private funding for these facilities. The Eastern Nebraska Justice Professionals proposed that each district within a city should contribute financially to the treatment centers to ensure service delivery for patients.

## **Client Convenience**

Other accessibility barriers cited in the roundtable discussions coincided with *TIP #33's* call to locate treatment services in safe areas near public transportation and to be open at times convenient for clients. Roundtable participants identified this scheduling issue as particularly applicable for people in rural areas, who may have to travel considerable distances to reach MA treatment services. Rural clients with day jobs are challenged to fit their working hours around an intensive out-patient schedule. Community Support Providers in Western Nebraska suggested satellite offices as an option. Eastern Nebraska Justice Professional proposed installing one or two intensive out-patient centers in Omaha, offering multiple levels of service. Justice Professionals from both Eastern and Western Nebraska saw a tremendous opportunity to have a day and night reporting center. Western Nebraska Justice Professionals noted that only 2 or 3 areas have day and night reporting systems. One Substance Abuse Officer (SAO) in Lexington offers night and day reporting centers (some contract and some probation). The Western Nebraska Justice Professionals would like to see out-patient care in a day reporting center, suggesting that college students be tapped for personnel support. They particularly liked the idea of a "one-stop shop" where clients can check in for probation, counseling and treatment support.

## **Clients' Concrete Needs**

To minimize barriers to treatment participation, research points to first addressing clients' concrete needs, including transportation, housing and finances (Rawson 1999).

## **Transportation**

Across the board, all roundtable discussion groups identified a deficit in transportation options as a primary obstacle for both urban and rural clients. Participants agreed that multiple solutions would be necessary to address the transportation problems across the state. The Justice Professionals from Eastern Nebraska observed clients' chief reasons for lacking transportation as not having a driver's license, and being unable to afford reliable transportation (a car/gas). The Eastern Nebraska Justice Professionals supported the idea of a mobile treatment center relying on part-time employees. A prototype program in urban Milwaukee was cited, where probation officers and Treatment Providers work together using a bookmobile that runs until 11:00 p.m. The Western Nebraska Justice Professionals also proposed the mobile reporting center concept, citing fewer personnel required and wireless access to HHSS as advantages.

Treatment Providers from Western Nebraska discussed the lack of public transportation in rural areas. In some communities the Handibus is available for substance abusers. In the northern part of the panhandle, Native American Outreach provides limited transportation assistance to Native Americans. When transportation to and from treatment is not available, the Treatment Providers indicated that they work with the client to problem solve and look for informal supports that could be utilized to provide transportation. These informal supports include family members, friends or volunteers from within the community that would be able to provide transportation to and from treatment. Unfortunately, these informal supports are not always reliable. The Western Nebraska Treatment Providers agreed that they would rather install resources to provide transportation than to rely on community supports. It was suggested that the Treatment Providers be allowed to use flex funding to compensate volunteers to transport users to and from treatment if they are meeting their treatment goals. This type of reimbursement will be particularly beneficial as fuel costs continue to rise.

## **Housing**

The Western Nebraska Community Support Providers voiced grave concerns regarding the lack of housing available for MA users. Public housing authorities do not allow MA users or manufacturers to use public housing. While MA users who have documentation of successful treatment completion can appeal to the public housing authority, these Community Support Providers indicated that they have never seen a successful appeal.

Another concern expressed by the entire Western Nebraska roundtable group was the clean-up expenses associated with buildings that have been used as methamphetamine labs. Once the lab has been shut down, owners are unable to resell the buildings. No training is available on how to deal with these contaminated buildings. Parents are considered neglectful if they continue to reside in a contaminated house. Therefore, there has been an increase in the number of children entering foster care because they live in buildings that were used as MA labs. A related outcome may be a shortage of foster care homes for these children.

All focus groups called for an increase in transitional housing facilities. The Eastern Nebraska Justice Professionals pointed out how MA users normally share housing. A MA user who has successfully completed treatment may return to a high-risk living environment, where housemates are using MA or other drugs. Both Eastern and Western Nebraska Justice Professionals would like to see transitory programs including half-way houses, three-quarter houses, and after-care services. Western Nebraska Justice Professionals revealed a need for half-way house reporting centers for MA users to use for transitioning between prison and returning into the community, since the half-way house in North Platte has closed, leaving no half-way

houses west of Kearney. The Eastern Nebraska Treatment Providers pointed out how the current system doesn't allow housing for relapse patients; relapsing MA addicts end up in the emergency room.

## **Finances**

Both the Eastern and Western Nebraska roundtable groups agreed that too often money dictates treatment options. The Eastern Nebraska Treatment Providers related how the working poor and even middle class clients who do not qualify for Medicaid cannot afford to pay for treatment. Many times their best course of action seems to be quitting their jobs in order to get the state to pay for treatment. Evaluation fees were a treatment barrier identified by the Eastern Nebraska Justice Professionals. MA users who are unable to pay the fees for the evaluation to the treatment consequently do not receive treatment. The cost for an evaluation is \$180 in Omaha, ranging from \$70-\$120 in other areas. Standardizing prices across the state was suggested, as was allowing patients to pay installments.

Patients with private insurance also face challenges in paying for treatment. Some insurance companies are not willing to cover MA treatment or will only cover a portion of the costs. Some contracts won't pay for outpatient care. The Eastern Nebraska Treatment Providers noted that even people with insurance requiring relatively inexpensive co-pay have difficulty paying for a co-pay of \$10 per visit, four times a week, plus transportation expenses.

Both the Eastern Nebraska Justice Professionals and the Western Nebraska Community Support Providers gave anecdotal evidence of how the judicial system seems to consider finances in sentencing and parole: A judge may set a bond very high so that a person with low income cannot afford it and must stay in prison for treatment. Or a juvenile offender from a low-income family may be incarcerated rather than sent to a treatment program.

## **On-Site Services**

The best practices model suggests addressing logistical barriers with onsite services (Rawson 1999). The Eastern Nebraska Justice Professionals favored a treatment center model that provides transportation and child care services. Eastern Nebraska Treatment Providers echoed the need for child care, citing the growing awareness of the need for parent-child treatment at all levels of treatment.

The Eastern Nebraska Treatment Providers stressed the importance of discreet funding for discreet services. A voucher system was proposed for individuals to use for individualized services.

## **Quick Response**

Because ambivalence about treatment is a common attitude among even those MA users seeking treatment, the best practices model recommends a quick, positive response to initial telephone inquiries (Rawson 1999), calling for the initial interview to be scheduled within 24 hours after the client initially contacts the program. All Treatment Providers participating in the roundtable discussions labeled the waiting list for all levels of treatment as "too long". The Eastern Nebraska Justice Professionals observed that the less expensive the program is, the longer the waiting list.

The Western Nebraska Treatment Providers would like to see intake completed on the same day that the user approached the treatment provider regarding services. Completing intake on the same day was more likely to occur if the MA user was able to work with the intake

worker who was on call at the treatment center. Intake workers are usually Licensed Alcohol and Drug Abuse Counselors (LADAC). These intake workers identify the essential functioning including medical needs, emotional needs, mental health needs, motivation, family support and the 13 Medicaid requirements. Patients needing to access the services of an intake worker with a specialty may be required to wait a day or two before intake can be completed, because these appointments are limited.

The Western Nebraska Treatment Providers outlined the routes through which MA users access treatment services. In the southern portion of the Panhandle, MA users generally access treatment services through their primary care physician. In the northern portion of the Panhandle, access usually begins through the law enforcement agency. The treatment facility there has a contract with the state for Native American beds. Rarely receiving walk-ins, most referrals come by phone contact with medical providers, law enforcement officers or counselors. Response time is particularly impeded through the law enforcement referral route. An individual must be arrested to receive a referral for treatment services. Since the goal of law enforcement is to stabilize a situation, no arrest (and no referral) is made if the situation stabilizes. The Eastern Nebraska Justice Professionals echoed frustrations around offenders whose offense is not severe enough to receive imprisonment not receiving treatment, noting that the recidivism rates among this population, for either drug offenses or other offenses, are very high. The Western Nebraska Treatment Providers suggested introducing the MA user to a community worker prior to returning to the community.

The Eastern Nebraska Treatment Providers gave a snapshot of their intake process. MA users are rarely seen within 24 hours of requesting assistance. Treatment providers must qualify to be accredited, licensed, a provider through Medicaid and in compliance with the patient's contract back to the region so that they can get paid once services have been provided. All contracts have differing requirements that must be met. Ensuring that each MA user's contract qualifies under all these requirements is time consuming and often detrimental to the user because he is not receiving the care that he needs.

The Eastern Nebraska Treatment Providers broke down the time barriers that they are currently experiencing: a 3-4 week wait time before an assessment, followed by a 4-6 week wait time for screening. Because of the wait list to enter services at another agency, there is often a period of time when the user is not getting the level of care needed. The MA user's ambivalent attitude surrounding MA treatment often leads the patient to believe that a higher level of care is not necessary. Access to step-down services is also impacted by wait times. The Eastern Nebraska Treatment Providers identified a 10-12 week wait for intensive outpatient services at this time.

A solution proposed by the Eastern Nebraska Treatment Providers to allow users quicker access to individualized treatment would be a 5-10 day pre-treatment period, much like the detoxification period. This would allow users to restore their bodies, as treatment providers determine the patient's needs in a variety of domains by assessing each level of service. A pre-treatment period would prevent half of the treatment period from being eaten up with assessments. Treatment providers could identify environmental problems and safety concerns and remove the MA user from the environment if necessary.

The Eastern Nebraska Justice Professionals suggested that quicker turn-around times could be facilitated through more coordination among the justice system, treatment professionals and insurance companies.



Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
Greater accessibility needed to treatment facilities across Greater Nebraska	•	•	•	•	•
Burdensome transportation costs and travel time	•	•	•	•	•
Treatment facilities and services need to be open on days and at times convenient to clients (i.e., rural clients with day jobs who must travel to site)	•	•	•	•	•
Waiting list for all levels of treatment is too long	•	•	•	•	•
Lack of transitional housing facilities	•	•	•	•	•
Money dictating treatment options	•	•	•	•	•
Clean-up expenses associated with buildings used as MA labs		•		•	•
Judicial system considers finances in sentencing and parole	•	•			
Lack of child care services	•		•		
Family needs access to MA user in treatment facility			•	•	
Removal from home community creates an artificial environment, isolating MA user from opportunities to practice avoidance strategies			•	•	
Offenders whose offense is not severe enough to receive imprisonment not receiving treatment	•				
Differing requirements of all MA user's contracts must be met			•		
Lack of transportation in rural areas				•	
Moving treatment out of local community interfering with interactions with local law enforcement				•	
Sensitivity to local culture, particularly Native American customs				•	
Treatment groups too large				•	
Difficulty in obtaining reimbursement for community programs			•		
Alienation from support system within MA user's community			•		
Lack of housing available for MA users					•
Working poor/middle class who don't qualify for Medicaid can't afford treatment			•		
Some insurance companies unwilling to cover MA treatment or only cover a portion of cost			•		
Even low co-pays of \$10/visit add up at 4 visits/week			•		
Evaluation fees too high	•				

**Table 16. Barriers to Implementing Best Practices in Maximizing Treatment Engagement, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**

## Assessments and Orientations

### Brief Initial Assessments

*TIP #33* (Rawson 1999) prescribes a brief, focused initial assessment. The Eastern Nebraska Treatment Providers validate this practice, calling for a brief screening to enable the MA user to enter a safe, stabilizing environment, followed by a comprehensive assessment during treatment. They protested that funding sources will not allow this approach. The current assessment mandated by the justice system involves an expensive comprehensive assessment that eats into the patient's allowed treatment time, leaving little time to focus on treatment. Currently, a MA user could be two weeks into treatment and still be undergoing assessment. A

suggestion arose to have a paraprofessional conduct the screening and a treatment professional conduct the assessment at a later time. This solution increases the accuracy of the comprehensive assessment, because the MA user has stabilized.

The Eastern Nebraska Treatment Providers described the current assessment tool as “a step backward”. They’d like to see an assessment outline rather than a required tool. The assessment outline would allow more patient individualization and provide direction for accessing more detailed information. To ensure collection of quality information, the assessment outline would include standard headings required by the criminal justice system.

The Western Nebraska Treatment Providers and Justice Professionals singled out affordable assessment as a critical issue to be addressed by a set of best practices. Both the Eastern and Western Nebraska groups stressed the need for money for more comprehensive assessment. The Western Nebraska Justice Professionals noted that weaknesses in the pre-sentence investigation (PSI) being relied upon now leaves some risks not fully identified. The Western Nebraska Community Support Providers blamed high assessment costs for parolees’ inability to access drug treatment. Discussion ensued on the likelihood of felons to recidivate without access to treatment services.

## **Clear Orientations**

Research indicates more successful outcomes when clients receive clear, realistic information on their MA treatment process, including program rules, expectations for their participation, and anticipated outcomes and timetables (Rawson 1999). Research also shows that addiction treatment is more effective when clients may negotiate with the treatment providers regarding treatment strategies to arrive at an individualized program, rather than being assigned a standard plan (Rawson 1999).

## **Empathetic Concern**

Authoritarian and confrontational staff demeanors increase the potential for violence. *TIP #33* advocates empathetic, nonjudgmental, straightforward counselors to engage patients (Rawson 1999). The Western Nebraska Justice Professionals’ comments support this aspect, suggesting that staff members act in a manner that reflects genuine care about their patients.

## **Family Involvement**

Assessment of the attitudes and involvement of the patient’s significant friends and family members helps the treatment provider gauge whether their influence will enhance or interfere with treatment goals. Research also shows that appropriate family involvement optimizes chances for a successful recovery (Obert J 2000) (Rawson 1999).

Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
Affordable assessments needed	•	•	•	•	•
Time-consuming initial assessments eat into patient's treatment time			•		
PSI leaves some risks not fully identified		•			
Staff need to act in caring manner		•			

**Table 17. Barriers to Implementing Best Practices in Assessments and Orientations, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**

## Planning Treatment

The best practices model for planning treatment for MA use follows *TIP #33's* 12-24 weeks of treatment, followed by a form of support group participation (Rawson 1999). Patients are provided with a written schedule to solidify attendance expectations and facilitate family member involvement in treatment.

## Time Period

The Eastern Nebraska Justice Professionals indicated that a longer time is needed for the whole treatment process. Six months of treatment was considered, with the duration of treatment to last at least 18 month to 2 years, but the Justice Professionals observed that few patients are able to complete the whole process. Reasons identified for treatment centers losing patients included the patient's inability to complete the treatment program, patient financial problems, and prohibitively long waiting lists. Even in prisons where the offenders volunteer for treatment, the waiting list is long.

The Eastern Nebraska Justice Professionals suggested that the state definition be changed to allow for longer treatment. The group strongly felt that treatment providers should be providing the appropriate level of treatment based on the individual's personal MA use. The Eastern Nebraska Treatment Providers built on this concept of individualized treatment plans, noting that treatment providers cannot treat MA users like other drug users. Since it can take up to three weeks for MA to clear a user's system, MA users cannot be treated in a short amount of time. Because most methamphetamine users are also using alcohol, marijuana or other drugs, treatment plans must also address secondary drug use.

The Eastern Nebraska Justice Professionals observed that MA users need a minimum of 4 to 6 months to clear their minds to be receptive for treatment. The group outlined the current timeline for treatment at 4 to 5 contacts per week, continuing for 5 to 6 weeks for the whole treatment. They consider the current outpatient schedule of one or two contacts per week as inadequate, calling for more contacts per week to facilitate patients' stability. There is no after-care following the treatment.

## Conflicting System Requirements

The Eastern Nebraska Treatment Providers observed that the regional treatment centers appear not to value outpatient treatment, instead funding residential programs even though more people could be treated on an outpatient basis for the same dollars. The Eastern Nebraska Justice Professionals proposed moving patients to residential facilities so that they can complete their treatment. However, long waiting lists prohibit patients from getting into the treatment programs

that they need. The Western Nebraska Justice Professionals pointed out how other system requirements conflict with one another. Other system requirements also conflict with one another. It can take a couple of weeks to get a user placed into residential treatment. However, if the user remains sober for two weeks then he no longer qualifies for residential care. Of course, if the user continues to use while waiting for a bed, treatment becomes more difficult. Health and Human Services and Probation’s recommendations often override tax provider recommendations.

The Western Nebraska Justice Professionals said that even the Matrix Model that is being used extensively by treatment providers is in direct conflict with state’s minimum mandate for the number of treatment hours required each week. The Matrix Model of intensive outpatient treatment requires six-eight hours of treatment, while the state’s minimum mandate is 10 hours of treatment. Both of these requirements conflict with the standards set by the behavioral health system and the Medicaid system which requires nine hours per week divided among three specific components. Participants all expressed frustration with attempting to tailor treatment so that it meets the criteria set forth by each group.

The Western Nebraska Treatment Providers stated that the guidelines set forth by Behavioral Health Services, Criminal Justice, Medicaid, Primary Care Providers, and Managed Care Providers require different levels of care, making it difficult for a MA user to access care. If the guidelines of a particular group are not met, then funding for treatment can be removed. The Eastern Nebraska Treatment Providers cautioned that a set of best practices for Nebraska will only be followed if there is money available to implement the recommended protocol.

## Planning Treatment

Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
Longer time needed for treatment process	•		•		
Treatment providers cannot treat MA users like other drug users	•		•		
Regional treatment centers fund residential programs, not outpatient treatment			•		
Conflicting system requirements		•		•	

**Table 18. Barriers to Implementing Best Practices in Planning Treatment, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**

*TIP #33* (Rawson 1999) organizes the treatment process into four phases:

- *Treatment initiation period*
- *Abstinence attainment period*
- *Abstinence maintenance phase*
- *Long-term abstinence support plan*

## Initiating Treatment

### Treatment Schedule

The first priority for initiating treatment is to develop expectations for the first weeks of treatment. *TIP #33* recommends setting a schedule of multiple weekly visits during the first 2-3 weeks, even if the sessions are for 30 minutes or less (Rawson 1999). As discussed above in the

*Planning* section, current treatment protocols are too often dependent on the patients' contracts, rather than dictated by individuals' needs.

## **Urinalysis Schedule**

To confirm that the patient has discontinued use of MA and any other drugs, a urinalysis schedule is set. *TIP #33* advises taking mandatory urine samples every 3-4 days, but cautions against exceeding the sensitivity limits of standard laboratory testing. The Western Nebraska Justice Professionals indicated that the current practice is twice weekly mandatory urine testing, and are in favor of sharing positive tests with others.

## **Self-Help Groups**

While not required by *TIP #33*, the model encourages patient participation in self-help groups (Rawson 1999). Eastern Nebraska Treatment Providers found Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) to be useful forms of community support. One Eastern Nebraska Treatment Provider cautioned against adopting a model that could undermine the 12-Step program that is currently working in Nebraska. Both Eastern and Western Nebraska Treatment Providers were not as impressed with the 12-Step programs available in Western Nebraska, referring to the AA chapter as being "alcohol only" and questioning the reputations of the Sydney and Chappell NA programs. The Western Nebraska Treatment Providers singled out the 12-Step program in Torrington as an example for other chapters to emulate.

## **Dual Diagnosis Assessment**

*TIP #33* assigns the diagnosis of psychiatric comorbidity in the *Initiating Treatment* phase (Rawson 1999). The Eastern Nebraska Treatment Providers devoted much discussion to the challenges in diagnosing mental disorders. The group suggested standardizing definitions for the terms "dual diagnosis" and "co-occurring conditions". Because the service definitions do not match, the common interchanging of the terms makes it difficult to navigate the different levels of care.

The Eastern Nebraska Treatment Providers called for a working relationship across the systems. Under the current system, Medicaid will not allow two authorizations for both mental health and chemical dependency open at the same time. Treatment providers are challenged to choose between mental health care and substance abuse care. Ways of manipulating the system were described that are often destructive to the family. Treatment providers must label a MA user "mentally ill" to receive funding from Medicaid or even private insurance companies. The mental health diagnosis is necessary to obtain treatment for family members with substance abuse problems. Then the MA user is burdened by the stigma that is attached to mental illness.

## **Safety Issues**

When asked to describe an ideal process for initiating treatment, Western Nebraska Treatment Providers identified safety issues as their primary concern. Treatment providers must first determine immediate medical concerns, ensure the MA user's personal safety, and determine if detoxification is necessary. The Eastern Nebraska Treatment Providers confirmed that environmental and safety concerns apply to users of MA. Once safety issues are addressed, treatment providers can determine the appropriate level of care for medical care and psychosocial needs.

## **Compulsive Sexual Behaviors**

Because MA users report a loss of control over their sexual expression, describing sex as ‘compulsive’ and ‘obsessive’ (Reback C 2004; Maxwell 2005), *TIP #33* (Rawson 1999) emphasizes the importance of assessing stimulant-associated compulsive sexual behaviors in an open, nonjudgmental manner. Compulsive sexual behaviors for MA abusers include: promiscuous sex, AIDS-risky behaviors, compulsive masturbation, compulsive pornographic viewing, and homosexual behavior for otherwise heterosexual individuals (Rawson 1999). Because these behaviors are associated with high risks of sexually transmitted and blood-borne disease, including HIV infection (Kurtz S 2003; Maxwell 2005), treatment providers must assess these dangers during the *Initiating Treatment* phase in order to connect addicts who may have these diseases to medical resources.

Eastern Nebraska Treatment Providers expressed concern over the sexual addiction associated with MA use and the spread of HIV. The group indicated that they vigilantly watch for this addiction in MA users. Treatment Providers would like to require a nursing assessment to test for STD’s at the time of referral.

## **Withdrawal Symptoms**

For the first 10-15 days of MA abstinence, patients report symptoms of depression, difficulty concentrating, poor memory, irritability, fatigue, craving for MA, and paranoia. Therefore, *TIP #33* prescribes remediation of stimulant “withdrawal” symptoms during the *Initiating Treatment* phase (Rawson 1999). These symptoms leave patients feeling completely out of control of their lives, because they are unable to associate their symptoms with drug use (Obert 2004). Research suggests that during the first 3 months of abstinence MA users may benefit from strategies to compensate for cognitive problems, as during this initial abstinence period neuro-cognitive performance drops, often affecting attention/psychomotor speed, gross and fine motor skills, short-term memory and fluency (Simon S 2004). The treatment provider informs the patient about these symptoms, offers remedial options, and encourages proper sleep and nutrition to allow the neurology of the brain to recover (Rawson 1999).

The Western Nebraska Treatment Providers discussed the accessibility, skill and knowledge of physicians regarding detoxification and substance abuse issues. Since treatment providers can only provide social detoxification treatment, they must rely on primary care physicians and emergency room doctors to deliver medical detoxification services. There is no medical model protocol for detoxification, so physicians are not required to deliver a standardized level of care. The Western Nebraska Treatment Providers stated that in some communities the doctors are unwilling to deal with MA users.

Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
Current treatment protocols dependent on patients' contracts, rather than dictate by individuals' needs	•	•	•	•	•
AA chapters in Western Nebraska described as "alcohol only"			•	•	
Environmental and safety concerns must be addressed prior to determining appropriate level of care			•	•	
Sexual addictions must be assessed			•	•	
No medical model protocol for detoxification for physicians and emergency room doctors				•	
Doctors unwilling to deal with MA users				•	
Medicaid will not allow 2 authorizations for both mental health and chemical dependency open at the same time			•		
Conflicting service definitions for "dual diagnosis" and "co-occurring conditions"			•		
Mental health diagnoses employed in order to secure funding from Medicaid or private insurance companies			•		

**Table 19. Barriers to Implementing Best Practices in Initiating Treatment, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**

## Initiating Abstinence

*TIP #33* (Rawson 1999) notes that there is no clear distinction between clients who are initiating abstinence and clients who are *maintaining* abstinence, estimating that the initiating abstinence period occurs roughly from 2-6 weeks into treatment.

## Structure and Support

The first order of business in the *Initiating Abstinence* phase is to set reasonable short-term goals with the patient. The first short-term goal should be immediate abstinence. Frequent brief counseling sessions help reinforce MA abstinence. The *TIP #33* format for these sessions is to review events of the past 24 hours and develop a plan of action for the next 24-hour period. Family and social support systems are established to fortify these goals (Rawson 1999)

## Secondary Drug Use

As MA users initiate abstinence, abstinence from all drugs is required. *TIP #33* advises treatment providers to help clients identify the connections between the use of other substances and their stimulant addiction. Family members, sober friends, and 12-Step sponsors can be enlisted to help the MA user throw away all substance-related items. (Rawson 1999)

Eastern Nebraska Treatment Providers and Justice Professionals validated the best practices' literature's reports that MA users abuse other substances as well. The Eastern Nebraska Treatment Providers called for a substance abuse treatment focus over a MA treatment focus, noting that without addressing the other substances, MA users will turn to alcohol or marijuana.

Discussion ensued regarding limited funding. Both the Eastern Nebraska Treatment Providers and Justice Professionals raised the issue of focusing funding on MA abuse by shifting it away from alcohol and other substance abuse programs. The Eastern Nebraska Treatment Providers warned that while the majority of drug problems are currently associated with MA, marijuana use is still prevalent, and possibly seen as more accepted. The group also

recommended that funding still needs to focus on alcohol because it serves as a gateway drug. Another barrier for allocating specific MA dollars was identified in how focusing on the number of MA-specific beds complicates funding for treatment facilities.

The Eastern Nebraska Justice Professionals pointed out how the number of general drug abusers is always greater than that of MA abusers. They proposed a general drug treatment which includes MA and other substances.

## Avoidance Strategies

To initiate avoidance, treatment providers work with clients to plan strategies to respond to cues and triggers. *TIP #33* specifically requires treatment providers to help clients develop action plans to break contacts with dealers and other stimulant users, as well as to avoid high-risk places that are strongly associated with stimulant use (Rawson 1999).

## Client Education

*TIP #33* describes a client education program where clients learn about conditioning factors associated with stimulant abuse and the impact of stimulants and other substances on the brain and behavior (Rawson 1999).

## Early Slips

*TIP #33* is very explicit about avoiding judgmental reactions to MA users' early slips, suggesting that they be treated as simple mistakes. Treatment providers are directed to respond by making a verbal or behavioral contract with the client, stating short-term achievable goals.

Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
Doctors unwilling to deal with MA users			•	•	
MA users abuse other substances as well	•		•		
Consequences of shifting funding away from alcohol and other substance abuse programs in order to focus on MA	•		•		
Focusing on number of MA-specific beds complicates funding for treatment facilities			•		

**Table 20. Barriers to Implementing Best Practices in Initiating Abstinence, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**

## Maintaining Abstinence

### Functional Analysis

*TIP #33* (Rawson 1999) suggests that treatment providers teach clients to examine the types of circumstances, situations, thoughts and feelings that increase the likelihood that they will use stimulants. Clients can then weigh the positive, short-term effects of their MA use against the negative and often delayed consequences.

### Relapse Prevention Techniques

*TIP #33* (Rawson 1999) prescribes the following relapse prevention techniques:



- *Psychoeducation about the relapse process and how to interrupt it*
- *Identification of high-risk situations and relapse warning signs*
- *Developing coping and stress management skills*
- *Enhancing self-efficacy in dealing with potential relapse situations (i.e., role-playing)*
- *Counteracting euphoric recall and the desire to test control over use*
- *Developing a balanced lifestyle including healthy leisure and recreation activities*
- *Responding safely to slips to avoid escalation into full-blown relapse*
- *Discouraging selective memory, euphoric recall, and “war stories” in recovery groups*
- *Restraining desires to test control*
- *Establishing behavioral accountability for slips and relapse via urine monitoring and/or Breathalyzer® testing*

Both the Eastern and Western Nebraska Justice Professionals discussed the need for more drug testing. Technologies are in place, but not as effective as expected, including sweat bud/patches, electronic monitoring (which was deemed expensive in terms of officers’ time), and urinalysis (which is not accurate if the user drinks too much water). Strategies for counteracting inaccurate urinalysis include waiting to test until the water level drops or conducting the test in the field where the incident occurred.

The Eastern Nebraska Justice Professionals noted that the levels of testing results are important for some drugs. If the result is only “negative” or “positive”, it is not specific enough for further actions to be taken by the Substance Abuse Officers, e.g., the level of marijuana test result can tell whether the offenders are continuous users or increased users. In the drug court, the abusers are tested over 3 times a week. If the result shows positive, there is a need for a urinalysis test, which reveals drugs in general, not just MA. If the result shows negative, then no urinalysis is necessary.

Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
More frequent and more specific/reliable drug testing needed	•	•			

**Table 21. Barriers to Implementing Best Practices in Maintaining Abstinence, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**

## Relapse Prevention

### Techniques

MA addicts experience physiological changes that often lead to relapse around 45-120 days into MA treatment. This compulsion to return to old behaviors, known as “The Wall” is a critical consideration when developing strategies for relapse prevention for MA addicts (Obert 2004). Research shows that recovering MA addicts require a longer and more intense outpatient program, with the most effective programs lasting at least 3 months to a year in duration. One study of predictors for relapse in 98 MA abusers in Los Angeles County identified shorter length of treatment as one of the predictors of shorter time to relapse (Brecht M 2000).

The Western Nebraska Treatment Providers discussed the need for ongoing support services to prevent relapse. Identifying a specific person to be available to assist the MA user

when he was tempted to relapse was suggested. Self help groups were also a solution. The Western Nebraska Treatment Providers said that RESPITE provides good intervention services in Scottsbluff for mental health patients. However, this service is primarily for mental health patients and would require additional funding if it were to be widely available to substance abusers. In Alliance, users fearing relapse can call a 24-hour hotline manned by an LADAC who is able to provide counsel over the phone. In addition, a residential stay is available at the Alliance facility as long as the user is current and paid. However, due to transportation problems, some users are not able to return the next day if a bed is unavailable.

The Eastern Nebraska Treatment Providers did not like the term “after care”, believing it implies that the real treatment has stopped and the “after care” might no longer be necessary. The trend in the profession is to use the term “continued care”. Long-term continued care addresses continuing medical issues, dental issues, chronic pain, cognitive damage, and vocational rehabilitation. To remedy the problem of support mechanisms disappearing immediately with the discontinuance of treatment, the Western Nebraska Treatment Providers were in favor of a gradual step-down treatment continuum, ranging from residential treatment to intensive outpatient treatment to general outpatient treatment.

## **Evaluation of Treatment Outcomes**

The Western Nebraska Justice Professionals expressed their discouragement by the low percentage of success after treatment for MA addiction. The success rate is highest for juveniles who move to another place. Evaluation of treatment outcomes was analyzed. To evaluate treatment outcomes, the Western Nebraska Treatment Providers often collect their data through a post discharge survey given at discharge and again 90 days to six months after discharge. The group agreed that a good time to evaluate recovery would be six to nine months after discharge. The Eastern Nebraska Treatment Providers pointed out difficulties in following up on treatment. When questionnaires are dispatched, they are often not returned. Once clients leave treatment, they are often hard to find. Western Nebraska Justice Professionals proposed instituting a tracker service for adults similar to that for juveniles. Right now there is only one tracker service left in northwest Nebraska, with agencies meeting trackers once or twice a month to listen to their reports. The justice professionals wondered whether trackers and treatment professionals could work together. It was suggested that college students could serve as trackers, supervising, testing and interviewing clients. A concern was raised regarding sending trackers to dangerous places.

Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
Difficult to follow-up on treatment	•	•	•	•	
Ongoing support services necessary to prevent relapse				•	
Term “after care” implies that real treatment has stopped			•		
Long-term continued care needed for medical issues, dental issues, chronic pain, cognitive damage, and vocational rehabilitation			•		
Support mechanisms disappear immediately after treatment discontinued				•	
Step-down services needed, ranging from residential treatment to intensive outpatient treatment to general outpatient treatment				•	
Low percentage of success after treatment for MA addiction		•			

**Table 22. Barriers to Implementing Best Practices in Relapse Prevention, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**

## Medical Aspects

### Management of Medical Complications

Studies have confirmed some of the medical complications arising from MA abuse (including hypertension, hyperthermia, rhabdomyolysis and stroke in HIV-infected patients) (Maxwell 2005) (Urbina 2004), as well as psychiatric disorders arising from MA abuse (including psychoses, persecutory delusion, auditory hallucinations, strange or unusual beliefs, and thought reading) (Maxwell 2005) (C. Chen 2003; Srisurapanont M 2003) . Use of MA causes medical complications on developing fetuses (Maxwell 2005). Children and adults exposed to toxic chemicals at MA laboratory sites also require medical treatment (Maxwell 2005). Dental complications arising from MA abuse include gingival enlargement, and bruxism (Maxwell 2005) (Hasan A 2004) (See S 2003).

## Medical Barriers

### Doctor Reluctance

The roundtable discussions indicated that MA users cannot concentrate on treatment when their medical and dental needs have not been addressed. Eastern Nebraska Treatment Providers observed that doctors and dentists do not want to work on MA users. There is a stigma associated with MA users, perhaps compounded by the police having to accompany the MA user due to contamination risks. The treatment providers would like to see hospital staff educated about safety precautions with MA users, so they will no longer be afraid of touching their MA patients due to the “shock and awe” education tactics. Some of the medical providers’ reluctance stems from the lack of funding. Eastern Nebraska Treatment Providers would like to see funds for immediate medical care, covering expenses like dental work and anti-depressants. In urban areas, medical providers are overwhelmed by the need for medical resources.

The Western Nebraska Treatment Providers observed that the problem of poor medical care is compounded by the fact that MA users are not forthright with their doctors. Taking medications is not a priority for MA users. A physician cannot expect a direct response when inquiring whether medications are being taken.

## **Long-Term Care**

Continuing care for MA users entering long-term abstinence encounters medical issues such as diabetes, dental problems, and chronic back pain. Users are often afraid to treat chronic back pain because of the concerns of becoming hooked on prescription drugs. Resources to receive this care, the cost of the medical care and the education of medical providers regarding the unique treatment issues for MA users are some of the issues that prevent users from getting the medical care that they need. Low-cost prescriptions are also difficult to attain. This issue is going to deteriorate in Norfolk, since the hospital can no longer give samples (a source of medicine for many).

## **Dental Problems**

Both Eastern and Western Nebraska Treatment Providers concurred that finding resources to address the dental problems created by MA use represents a significant challenge. In Western Nebraska the community health center is unable to handle the dental problems created by methamphetamine use. Dentists do not want to take Medicaid patients because they are already over their limit providing dental care for children on Medicaid. There is no way to obtain dental care for the user because there are no funding resources. A participant from North Platte noted that dentists in the North Platte area have put on a free dental clinic, either annually or semiannually, to provide methamphetamine users with needed dental care.

## **Medical Coverage**

The Western Nebraska Community Support Providers identified an insistent need for Panhandle residents to secure financial help for prescriptive medication. The community support providers can attain assistance with obtaining psychotropic drugs, but not for pain killers. Nearly all of the MA users that rural community support providers work with do not have medical coverage other than Medicare. Many people do not meet the criteria for Medicaid. The Eastern Nebraska Treatment Providers suggested funding free and reduced-cost clinics.

## **Risk of Violence**

A body of empirical research associates stimulant use with anxiety, psychotic symptoms, depression, attempted suicide, paranoia, aggression, and violence (Maxwell 2005) (Boles S 2003) (Zweben J 2004). *TIP #33* (Rawson 1999) recommends preparations for violence associated with MA abuse. MA users describe with a lifestyle of violence with the user in both victim and perpetrator roles (Cretzmeyer CM 2003) (Maxwell 2005) (J. Cohen 2004). In the *Methamphetamine Treatment Project*, users reported abuse or violence from their partner, friends and others. (Maxwell 2005) (Cohen J 2004). ER staff need to be prepared for presentations of MA-associated aggression and violence in emergency rooms (Maxwell 2005). Counseling staff must also be trained to handle psychotic symptoms (Zweben J 2004).

Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
MA users cannot concentrate on treatment when their medical & dental needs are unmet	•	•	•	•	•
Doctors reluctant to treat MA patients			•	•	
Hospital staff afraid of touching MA patients			•	•	
No funding resources for dental care			•	•	
Lack of medical coverage			•		•
Many MA users do not meet the criteria for Medicaid					•
MA users are not forthright with their doctors				•	
MA users fear becoming hooked on pain relievers, so are afraid to treat chronic back pain				•	
Long-term continued care needed for medical issues, dental issues, chronic pain, cognitive damage, and vocational rehabilitation			•		
Dentists reluctant to take Medicaid patients (already over their limit providing dental care for children on Medicaid)				•	
Financial help needed for prescriptive medication					•

**Table 23. . Barriers to Implementing Best Practices in Medical Aspects, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**

## Special Groups and Settings

The roundtable discussions identified the following impressions of special groups and settings in Nebraska.

### Co-occurring Diagnosis

The Eastern Nebraska Treatment Providers would like to see wet houses to accommodate the high needs of MA users with co-occurring diagnoses.

### Juvenile MA Users

The Western Nebraska Community Service Providers stated their goal to intervene and treat juveniles while they have an acute problem, before it becomes a chronic problem. The Western Nebraska Justice Professionals observed that juveniles start using MA between 12-15 years of age. Many of them learn it from their siblings. The Eastern Nebraska Treatment Providers noted that MA use at ages 16-19 diminishes juveniles' cognitive abilities, placing a burden on the school district. In Sidney, roughly 60% of the youth and young adults requesting services are not under court orders, although they may be ordered by another agency.

The Western Nebraska Community Support Providers were disillusioned by the lack of swift interventions for first-time juvenile offenders. Delays in court prevent juveniles from receiving treatment the day that they are picked up. Eastern Nebraska Treatment Providers expressed frustration regarding securing treatment for gang members and other dangerous/high-risk juveniles. The Western Nebraska Justice Professionals suggested hiring Substance Abuse Officers who can also work with juveniles.

The Western Nebraska Community Support Providers turned their attention to the barriers to securing treatment for juvenile MA users. Limited money and services are available in Western Nebraska for youth MA programs. Contract reimbursement policies interfere with

securing individualized treatment. Magellan was used as an example, because it will not pay for inpatient treatment unless the juvenile MA user has failed an outpatient treatment program. There is a wait time as long as a year to enter residential programs. Once a juvenile is in treatment, contracts will not pay for drugs for youth in residential settings. The distance of treatment centers separates juveniles from their families, presenting another hurdle for transporting and involving the juvenile's family in treatment.

## **Sexual Addicts**

Most Eastern Nebraska Treatment Providers indicated that they treat sexual addiction as a cross-addiction, relying on an addiction model. Continuing care for sexual addicts should include medical evaluation and care for co-occurring diseases. In addition to HIV, the spread of HEP C is seen in many MA users. The group noted that HIV patients are moved to the top of any waiting list. Treatment providers must also be alert for signs of Post Traumatic Stress Disorder (PTSD) and eating disorders. If available, a sexual addiction counselor would play a significant part in the continued care program.

## **Homeless Population**

The Eastern Nebraska Treatment Providers pointed out that all treatment services most appropriate for the homeless population are waitlisted.

## **Language Barriers**

The Eastern Nebraska Justice Professionals emphasized that receipt of equal services is a constitutional right. However, because insurance providers do not provide translation services, people who speak other languages cannot receive appropriate treatment. Eastern and Western Nebraska Justice Professionals see a high demand for bilingual treatment providers and certified interpreters. In some communities near Lexington, it was estimated that 75-80% of probation contacts are non-English speaking. This language barrier creates difficulties when addressing MA issues.

The Eastern Nebraska Justice Professionals were aware of only one treatment facility in Omaha that provides services for people who speak Spanish. Even so, the need is not only for Spanish-language interpreters and providers. The Eastern Nebraska Treatment Providers identified a high need to fund interpreters for Spanish and Sudanese and deaf MA users.

## **Criminal Justice System Population**

Both Eastern and Western Nebraska Justice Professionals would like to see a change in judges' philosophies regarding MA abusers away from the "nail 'em and jail 'em mentality". The judges seem to be relying upon the jail/prison systems to stabilize MA users. To make a good impression on the judge at parole hearings, the majority of offenders volunteer for MA treatment. This practice clogs the system when the offender is not in urgent need of treatment, wasting limited opportunities that could help MA users who are in need. Eastern Nebraska Justice Professional voice concerns that treatment may not be effective when offenders have such a casual attitude regarding it.

To combat their inability to respond to MA users' needs quickly, the Eastern Nebraska Justice Professionals recommended coordination with all agencies, including treatment and justice professionals.

The Eastern Nebraska Justice Professionals also pointed that the current system is set up so few felony drug offenders can receive treatment for MA addiction.

## **Native Americans**

The Western Nebraska Justice Professionals revealed that many Native Americans have a MA problem but cannot afford treatment. The system is also overloaded, making it impossible to send all 400 Native American MA users for treatment.

## **Women MA Users**

The need for treatment tailored to women's needs, specifically with a parent/child focus, was discussed by the Eastern and Western Nebraska Treatment Providers. The Western Nebraska Community Support Providers pointed out women fear entering a 30-day treatment center because they don't want to put their children in foster care. Many female MA users do not have a healthy support network to care for their children while they're in treatment, since their peers often are also MA users. Community support providers would like to see funding for day, evening and weekend child care.

Other issues pertaining to female MA users were identified by the Eastern Nebraska Treatment Providers. Eating disorders are a common co-occurrence in women. Family treatment is often necessary, since women's significant others tend to also be MA users. The Western Nebraska Treatment Providers and Justice Professionals reported an increase in the number of pregnant mothers who are using MA. Eastern Nebraska Treatment Providers stated that pregnant MA users are bumped to the top of waiting lists for services.

## **Rural Communities**

The Western Nebraska Community Support Providers described the attraction of rural communities for MA users and producers. Small communities provide lower housing costs, a chance to fly under the radar of sparse law enforcement personnel, and a large transient population.

The transitory nature of rural communities in Western Nebraska includes an influx of Native Americans, along with people from the neighboring states of Wyoming and Colorado. MA users come to one town for a few months, but once they get into trouble or have contact with the authorities, they move to a different town. Many times Western Nebraska Community Support Providers see a MA user once and the individual moves without receiving the chance to go to treatment. All of the professionals representing Western Nebraska noted that this transient lifestyle makes it difficult to gauge the scope of MA problems in any given town. Oshkosh, Chappell, Morrill County, Kimball County, Deuel County, Sioux County, Garden County, Dawes County, and the western edge of Scotts Bluff were identified as counties facing the problem of transient populations and limited ability to get them to treatment.

Small communities try to decrease the problem of chronic MA use among 21-40 year olds where long-term treatment is required, by targeting the acute cases, the juveniles age 19 and under who need immediate help. However the isolated, rural communities offer very few treatment options for those who seek assistance.

Western Nebraska Community Service Providers highlighted the need for a more structured referral base, involving collaboration among all agencies including doctors, psychologists and the justice system. This would be particularly beneficial for individuals completing treatment and returning to their home community.

## Race-Ethnic Differences

Eastern Nebraska Justice Professionals observed that Omaha is a multi-cultural city. Race and ethnic differences among MA users were discussed. The Eastern Nebraska Justice Professionals reported an increasing number of African American MA users. In Eastern Nebraska, Hispanic MA users are more likely to be suppliers/dealers.

The Western Nebraska Justice Professionals, Treatment Providers and Community Support Providers said that not all areas reported that MA use was racially related. In Sidney, MA use tends to be associated with a lower socioeconomic class.

Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
High demand for bilingual treatment providers and certified interpreters	•	•	•		
Judges relying on jail/prison systems to stabilize MA users	•	•			
Increase in pregnant MA users		•		•	
Need for parent/child focus for MA treatment programs			•	•	
High needs of MA users with co-occurring diagnoses			•		
Reduced cognitive abilities of juvenile MA users places burden on school district			•		
Delays in court prevent juveniles from receiving treatment the day that they are picked up				•	
Difficulty in securing treatment for gang members and other dangerous/high-risk juveniles			•		
Limited funds and contract reimbursement policies interfere with treatment for juvenile MA users					•
Wait time as long as a year to enter juvenile residential programs					•
Continuing care for sexual addicts should include medical evaluation and care for co-occurring diseases			•		
All treatment services most appropriate for homeless persons are waitlisted			•		
Insurance providers do not provide translation services	•				
Offenders volunteering for MA treatment to impress judge at parole hearing clogs system	•				
Few felony drug offenders can receive treatment for MA addiction	•				
Many Native Americans have a MA problem but cannot afford treatment		•			
Women won't enter 30-day treatment center because they don't want their children in foster care				•	
Eating disorders common among female MA users			•		
Transitory nature of rural communities in Western Nebraska limits treatment contact					•
Isolated, rural communities offer very few treatment options					•
More structured referral base needed					•
Increasing number of African American MA users	•				

**Table 24. Barriers to Implementing Best Practices for Special Groups and Settings, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**



## **Education, Training & Staffing**

### **Health Professionals**

The Eastern Nebraska Treatment Providers made a plea for educating doctors, nurses and psychiatrists in identifying addiction. The Western Nebraska Treatment Providers thought that it would be of value to train emergency personnel on how to deal with MA addicts, including how to implement safety precautions and how to interact with the police to determine contamination risks. Home health professionals were also singled out as potentially benefiting from training in dealing with MA addicts and how to react to the environment. The Eastern Nebraska Treatment Providers were in favor of requiring mandatory continuing education units for doctors, dentists and nurses.

### **Business Leaders**

The Western Nebraska Treatment Providers discussed the need to educate business leaders regarding MA's effects on people in the community. Real estate agents and merchants could be trained to notice signs that suggest methamphetamines are being used. Some community education programs have had positive results. An effort to educate farmers in the central portion of the state regarding signs that MA labs are being operated nearby was well attended by farmers. Farmers have subsequently provided law enforcement officials with information that has resulted in the shut-down of several labs.

### **Friends & Family**

The Western Nebraska Treatment Providers reported that 85% of MA users are brought into treatment by someone else. Community education can address the topic of how to get help for someone who is using MA. Parental and family education is also vital for prevention and identification efforts. The DARE Program was praised for their efforts.

### **Legislators**

The Eastern Nebraska Treatment Providers would like to educate legislators so that they understand the full issue, rather than just seeing a piece of legislation. They thought that this is especially relevant with the term limits that now exist.

### **Schools**

Input from teachers and school professionals is essential to early identification of MA users. Eastern Nebraska Treatment Providers said that teachers and principals may be reluctant to report MA use, because the school doesn't want to shoulder the financial burden. Recommendation was made for continuing education on MA for teachers, and staff in-service training on what to look for to recognize drug use and guidelines in what to do once drug use is identified.

Prevention efforts were addressed by the Western Nebraska Treatment Providers. They were impressed by the efforts of SICA (State Incentive Cooperative Agreement), a regional prevention group working to promote prevention efforts in Greater Nebraska. The group's focus has been elementary school prevention, using a model that allows each community to adopt their own strategy based on areas of need (for instance, alcohol use may be the forerunner drug of choice in one community, while MA or marijuana may be another community's chief issue).

The Eastern Nebraska Treatment Providers singled out Gretna's Parent Call Line for recognition as a model drug prevention program.

## **Research**

Linking research, policy making & treatment can give researchers and policy makers insight into the reactions of consumers and treatment providers to programming (Blumenthal 2005). The academic institutional infrastructure in place today, however, inhibits collaboration across departments, institutions and professions (Boust 2005). Higher effectiveness and efficiencies can be obtained by partnering Nebraska State and Regional officials with academic institutions for their research needs (Boust 2005).

In addition, practitioners need training tools that can keep them abreast of the best practice models and cutting-edge treatment protocols, like teamwork and collaborative care training which are needed in Nebraska (Boust 2005). Nebraska's training repertoire is also sorely deficient in interdisciplinary approaches for practitioners (2003) (Boust 2005).

## **Criminal Justice Professionals**

The Western Nebraska Justice Professionals noted that the current focus on policing is to trace MA dealers more than users in possession. The Eastern Nebraska Treatment Providers perceived conflicting theories among law officials regarding how to treat MA users. They suggested that requiring judges, lawyers, probation officers and court personnel to take continuing education regarding MA would help develop a unified, client-centered approach. A consistent response to MA offenses was considered particularly important, since MA users experience numerous contacts with the justice system because of numerous infractions with the law as offenders recidivate because of MA use.

The Western Nebraska Justice Professionals were concerned with retention and recruitment of criminal justice professionals. The chief barrier to recruiting people to work for the justice department is the lack of an adequate salary to permit professionals to move their family with them.

The Eastern Nebraska Justice Professionals addressed the issue of losing Substance Abuse Officers (SAOs) to other states. While the SAOs are highly trained professionals, working with law enforcement officers, taking high risk assignments that deal with parole, intensive supervision and the drug court population, they are overloaded and do not receive overtime pay. Compared to Iowa, Nebraska's SAOs make \$10,000 less per year. It was also asserted that the reimbursement rate for education and training certifications is too low.

## **Treatment Providers**

### **Lack of Professionals**

Maintaining qualified practitioners is a topic for concern relating to Nebraska's lack of treatment professionals. In fact, the Academic Support Work Group (2003) labeled education as a critical mission in their needs assessment. They recommended varied training programs relevant to Nebraska's local populations, as well as an area of special focus to train public sector behavioral health professionals. Enhancing interaction among clinicians, policy experts and public mental health advocates was proposed in order to provide clinician trainees with exposure to health care systems, research and outreach.

Treatment providers in Nebraska have raised the issue that the least trained people are working with highest risk clients. While not unique to Nebraska, the state appears to be suffering symptoms similar to the treatment provider education paradoxes identified by the Annapolis Coalition:

- *Graduate programs have not kept pace with the dramatic changes wrought by managed care and subsequent health care reforms, leaving students unprepared for contemporary practice environments*
- *Continuing education models persist in using passive, didactic models of instruction that have been proven ineffective in controlled research*
- *Non-degreed and bachelor-degreed direct care providers, who may have the most contact with consumers, receive very little training.*
- *Consumers and families, who play an enormous care giving role, typically receive no educational support.* (Boust 2005)

The Behavioral Health Reform Academic Support Work Group identified the need statewide for practitioners at all levels (2003). In a later report, the Academic Support Work Group emphasized the projected need for behavioral health providers in all areas of the state, addressing the full continuum of care including emergency services, long term care, rehabilitation and community support (Boust 2005). The State was advised to find ways to recruit and retain providers representing all disciplines of behavioral health (2003).

The roundtable discussion groups called attention to the shortage of workers, counselors, tech staff, case managers, and dual diagnosis professionals. Western Nebraska faces a challenge in importing quality staff because the rural areas offer limited job opportunities for spouses. The Western Nebraska Community Support Providers speculated that retired nurses might provide potential pool of workers. Cross-training local people to identify and work with MA users was proposed to increase saturation.

Research indicates that peer specialists are seldom employed in Nebraska and that education activities are needed to support the emerging concept of consumers as providers (Boust 2005). The Eastern Nebraska Treatment Providers suggested that treatment providers draw upon the alumni base from 12-step programs to assist MA transition from one level to the next. The Eastern Nebraska Treatment Professionals also suggested that agencies draw not only from their alumni, but create working relationships across different treatment settings.

The Behavioral Health Reform Academic Support Work Group called for education activities that broaden service coverage in underserved geographic areas (Boust 2005). Outreach training and services, such as telephone or tele-video consultation would particularly support local needs in outlying Nebraska, but remain uncommon and rare (2003). It appears that the tradition of face-to-face contact between patients and clinicians tends to suppress spontaneous innovation with such practices. Support is also needed for rural rotations (Boust 2005). The Western Nebraska Community Service Providers endorsed the concept of creating local networks. Telehealth medicine was one option. Developing virtual AA/NA support groups was another. Virtual training was mentioned as an opportunity to secure education credentials without transportation costs.

Transportation costs pose a significant challenge for staff. The Eastern Nebraska Treatment Providers indicated that the current system for reimbursement is not compensatory for treatment providers. The Western Nebraska Community Service Providers indicated that there

is no payment for team meetings. The Western Nebraska Community Service Providers were particularly concerned about the reimbursement issue, noting that they don't break even on the driving reimbursement rates. The reimbursement system for HHSS won't reimburse mileage for family services unless travel of 25 miles or more is required. In addition, the system does not support windshield time – community service providers are not paid for being in a car.

As gas prices increase, the Western Nebraska Community Providers predicted that MA users' access to services will decrease, unless a local solution is in place. Satellite offices staffed on a weekly basis were suggested. Another idea was to refer MA users to local facilities staffed at an hourly reimbursement wage. The community service providers agreed that seeing people in the community rather than in a centralized office would provide a better continuum of support for MA users.

### **Case Management**

The Western Nebraska Treatment Providers expressed a need for case managers who can handle the outcomes, record keeping, etc. The Eastern Nebraska Treatment Providers validated this claim, saying that the case management positions that currently exist are given too many clients. Users without case managers are not receiving services. The Eastern Nebraska Treatment Providers' ideal model would assign a case manager to the client at pre-assessment who would follow the MA user all the way through the client's continuum of care, even assisting with employment, finances and life skills. At this time, case management is being performed by community support providers because the treatment providers are concentrating on treatment. Many agencies rely on practicum students for this help.

The Western Nebraska Treatment Providers described a case manager/liaison model based on what is being done in Michigan, South Carolina, Texas and Arizona. A local liaison serves in a case management/peer advocate capacity as the client's long-term care provider, connecting the MA user with his home while in treatment. Before the MA user leaves for treatment, the liaison meets with the MA user and commences paving the way toward the long-term recovery process. Because the liaison is a part of the community where the MA user resides, even if the treatment facility is far from the MA user's community, the liaison works to engage the family in the treatment process. The liaison guides the MA user through the continuum of treatment services. The liaison holds a discharge conference with the MA user and assists the recovering addict through a step-down process, connecting the patient to community support services after leaving treatment.

### **Substance Abuse Education**

Research points to a current state of crisis in the education system for behavioral health professionals. The educational system has not kept pace with the accelerating changes in behavioral health care, lagging behind in translating current research into training (Hoge 2002; Daniels 2005). Nebraska's Behavioral Health Reform Academic Support Work Group characterized a lack of statewide coordination for academic and education efforts as the cause of fragmented service delivery (Boust 2005).

Accreditation requirements, board examinations, and state licensing requirements currently dictate Nebraska's training and continuing education opportunities (Boust 2005). Training curricula need the flexibility to adjust to changing treatment methods, while retaining credibility for licensure (Boust 2005). Public-sector behavioral health specialists need specialized training, accompanied by mandatory clinical training (2003).

The Eastern Nebraska Treatment Providers attributed the limited number of qualified treatment professionals in the state to the high level of education required in exchange for a relatively low rate of pay. A prime example can be found in the licensing and certification requirements for LADACS. In order to meet the 6,000 hours of supervised clinical experience required, applicants can substitute an associate’s degree in addictions or chemical dependency for 1,000 hours, a bachelor’s degree for 2,000 hours, and a master’s degree for 4,000 hours (Neb. Rev. Stat. Sec. 71-1,357). The state requires 270 hours of alcohol and drug counseling plus 300 hours of supervised practical training just to obtain a *provisional alcohol and drug counselor* license (Neb. Rev. Stat. Sec. 71-1,355). Not only does this demand a high degree of commitment from potential counselors, the thousands of hours of supervised clinical experience tax the capacity of the State’s professionals required to deliver this oversight.

The Eastern Nebraska Treatment Providers observed that to implement a best practices model, staff will require an even higher level of dually credited training. As a trade off for higher pay, treatment professionals proposed that agencies require licensures and certificates. More substance abuse and MA training opportunities, a certificate for co-occurring disorders, and mandatory continuing education credits were identified to prepare the level of professional staff necessary to implement the best practices model.

Training barriers include finances, the time required, and lack of professionals with dual credentials. Masters level professionals’ reluctance to work with MA addiction was another obstacle, since funding sources like Medicaid won’t accept LADACs or those working toward their license.

More substance abuse licensing programs and criminal justice training at the collegiate level were suggested by the Eastern Nebraska Treatment Providers. They also favored combining LADAC and LMHP licensure. They agreed that students would benefit from training in dealing with dual diagnoses that are common with MA users. The Western Nebraska Community Support Providers suggested combining training with agencies and creating a training academy for substance abuse professionals.

Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
Shortage of workers, counselors, tech staff, case managers and dual diagnosis professionals	•	•	•	•	•
Current system for reimbursement does not adequately compensate treatment providers			•	•	•
Case managers have too many clients			•	•	
Doctors, nurses & psychiatrists need to learn how to identify addiction			•		
Emergency personnel need training on safety precautions for MA addicts and interaction with police to determine contamination risks				•	
Home health professionals need training in dealing with MA addicts and how to react to the environment			•		
Business leaders need education regarding MA’s effects on people in the community				•	
Parents and family need education for prevention and identification				•	
Legislators need to understand full issue			•		
Teachers and principals reluctant to report MA user, because school doesn’t want to shoulder the financial burden			•		

Need to focus on elementary school prevention				•	
Conflicting theories among law officials regarding how to treat MA users	•				
Judges, lawyers, probation officers and court personnel need continuing education regarding MA	•				
Lack of adequate salary hinders recruitment and retention of criminal justice professionals		•			
Losing Substance Abuse professionals to other states	•				
Reimbursement rate for education and training certifications is too low	•				
Low rate of pay hinders recruitment and retention of treatment providers			•		
Lack of finances and time bar treatment professionals from training			•		
More substance abuse licensing programs and criminal training is needed at the collegiate level			•		
More training needed for dual diagnoses			•		
Rural areas offer limited job opportunities for spouses				•	
Need to draw from alumni base			•		
Need to create local networks for telehealth, virtual AA/NA groups, and virtual training				•	

**Table 25. Barriers to Implementing Best Practices for Education, Training & Staffing, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**

## Community Support

### Wrap Around Support

The Western Nebraska Community Support Providers favored wrap-around support utilizing the Strength-Based Model. Community education would educate groups on prevention and identification of MA abuse, reaching out to doctors, pharmacists, parole and probation officers, HHSS, hospital, EMS, law enforcement officials, psychiatrists, churches, parish nurses, public health resource nurses, schools, rural bus drivers, college student health services, foster care providers, HIV- HEP C clinics, the Nebraska AIDS Project, WIC family planning teams, Child Protective Services, child abuse teams, community centers, and recipients of 21<sup>st</sup> Century Grants. Telehealth resources would be employed to reach management teams.

Informal supports provide vital resources as MA users' numerous needs strain the system. MA users repeatedly cycle through the system due to relapse. Without proper referrals and an established continuum of care, MA and general substance abuse resources are spent inefficiently in this recurring cycle.

A flaw in the current system was pointed out by the Eastern Nebraska Treatment Providers: because community support staff members are undervalued, the least experienced employee is working with the highest risk clients. Because there is not enough staff, some participants rely on practicum students.

The Eastern Nebraska Treatment Providers encouraged training community support staff to work in the client's home environment, where they can give assistance in specialty and acute areas. Working with the client within his/her own community was emphasized, providing valuable life skills lessons including budgeting, cleaning, cooking, job hunting, and securing transportation.

Both the Eastern Nebraska Treatment Providers and Western Nebraska Community Support Providers discussed the challenges in linking recovering MA users to jobs. The Western Nebraska Community Support Providers posed the problem bluntly: "If they didn't want to

work before...why should they want to work now?" Without a job, the MA addict may return to selling drugs and incur a felony charge. Barriers to employment include the applicant's physical appearance associated with MA use, as well as cognitive damage that interferes with the applicant's ability to hold a job. Surgery and medical costs associated with long-term treatment compound the problem. The Eastern Nebraska Treatment Providers recommended vocational rehabilitation for MA users.

## **Regional Support**

The Eastern Nebraska Treatment Providers saw an opportunity for treatment providers to network to services in other regions. However, funding issues drive regions to first address their own region, creating pockets that are competing for the money with other regions within Nebraska. The Western Nebraska Treatment Providers gave an example of how this regionalism complicates the system. Law enforcement will not bring someone into emergency protective custody without the approval of the county attorney. Because the county attorney does not want to expend money for someone from a different county, approval will often not be granted if the individual is not a resident.

The Western Nebraska focus group said that the natural linkages for their referrals don't go east; they go west to South Dakota, Wyoming, and Colorado. Denver, Rapid City, Fort Collins, Cheyenne, Hot Springs, and Torrington were named as alternatives to Nebraska treatment shortages. Barriers to intra-state referrals are primarily financial. To access the sliding fee scale, a MA user must be a Nebraska resident. Medicaid coverage does not cross state lines. Intrastate protocols also interfere with Indian Health Services and prescription drug coverage.

The Western Nebraska Treatment Providers proposed intrastate collaboration for meeting education and training needs. All Western Nebraska participants expressed a willingness to work with whomever necessary, regardless of the state, to ensure that their clients received the best care possible.

## **Drug Court**

The Eastern Nebraska Justice Professionals discussed the advantages and disadvantages of drug courts.

### Advantages:

- Things happen faster. The patients can receive treatment 3 to 4 weeks after the test.
- Probation officers conduct regular spot checks and reports.
- Success rate for treatment in the drug court is 80%.
- Drug court can provide many services.
- Most drug courts are financially supported locally, and a few receiving funding from both the state and local government.

### Disadvantages:

- Due to drug courts' tight budgets, they don't provide primary treatment.
- A shortage of supervisors may leave patients on their own at night.
- The drug court may take resources away from other programs.

The Eastern Nebraska Justice Professionals suggested that the drug court coordinate with other departments to share data, use standardized definitions, etc.

## Work Ethic Camp

The Western Nebraska Justice Professionals viewed the Work Ethic Camp as a good treatment option. The Eastern Nebraska Justice Professionals pointed out that the misdemeanor offenders cannot go to the work ethic camp. The treatment beds at the work ethic camp are for drug abusers in general. The Eastern Nebraska Justice Professionals proposed stipulating beds for MA abusers.

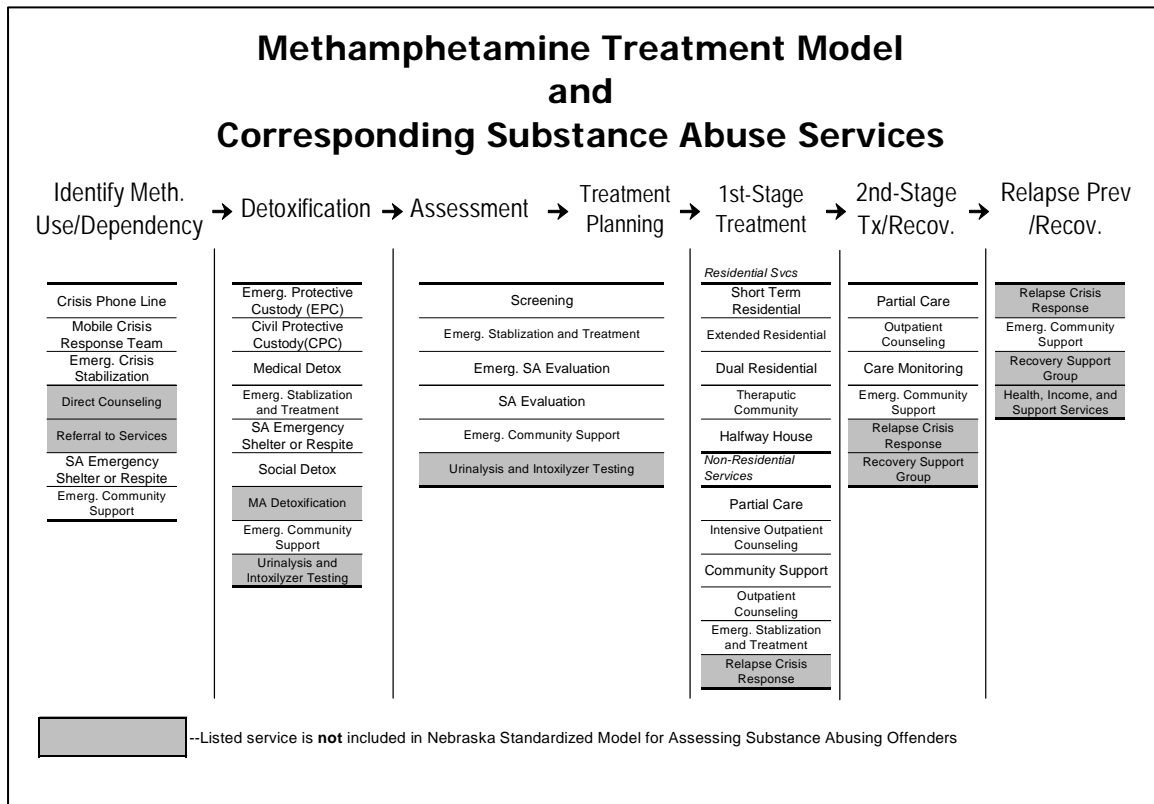
Barrier to Implementing Best Practices	Justice Professionals		Treatment Providers		Community Support Providers
	E. Neb.	W. Neb.	E. Neb.	W. Neb.	W. Neb.
Natural linkages for services in Western Nebraska go west to South Dakota, Wyoming and Colorado		•		•	•
MA users' numerous needs strain the system				•	•
Challenges in linking MA users to jobs			•		•
Medicare won't cross state lines				•	•
Wrap-around support needed to educate community groups on prevention and identification of MA abuse					•
Least experienced community support providers working with highest risk clients			•		
Regions competing for funding discourages collaboration			•		
To access the sliding fee scale, a MA user must be a Nebraska resident					•
Intrastate protocols interfere with Indian Health Services and prescription drug coverage					•
Drug courts tight budgets	•				
Misdemeanor offenders cannot go to the work ethic camp				•	

**Table 26. Barriers to Implementing Best Practices for Community Support, as identified by Eastern and Western Nebraska Justice Professionals, Treatment Providers, and Community Support Providers, 2005.**



## Overview of Recommendations

With a treatment model, cost and prevalence data, site-visit data, and feedback from treatment, social service, and justice providers, a foundation has been laid for final recommendations. *Figure 13* below, illustrates the general MA treatment response model and those substance abuse services which correspond to the different phases of treatment.



**Figure 11. Methamphetamine Treatment Model and Corresponding Substance Abuse Services.**

A model and service array does not make a treatment and recovery strategy, however. Both the model and services listed above are already implemented to some degree throughout Nebraska. The problem is that gaps, delays, and explicit barriers exist in Nebraska's present substance abuse system which hinder motivated addicts' pursuit of recovery and allow unmotivated addicts to slip between the cracks. To reduce methamphetamine abuse, an infrastructure must be laid which enforces a state-wide response to the problem and channels addicts into a fast-flowing stream of recovery to which it is easier to succumb than escape.

This infrastructure includes three core components beyond the model and service array: people, buildings, and data. The main recommendations for changing or expanding the infrastructure for Nebraska's methamphetamine response system include:

- ***Legislative action and incentives to develop more methamphetamine treatment professionals throughout the state;***
- ***Incentives for treatment providers to expand and develop localized methamphetamine abuse treatment programs;***

- *Funding and legislative action to establish and staff day/night reporting centers across Nebraska;*
- *Promoting an increased utilization of the WEC as a methamphetamine treatment facility for those offenders whose crimes and risk do not warrant incarceration by DCS;*
- *A centralized substance abuse treatment facility for medium and low risk offenders committed to the custody of the Department of Correctional Services;*
- *Expanding the use of ASI/CASI evaluations and the standardized reporting format throughout all of justice and HHSS;*
- *A centralized database where substance abuse evaluation results and treatment summaries are kept and accessed by social service, justice, and treatment providers;*
- *Ongoing research to drive targeted capacity expansion for treatment and recovery services*
- *Ongoing research to monitor the effectiveness of treatment programs; and*
- *Creating an office which can coordinate the implementation of any recommendations which may be adopted and report to the Governor, Legislature, and Supreme Court on the progress being made.*

The next section discusses in detail each of these recommendations and other recommendations which will contribute to Nebraska's reform effort.

## **Implementation Plan**

As Nebraska attempts to address the MA crisis which it is currently facing, both practitioners and clients will require tools to ensure progress. Some of these tools will be MA-specific; others will be more system specific. The state must develop solutions which address the long term challenge of recovery. The practice of recycling MA addicted offenders through the justice system until they are incarcerated must stop. The following implementation plan will provide guidance to state and private agencies seeking to address the MA crisis within Nebraska.

### ***Voucher Fund***

#### **Treatment and Recovery Services**

There is no single point in the justice or social services process where policy makers can fix funding decisions or capacity expansion. Instead, every agency and justice provider possesses some lever which can be used to press methamphetamine addicts to seek help or maintain the recovery process. Therefore, it is necessary to initiate assessment/treatment at all stages of the justice/social service process. The state must capitalize on addict's contact with any stage of the justice/social service process by making voucher funds available at all stages of the justice/social service process. Use of vouchers can fund substance abuse capacity expansion within those stages of the justice/social service system with the potential to impact addiction.

Whether it is the police, HHSS case-workers investigating abuse/neglect allegations, judges making sentencing decisions, parole officers supervising offenders' re-entry programs, or any of the other justice and social service providers executing their official duties, each of these contacts with an addict is one more opportunity to steer offenders to treatment. When these efforts are successful, additional barriers have been erected to keep the methamphetamine user from pushing on to more expensive, intensive systems of punishment.

To promote the conversion of all justice and social service system points into portals for engaging treatment, voucher funds must be available. Flexible funding for assessments and treatment services are the best way to transform these possibilities into genuine opportunities. Although it is tempting to allocate limited resources to one class of addicts, such as felony offenders, voucher funds must be made available to addicts at all levels of the criminal justice and social service systems. Only about 500 MA using offenders were sentenced to prison in 2005. Given the number of arrestees who tested positive for MA in 2003, it is estimated that approximately 19,000 offenders would have probably tested positive for MA if every arrestee had been subjected to a drug test. This means that 97% of all of Nebraska's offenders who use MA were not sent to prison in 2005. Limiting voucher funds to felony offenders would preclude many MA users within Nebraska from accessing voucher funds to receive treatment.

Policy makers may debate what priority, if any should be given to the distribution of voucher funds. For example, since the children of HHSS clients are facing the devastating loss of their parents, should these parents receive greater priority for voucher resources than Probation clients who face prison if they violate the terms of their supervision or re-offend? If carefully designed and implemented, the voucher program could eliminate the need for the Legislature to somehow anticipate which agency will require what levels of funding on an annual basis, by simply distributing funds on a first come, first served basis until the support is exhausted.

This type of funding strategy also holds offenders more accountable for their progress in recovery. Consider the example of a newly convicted methamphetamine user. As part of the PSI process, Probation requests the person to complete a substance abuse evaluation. When the offender demonstrates they lack the \$75 to \$155 for the evaluation, a voucher can issue for the assessment. If the offender continues to follow-through with the treatment paid for by the voucher program, they should remain eligible to receive voucher funds in support of their recovery progress. If the user resists treatment, then voucher funds would not be issued and the user is left to the legal consequences that may result. Similarly, parents involved with HHSS for whom methamphetamine treatment is required, would be motivated to incrementally pursue recovery one step at a time in order to capitalize on the chain of funding support as they seek reunification and the restoration of their family.

## **Urinalysis**

Nebraska must fund urinalysis at all stages of the justice/social service process and collect the results in a centralized database. One way for the social service and justice systems to monitor the sincerity of a methamphetamine user's efforts to take advantage of these treatment opportunities is the regular use of urinalysis tests. Funding or a State-sponsored testing program need to be created so that the financial impact to state and local agencies for testing is not a disincentive for it to be used as often as necessary. If these agencies are to bear increasing responsibility for intercepting and diverting methamphetamine users from higher levels of justice involvement, they must have all the tools they need to achieve success.

## ***Day Reporting Centers***

When examining the barriers to providing effective MA treatment, several common constraints emerged. Treatment providers and justice professionals both reported that access to treatment services was problematic in many communities. Lack of transportation prevents many MA users from accessing treatment or and complying with conditions of probation. Lack of transportation is felt most acutely by substance abuse offenders who lose their driving privileges as a result of their substance abuse problems. In parts of the state where treatment services are scattered across large geographic areas and public transportation is non-existent, a lack of driver's license becomes more than an inconvenience. It becomes a seemingly insurmountable hurdle to accessing treatment and services. The user is reliant on friends and family for transportation to attend treatment and meet with probation officers. In situations where friendships and familial relationships are strained, these arrangements are perilous and inconsistent at best.

Services are often located far from one another. If a user needs to meet with his probation officer, attend drug treatment and apply for a job, he must travel to three separate locations, sometimes, in separate communities. These competing obligations further strain users' tenuous resources, undermining their ability to effectively address their addiction problems. Treatment providers and probations reported that a great deal of their time is taken up driving to appointments or transporting clients. This "windshield time" robs professionals of time when they could be meeting with clients or providing services. Given the overall lack of treatment capacity in Nebraska, the time that licensed professionals can spend providing services should be maximized.

One way Nebraska can address these problems is to establish at least one reporting center in every Probation District or Mental Health Region across the State. Staffed by probation

officers, parole officers, LADACS, psychologists/mental health providers, and social workers/community support specialists, these centers would become a hub for all the substance abuse services, supervision, and drug and alcohol testing which will sustain methamphetamine recovery over time. The supervisory powers of probation and parole officers can compensate for less than ideal levels of direct treatment. The centers' physical space will become a venue through which intensive outpatient, individualized counseling, group counseling, and relapse crisis response can be administered and ease the transportation and logistical challenges methamphetamine users face during recovery. The availability of multiple counseling group options and recovery support services will allow offenders to continue their pursuit of sobriety even after they have been discharged from drug courts, probation, or parole.

Day/night reporting centers also provide policy makers with one more way to lure treatment professionals into practice. Free or subsidized office space with telephone, photocopying, and computer networking and internet services comes at a relatively modest cost to the State, but can be a lucrative benefit to contract and private treatment providers delivering services to the offender and HHS populations. To the extent that cities and counties desire the placement of reporting centers in their locations, local government should be able to partner with the State in bearing some of the costs associated with the buildings in which the reporting centers are housed. Alternatively, private/commercial agencies may be willing to provide probation and parole officers space and support in order to secure convenient access to offender populations for their staff counselors and psychologists who are delivering treatment services.

Because of limited funding it is tempting to establishing reporting centers that are open for limited hours or offer minimal services. A review of the literature found the success of DRCs was conditioned on providing a wide range of services. The literature review revealed that the following components comprise successful DRCs (Craddock 2001, Martin 2003, Roy 2004, Marion, 2002, Kim, 2005, Parent 1990, Parent 1995). To create reporting centers that lack these basic requirements undermines the effectiveness of the day reporting center model.

## **History of Day Reporting Centers**

DRCs were first used in Britain during the 1970's. DRCs were first introduced in the United States in the late 1980's to address overcrowded prisons and high incarceration costs. DRCs are intermediate sanctions that operate as a community-based corrections alternative to incarceration for criminal offenders. Primary goals included reducing costs of incarceration, jail/prison overcrowding, and recidivism (Parent 1990; Marion 2002; Martin 2003; Roy 2004). Although all the programs varied in design and purpose, the first DRCs in the United States were largely operated by private organizations many of which focused on providing surveillance services rather than treatment services. By the mid 1990's, however, the number of publicly run DRCs had increased and their focus shifted from surveillance alone to a combination of surveillance and treatment services.

Research shows that the number of DRCs within the United States continues to grow. DRC programs are located in various regions throughout the country. DRCs operate in rural and urban settings and provide a vast array of services. Research to determine the most effective type of DRC has been challenging because each program serves a specific population, has specific goals and emphasize different resources and services. In spite of this diversity in structure and procedure, a number of specific services are offered in most, if not all effective DRCs. By building on these common features, Nebraska can begin to develop DRCs to positively impact treatment and justice needs within the state.

## **Hours of Operation**

All DRCs are open at least five days a week, with some operating six to seven days per week. The DRCs surveyed were open for an average of eight to ten hours a day. Hours of operation varied with some providing early morning hours and others offering evening hours.

## **Structured Surveillance**

All of the DRCs relied on some type of structured surveillance to monitor offenders' activities, behaviors and compliance with DRC rules and requirements.<sup>17</sup> The number of weekly DRC contacts with the offender far exceeds the norm for community supervision (Parent 1990). Each DRC has a unique method for handling surveillance. Methods include a combination of graduated phases, personal contact, phone contact, itineraries and curfews. Another important element of surveillance, drug testing will be discussed below.

## **Graduated Phases**

DRCs often divide surveillance into phases which decrease in frequency and intensity of contact as offenders progress through the program. Advancement to the next phase serves as an incentive for offenders to comply with DRC requirements. The majority of programs are divided into three phases. There is no research suggesting how long each phase should last. Some DRCs move offenders to the next phase after a specified amount of time, such as six weeks, has passed. Other DRCs move offenders to the next phase upon completion of specified program requirements, such as drug treatment or maintaining employment. Some DRCs give their staff discretion regarding progression to the next phase.

The length of the phases and the length of the whole DRC program must be carefully determined. Research indicates that termination from DRCs increases as the length of stay increases. This is attributable to the fact that the longer an offender is in the program, the greater his chance of violating the DRC's strict rules and requirements. However, a recent evaluation of the Douglas County Day Reporting Center suggests that structured control and intensive programming lessens this effect (Kim 2005). Research also shows that the longer an offender is involved with a DRC the more services he can access. Therefore, the length of stay must be structured so the offender can maximize exposure to provided services without being terminated from the program for rule violations.

## **Contact**

Regardless of how the phases are structured all programs require offenders to have regular, in-person contact with DRC staff. Two-thirds of DRCs surveyed by National Institute of Justice required offenders to check-in at the DRC 5 days a week (Parent 1995). One of the programs surveyed did not require the offenders to check-in daily if they were at work, school or had a court date. After checking in, offenders then participated in the services offered by the DRC such as treatment and employment services.

Contact also includes unannounced visits by DRC staff at the offender's home or workplace. DRCs also used unannounced phone calls to monitor offenders' activities. DRC staff call the offender at home or work verifying her compliance with DRC regulations. Unannounced visits were not used as often as checking in at the DRCs.

---

<sup>17</sup> Based upon goals and services provided, each DRC develops rules and regulations that govern the expected behavior of offenders utilizing the DRC.

## **Itineraries**

A commonly utilized method of surveillance is itineraries. When an offender checks in at the DRC, she is asked to complete a daily itinerary detailing her day's activities. Itinerary completion forces offenders to plan their daily activities which provides structure and fosters accountability. DRC staff can reference the itineraries when planning unannounced contacts.

## **Curfews**

Some DRCs mandate curfews requiring offenders to be at home after a certain time each evening. Curfews are enforced by calling the offender to verify his presence at home. This requires DRC to make phone contact during the times when the DRC is not in operation. This can be accomplished by employing a small staff to handle off-hour contacts or partnering with another organization or agency that already has staff working at times when unannounced telephone contact must be made.

## **Drug Testing**

All of the successful DRCs included random drug testing to monitor compliance and provide accountability. The frequency of drug testing varied and many programs decreased the number of drug tests per month as offenders progressed to less intensive phases. On average DRCs administered drug tests five times per month in the most intensive phase.

## **Services**

Every DRC is unique in the services that it offers. Some programs focus on substance abuse treatment while others emphasize literacy. No matter what specific services are provided, each DRC offers services intended to assist offenders in reintegrating into the community. Services can act as control mechanisms providing structure to the offenders' daily activities therefore positively affecting reintegration. Intensive programming not only provides structure, but helps the offender to establish social ties and life skills necessary to succeed once she leaves the DRC. Many services are provided by outside agencies with whom the DRC has contracted. The services that are found in virtually all DRCs are highlighted below. It is these services that Nebraska must focus on developing first adding in additional services as resources permit.

## **SA Treatment**

Virtually every DRC provided some type of substance abuse treatment. Some programs offered only support groups such as AA and NA while others provided treatment programs, individual counseling and group therapy. Providing treatment services is beneficial given that offenders who receive treatment as well as surveillance are less likely to recidivate. DRCs often contract with outside organizations to provide the services. Doing this allows the DRC to provide a wider array of treatment services. DRCs throughout the country have attracted qualified organizations to provide services by supplying the organizations with free or low cost office space. Organizations are allowed to provide treatment services to non-offenders with the understanding that DRC clients will be given priority.

Because the DRCs in Nebraska will be dealing with MA users, many of whom are poly-drug users, it is important for the centers to provide the highest level of substance abuse treatment possible. Best practices show that intensive outpatient treatment is effective in treating MA addiction. Since residential treatment is not necessary, it is possible to MA users to receive

their actual treatment at the DRC. Follow-up resources including group meetings and relapse prevention can also be provided at the DRC.

### **Relapse Prevention**

Although much of the research did not describe specific characteristics of substance abuse treatment provided by DRCs, an evaluation of the Douglas County Day Reporting Center found that there was a correlation between participation in relapse prevention classes and success in the program (Kim 2005). Instead of changing their antisocial personalities, relapse prevention classes teach offenders how to avoid the types of situations that induce them to commit crimes or begin using again. Relapse prevention classes at the Nebraska DRCs will equip offenders with the skills necessary to avoid potentially harmful situations enhancing their ability to remain drug free.

### **Directive Counseling**

The Douglas County evaluation also highlighted the need for directive counseling (Kim 2005). The counselors need to actively participate in the counseling process helping the offender to recognize problems and formulate solutions. It is ineffective for the counselor to passively listen to the offenders' problems without providing direction. Likewise, self-help groups are not effective treatment strategies as offenders need guidance in dealing with their substance abuse problems.

### **Employment**

Research shows that employed offenders are less likely to recidivate than unemployed offenders (Kim 2005). Employment facilitates the offender's reintegration into the community and heightens his likelihood of success. Not only does employment provide structure and accountability, it also provides resources to enable the offender cope with housing and financial issues. Therefore, it is not surprising that the vast majority, 98% in one study, of DRCs nationwide provided some type of vocational services (Parent 1995).

Employment services are multi-faceted. At the very minimum, a DRC must provide instruction in job seeking skills and job placement assistance. Job seeking skills include instruction in appropriate employee behavior as well as assisting offenders to identify or develop vocational skills. It is here that education and employment overlap. Education may be required before an offender is able to seek employment. DRCs must identify the types of education that will be most useful in assisting their particular clients in gaining employment. Once an offender is employable, DRCs must also provide job placement assistance to help connect the offender with potential employers. Training in interviewing protocol and resume preparation is also necessary to assist offenders in obtaining employment.

### **Other Considerations**

DRCs offer a variety of other services including life skills, literacy training, GED preparation, education assistance, housing assistance, mental health services and recreation and leisure activities. The types of services vary based on the DRC's resources and goals. Because services are often provided by outside organizations, the services offer also depend on what the organizations are able to offer. Although not as critical as substance abuse treatment and employment services, all of these services assist the offender in maintaining sobriety and not recidivating. Research shows that the more services an offender can access, the better his chance



of getting employment and not recidivating. As resources allow, Nebraska DRCs should provide as many of these services as possible.

Another common feature at DRCs around the country is required community service. Many programs require offenders to complete a minimum number of community service hours. The degree to which community service is required varies depending on the community's acceptance of the program and its development within the DRC. Some states have developed such comprehensive community service programs that DRC clients have been assigned to crews that provide maintenance and support services in light of state budget cuts.

Recognizing that many offenders have family responsibilities, some DRCs provide child care services for offenders while they are participating in services at the center. Provision of child care prevents the offender from having to choose between receiving treatment and services and caring for a child. Child care services ensure that children are in a safe environment while their parent(s) are at the DRC.

### **Nebraska's Day Reporting Centers**

After reviewing all of the components comprising DRCs, we begin to see how DRCs in Nebraska should be structured.

- Because offenders will be expected to travel to DRCs, they must be located in key locations throughout the state to maximize the number of people who will be able to utilize the services offered there.
- To maximize benefits, the DRCs in Nebraska should be open five days a week for at least eight hours a day. As funding for the centers increase the hours of operation can be expanded.
- At a minimum staffing at each DRC should probation officers, treatment providers and intake workers.
- The DRC will also be available if a recovering addict is in danger of relapse and needs a safe place to access resources. Services will be provided to assist these individuals in maintain sobriety.
- Offenders must report to the DRC on a daily basis during the first phase. Number of weekly visits will lessen as offenders move to less restrictive phases.
- Offenders must complete itineraries and adhere to curfews while at the DRC. Staff will conduct announced telephone contact with offenders to ensure compliance with itinerary and curfew requirements.
- DRCs must have the capabilities to conduct random drug tests on offenders at each center.
- DRCs should contract with local organizations or partner with other agencies to provide substance abuse treatment at each center. Offenders should be able to access intensive outpatient treatment as well as relapse prevention and group therapy.
- DRCs should provide job skills and job placement assistance at each center. Gaining or maintaining employment could serve as an incentive to move to next phase.
- As resources allow, DRCs should provide additional services. DRCs should focus first on skills that will assist the offender in obtaining and maintaining employment such as education and life skills.

Obviously, day/night reporting centers cannot be built or staffed in every place in Nebraska so that all transportation and accessibility obstacles are eliminated for every offender.

Justice officials from around the state strongly support the creation of mobile reporting centers. Staffed with a probation officer and a treatment specialist, these vehicles could travel between communities with significant numbers of methamphetamine users and serve many of the same functions as the day and night reporting centers. As mobile units, however, they could reduce the practical transportation problems that offenders face when work and residences are removed from population centers within the state and the loss of driving privileges make it illegal for them to drive themselves to a regional center.

## **Database**

An evidence-based, standardized assessment process is important to developing effective treatment plans for individual methamphetamine users. It is critical, however, to develop accurate data about Nebraska's treatment services needs on which policy makers can rely while mapping out future capacity expansion strategies and appropriations. To this end, Nebraska must collect adult and juvenile assessment results to a centralized data-base within State government. To guarantee the database's utility, the state must then ensure that all justice, social service and treatment providers can access and review assessment results as needed for treatment and supervision case-planning.

Many of the planning questions the Legislature raised in crafting this study have proven impossible to answer more definitively than the estimates reported earlier in the report. For example, despite the Legislature's obvious interest in expanding treatment services which are underdeveloped in the State's present substance abuse response system to ensure that methamphetamine users have all the levels of treatment and recovery services which are needed to ensure success, answering these questions depends on access to standardized assessment results which have been collected throughout justice and HHSS. This data does not exist. This data will not exist even if the ASI/CASI are used for every methamphetamine addict assessed over the next five years—if those results are not collected in a centralized database.

A small group within the JSAT subcommittee of the Community Corrections Council has been working to develop a modest application in which ASI/CASI results can be amassed and accessed by justice and treatment providers. Since this effort has largely relied on the time and resources which its members can string together on an ad hoc basis, progress has been slow. Uncertainties about funding resources have also constrained design expectations and an implementation schedule. The possible purchase and implementation of similar systems from other states has been explored, but issues related to cost and development schedules have essentially foreclosed this strategy.

That said, a good deal of discussion and planning for the database has already been completed and the group is well-acquainted with most of the design and deployment issues. Mike Overton of the Crime Commission and Dave Wegner of State Probation have provided critical leadership in the process. If funding were made available for the creation of such a database, much of this planning could be harnessed towards a final design and implementation.

For Nebraska to move towards an evidence-based system for substance abuse treatment, however, collecting assessment results is only the first step. Nebraska must utilize assessment results and treatment histories to identify which treatment providers and treatment models promote the best recovery outcomes. A comprehensive data-system would include treatment summaries which would enable the effectiveness of different services to be evaluated. Accordingly, if the recommendation for a centralized database is adopted, sufficient resources must be provided to grow the application beyond the concept on which the JSAT group has

concentrated its energy. For the database to be effective, researchers have access to the data for evaluation purposes.

### ***Scarcity of Treatment Providers***

One of the more surprising findings from the research is that Nebraska cannot buy its way past the biggest hurdle to establishing effective methamphetamine treatment, at least not very quickly. The State presently faces such a severe shortage of substance abuse clinicians, treatment professionals, and support facilities that every level of service for every type of substance abuse within the continuum of care has a waiting list. Justice and treatment professionals from across Nebraska report that regardless of an individual's personal financial resources, even the initial assessment on which so many critical legal and treatment decisions depend is often delayed for weeks. Similarly, once an assessment has been obtained, addicts face more delays waiting for admission to the most appropriate level of treatment, if it exists at all. This delay threatens to destroy addicts' motivation as frustration over the lack of services builds. Worse, it increases the likelihood that users and offenders who wish to avoid treatment will escape it: a particularly important concern since most methamphetamine users come to treatment reluctantly. (Rawson, 1999)

The impact of this shortage on individual methamphetamine users is fairly obvious. The impact on the justice and social service process is more subtle, but equally profound. The primary mission for justice and social services is to hold substance abusing offenders accountable for their crimes and/or the family crises of child-abuse or neglect related to their methamphetamine use. When criminal rehabilitation and the restoration of parental responsibility turn on eliminating a person's substance abuse problem, these waiting lists and gaps in the continuum of assessment, treatment and recovery become part of the transactional calculus offenders and parents use to avoid the compelled surrender of addiction. Addicts play justice professionals, social service workers, and treatment providers against each other, exploiting these gaps and shortages as excuses for their lack of recovery progress. For these reasons, the state must address the scarcity of methamphetamine treatment providers. This can be accomplished by implementing the practices outlined below.

### **Methamphetamine Specific Training**

Nebraska must immediately develop and implement methamphetamine-specific training for Nebraska mental health and chemical dependency counselors which includes use of the MATRIX Model of methamphetamine treatment. Rawson recommends treatment for 12 to 24 weeks followed by some type of support group participation. The MATRIX model lasts 16 weeks. Simon et al. (Simon S 2004) suggest that during the first 3 months of abstinence MA users may benefit from strategies to compensate for cognitive problems, as during this initial abstinence period neuro-cognitive performance drops, often affecting attention/psychomotor speed, gross and fine motor skills, short-term memory, and fluency (Simon S 2004). To ensure compliance with these MA specific treatment practices, Nebraska can condition state-reimbursement for methamphetamine treatment services on the completion of the state-provided training.

While it may take years for these types of efforts to pay off, the State must act quickly to fill the current void of methamphetamine expertise in Nebraska. At best practices meetings,

participants repeatedly spoke of poor outcomes when treatment specialists tried to apply alcohol and marijuana-related treatment strategies to methamphetamine addicts. The confrontational dynamics of most alcohol recovery programs have proven to be ineffective responses to methamphetamine addicts struggling to maintain sobriety. Although it will shift some treatment capacity away from alcohol and other illicit drug programs until new providers enter the market, the State has little choice but to motivate some existing providers to acquire a specialized expertise in methamphetamine treatment.

In a similar vein, Nebraska must seize this opportunity to establish standardized treatment requirements and documentation regarding methamphetamine. The State is moving towards the widespread adoption of a standardized assessment process with the ASI/CASI and it is not unreasonable to condition reimbursements and contracts on the use of a standardized, evidence-based treatment program for methamphetamine. The MATRIX treatment model has been the most scrutinized and successful methamphetamine addiction program of the past ten years. It is a manualized, 16 week program designed for outpatient settings, but can easily be adapted and applied within the therapeutic community program of a correctional or treatment facility. Until a more successful treatment model for methamphetamine emerges, Nebraska should aggressively push providers to utilize the MATRIX as the prevailing treatment strategy.

## **Certification and Licensure Requirements**

Nebraska must re-examine certification and licensure qualifications of LADACs and provisional LADACs to ensure that education and clinical requirements are in accord with the minimal competencies required and are not an artificial disincentive to students and professionals who would otherwise make effective substance abuse treatment counselors.

## **Creation of an Academic Program**

To promote the development of professional capacity within the state, Nebraska must create a degree track within Nebraska schools and universities by which a pool of chemical treatment professionals can be developed; completion of degree, clinical work, and passing of an exam should suffice for licensing and certification requirements. To address the need for multicultural services, schools could actively recruit students for these programs from the minority populations in Nebraska and establish support mechanisms beneath them as encouragement for them to adopt substance abuse counseling as a viable career.

## **Financial Incentives**

Nebraska must improve financial incentives for people to pursue a career in substance abuse treatment and agencies to provide substance abuse treatment. One way to accomplish this is to increase reimbursement rates for substance abuse treatment to reflect the education level and financial/time expenses of becoming a substance abuse treatment specialist. At first blush, it seems the State could solve this dilemma by simply increasing reimbursement rates to entice substance abuse professionals to migrate from other states. As other Nebraska studies have shown, however, this strategy provides only a partial remedy. Unless all substance abuse rates are increased across the board, Nebraska treatment professionals will simply shift around to fill the more lucrative positions and those jobs which rely on state-reimbursed case-loads will remain less financially attractive to out-of-state chemical dependency counselors. Increasing reimbursement levels would motivate more people to complete the rigorous education and

training requirements to become treatment professionals and possibly improve Nebraska's ability to recruit and retain them from other states.

Reimbursement rates can also be used to provide leverage to attract treatment professionals to underserved areas. The primary obstacle to wide-spread implementation of community-based treatment services is that too few providers are scattered across the State to make this goal feasible. As the recommendations above, gradually increase the pool of treatment professionals, hospitals, clinics, and treatment facilities must have an economic basis for recruiting these new professionals. Reimbursement rates need to be differentially structured to account for the situational difficulties of recruiting treatment staff to Greater Nebraska. Policy makers have to realize that many providers require additional work to be located for spouses before they can move to the less populated areas around the State. Financial incentives in the recruitment of treatment providers alleviate the strain on these families and compensate for the diminished income their husbands and wives face. Facility administrators have repeatedly stated these dynamics render the present profit potential from state-reimbursed contracts insufficient to operate chemical dependency programs on the scale needed to meet the State's needs.

Nebraska could also conduct a salary study to improve the state's ability to attract out-of-state providers, maintain our current base of Nebraska providers, and identify critical positions for which premium salaries are required in order to meet the State's needs. Another means of providing financial incentives is the establishment of tuition reimbursement and student loan repayment programs for LADACs who remain in Nebraska. The forgiveness of student loans and tuition reimbursement programs for students serving as interns while working on their degree would also make the pursuit of such a career more appealing.

## **Multicultural Services**

If clinicians are in short supply generally, the scarcity of culturally and linguistically competent providers is even worse. The measures discussed above must be combined with active recruitment, mentoring networks, and the promise of quick jobs upon the completion of prerequisite training to motivate Spanish, Sudanese and members of Nebraska's other minority populations to fill the gaps in treatment services for non-English speaking addicts and offenders.

## ***Case Management***

Every case plan should encompass both the initial stages of substance abuse treatment, including assessment, and a long-term strategy for recovery and maintaining abstinence. Once a case plan has been prepared, Nebraska must establish the process of exchanging information required to advance addict's progress through the continuum of recovery. This exchange of information includes the development of professional case managers who oversee an addict's progression through the treatment process.

Establishment of the financial resources required to advance an addict's progress through the continuum of recovery is crucial to effective case management. When addicts continue to satisfy treatment expectations, financial resources must be available to obtain any services reasonably related to long term recovery. One method of accomplishing this is funding of the voucher program outlined above. Another is to leverage justice and social service resources in support of substance abuse treatment. Nebraska can use justice-related supervision to monitor, promote and enforce abstinence, treatment participation and community reintegration. Prosecution, incarceration and release decisions can be used as incentives for offenders to complete treatment and remain abstinent.

To maximize the impact of effective assessment, treatment plans, urinalysis test result and progress notes must be collected at centralized database within State government. The government must then ensure that all justice, social service and treatment providers can access and review treatment plan and progress notes as needed, to facilitate effective case planning.

While effective case planning would improve treatment planning from a clinical perspective, it is really aimed at promoting the State's need to understand where gaps in the service array exist. Case-plans which encapsulate only the immediate and short-term treatment needs of the methamphetamine user lack the documentation Nebraska policy makers require to evaluate whether sufficient services are in place to maintain the progress of recovery over time. The outcome indicators buried in the assessment and treatment histories of methamphetamine offenders are the only pathway by which Nebraska will be able to eventually determine which treatment models and funding strategies are consistently effective in reducing the toll of substance abuse on the state's citizens and resources.

## **Justice System Participation**

All points of the justice system must commit to substance abuse treatment as an effective deterrent to methamphetamine users' future offending. Criminal sanctions must be structured to balance punitive considerations against the rehabilitative potential of substance abuse treatment. Except when public safety and/or moral outrage demand otherwise, justice planning should be driven by an offender's substance abuse treatment needs.

The first step in treatment planning depends on those justice providers who possess the greatest discretion—prosecutors and judges—to prioritize recovery over sanctions or punishments which are unlikely to resolve the central factor contributing to recidivism, methamphetamine use. At most, prosecutors and judges can ensure that the legal constraints placed on an offender contribute to the addict's recovery; at the least, they have the power to see that legal controls do not detract from it.

When treated offenders and neglectful parents quickly re-enter society and the lives of their families, far from being treated soft-heartedly, they are being held accountable for their acts in the most appropriate way society can design: they are being forced to daily assume responsibility for repairing the damage left in the wake of their substance abuse and offending. With sufficient recovery support and relapse prevention services in place, methamphetamine addicts can resume their role as a contributing member of society and the web of social involvement which keeps them from succumbing to their old habits strengthens.

## **Behavioral Health Participation**

Treatment should be community based and non-residential except for addicts with significant, persistent mental health issues. People who suffer from serious mental health problems *and* methamphetamine addiction present treatment management issues which may not be amenable to outpatient treatment models. As explained above, symptoms from methamphetamine use can mask or distort the perceived mental health of even those people who actually have no psychological or cognitive impairments. Upon the discovery of a methamphetamine user's history for recurring mental health problems, the detoxification process demands a strict abstinence from additional use so that treatment providers can observe and document the user's true state of mental disease. In these instances, residential detoxification during the early stages of recovery may be the only way for clinicians to separate the two.

## **Referral Services**

### **Hotline**

Methamphetamine users must be able to easily initiate the treatment process. Rawson says telephone inquiries about treatment must be handled quickly and positively. Nebraska must improve methamphetamine addicts' ability to link up with assessment and treatment services when they are willing to do so by creating and widely publicizing a hotline service by which addicts and families can identify assessment and treatment resources. This hotline would be similar to the gambling addiction hotlines.

While detoxification and treatment services exist throughout the state, there is no prominent hotline or referral resource which has been widely marketed to the general public. Compare, however, the numerous television and radio advertisements which identify similar referral services for gambling and other social issues such as pregnancy assistance. If a methamphetamine addict is actually motivated enough to reach out for help, they must know where to call to find out about recovery options. Even when local services are unavailable for special populations, such as non-English speaking minorities, multi-lingual public service announcements could provide a starting point for addicts and their families.

### **Professional Training**

One of the greatest frustrations for program directors is the inability to match their services with clients who would benefit most. Police officers, dispatchers, social workers, community support specialists, medical doctors, and, in the case of methamphetamine use, dentists can constitute a formidable network of referral sources. Therefore, it is necessary to educate all justice, social service and medical providers about where to refer addicts and families for assessment and treatment services. Tools such as preprinted tip cards, in-services, dispatcher trainings can be used to accomplish this goal. Ideally, these should receive training on how to provide direct counseling to methamphetamine addicts and families in crisis when the factual circumstances of a situation do not permit official action to be taken. Giving these front-line professionals the means by which they can provide concrete information about available services, though, is a major step towards activating a powerful, but untapped resource in the fight against methamphetamine abuse.

### **Assessment**

Rawson says assessments should be focused, orient the addict to realistic expectations about treatment, provide them with different treatment options to consider, and involve family and friends who support the treatment and recovery process. For methamphetamine users, the person conducting the assessment should be warm, straightforward and non-judgmental. Confrontational tactics can not only diminish a methamphetamine user's motivation for treatment but may also provoke violence.

### **Detoxification**

To reap the full benefit of assessing methamphetamine users, methamphetamine detoxification must be managed as part of the assessment process. Methamphetamine addicts

undergo two stages of detoxification after they have stopped using. In the first stage, the intense symptoms of methamphetamine intoxication are typically resolved by the user going through a long period of sleep. Complications are rare and the only medical responses reported in the literature relate to monitoring the user for hyperthermia and treating it with ice-baths if it becomes severe. This stage of detoxification does not pose any particular problem for assessment.

However, the assessment of methamphetamine users in the second stage of detoxification can be compromised by lingering effects the drug has on an addict's cognitive and psychological capacity. During the site-visit to the Norfolk Regional Center, it was learned that many of the methamphetamine users committed to NRC exhibit signs of psychosis and neurological deficits which suddenly clear 45 to 60 days following the cessation of methamphetamine use. The treatment research literature also reports that methamphetamine addicts experience physiological changes that can produce sudden episodes of psychosis, violence without any prior warning signs, and lead to relapse as many as 45 to 120 days into treatment. This phenomenon, commonly known as "The Wall" is a critical consideration when developing strategies for treatment and relapse prevention for methamphetamine addicts (Obert 2004).

These characteristics of methamphetamine detoxification must be managed in order for a reliable drug abuse assessment to be completed. Unlike most other drugs, assessment results for a methamphetamine user can be dramatically distorted during the 45 to 60 days after their last use. Failure to account for these possibilities can lead to treatment decisions which become inappropriate for the methamphetamine user's new state of mind. The manifestation of severe symptoms in a treatment setting can put staff, family, and other recovering addicts at risk of harm.

For these reasons, it is recommended that the assessment process for methamphetamine users include explicit plans for addressing these potential changes in the addict. At a minimum, methamphetamine addicts should have access to the resources required to obtain two or three assessments as needed during the initial four months after drug use has stopped. MA users should also have access to services during this time period which can best be described as "Methamphetamine Detox". These services would help the addict manage the temporary cognitive and neurological deficits, anticipate and avoid violent behavior, and guard against relapse.

## **Standardized Model**

To achieve standardization in assessment, all justice agencies should immediately work to implement the Standardized Model for Assessing Substance Abusing Offenders and all social service and treatment providers should move towards adopting the ASI/CASI for their initial substance abuse assessment tool.

Thanks to the leadership of the Supreme Court, Probation Administration, and the Department of Corrections, most state-level justice officials are actively striving to implement the Standardized Model for Assessing Substance Abusing Offenders. While it is expected that local justice agencies will eventually follow suit, county attorneys and drug courts need to be particularly mindful of adopting these assessment protocols. General diversion and drug courts must work to incorporate ASI/CASI results as part of the criteria by which candidates are selected.

Similarly, it is unclear to what extent, if any at all, HHSS plans to utilize the ASI in assessing the substance abuse treatment needs of parents whose methamphetamine use has



interfered with their ability to properly care for children. Adopting the Standardized Model as a key part of reunification planning and/or family counseling would convey the same benefits to juvenile court proceedings for abuse and neglect that are expected in criminal matters. If HHSS is reluctant to utilize this assessment model in all chemical dependency cases, it would greatly contribute to the State's overall methamphetamine reform effort if the ASI could at least be used with parents who are methamphetamine users. The data produced by these assessments would provide a common platform from which the relative treatment service needs of HHSS and justice agencies could be evaluated.

### ***Relapse Prevention***

The historical neglect of long-term recovery support and relapse crisis services must be rectified. One way to begin rectification is to make voucher funds available for health, employment, and general support services. This will provide methamphetamine addicts with access to recovery support groups and other substance abuse treatment services even after they have been discharged from the oversight and control of justice and social service systems.

The State's commitment to the end of the recovery process must match its commitment to the initiation of treatment. Once the sobriety of an addict has been stabilized through initial interventions, their continued abstinence will always depend on the accessibility of recovery support and relapse prevention services. Recovery is like a long trip up a steep hill: if the support pushing a methamphetamine user falters, they risk not only stalling, but a rapid plunge back into the valley of addiction from which they had emerged. This fails the methamphetamine user, but it betrays social service, justice, and treatment providers by squandering the time, energy, and resources they already expended.

As with the earlier stages of treatment, the State's best appropriation strategy for promoting life-long abstinence is a pool of flexible voucher funds which can be accessed as the recovered methamphetamine user requires. The availability of these funds will catalyze the expansion of such services. Provided addicts have demonstrated an ability to capitalize on these investments by the state, eligibility should be maintained even though no formal link between Nebraska's social service and justice agencies remains.

It is easy to say that support and relapse prevention services are an integral part of an addict's recovery, but debates over funding priorities turn on hard data, not theoretical concepts. The collection of full course treatment plans provides a source from which responsible analyses can be conducted to isolate the extent these late term services demand and deserve funding.

### ***Work Ethic Camp***

To provide access to treatment to more Nebraskans, the state should increase utilization of the WEC as a methamphetamine treatment facility for those offenders whose crimes and risk do not warrant incarceration by DCS. Last year Probation supervised 1250 cases in which the offender had been convicted of methamphetamine possession or some other methamphetamine-related charge. If the full capacity of the WEC had been dedicated strictly to methamphetamine offenders, approximately 300 Probation clients could have rotated through the program. One of the main obstacles to keeping the WEC even half-full of methamphetamine users, though, is that judges do not fully appreciate WEC's ability to provide offenders with intensive, quality substance abuse treatment. It is unclear how these perceptions can be altered, but attempts must

be made to do so. Judges need to better appreciate Probation's ability to provide offenders with intensive treatment services at the WEC.

The Work Ethic Camp (WEC) is a 100 bed co-ed facility located in McCook, NE. Inmates are sentenced to the WEC as an alternative to prison and must have been convicted as an adult of a felony offense to be sentenced here. WEC staff work closely with probation in determining who should be sent to this facility. Suitability for the WEC is based upon the pre-sentence investigation and offender selection worksheet. If an offender is suitable for the WEC, referral is made by probation and the District Court places the offender at the WEC as a condition of his probation. The close working relationship with probation continues once an offender completes the program and returns to the community. Before leaving the WEC, an after-care plan is created and the offender is placed under Intensive Supervision Probation.

Offenders typically stay at the WEC for 120 days. By law, the offender cannot remain at the camp for more than 180 days. The offender's day begins at 5:00 a.m. with physical training. Throughout the day offenders are required to work in designated areas, attend classes and participate in substance abuse treatment. All offenders are expected to work at the camp or on a road crew. On-site work includes working in the kitchen, laundry or maintenance. The WEC offers a variety of classes including GED, cognitive restructuring, job preparation, and life skills such a budgeting and emotions management. All offenders that have not completed high school must participate in the GED program. Because 96% of offenders at the WEC need substance abuse treatment, substance abuse assessments and intensive outpatient treatment are provided. The camp employees licensed professional staff to provide the substance abuse treatment.

The WEC is well-positioned to address the needs of MA users. The 16 week Matrix program could easily be administered in the 120 days that offenders routinely stay at the WEC. The WEC has the professional staff available to provide effective treatment. The WEC's close working relationship with probation and after-care planning helps to ensure that offenders will receive the recovery support services that they need once they leave the facility. The extensive educational programming available also prepares offenders for re-entry into the community by providing them with the skills they need as they transition from institutional life. The routine of daily life at the camp provides recovering MA addicts with the structure and accountability that they need to be successful in their recovery.

During the research team's site visit, the WEC was revealed to be a bright, comfortable facility, well-equipped with the technological capacity to implement a number of innovative pilot projects. Perhaps the best example of this flexibility is the video-conference system. To compensate for treatment staff shortages, a pilot program using a remote therapist for group or individual counseling should be designed and implemented. To improve the re-integration of WEC residents in their home community, a pilot project in which community-based probation officers remotely confer with the residents on re-entry case planning should be attempted and evaluated. To ensure that supportive family members remain connected with WEC residents during their stay, an experiment which allows video-conferenced visitations may prove an effective alternative to expensive, time-consuming trips. These examples and others illustrate that the WEC possesses untapped potential for providing Probation and the justice system with a wider array of options for rehabilitating methamphetamine-dependent offenders whose recovery progress requires a brief removal from their home community until abstinence can be established.

Efforts of this nature instituted and evaluated over the next twelve to fourteen months will reveal whether expanding WEC's capacity for a larger residential population is justified.

Using WEC as a lab where innovative treatment strategies exploit modern communication technology holds the potential for developing discovering even more ways by which the State can attack its overall shortage of treatment professionals. Therefore, WEC should be granted license to pilot video-conference treatment strategies.

One drawback to expanding the use of WEC as a MA treatment facility is its remote location which inhibits its ability to attract qualified professionals. To remedy this situation, WEC should be allowed salary and/or reimbursement premiums to improve its ability to recruit treatment providers and continue to provide much needed substance abuse treatment.

The WEC is already providing many of the key elements for successful MA treatment. The State of Nebraska can capitalize on the work that is being done there by structuring the offender selection worksheet to ensure that the individuals who would most benefit from the program are placed at the camp. In doing so, the State will be providing effective MA treatment without placing an added burden on the state budget.

### ***Department of Correctional Services Treatment Facility***

One of the initial questions for which the Legislature sought an answer was whether Nebraska needed to develop a centralized facility for methamphetamine treatment. As the literature review of the Final Report indicates, the most effective treatment models for the majority of methamphetamine addicts actually focus on outpatient treatment as the primary intervention strategy. This is good news given Nebraska's desire to develop alternatives to incarceration founded on community based correction and treatment options and fits perfectly with the State's efforts to grow community based mental health services. Therefore, treatment should be community based and non-residential except for offenders at a high risk of continued criminal behavior or whose crimes require incarceration.

A group of offenders will always exist, however, whose resistance to treatment and recovery will outpace even the most complete system of intervention services available at stages prior to incarceration within the Department of Corrections Services. In 2004 alone, more than five hundred men and women were admitted to the custody of DCS with evidence of a methamphetamine problem. Though the sentences for these offenders vary, all will be reviewed as possible parolees and all will eventually return to society. The question is whether they will have obtained the level of substance abuse treatment and recovery services that are required to keep them from falling back into old patterns of use and offending.

Establishment of a centralized MA and substance abuse treatment facility is strictly for the treatment of prison inmates. DCS requires a centralized, secure facility in which those offenders who have proven unamenable to the justice and social service system's alternative interventions can finally be forced to initiate aggressive, non-negotiable treatment for their methamphetamine abuse problems. The research shows that while methamphetamine users' are overwhelmingly ambivalent about seeking treatment, they also tend to do just as well in coerced treatment as those who pursue it voluntarily. (Brecht M., 2005)

The potential for a DCS treatment facility to be effective would be greatly enhanced if two more slight changes were made in the justice process points around sentencing an individual to prison. First, to the extent that other security and risk factors permit, all offenders committed to the custody of DCS should go immediately from the DEC to the centralized treatment facility. This practice would enable DCS to detoxify prisoners, identify the degree to which serious, persistent mental health problems emerge upon the remission of drug-related symptoms, deliver the complex array of treatment strategies and structure required for this resistant population, and

better orient these inmates for the transfer to regular prison life, transitional incarceration such as OCC, or even parole.

Granted, some inmates may fail and be removed from this treatment facility, but DCS is no worse off for it—they were going to have to place and manage these prisoners eventually. When the strategy succeeds, however, the benefits to DCS and society are tremendous. DCS now has an inmate whose withdrawal and substance abuse-related problems have already been given the maximum response the State of Nebraska can provide. Not only will this minimize potential management problems of the inmate within prison facilities, it positions the offender to better avail him or herself of the vocational, educational, and other therapeutic services DCS provides. This practice shifts DCS focus from simply having to house and manage inmates, and makes them an active, positive force in preparing an inmate to return to society. The strides taken as part of the prisoner's DCS custody establish a solid foundation on which Parole can build re-entry case-plans which optimize the offender's likelihood of success. Similarly, with the treatment gains achieved under DCS custody, HHSS can begin the crucial process to reconnect offender-parents with their children and change the chance of re-unification from a remote possibility to a reality.

The second change required to maximize the effective reach of a centralized treatment facility within DCS is to transplant a few key drug court concepts into Nebraska's criminal courts. Wyoming pursued this strategy and passed legislation which now requires every offender convicted of a felony to receive a comprehensive substance abuse evaluation regardless of their actual crime. Given Nebraska's severe shortage of substance abuse providers, this sort of legislation may not be immediately feasible, but Courts can change the way in which an offender approaches his or her sentence.

Nebraska law allows judges to set both a minimum and maximum period in their sentencing decisions. If DCS had a comprehensive treatment facility in which the court could be confident that offenders would receive aggressive interventions against their substance abuse problem, judges could structure sentence minimums as an incentive for offenders to abide by treatment recommendations and pursue their recovery. Offenders whose primary offenses relate to drug and alcohol use, could even transition directly from the treatment facility to less secure, re-entry oriented facilities like OCC.

In 2004 DCS admitted 418 men and 109 women who were confirmed methamphetamine users. DCS believes commitment practices to the York Correctional Facility can be adjusted to implement the above treatment protocols for women without a separate facility. The substance abuse treatment program that DCS presently operates runs for ten months. As resources and staff permit, DCS intends to create and implement individualized, evidence-based methamphetamine treatment strategies in which treatment duration is determined by the pace of an addict's recovery progress. Under these circumstances, a male inmate's average length of stay at a centralized treatment facility is expected to be approximately six months. Assuming that methamphetamine users enter DCS custody at a fairly even rate, the treatment facility will require capacity for 225-250 beds.

In discussions with DCS about a centralized treatment facility, it was determined that methamphetamine users who were classified as requiring a maximum security institution would receive their treatment from within one of the State's maximum security facilities. Methamphetamine users who met medium or low security classification criteria would be sent to the centralized treatment facility.

A Program Statement prepared by an architecture or engineering firm has been commissioned to more accurately estimate the construction, staffing, and operational expenses of the proposed facility. In determining the best location for a DCS treatment facility, the state must take into consideration the effects that its construction will have on the community in which it is located. Every county in Nebraska faces an overall scarcity of treatment providers. DCS could build a centralized treatment center anywhere in the state; however, the staffing needs for such a facility would have a devastating effect on most Nebraska cities' community-based service capacity. There are already waiting lists for treatment resources throughout the State. A facility the size of the one recommended for DCS would draw heavily from the local pool of community based treatment providers and simply exacerbate treatment shortages for the surrounding, non-incarcerated substance abuse population.

### ***Centralized Coordination of Implementation Plan***

The recommendations of the Final Report fall across many points of the social service and justice systems and require the coordinated efforts of state and local agencies to keep time from being lost and money from being wasted. A Coordinator with sufficient support staff to organize meetings, promote inter-agency agreements, monitor overall progress, and serve as a liaison to the Governor, Legislature and Supreme Court will be necessary. The overall process cannot be adequately managed by the agencies charged with actually designing and deploying the variety of reforms envisioned. For these reasons, Nebraska should create an office which can coordinate the implementation of any recommendations which may be adopted and report to the Governor, Legislature, and Supreme Court on the progress being made.

# **Cost Study: The Benefits of Treating Methamphetamine**

## ***Treatment vs. Incarceration***

In spite of advances in treatment and technology, it remains a challenge to successfully treat those addicted to alcohol and drugs and to help them maintain abstinence. Traditional research on these topics has focused on the effectiveness of treatments and access to treatment.

More recently, there has been greater focus on assessing the societal impact of addiction and substance abuse treatment. A substantial body of empirical evidence suggests that in addition to the cost of substance abuse treatment itself, drug and alcohol abuse are associated with increases in a wide range of costs (Harwood et al. 1998; Holder 1998; French, Salome, and Carney 2002; McCollister and French 2003), including those associated with crime and the criminal justice system (Wall et al. 2000; Vencill and Sadjadi 2001); medical care, especially hospital and emergency room (ER) (French, Salome, Krupski et al. 2000; Wall et al. 2000; Hunkeler et al. 2001); and government and private transfer payments and other social programs (Gresenz et al. 1998; Merrill and Fox 1998; Cook and Moore 2000; Mark et al. 2001), including unemployment benefits, welfare payments, disability benefits, and food stamps.

While there is a general agreement in the research community that successful substance abuse treatment can have an extraordinarily important impact on lives, it is also acknowledged that in many instances, these programs are needed by those who are indigent and hence dependent on services that are publicly financed (Alexandre, P., et al. 2002). In more recent years, States have operated in cost-cutting environments, and public funding for substance abuse treatment has had to compete more broadly with other uses of limited societal resources for improving population health. In light of the stigma associated with substance abuse and the underlying skepticism about the value of rehabilitation, financing substance abuse treatment is among the least popular options in the current policy climate (Belenko, S. et al., 2005). As a result, there is a fair amount of pressure for advocates to demonstrate that the benefits of substance abuse treatment can be explained in both monetary and human terms. Policymakers are generally more inclined to support treatment programs if they “pay for themselves” through reductions in other types of costs, e.g., health care, criminal justice costs (Garnick et al., 2002; McCorry et al., 2000).

The literature in this area is consistent: substance abuse treatment is associated with net benefits. Prior studies were subject to certain limitations, including the inability to compare the benefits with the cost of treatment; small sample sizes; potential lack of generalizability beyond randomized-controlled trial settings, populations and interventions; inability to measure a comprehensive array of costs, including both health care and crime; and age of the data. For example, Holder’s 1998 review of the older literature identified cost savings resulting from substance abuse treatment, but did not provide information on the cost of the treatment itself, so the benefit-cost ratio was not available.

In more recent literature, several studies looked only at reductions in health care costs or use only (Zywiak et al. 1999; Goodman et al. 2000; Parthasarathy et al. 2001); conversely other studies looked only at reductions in crime (Flynn et al. 1999; Daley et al. 2000; Aos et al. 2001). One study (Mauser et al. 1994) adopted a more comprehensive approach in exploring monetary benefits associated with substance abuse treatment, including savings related to both health care and crime, but had a relatively small sample size that made detection of statistically significant differences challenging. A number of studies assessed the cost-benefit of one treatment modality

only relative to another modality (Flynn et al., 1999; Salome et al., 2003; Holder et al. 2000). Still other studies compare enhanced interventions with standard ones( Hartz et al., 1998; Avants et al., 1999; Koenig et al., 2000; French, McCollister et al., 2002; Fleming et al., 2002). One of the strongest estimates of the treatment cost benefit ratio comes from Loman 2004, who found that on average, substance abuse treatment costs \$1,730 and producing a net societal benefit of \$11,000 for a ratio of 6.35:1 of benefits to costs. In their review of 11 studies McCollister and French 2003, found that the benefit-cost ratios associated with substance abuse treatment ranged from 1.33 to 23.33 and that benefits were overwhelmingly because of reductions in criminal activity, with smaller contributions of earnings, and averted health care. The work of Loman (2004) combined with the literature review of McCollister and French (2003) seems to provide a reasonable range to estimate a sensitivity analysis of the ratio of benefits to costs.

A sensitivity analysis is presented in lieu of a formal cost benefit analysis (CBA) because of the retrospective nature of CBA, the multiple data sources required, and the relative expense (Lave & Joshi, 1996). In light of individual study limitations reviewed for this report, it is not permissible to generalize from CBA state-specific studies. Reliable national estimates simply do not exist.

A typical CBA compares the total economic cost of a program to its economic benefits. In the absence of the outcomes for MA abuse treatment specific for the State of Nebraska, it is impossible to assign a common metric of dollars to the multiple outcomes which would likely result from a MA treatment program. It is only after the outcomes (attributable to the program) are valued in monetary terms that one is permitted to compare the sum of outcomes expressed in common dollar terms to the total program costs. This analysis is presented in either of two ways: expressed in net economic benefits (total program benefits minus total program costs) or as benefit cost ratio (BCR; total benefits divided by total costs). Economically beneficial programs are those that achieve a positive net benefit. Similarly, programs with higher BCRs produce greater returns on treatment investment when comparing different interventions.

### Sensitivity Analysis

The sensitivity analysis reported below illustrates the range of benefit cost ratios reported in the literature for three of the different levels of care recommended above. As the table shows,

Sensitivity Analysis of Cost-Benefit Ratios of Prior Studies				
Estimate Range	BCR		Estimated Costs	Estimated Benefits
<b>Outpatient</b>				
		Diversion/probation		
High	39:1 (Fleming, et al. 2002)	1120	\$2,877,280	\$112,213,920
Medium	6.5:1 (French, et al. 2002)	1120	\$2,877,280	\$18,702,320
Low	1.33:1 (Flynn, et al. 1999)	1120	\$2,877,280	\$3,826,782
<b>Residential</b>				
		Convicted of MA-Related Charge		
High	5.19 (French, McCollister et al., 2002)	950	\$2,003,050	\$10,395,830
Medium	4.34:1 (French, Roebuck, et al. 2003)	950	\$2,003,050	\$8,693,237
Low	1.68:1 (Flynn, et al. 1999)	950	\$2,003,050	\$3,365,124
<b>Drug Court</b>				
		Drug Court		
High	6.32:1 (Loman, 2004)	400	\$1,385,200	\$8,754,464
Medium	2.80:1 (Loman, 2004)	400	\$1,385,200	\$3,878,560
Low	1.74:1 (Barnoski & Aos, 2003)	400	\$1,385,200	\$2,410,248

Table 27. Sensitivity Analysis of Cost-Benefit Ratios of Prior Studies-Brown

investment in substance abuse recovery pays strong dividends. For the purposes of this study, it is especially encouraging that the benefits associated with outpatient treatment protocols are particularly robust.

## Cost Estimates of Implementation Plan

It is not difficult to develop cost estimates for the particular levels of care which must be funded before a complete continuum is in place for the treatment of MA using offenders. To predict the total cost of implementing such a plan however, one must know the demand for each of the different levels. For example, this report repeatedly argues that the majority of the State's MA users can be successfully treated with intensive out-patient protocols like the MATRIX model. Sixteen weeks of IOP costs approximately \$3700. Unfortunately, Nebraska's current treatment delivery system is driven more by chance than design. The Community Corrections Council has helped draw increased scrutiny to felony drug offenders, but routine drug and alcohol test results are not collected for the vast remainder of all offenders. As a result, many drug and alcohol users who would test positive simply slip through the system undetected. Standardized evaluations are not conducted, addiction data is not collected, and the information on which accurate forecasts for treatment needs are based never accumulates.

The question is further complicated as a result of Nebraska's severe treatment capacity shortage. Even if the justice and social service system's actual treatment needs were known, it is unrealistic to expect that the State's treatment capacity could expand quickly enough to meet that demand. In fact, one of the greatest expenses Nebraska faces in establishing the complete continuum care is the cost associated with developing the treatment capacity it needs, not funding the actual delivery of services.

Although it is not possible to consider the aggregate costs of the continuum of care, it is instructive to review a pair of hypothetical case-studies. Separately, these individual examples illustrate the costs which can be reasonably expected for a MA treatment case.

Hypothetical MA User 1 MA user sentenced to prison on drug charges Assume no ax or tx prior to DEC	
Assessment:	\$180.00
Treatment:	
Therapeutic Comm model Incarceration (4.5 yrs avg) with appropriate tx \$27,544/year (NSP)	\$123,948.00
After care:	
Community Support (episode) 6 mos	\$1,206.00
Peer driven support group (free)	0
<b>Total treatment/system borne costs:</b>	<b>\$125,334.00</b>

**Table 28. Hypothetical Treatment Case-Study I**

Hypothetical I illustrates the treatment costs associated with a MA user who has been incarcerated as a result of their drug use. This example uses the four and half year average sentence reported by DCS for a drug possession conviction. This individual has received no assessment or treatment prior to entering the correctional system. To determine what type of SA treatment is necessary DCS must initially perform a SA evaluation costing \$180.00. The cost of the inmate's treatment is included in the annual cost of incarceration. Due to the stresses and complications of re-entry, the offender's recovery depends on both the support of a peer-driven group and community support services.

In contrast, Hypothetical II demonstrates the substantial cost savings realized over the entire course of recovery when treatment succeeds without incarceration. In this instance, not



only does the MA user access intensive outpatient treatment at a considerably lower cost, but she also reaches a point of stabilized recovery within her community in a much shorter time.

Hypothetical MA User 2 MA user sentenced to Probation (48 months)	
Assessment:	\$180.00
Treatment:	
IOP (16 weeks*) 10 hours per week for 16 weeks at \$23.65 an hour	\$3,784.00
Aftercare:	
UA testing (1 test every other month for duration of sentence) \$7.00 per test	\$168.00
Care monitoring (6 months) \$55.00 per month	\$330.00
Recovery Support Group through a private provider 1 session every other week for the first 6 months after IOP \$100.00 per 90 minute session	\$1,200.00
<b>Total treatment/system borne costs:</b>	<b>\$5,662.00</b>
* BHS suggests 6 weeks of IOP treatment. However, the MATRIX model which is the recommended model for treating MA addiction, requires 16 weeks of IOP treatment.	

**Table 29. Hypothetical Case Study II**

These two hypothetical cases dramatically illustrate that the cost of treatment varies greatly depending on which point of the justice process applies treatment resources to the offender's addiction.

## Unfinished Business

MA use and treatment is a multi-faceted topic with wide reaching implications for the state of Nebraska. While completing this study, researchers identified several issues that impact SA treatment in Nebraska that were not readily resolved due to the short duration of this study. These issues bear consideration and will be relevant as the state continues to address the MA use.

## Mental Illness and the Prison Population

Due to the deinstitutionalization of mental health treatment and the move towards community based services, the number of mentally ill prisoners has risen dramatically over the past two decades. This problem has reached such epidemic proportions throughout the nation that the Council of State Governments instituted the Criminal Justice/Mental Health Consensus Project in 2002 to address the issue. The resulting report presented the following findings:

- About 16% of the prison/jail population has serious mental illness in contrast to 5% of the general U.S. population,
- Of 10 million people booked into U.S. jails in 1997, at least 700,000 has a serious mental illness,
- Men with mental illness are 5 times as likely to be incarcerated as the general population, and
- Approximately 75% of the inmates with serious mental illness have a co-occurring substance abuse disorder.

It is this final statistic that makes this topic relevant to this report. As the state of Nebraska begins to address the needs of MA users, it needs to be aware of the pitfalls facing inmates who are dually diagnosis with mental illness and substance abuse problems.

According to the Consensus Report, in 1955 before mental health reform began, there were 559,000 people in mental health hospitals throughout the country. By 1999 that number had dropped to less than 80,000 with the intent that the mentally ill would be treated in community based programs. The closure of mental health hospitals brought a slew of challenges to the mentally ill residing in the communities. One of these challenges is locating and maintaining housing. Between 70 to 90% of people suffering from mental illness are unemployed making it impossible to find affordable housing. The presence of co-occurring substance abuse problems and/or criminal histories bar the mentally ill from accessing federally subsidized housing.

Homeless and unemployed, many mentally ill become involved with the justice system. Often criminal behavior is a result of the mental illness from which the individual suffers. The justice system is ill-equipped to contend with the influx of mentally ill inmates it receives. Nearly 500,000 of the 2 million inmates incarcerated in the United States suffer from mental illness. The Bureau of Justice Statistics and the "Inmate Mental Health Care" survey found that 17.5% of Nebraska inmates were mentally ill. Prisons are not equipped to provide the treatment these individuals need. The structure of the prison system often exacerbates the symptoms of the mental health condition. Mentally ill inmates are unable to comply with the strict rules necessary to maintain order in a penal environment and are often the subjects of disciplinary actions.

The mentally ill are often arrested on minor offenses for which the sentence is served at a minimum or medium security facility. But, because of disciplinary or behavioral problems, inmates with mental illness progress to maximum security facilities. Mentally ill inmates serve terms years longer than their original sentence because of disciplinary infractions and the

resulting inability to receive parole. Once parole is achieved the mentally ill return to the community with no resources, quickly commit a crime and begin the process all over again.

The trend of using the correctional system as a way to address mental health is concerning and seemingly ineffective. To ensure that people with mental health and co-occurring substance abuse problems are properly treated, the state of Nebraska must develop the spectrum of community-based services necessary to address these severe behavioral health concerns. The state needs to examine how the lack of available housing affects these populations and how to alleviate these concerns. The frequent incarceration of mentally ill and their prolonged sentences drain the resources of the state's correctional system. Identifying way to address mental illness without incarceration will improve the circumstances of Nebraskans with mental illness and substance abuse problems and ensure the financial resources are being spent in the most effective manner.

### **Other MA related issues identified by Treatment and Justice Professionals**

A workgroup comprised of representatives from Probation, Department of Corrections, Behavioral Health Services and Drug Court identified the following issues that must be addressed to promote effective MA treatment within Nebraska.

- **The need for early assessment.** The earlier assessments are conducted the greater the likelihood of earlier intervention. Law enforcement must understand and implement best practices so that early intervention can occur.
- **The need for statewide substance abuse integration and coordination.** A coordinated approach will minimize replication of efforts and counterproductive agendas. Integration will support utilization of best practices by all agencies and treatment providers.
- **The need to administer UA testing and compile the results.** UA testing is critical because it serves as a performance measure, is a motivational tool/deterrent and serves as an objective measure of success.
- **The need to examine alternative methods of testing.** There are cheaper, quicker and easier ways to obtain the information.
- **The need for standardized language to describe substance abuse treatment and services.** The current state system does not coordinate with the ASAM criteria. Nebraska needs standardized levels of care and a common language for the community to use when thinking about these concepts. Criminal risk needs to be included in the standardize language.
- **The need for integrated, mandatory cross system/cross agency training for justice professionals and treatment workers.** Training curriculum and development is costly and time consuming. All agencies need assistance in planning and conducting training. Agencies can pool funding and resources to provide professional training.
- **The need for follow-up training.** Continued training is fundamental for standardized implementation. Without it the system falls apart. The state should look at innovative training methods and ensure proper CEU credits to make training more accessible and worthwhile.
- **The need for pre-graduation training.** State agencies must work with universities and colleges so students receive necessary training while completing their degree programs. Agencies can facilitate this education process by providing budgeted internships.

## **ASAM Criteria**

Although Nebraska recently adopted the Mental Health Service Definitions and Utilization Guidelines based upon the ASAM criteria, some elements of treatment services may not be adequately captured in the debut version. As the state's treatment capacity evolves and develops, these ASAM criteria will have to be reviewed and revised to keep pace with innovative treatment models.

## Bibliography

- (1998). Methamphetamine abuse and addiction. National Institute on Drug Abuse Research Report Series, US Department of Health and Human Services, National Institutes of Health.
- (1999). Drug Court Clearinghouse and Technical Assistance Project [DCCTAP]: looking at a decade of drug court. DCCTAP. A. U. O. o. J. Programs. Washington, DC.
- (1999). Principles of drug addiction treatment: A research-based guide., National Institute on Drug Abuse.
- (1999). Principles of Drug Addiction Treatment: A Research Guide. NIDA. Washington, DC, National Institute on Drug Abuse.
- (2001). Amphetamine treatment admissions increase: 1992-1999. , Office of Applied Studies, Substance Abuse and Mental Health Services Administration.
- (2002). Drug Courts: Better DOJ Data Collection and Evaluation Efforts Needed to Measure Impact of Drug Court Programs. U. S. G. A. Office. Washington, DC, U.S. General Accounting Office.
- (2003). The Nebraska Academic Health Centers Plan for Excellence in Behavioral Health. B. H. R. A. S. W. Group. Omaha, University of Nebraska Medical Center, Creighton University and the State of Nebraska.
- (2005). Hearing on Methamphetamine Abuse. Senate Appropriation Subcommittee on Labor, Health and Human Services, Education and Related Agencies. Washington, DC, US Department of Health & Human Services.
- Addis M, W. W., Hatgis C. (1999). "Barriers to dissemination of evidence-based practices: addressing practitioners' concerns about manual-based psychotherapies." Clinical Psychology: Science and Practice **6**: 430-441.
- Anglin MD, P. B. (1998). "Drug use and crime: a historical review of research conducted by the UCLA drug abuse research center." Subst Use Misuse **33**(9): 1871-1914.
- Belenko, S. (1998). "Research on drug courts: a critical review." Natl Drug Court Inst Rev **1**: 1-42.
- Blumenthal, D. (2005). "Reverse translation in health policy and management: from bedside to bench and beyond." Health Serv Res. **40**(1): 9-18.
- Boles S, M. K. (2003). "Substance abuse and violence: a review of the literature." Aggression Violent Behav **8**: 155-174.

Boust, S. (2005). A Behavioral Health Education and Research System for Nebraska. Nebraska Behavioral Health Reform, Nebraska Department of Health and Human Services: Division of Behavioral Health Services.

Brecht M, A. M., Wang JC (1993). "Treatment effectiveness for legally coerced vs. voluntary methadone maintenance clients." Am J Drug Alcohol Abuse **19**(1): 89-106.

Brecht M, D.-A. M., Dylan M (2005). "Coerced treatment for methamphetamine abuse: differential patient characteristics and outcomes." The American Jnl of Drug and Alcohol Abuse **31**: 337-356.

Brecht M, v. C., Anglin MD (2000). "Predictors of relapse after treatment for methamphetamine use." Jnl of Psychoactive Drugs **32**(2): 211-220.

Brown, A. H. (2004). "Integrating research and practice in the CSAT Methamphetamine Treatment Project." Jnl of Substance Abuse Treatment **26**: 103-108.

C. Chen, L. S., Sham P., et al. (2003). "Pre-morbid characteristics and co-morbidity of methamphetamine users with and without psychosis." Psychol Med **33**: 1407-1414.

Caulkins, J. (2003). "Methamphetamine epidemic; an empirical overview." Law Enforcement Executive Forum **3**: 17-42.

Cohen J, C. D., et al. (2004). "Psychiatric symptoms in methamphetamine users." Am J Addict **13**: 181-190.

Cretzmeyer CM, S. M., Huber D, et al. (2003). "Treatment of amphetamine abuse: research findings and clinical directions." J. Subst Abuse Treat **24**: 267-277.

Daniels, A. A., N. (2005) From Policy to Service: A Quality Vision for Behavioral Health. **Volume**, DOI:

De Leon, G. M. G. K. D. J. N. (1994). "Circumstances, motivation, readiness and suitability (the CMRS scales): predicting retention in therapeutic community treatment." Am J Drug Alcohol Abuse **20**(4): 495-515.

Farabee, D. P., M; Anglin, MD. (1998). "The effect of coerced treatment for treatment for drug-abusing offenders." Fed Probat **62**(1): 3-10.

Frawley P, S. J. (1992). "One-year follow-up after multimodal inpatient treatment for cocaine and methamphetamine dependencies." Jnl of Substance Abuse Treatment **9**: 271-286.

Galloway G, N. J., Knapp T, Stalcup S, Smith D. (1994). "Imipramine for the treatment of cocaine and methamphetamine dependence." Jnl of Addictive Diseases **13**(4): 201-216.

Grabowski J, S. J., Merrill J, Negus S. (2004). "Agonist-like, replacement pharmacotherapy for stimulant abuse and dependence." Addict Behav **29**: 1439-1464.

Guydish, J. W., E.; Tajima, B.; Woods, W. (2001). "Drug court effectiveness: a review of California evaluation reports: 1995-1999." J Psychoact Drugs **33**(4): 369-378.

Hasan A, C. S. (2004). "Relationship between amphetamine ingestion and gingival enlargement." Pediatr Dent **26**: 396-400.

Havel, M. (1997). Annual report of the centralized substance abuse assessment project. Des Moines, IA, Report submitted to the Governor's Alliance on Substance Abuse.

Herinch, H. (2004) Co-Occurring Methamphetamine Expanded Treatment (COMET) Program. Regional Research Institute for Human Services Website **Volume**, DOI:

Herrell J, T. J., Gallagher C, Dawud-Noursi S. (2000). "A multisite study of the effectiveness of methamphetamine treatment: an initiative of the Center for Substance Abuse Treatment." Jrnl of Psychoactive Drugs **32**(2): 143-147.

Herz, D. (2001). Substance Abuse Treatment Task Force Final Report. C. o. L. E. a. C. Justice. Omaha, University of Nebraska - Omaha.

Herz, D. (2003). Building a Coordinated Response to Offender Substance Abuse: The Work of the Nebraska Substance Abuse Treatment Task Force., Los Angeles, California State University -- Los Angeles.

Herz, D. a. M. V. (2000). Substance Abuse Treatment Task Force Final Report. C. o. L. E. a. C. Justice. Omaha, University of Nebraska - Omaha.

Hiller M, K. K., Broome K, Stimpson D. (1998). "Legal pressure and treatment retention: a national sample of long-term residential programs." Crim Justice Behav **25**(4): 463-481.

Hoge, M. (2002). "The training gap: an acute crisis in behavioral health education." Adm Policy Ment Health **29**(4-5): 305-17.

Huber A, L. R., Gulati V, Marinelli-Casey P, Rawson R, Ling W. (2000). "The CSAT Methamphetamine Treatment Program: Research design accommodations for "real world" application." Jrnl of Psychoactive Drugs **32**(2): 149-156.

Huber A, L. W., Shoptaw S, Gulati V, Brethen P, Rawson R. (1997). "Integrating treatments for methamphetamine abuse: A psychosocial perspective." Journal of Addictive Diseases **16**: 41-50.

J. Cohen, C. D., et al. (2004). "Psychiatric Symptoms in methamphetamine users." Am J Addict **13**: 181-190.

- Joe, G. S., J; Broome, K (1999). "Retention and patient engagement models for different treatment modalities in DATOS." Drug Alcohol Depend **57**: 113-125.
- Johnson A, A. S., Barber K. (2004). Outcomes Monitoring System -- Iowa Project: Year Six Report. T. I. C. f. S. A. R. a. Evaluation. Iowa City, IA, University of Iowa.
- Kurtz S, I. J. (2003). "Crystal meth, gay men, and circuit parties." Law Enforcement Executive Forum **3**: 97-114.
- Lukas, S. (1996) Proceedings of the national consensus meeting on the use, abuse and sequelae of abuse of methamphetamine with implications for prevention, treatment, and research. US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. Volume, DOI:
- M. Srisurapanont, A. R., Marsen J., et al. (2003). "Psychotic symptoms in methamphetamine psychotic in-patients." Neuropsychopharmacol **6**: 347-352.
- Maxwell, J. C. (2005). "Emerging research on methamphetamine." Current Opinion in Psychiatry **18**(3): 235-242.
- McGlothlin WH, A. M., Wilson BD. (1977). An evaluation of the California Civil Addict Program. NIDA Services Research Monograph Series. Rockville, MD, National Institute on Drug Abuse.
- Miller N, F. J. (2000). "Effectiveness of coerced addiction treatment (alternative consequences): a review of the clinical research." J Subst Abuse Treat **18**: 9-16.
- Obert, J. (2004). Methamphetamine treatment approaches II (Applied). California Addiction Training and Education Series: Methamphetamine Sacramento, Matrix Institute on Addictions.
- Obert J, H.-B. A., Zweben J, Christian D, Delmhorst J, Minsky S, Morrisey P, Vandersloot D, Weiner A. (2005). "When treatment meets research: clinical perspectives from the CSAT Methamphetamine Treatment Project." Jrnl of Substance Abuse Treatment **28**: 231-237.
- Obert J, M. M., Marinelli-Casey P, Weiner A, Minsky S, Brethen P, Rawson R. (2000). "The Matrix Model of outpatient stimulant abuse treatment: History and description." Journal of Psychoactive Drugs **32**(2): 157-164.
- Platt, J. B., G; Kressel, D; Jainchill, N. (1994). "The prospects and limitations of compulsory treatment for drug addiction." J Drug Issues **18**(4): 505-525.
- Prendergast M, M. T. (1995). "Drug courts: diversion that works." Judges J **34**: 10-15, 46-47.
- Rawson R A, G. R., Brethen P. (2002). "Treatment of methamphetamine use disorders: an update." Jrnl of Substance Abuse Treatment **23**: 145-150.



- Rawson R A, H. A., Brethen P, Obert J, Gulati V, Shoptaw S, Ling, W. (2000). "Methamphetamine and cocaine users: differences in characteristics and treatment retention." Jrnl of Psychoactive Drugs **32**: 233-238.
- Rawson R A, M.-C. P., Anglin M, et al. (2004). "A multi-site comparison of psychosocial approaches for the treatment of methamphetamine dependence." Addiction **99**: 708-717.
- Rawson, R. A. (1999). Treatment for Stimulant Use Disorders: Treatment Improvement Protocol (TIP) Series 33. C. C. P. U. S. D. o. H. a. H. S. (Chair, Public Health Service, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment, Rockville, MD.
- Reback C, S. L., S Shoptaw. (2004). "Changes in the meaning of sexual risk behaviors among gay and bisexual male methamphetamine abusers before and after drug treatment." AIDS Behavior **8**: 87-98.
- Rosenthal, M. (1988). "The constitutionality of involuntary civil commitment of opiate addicts." J Drug Issues **18**: 6410661.
- Roth, K. (2003). Iowa adult methamphetamine treatment project: Final report. Iowa City, IA, The Iowa Consortium for Substance Abuse Research and Evaluation, Iowa Department of Health.
- Schumaker A., E. W., and D. Herz (2002). Standardized Model for Assessing Substance Abuse Among Offenders: Training Manual. Omaha.
- See S, T. E. (2003). "Severe amphetamine-induced bruxism: treatment with botulinum toxin." Acta Neurol Scand **107**: 161-163.
- Shoptaw S, R. C., Peck J, et al. (2005). "Behavioral treatment approaches for methamphetamine dependence and HIV-related sexual risk behaviors among urban gay and bisexual men." Drug Alcohol Depend **78**: 125-134.
- Simon S, D. C., Sim T, Richardson K, Rawson R, Ling W. (2002). "Cognitive performance of current methamphetamine and cocaine abusers." J Addict Dis **21**(1): 61-74.
- Simon S, D. J., Glynn S, et al. (2004). "The effect of relapse on cognition in abstinent methamphetamine abusers." J Subst Abuse Treat **27**: 59-66.
- Simpson, D. J., G.. (1993). "Motivation as a predictor of early dropout from drug abuse treatment." Psychotherapy **30**(2): 357-368.
- Srisurapanont M, A. R., Marsen J, et al. (2003). "Psychotic symptoms in methamphetamine psychotic in-patients." Neuropsychopharmacology **6**: 347-352.

Terry, W. (1999). The Early Drug Courts: Case Studies in Judicial Innovation. Thousand Oaks, CA, Sage Publications.

Urbina, A. a. K. J. (2004). "Crystal methamphetamine, its analogues, and HIV infection: medical and psychiatric aspects of a new epidemic." Clin Infect Dis HIV/AIDS **38**: 890-894.

Volkow N, F. J., Wang G. (2003). "The addicted human brain: insights from imaging studies." J Clin Invest **111**: 1444-1451

Zweben, J. (1999). The role of drug courts in methamphetamine treatment. . Center for Substance Abuse Treatment Regional Conference, Hawaii, Substance Abuse and Mental Health Services Administration.

Zweben J, C. J., Christian D, et al. (2004). "Psychiatric symptoms in methamphetamine users." Am J Addict **13**: 181-190.

# Appendices

# Appendix A: Crosswalk of Substance Abuse Services

Nebraska Standardized Model for  
Assessing Substance Abusing Offenders

As of January 1, 2005

"JUVENILE OFFENDER  
Levels of Care and Services"

## **SUBSTANCE ABUSE SERVICES FOR JUVENILE JUSTICE CLIENTS**

*The terms listed are for use by all substance abuse providers and justice entities in referring  
justice system clients to substance abuse services provided in Nebraska.*

**LEVEL OF CARE (LOC):** General category that includes several similar types of services.  
**Substance Abuse Services:** The specific service name that more specifically identifies the type of actual substance abuse service a consumer will receive.  
**Childrent/Youth:** Age 18 and below (note that Medicaid SA services apply for ages 21 and below).

**NOTE:** Not all of these services are available in Nebraska; some services may be available in some areas but not in others. This service array is intended to be a balanced array of substance abuse services that could meet various needs at different levels of severity.

### **LOC: EMERGENCY SERVICES**

#### **(very short term, unscheduled service availability in time of crisis in a variety of settings)**

<b>Crisis Phone Line</b>	Clinician on-call for early intervention/screening/referral; available 24/7.
<b>Mobile Crisis or Crisis Response Team</b>	A two-member team that offers on-site crisis stabilization, SA and MH screening usually at the crisis location, brief interventions to stabilize the crisis, and referrals for SA Crisis Respite and thorough SA evaluation; available 24/7; includes access to a LADC.
<b>Emergency Crisis Stabilization</b>	Supportive services; therapy, brief SA assessment, and coordination of svcs to help a child and/or family to alleviate a crisis and facilitate involvement in ongoing services; services may be provided in a variety of settings (i.e. residential or non-residential, dependent on severity of crisis).
<b>SA Emergency Shelter or SA Respite</b>	Residential or home based service for a short term placement of a youth or child in a substance abuse crisis; program has capability to supervise alcohol/drug social setting detoxification (non-medical); length of stay varies by legal status, but emphasis is short term (less than 14 days); 24/7 availability of on-site clinically managed and monitored services; medically stable; limited nursing coverage.
<b>Medical Detox</b>	24-hr medically supervised alcohol/drug detoxification where severe medical issues are involved; 24/7; medical staff coverage.

Nebraska Standardized Model for  
Assessing Substance Abusing Offenders

As of January 1, 2005

"JUVENILE OFFENDER  
Levels of Care and Services"

**LOG: ASSESSMENT SERVICES**  
**(screening or evaluation tools used to determine the level of a SA problem & make appropriate service referral; generally provided in a non-residential setting)**

Screening	General preliminary screening by provider to identify a substance abuse problem and refer for a complete SA evaluation and early intervention or treatment; includes a screening for mental health and gambling issues. <u>For justice referrals, the Simple Screening Instrument (SSI) that indicates the need for a further evaluation is completed by the criminal justice system and is sent to the SA provider.</u>
Emergency SA valuation	SA evaluation needed on an urgent and unscheduled basis; a provider is available within 24 hours to do a complete evaluation; <u>all evaluations completed for justice clients must be completed by a clinician licensed by the State of Nebraska to assess and treat substance abuse problems and who has completed the Standardized Model requirements, and the state approved CASI training and the criminal justice behaviors/thinking training; available from any licensed SA service provider. Evaluation Tool Required: Comprehensive Adolescent Severity Inventory (CASI); Approved State Reporting Format: SA Evaluation results are required to be provided in a state approved format only.</u>
SA Evaluation	SA evaluation <u>for justice clients must be completed by a clinician licensed by the State of Nebraska to assess and treat substance abuse problems and who has completed the Standardized Model requirements, and the state approved CASI training and the criminal justice behaviors/thinking training; available at any state approved SA service provider. Evaluation Tool Required: Comprehensive Adolescent Severity Inventory (CASI); Approved State Reporting Format: SA Evaluation results are required to be provided in a state approved reporting format only.</u>

**LOG: NON-RESIDENTIAL SERVICES**  
**(least intensive services based on clinical need offered in a variety of community settings; youth/child lives independently with family, guardian, relatives, or other).**

**NON-RESIDENTIAL SERVICES: A range of services for youth at risk of developing or who have substance abuse problems, specific functional deficits, problems with intoxication or withdrawal, but few biomedical complications. Youth may have significant deficits in the areas of readiness to change, relapse, continued use or continued problem potential or recovery environment and thus is in need of interventions directed by addiction specialists rather than medical or psychiatric personnel in a variety of non residential settings. Level 1 is the most intensive and Level 5 is the least intensive service level of care.**

Lv 5	Prevention and Education Education and other activities designed to prevent abusing substances.
Lv 5	Intervention Intervention counseling and education for persons experimenting or currently using substances but who are NOT abusing or dependent; staff supervised EDUCATION programs are very structured with a specific outcome for the client; LOS varies (i.e., minimally one staff supervised 6 or 8 hr class; other options might include eight one-hour sessions, 3-4 four-hour sessions, or other); includes support group or self help referrals.
Lv 5	Care Monitoring SAIMH Monitoring service designed for youth eligible under the definition for Community Support Substance Abuse, who have made significant progress in recovery and stable community living, or for those youth unwilling to accept the more intensive and rehabilitative community support service; this service monitors youth progress in community living, provides crisis/relapse intervention/prevention as needed, provides oversight and follow-up functions as identified in the youth's monitoring plan (i.e., services, appointments, reminders), and intervenes to protect current gains and prevent losses or decompensation/relapse; contact with youth as needed.
Lv 4	Outpatient Counseling Individual and/or group counseling/therapy by a licensed addiction specialist for a variety of substance use disorders which disrupt a client's life; treatment focus is on permanent change of behaviors and modifying thought patterns, coping with problems, improving functioning, and other services to achieve successful outcomes and prevent relapse; LOS varies depending on individual illness and response to treatment (i.e., may average 10-12 sessions at 1-4 hrs per week but treatment frequencies and duration will vary); includes brief therapy model (3-5 sessions); group therapy sessions include approx 3-8 persons; family counseling is included.
Community Support	Support for a children and youth with chemical dependency, habitual use/abuse, and functional deficits; 1-1 staff to client support in school, residence or other non-office location to ensure child's focus on rehabilitating his/her social and relationship skills; aiding the child in using appropriate coping skills; child, guardian, and family relationship building; relapse and recovery mgmt and skill teaching; provides client advocacy; assistance with schooling, housing, accessing transportation, and a variety of other case management activities; ensure attendance at medical appointments or SA non-residential treatment services; coordination of a care/case plan and services; 24/7 on call availability of community support worker, often provided concurrently with another SA non-residential service.
Lv 2	Intensive Outpatient Counseling Intensive group and individual therapy and counseling for persons with substance abuse disorders or chemical dependence; provide essential education and treatment counseling components while allowing clients to apply new skills within real world environments; counseling provided by a licensed addiction specialist; offered in day or evening, before or after work or school; more intensive than Outpatient. Therapy and less intensive than partial care; service includes a combination of group sessions 3-5 times/week plus individual sessions 1-3 hrs/week; total services to the client average 10-15 hours per week; hours per week are tapered to a prescribed schedule or client need as the client transitions to the less intensive Outpatient Therapy or other service; LOS varies with individual response to treatment but the intensity of the service averages 5-6 weeks in duration.
Lv 1	Partial Care Very intensive day treatment program by licensed addiction specialists under supervision for clients with substance abuse disorders or chemical dependence problems; medical backup; includes individual and group counseling; medication monitoring services; services may occur during school hours, but education must be available through other resources; client needs are of higher intensity need than Intensive Outpatient; services are provided 5 days per week at 6-10 hours daily including minimum of 4 hrs daily of primary SA treatment; LOS varies but averages 5-6 weeks; highest intensity, non-residential service.

**LOC: RESIDENTIAL SERVICES**  
**(treatment services provided in a 24 hr community based residential setting)**

*CLINICALLY MANAGED RESIDENTIAL SERVICES: An array of residential services for youth who need a safe living environment to develop recovery skills; have specific functional deficits; minimal problems with intoxication or withdrawal and few biomedical complications; youth may have significant deficits in the areas of readiness to change, relapse, continued use or continued problem potential and recovery environment and thus is in need of interventions directed by addiction specialists rather than medical or psychiatric personnel. Level 1 is the most intensive and Level 3 is the least intensive service level of care.*

Lv 3 SA Group Home	CLINICALLY MANAGED, LOW INTENSITY: Non-medical transitional residential program of substance abuse treatment for youth who are transitioning from more intensive treatment to family/independent living; structured living environment and semi-structured activities designed to develop/support recovery living and relapse prevention skills; maintaining the skills necessary for a life free from substance abuse outside of residential treatment; service has ability to arrange for services or support/coordinate access to school, work, concurrent emotional/behavioral/other treatment activities; staffing must include LADC; treatment plan must include relapse prevention planning (crisis). LOS varies but averages 3 - 6 months.
Lv 2 Therapeutic Community or SA Therapeutic Group Home	CLINICALLY MANAGED, MEDIUM INTENSITY: Non-medical residential program of substance abuse treatment for youth with chronic substance use, repeated relapse &/or resistance to treatment whose substance use recovery efforts are effected by emotional, behavioral or cognitive problems; 24 hour structured therapy to promote sustained focus on recovery tasks; program relies on a treatment community or milieu as the agent of change for acquiring recovery and basic life skills; skills are built through a longer term, highly structured set of peer oriented activities; services include individual & group counseling/therapy, relapse prevention (crisis), education, vocational & skill building; treatment goals include motivation to change, anger management, conflict resolution, values clarification & limit setting; program facilitates integration into the community; treatment services are directed by addiction specialists and access to medical/other consultation; program is staff secure & has ability to arrange for services or support/coordinate access to school, work; LOS varies from 6 -18 months. TC or SA-TGH programs specialize in serving youth in the justice system, many with conduct or personal
Lv 2 SA Extended Residential or SA Residential Treatment Center	CLINICALLY MANAGED, MEDIUM-HIGH INTENSITY: Non-medical longer term, medium intensity residential service for adolescents who are chemically dependent and who are at high risk for relapse &/or potential harm to self or others; clients have significant deficits in ability to perform activities of daily living &/or cognitive deficits; skills training emphasizes impulsive behavior change & other behavior deficits; service may be combined for chemically dependent youth transitioning from Short Term Res who need longer term structured treatment; LOS ranges from 4 - 24 months; service has capability to address mental health issues; staffing includes LADCs; program is staff secure.
Lv 1 Short Term Residential	CLINICALLY MANAGED, HIGH INTENSITY: Enhanced non-medical residential program of primary substance abuse treatment for youth with an entrenched dependency pattern of usage and an inability to remain drug free outside of a 24 hour care; highly structured, intensive, shorter term comprehensive addiction recovery service including group counseling/therapy and relapse prevention; that is of shorter duration but at a higher intensity level; access to medical evaluation and consultation available 24/7; significant emphasis is on readiness to change and treatment engagement; experience induces the adolescent into a peer group; promote coordination of the multiple systems surrounding the youth and implement strategies for ongoing engagement in treatment; physician monitoring and nursing care observation available as needed; addiction treatment by licensed addiction specialists/LADCs; interdisciplinary staff including LMHP, psychologists as needed; administer/monitor medications; program is staff secure. LOS varies but averages 30 - 45 days.

## SUBSTANCE ABUSE SERVICES FOR ADULT CRIMINAL JUSTICE CLIENTS

*The terms listed are for use by all substance abuse providers and criminal justice entities in referring  
criminal justice system clients to substance abuse services provided in Nebraska.*

LEVEL OF CARE (LOC): General category that includes several similar types of services.

Substance Abuse Services: The specific service name that more specifically identifies the type of actual substance abuse service a client will receive.

Adult: Age 19 and above.

NOTE: Not all of these services are available in Nebraska, some services may be available in some areas but not in others. This service array is intended to be a balanced array of substance abuse services that could meet various needs at different levels of severity.

### LOC: EMERGENCY SERVICES

(very short term, unscheduled service availability in time of crisis in a variety of settings)

Crisis Phone Line	Clinician on-call for early intervention/screening/referral; available 24/7.
Mobile Crisis / Crisis Response Teams	Teams of professional and/or paraprofessionals that offer on-site screening usually in the home; brief interventions to stabilize the crisis and refer for SA Crisis/Crisis Respite or other appropriate service; and a thorough SA evaluation; available 24/7; includes access to a LADC.
SA Emergency Shelter or SA Respite	Residential or home based service for a short term placement of a individual in a substance abuse crisis; most clients are not intoxicated but program has capability to supervise alcohol/drug social setting detoxification (non-medical); length of stay varies by legal status; but emphasis is very short term (less than 7 days); 24/7 availability of on-site clinically managed and monitored services as needed; client is medically stable; very limited nursing coverage/can be on-call.
Emergency Community Support	Support service for persons once a MH or SA crisis has been stabilized; 1-1 staff to client work to ensure client focuses on relapse and recovery mgmt, and skill teaching, assistance with housing, ensure attendance at medical appointments or SA non-residential treatment services; coordination of a care plan; coordinating services; transportation; 24/7 on call; service is very short term; often provided concurrently with another SA service to ensure client stays connected with services; LOS varies but not longer than 30-90 days.
Emergency Stabilization & Treatment	Service to stabilize acute withdrawal and/or intoxication symptoms and return person to independent living in the community or engage & refer the person to a recovery program; supportive services therapy; brief SA assessment; primary clinical treatment for substance abuse disorder implemented, and coordination of services to help the client alleviate a substance abuse crisis; LOS varies but not longer than 14 days; on site clinically managed and monitored; medically stable; limited nursing coverage.
Social Detox	Residential service for the short term placement for an adult needing alcohol/drug detoxification (non-medical); length of stay varies but usually not more than 5-7 days depending on the drugs involved; 24/7 on-site availability of clinically managed and monitored; medically stable; limited nursing coverage.
Medical Detox	24-hr medically supervised alcohol/drug detoxification where severe medical issues are involved; 24/7; medical staff coverage.
Emergency Protective Custody (EPC)	Crisis Center services provided in a medical facility to stabilize a person in psychiatric and/or substance abuse crisis; clinically managed detox with legal hold; 24/7; admission on involuntary basis by EPC legal hold because of alleged dangerousness to self or others; generally 7 day or less stay to stabilize; begin emergency treatment & referral to most appropriate service to meet client's need; LOS not longer than 7 days; or if the client is on an EPC hold may continue to a commitment hearing.
Civil Protective Custody (CPC)	Residential services; 24 hr legal hold to keep someone involuntarily in a social detox service.



Nebraska Standardized Model for  
Assessing Substance Abusing Offenders

As of January 1, 2005

"ADULT OFFENDER  
Levels of Care and Services"

**LOG: ASSESSMENT SERVICES**

**(Screening and evaluation tools used to determine the level of a SA problem & make appropriate service)**

Screening ..... General screening by provider to identify a substance abuse problem and refer for a complete SA assessment, early intervention or treatment; includes screen for mental health and gambling issues. Criminal justice referrals will have had an SSI screen done by criminal justice system staff.

Emergency SA Evaluation ..... SA evaluation needed on an unscheduled basis and completed within 24 hours of request; all evaluations completed for justice clients must be completed by a clinician licensed by the State of Nebraska to assess and treat substance abuse problems and who has completed the Standardized Model requirements and state approved ASI and criminal justice behavior/thinking training; available from any state licensed SA service provider; Evaluation/Assessment Tool Required: Addiction Severity Index (ASI); Approved State Reporting Format: SA Evaluation/Assessment results are required to be provided in the state approved reporting format only.

SA Evaluation ..... All SA evaluations completed for justice clients must be completed by a clinician licensed by the State of Nebraska to assess and treat substance abuse problems and who has completed the Standardized Model requirements and state approved ASI and criminal justice behavior/thinking training; available from any state licensed SA service provider; Evaluation/Assessment Tool Required: Addiction Severity Index (ASI); Approved State Reporting Format: SA Evaluation/Assessment results are required to be provided in the state approved reporting format only.

**LOG: NON-RESIDENTIAL SERVICES**

**(least intensive services based on clinical need offered in a variety of community settings; client lives independently)**

**NOTE: Persons MUST be psychiatrically and medically stable to be admitted to the non-residential services.**  
*NON-RESIDENTIAL SERVICES: A range of services for persons at risk of developing, or who have substance abuse problems, specific functional deficits, problems with intoxication or withdrawal, but few biomedical complications. Clients may have significant deficits in the areas of readiness to change, relapse, continued use or continued problem potential or recovery environment, and thus is in need of interventions directed by licensed addiction specialists rather than medical or psychiatric personnel in a variety of non residential settings. Level 1 is the most intensive and Level 5 is the least intensive service in this level of care.*

LV 5 Prevention and Education	Education and other activities designed to prevent abusing substances. Intervention counseling and education for persons experimenting or currently using substances but who are NOT abusing or dependent; staff supervised EDUCATION programs are very structured with a specific outcome for the client; LOS varies (i.e., minimally one staff supervised 6 or 8 hr class; other options might include eight one-hour sessions, 3-4 four-hour sessions, or other); includes support group or self help referrals.
LV 5 Methadone Maintenance	Administration of methadone medication to enable an opiate addicted person to be free of heroin; methadone replacement for heroin is a lifetime maintenance program; counseling therapy interventions are included in the service.
LV 5 Care Monitoring SAMH	Monitoring service designed for persons eligible under the definition for Community Support Mental Health or Substance Abuse, who have made significant progress in recovery and stable community living, or for those clients unwilling to accept the more intensive and rehabilitative community support service; this service monitors a client's progress in community living, provides crisis/relapse intervention/prevention as needed, provides oversight and follow-up functions as identified in the client's monitoring plan (i.e., services, appointments, reminders), and intervenes to protect current gains and prevent losses or decompensation/relapse; contact with client as needed.
LV 4 Outpatient Counseling	Individual and/or group counseling/therapy by a clinician licensed in Nebraska to treat substance use disorders that disrupt a client's life; treatment focus is on changing behaviors, modifying thought patterns, coping with problems, improving functioning, and other services to achieve successful outcomes and prevent relapse. LOS varies depending on individual illness and response to treatment (i.e., may average 10-12 sessions at 1-4 hrs per week but treatment frequencies and duration will vary); includes brief therapy model (3-5 sessions); group therapy sessions include approx 3-8 persons; family counseling is included.
LV 3 Community Support	Support for a persons with chemical dependency and functional deficits; 1-1 staff to client support (face to face) in residence or other non-office location to ensure client focus on rehabilitating his/her social and relationship skills; aiding client in use of appropriate coping skills; active relapse and recovery might and skill teaching; provides client advocacy; assistance with housing, accessing transportation, and a variety of other case management activities; ensure attendance at medical appointments or SA non-residential treatment; coordination of a care plan and services; 24/7 on call availability of community support worker; often provided concurrently with another non-residential SA non-residential service.
LV 2 Intensive Outpatient Counseling	Intensive group and individual counseling for persons with substance abuse disorders or chemical dependence; counseling provided by a clinician licensed in Nebraska to treat substance abuse disorders; offered in day or evening, before or after work, more intensive than Outpatient Therapy and less intensive than Partial Care; service includes a combination of group sessions 3-5 times/week plus individual sessions 1-3 hrs/week; total services to the client averages 10-15 hours per week; hours per week are tapered to a prescribed schedule or client need as the client transitions to the less intensive Outpatient Therapy or other service; LOS varies with individual response to treatment but the intensity of the service averages 5-6 weeks in duration.
LV 1 Partial Care	Very intensive day treatment program by clinician licensed in Nebraska to treat substance abuse disorders for clients with substance abuse or dependence problems; medical backup; includes individual and group counseling and medication monitoring services; services are provided 5 days per week at 6-8 hours of daily including a minimum of 4 hrs daily of primary SA treatment; LOS varies but average is 5-6 weeks; highest intensity, non-residential service.

**LOC: RESIDENTIAL SERVICES**

**(treatment services provided in a 24 hr community based residential setting)**

**NOTE: Persons MUST be psychiatrically and medically stable to be admitted to the residential services.**

*CLINICALLY MANAGED RESIDENTIAL SERVICES: An array of residential services for persons who need a structured, safe living environment to develop recovery skills; have specific functional deficits; minimal problems with intoxication or withdrawal and few biomedical complications; client may have significant deficits in the areas of readiness to change, relapse continued use or continued problem potential or recovery environment, and thus is in need of interventions directed by addiction specialists rather than medical or psychiatric personnel. Level 1 is the most intensive and Level 3 is the least intensive service in this level of care.*

**LV 3 Halfway House**

*CLINICALLY MANAGED, LOW INTENSITY: Non-medical transitional residential program for persons who as with chemical dependency or substance abuse disorder who are successfully moving from more intensive treatment to independent living and seeking to re-integrate into the community; structured living environment and semi-structured activities designed to develop recovery living and relapse prevention skills; assistance in maintaining or accessing employment and developing the skills necessary for an independent life free from substance abuse outside of residential treatment; service has capacity to address mental health issues; counseling is provided by a clinician licensed in Nebraska to treat substance abuse disorders; LOS varies but is usually not longer than 3-6 months.*

**LV 2 Therapeutic Community**

*CLINICALLY MANAGED, MEDIUM INTENSITY: Non-medical transitional residential treatment for persons with chemical dependency; treatment includes psychosocial skill building through a longer term, highly structured set of peer oriented activities incorporating defined phases of progress; services include individual and group counseling/therapy, relapse prevention, education, vocational and skill building; service has the capacity to address mental health issues; counseling is provided by a clinician licensed in Nebraska to treat substance abuse disorders; program is staff secure; LOS varies but is usually not longer than 10-18 months.*

**LV 2 Dual Residential (MHSA)**

*CLINICALLY MANAGED, MEDIUM-HIGH INTENSITY: Non-medical, simultaneous, integrated substance abuse and mental health residential treatment for persons with co-occurring primary chemical dependence AND primary major mental illness (schizophrenia, bi-polar, major depression, major psychosis); structured, supervised service includes addiction recovery counseling & activities, medication management and education, and psychosocial rehabilitation services; focus on mental functioning, not psychiatric care; staff include dually credentialed clinicians (LADC/LMHP) and/or both LMHPs and LADGs; LOS varies but is usually not longer than 4-8 months.*

**LV 2 Extended Residential**

*CLINICALLY MANAGED, MEDIUM-HIGH INTENSITY: Non-medical longer term, medium intensity residential service for chronic chemically dependent persons who are at a high risk for relapse and/or potential harm to self or others; clients have significant deficits in ability to perform activities of daily living and/or cognitive deficits; counseling is provided by a clinician licensed in Nebraska to treat substance abuse disorders; program is staff secure; LOS ranges from 8-24 months; service has capability to address mental health issues.*

**LV 1 Short Term Residential**

*CLINICALLY MANAGED, HIGH INTENSITY: Non-medical residential community treatment for persons with a primary chemical dependency, an entrenched dependency pattern of usage and an inability to remain drug-free outside of a 24 hr care; highly structured, intensive, shorter term comprehensive addiction recovery service including individual, group counseling/therapy and relapse prevention; medication monitoring; service has the capacity to address mental health issues; counseling is provided by a clinician licensed in Nebraska to treat substance abuse disorders; program is staff secure; LOS varies but is usually not longer than 14-30 days.*

**Appendix B: Attendance List for Best Practice Roundtable  
Discussions**

**Attendance at the Bridgeport  
August 29, 2005, Best Practices Meeting**

Orpha Peterson	Panhandle Community Services
Bonnie Lockhart	PMHC
Dan Witko	District 10 Probation
Lonnie Folchert	ISP Region B
Juanita Rodriguez	Addiction Counseling/Consultation Services
Barb Jolliffe	Panhandle Substance Abuse Counseling
Gary Cotton	PMHC
Don Douglas	ISP Region A
Melody Lisin	PPHD
Sandy Roes	WCHR
Pat Anderson	HHSS
Michelle Chance	PMHC-Community Services
Glenda Luay	Human Services, Inc.
Colleen Houd	Human Services, Inc.
Doug Watson	District 9 Probation
Trish Davison	GCHS
Russ Allie	GCHS
Pamela Richardson	PMCH Region I
Katherine McGowen	PMHC
Jim Young	SCSI
Jane Morgan	NEPSAC
Trina Janis	NEPSAC
Sandra Babin	PMHC Region I
Kim Engel	PPHD

## Attendance at the Lincoln September 16, 2005, Best Practices Meeting

Ellen Brokofsky	Probation/Sarpy, Cass, Otoe
Carroll Brown	Probation/Hall, Howard
Pamela Lewis	Region E ISP
Therese Voboril	Region D ISP
Rich Chisholm	Dist. 3 Probation
Bob Horton	Dist. 7 Probation
Ron Broich	Dist. 4 Probation
Tim Perry	Dist. 6 Probation
Kent Lilly	Dist. 17 Probation
Dick Brown	Dist. 2 Probation
Tom Rathbun	Lancaster Co. Drug Ct.
Christina Lyons	Dist. 12 Probation
Creston Ashburn	Dist. 5 Probation
Pam Butler	Northeast NE Drug Ct.
Judi Brenamow	Douglas County Drug Ct.
Tim Sprakel	Region E ISP
Howard Kensinger	Supreme Court
Derek Vaughn	Douglas County Attorney's Office
Beverly Lueshen	Norfolk Regional Center
Susan Krome	NAMI-NE
Connie Barnes	Behavioral Health Specialists
Cindy Oltmer	Behavioral Health Specialists
Julie Hippen	Lutheran Family Services
Kent Kretz	The Link, Inc.
Connie Stuckey	Cornhusker Place
Shawn Schutz-Long	Cornhusker Place
Melva Denholm	Alegent Health
Jim Swallow	The Link, Inc.
John Wells	BHS
Rita Burke	n/a
Lewis Burke	Heartland Counseling
Brad Shay	Bryan LGH Independence Center
Scott Halverson	Alegent Health
Mike Ryan	Valley Hope
Mike Phillips	Catholic Charities
Ida-Marie Hebrant	Catholic Charities
Marti Wilson	Lutheran Family Services
Kathie Repp	HHSS R&L
Jeff Beaty	Legislature
Jim McKenzie	Corrections
Jessica Watson	Legislature
Doug Koeberack	Legislature
Julie Rogers	Community Corrections Council

***Appendix C: Tables on State SA Spending for Nebraska and 6 Surrounding States***

	State Spending by Category (\$000)	Spending Related to Substance Abuse			
		Amount	%	% S/Bdgt	Per Capita
<b>Affected Programs:</b>	<b>1,967,751.16</b>	<b>264,665.40</b>		<b>7.4</b>	<b>\$159.82</b>
<b>Justice</b>	<b>87514</b>	<b>66440.8</b>		<b>1.9</b>	<b>40.12</b>
Adult Corrections	73451	57624.6	78.5		
Juvenile Justice	14063	8816.1	62.7		
Judiciary (Courts)	NA	NA	NA		
<b>Education (Elem/Secondary)</b>	<b>594625</b>	<b>51537.4</b>	<b>8.7</b>	<b>1.5</b>	<b>31.12</b>
<b>Health</b>	<b>308145</b>	<b>72813.4</b>	<b>23.6</b>	<b>2.1</b>	<b>43.97</b>
<b>Child/Family Assistance</b>	<b>64297</b>	<b>35612.1</b>		<b>1</b>	<b>21.5</b>
Child Welfare	51489	34284.9	66.6		
Income Assistance	12808	1327.2	10.4		
<b>Mental Health/Dev Disabled</b>	<b>112833</b>	<b>29925.8</b>		<b>0.8</b>	<b>18.07</b>
Mental Health	53286	25076.4	47.1		
Development Disabled	59547	4849.4	8.1		
<b>Public Safety</b>	<b>23053</b>	<b>6343.6</b>	<b>27.5</b>	<b>0.2</b>	<b>3.83</b>
<b>State Workforce</b>	<b>777284.6</b>	<b>1992.5</b>	<b>0.3</b>	<b>0.1</b>	<b>1.2</b>
<b>Regulation/Compliance:</b>	<b>17492</b>	<b>17492</b>	<b>100</b>	<b>0.5</b>	<b>10.56</b>
Licensing & Control	720	720			
Collection of Taxes	16772	16772			
<b>Prevention, Treatment, Resrch:</b>	<b>8945.7</b>	<b>8945.7</b>	<b>100</b>	<b>0.3</b>	<b>5.4</b>
Prevention	NA	NA			
Treatment	8945.7	8945.7			
Research	0	0			
<b>Total</b>		<b>\$291,103.10</b>		<b>8.2</b>	<b>\$175.78</b>

\*Nebraska state budget data compiled by National Center on Addiction and Substance Abuse (CASA) at Columbia University (2001)

	State Spending by Category (\$000)	Spending Related to Substance Abuse			
		Amount	%	% S/Bdgt	Per Capita
<b>Affected Programs:</b>	<b>\$5,708,737</b>	<b>\$845,374.50</b>		<b>12.4</b>	<b>\$217.25</b>
<b>Justice</b>	<b>462593</b>	<b>379297.9</b>		<b>5.6</b>	<b>97.47</b>
Adult Corrections	370000	303932.3	82.1		
Juvenile Justice	NA	NA	NA		
Judiciary (Courts)	92593	75365.7	81.4		
<b>Education (Elem/Secondary)</b>	<b>1884000</b>	<b>201704.5</b>	<b>10.7</b>	<b>3</b>	<b>51.83</b>
<b>Health</b>	<b>827000</b>	<b>201797.4</b>	<b>24.4</b>	<b>3</b>	<b>51.86</b>
<b>Child/Family Assistance</b>	<b>91670</b>	<b>8434.2</b>		<b>0.1</b>	<b>2.17</b>
Child Welfare	135	96.6	71.6		
Income Assistance	91535	8337.6	9.1		
<b>Mental Health/Dev Disabled</b>	<b>124652</b>	<b>46042.6</b>		<b>0.7</b>	<b>11.83</b>
Mental Health	78663	41612.5	52.9		
Development Disabled	45989	4430.1	9.6		
<b>Public Safety**</b>	<b>651</b>	<b>595.1</b>	<b>91.4</b>	<b>&lt;.01</b>	<b>0.15</b>
<b>State Workforce</b>	<b>2318171</b>	<b>7502.7</b>	<b>0.3</b>	<b>0.1</b>	<b>1.93</b>
<b>Regulation/Compliance:</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
Licensing & Control	NA				
Collection of Taxes	NA				
<b>Prevention, Treatment, Resrch:</b>	<b>548</b>	<b>548</b>	<b>100</b>	<b>&lt;.01</b>	<b>0.14</b>
Prevention	340	340			
Treatment	208	208			
Research	0	0			
<b>Total</b>		<b>\$845,922.50</b>		<b>12.4</b>	<b>\$217.39</b>

\*Colorado state budget data compiled by National Center on Addiction and Substance Abuse (CASA) at Columbia University (2001)

\*\*Colorado did not report any spending for highway safety or local law enforcement



	State Spending by Category (\$000)	Spending Related to Substance Abuse			
		Amount	%	% S/Bdgt	Per Capita
<b>Affected Programs:</b>	<b>\$3,678,682.40</b>	<b>\$720,839.40</b>		<b>9.2</b>	<b>\$252.54</b>
<b>Justice</b>	<b>360526</b>	<b>289077.2</b>		<b>3.7</b>	<b>101.27</b>
Adult Corrections	222200	179754.3	80.9		
Juvenile Justice	36845	24373.5	66.2		
Judiciary (Courts)	101481	84949.3	83.7		
<b>Education (Elem/Secondary)</b>	<b>1714014</b>	<b>170379.3</b>	<b>9.9</b>	<b>2.2</b>	<b>59.69</b>
<b>Health</b>	<b>404148</b>	<b>91781.4</b>	<b>22.7</b>	<b>1.2</b>	<b>32.15</b>
<b>Child/Family Assistance</b>	<b>190824</b>	<b>106105.1</b>		<b>1.4</b>	<b>37.17</b>
Child Welfare	143892	100523.4	69.9		
Income Assistance	46932	5581.7	11.9		
<b>Mental Health/Dev Disabled</b>	<b>165066</b>	<b>50616.8</b>			
Mental Health	85586	43506.8	50.8		
Development Disabled	79480	7110.1	8.9		
<b>Public Safety</b>	<b>41271</b>	<b>10487.1</b>	<b>25.4</b>	<b>0.1</b>	<b>3.67</b>
<b>State Workforce</b>	<b>802833.4</b>	<b>2392.6</b>	<b>0.3</b>	<b>&lt;.01</b>	<b>0.84</b>
<b>Regulation/Compliance:</b>	<b>1589</b>	<b>1589</b>	<b>100</b>	<b>&lt;.01</b>	<b>0.56</b>
Licensing & Control	1589	1589			
Collection of Taxes	NA	NA			
<b>Prevention, Treatment, Resrch:</b>	<b>11428.8</b>	<b>11428.8</b>	<b>100</b>	<b>0.2</b>	<b>4</b>
Prevention	1654	1654			
Treatment	9774.8	9774.8			
Research	0	0			
<b>Total</b>		<b>\$733,857.20</b>		<b>9.4</b>	<b>\$257.10</b>

\*Iowa state budget data compiled by National Center on Addiction and Substance Abuse (CASA) at Columbia University (2001)

	State Spending by Category (\$000)	Spending Related to Substance Abuse			
		Amount	%	% S/Bdgt	Per Capita
<b>Affected Programs:</b>	<b>\$4,982,580.80</b>	<b>\$575,085.30</b>		<b>9.3</b>	<b>\$219.81</b>
<b>Justice</b>	<b>248616.2</b>	<b>185153.2</b>		<b>3</b>	<b>70.77</b>
Adult Corrections	190233	148758.3	78.2		
Juvenile Justice	58383.2	36394.9	62.3		
Judiciary (Courts)	NA	NA	NA		
<b>Education (Elem/Secondary)</b>	<b>1885227.8</b>	<b>161167</b>	<b>8.5</b>	<b>2.6</b>	<b>61.6</b>
<b>Health</b>	<b>372045</b>	<b>88488.7</b>	<b>23.8</b>	<b>1.4</b>	<b>33.82</b>
<b>Child/Family Assistance</b>	<b>153999</b>	<b>67672.9</b>		<b>1.1</b>	<b>25.87</b>
Child Welfare	84100	55717.6	66.3		
Income Assistance	69899	11955.3	17.1		
<b>Mental Health/Dev Disabled</b>	<b>252113</b>	<b>61207.5</b>		<b>1</b>	<b>23.39</b>
Mental Health	107703	50281.9	46.7		
Development Disabled	144410	10925.6	7.6		
<b>Public Safety</b>	<b>40600</b>	<b>6269.9</b>	<b>15.4</b>	<b>0.1</b>	<b>2.4</b>
<b>State Workforce</b>	<b>2029979.8</b>	<b>5126.1</b>	<b>0.3</b>	<b>0.1</b>	<b>1.96</b>
<b>Regulation/Compliance:</b>	<b>1073</b>	<b>1073</b>	<b>100</b>	<b>&lt;.01</b>	<b>0.41</b>
Licensing & Control	968	968			
Collection of Taxes	105	105			
<b>Prevention, Treatment, Resrch:</b>	<b>8376.2</b>	<b>8376.2</b>	<b>100</b>	<b>0.1</b>	<b>3.2</b>
Prevention	1512.5	1512.5			
Treatment	6863.6	6863.6			
Research	0	0			
<b>Total</b>		<b>\$584534.4</b>		<b>9.4</b>	<b>\$223.42</b>

\*Kansas state budget data compiled by National Center on Addiction and Substance Abuse (CASA) at Columbia University (2001)

	State Spending by Category (\$000)		Spending Related to Substance Abuse			
	Amount	%	Amount	%	% S/Bdgt	Per Capita
<b>Affected Programs:</b>	<b>\$6,928,833.90</b>		<b>\$1,325,790.90</b>		<b>12.5</b>	<b>\$245.19</b>
<b>Justice</b>	<b>864448.3</b>		<b>699253.3</b>		<b>6.6</b>	<b>129.32</b>
Adult Corrections	750662.2		612361.1	81.6		
Juvenile Justice	52649.9		35349.7	67.1		
Judiciary (Courts)	61136.2		51542.5	84.3		
<b>Education (Elem/Secondary)</b>	<b>3062755.2</b>		<b>316876.2</b>	<b>10.3</b>	<b>3</b>	<b>58.6</b>
<b>Health</b>	<b>28603.2</b>		<b>8903</b>	<b>31.1</b>	<b>0.1</b>	<b>1.65</b>
<b>Child/Family Assistance</b>	<b>219745.6</b>		<b>67164.7</b>		<b>0.6</b>	<b>12.42</b>
Child Welfare	59620.9		42205.3	70.8		
Income Assistance	160124.7		24959.4	15.6		
<b>Mental Health/Dev Disabled</b>	<b>515624.8</b>		<b>201864.5</b>		<b>1.9</b>	<b>37.33</b>
Mental Health	358411.5		186180.9	51.9		
Development Disabled	157213.3		15683.6	10		
<b>Public Safety</b>	<b>144887</b>		<b>25209.3</b>	<b>17.4</b>	<b>0.2</b>	<b>4.66</b>
<b>State Workforce</b>	<b>2092769.8</b>		<b>6519.9</b>	<b>0.3</b>	<b>0.1</b>	<b>1.21</b>
<b>Regulation/Compliance:</b>	<b>4536.8</b>		<b>4536.8</b>	<b>100</b>	<b>&lt;.01</b>	<b>0.84</b>
Licensing & Control	4150		4150			
Collection of Taxes	386.7		386.7			
<b>Prevention, Treatment, Resrch:</b>	<b>41670.9</b>		<b>41670.9</b>	<b>100</b>	<b>0.4</b>	<b>7.71</b>
Prevention	NA		NA			
Treatment	41670.9		41670.9			
Research	0		0			
<b>Total</b>			<b>\$1,371,998.50</b>		<b>12.9</b>	<b>\$253.74</b>

\*Missouri state budget data compiled by National Center on Addiction and Substance Abuse (CASA) at Columbia University (2001)

	State Spending by Category (\$000)	Spending Related to Substance Abuse			
		Amount	%	% S/Bdgt	Per Capita
<b>Affected Programs:</b>	<b>\$680,795.60</b>	<b>\$125,216.40</b>		<b>10.6</b>	<b>\$171.33</b>
<b>Justice</b>	<b>57516</b>	<b>46021.6</b>		<b>3.9</b>	<b>62.97</b>
Adult Corrections	32992	27149.2	82.3		
Juvenile Justice	11693	7974.3	68.2		
Judiciary (Courts)	12831	10898.1	84.9		
<b>Education (Elem/Secondary)</b>	<b>265045.7</b>	<b>28631.2</b>	<b>10.8</b>	<b>2.4</b>	<b>39.17</b>
<b>Health</b>	<b>109080</b>	<b>26131.8</b>	<b>24</b>	<b>2.2</b>	<b>35.76</b>
<b>Child/Family Assistance</b>	<b>11395</b>	<b>4790.5</b>		<b>0.4</b>	<b>6.55</b>
Child Welfare	5403	3878.1	71.8		
Income Assistance	5992	912.4	15.2		
<b>Mental Health/Dev Disabled</b>	<b>50931.6</b>	<b>17318.2</b>		<b>1.5</b>	<b>23.7</b>
Mental Health	27549.2	14642.2	53.1		
Development Disabled	23382.4	2676	11.4		
<b>Public Safety</b>	<b>11164.7</b>	<b>1748.8</b>	<b>15.7</b>	<b>0.2</b>	<b>2.39</b>
<b>State Workforce</b>	<b>175662.6</b>	<b>574.2</b>	<b>0.3</b>	<b>0.1</b>	<b>0.79</b>
<b>Regulation/Compliance:</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
Licensing & Control	NA	NA			
Collection of Taxes	NA	NA			
<b>Prevention, Treatment, Resrch:</b>	<b>3768.6</b>	<b>3768.6</b>	<b>100</b>	<b>0.3</b>	<b>5.16</b>
Prevention	256.7	256.7			
Treatment	3511.9	3511.9			
Research	0	0			
<b>Total</b>		<b>\$128,985</b>		<b>10.9</b>	<b>\$176.49</b>

\*South Dakota state budget data compiled by National Center on Addiction and Substance Abuse (CASA) at Columbia University (2001)

	State Spending by Category (\$000)	Spending Related to Substance Abuse			
		Amount	%	% S/Bdgt	Per Capita
<b>Affected Programs:</b>	<b>\$830,172.40</b>	<b>\$111,296</b>		<b>7.5</b>	<b>\$231.85</b>
<b>Justice</b>	<b>56154</b>	<b>43531.3</b>		<b>2.9</b>	<b>90.68</b>
Adult Corrections	32127	26121.9	81.3		
Juvenile Justice	16109	10752.6	66.7		
Judiciary (Courts)	7918	6656.8	84.1		
<b>Education (Elem/Secondary)</b>	<b>326265</b>	<b>33223.3</b>	<b>10.2</b>	<b>2.2</b>	<b>69.21</b>
<b>Health</b>	<b>79228</b>	<b>18447.3</b>	<b>23.3</b>	<b>1.2</b>	<b>38.43</b>
<b>Child/Family Assistance</b>	<b>19697</b>	<b>8959.5</b>		<b>0.6</b>	<b>18.66</b>
Child Welfare	10025	7059.8	70.4		
Income Assistance	9672	1899.8	19.6		
<b>Mental Health/Dev Disabled</b>	<b>16227</b>	<b>3411.5</b>		<b>0.2</b>	<b>7.11</b>
Mental Health	4629	2384.1	51.5		
Development Disabled	11598	1027.4	8.9		
<b>Public Safety</b>	<b>12583</b>	<b>2743.5</b>	<b>21.8</b>	<b>0.2</b>	<b>5.72</b>
<b>State Workforce</b>	<b>320018.4</b>	<b>979.6</b>	<b>0.3</b>	<b>0.1</b>	<b>2.04</b>
<b>Regulation/Compliance:</b>	<b>1148</b>	<b>1148</b>	<b>100</b>	<b>0.1</b>	<b>2.39</b>
Licensing & Control	NA	NA			
Collection of Taxes	1148	1148			
<b>Prevention, Treatment, Resrch:</b>	<b>2790</b>	<b>2790</b>	<b>100</b>	<b>0.2</b>	<b>5.81</b>
Prevention	379	379			
Treatment	2411	2411			
Research	0	0			
<b>Total</b>		<b>\$115,234</b>		<b>7.8</b>	<b>\$240.06</b>

\*Wyoming state budget data compiled by National Center on Addiction and Substance Abuse (CASA) at Columbia University (2001)

***Appendix D. Drug Dependence-Abuse Estimates***

State/Regions	Population (12+) (Total Persons)	Alcohol [11.83% SAMSHA]	Any Illicit Drug [3.46%]	Alcohol or Illicit# [12.71%]
<b>Nebraska</b>	<b>1,419,450</b>	<b>167,921</b>	<b>49,113</b>	<b>180,412</b>
Male	694,156	82,119	24,018	88,227
Female	725,294	85,802	25,095	92,185
<b>Region 1</b>	<b>76,085</b>	<b>9,001</b>	<b>2,633</b>	<b>9,670</b>
Male	36,626	4,333	1,267	4,655
Female	39,459	4,668	1,365	5,015
<b>Region 2</b>	<b>85,206</b>	<b>10,080</b>	<b>2,948</b>	<b>10,830</b>
Male	41,860	4,952	1,448	5,320
Female	43,346	5,128	1,500	5,509
<b>Region 3</b>	<b>186,125</b>	<b>22,019</b>	<b>6,440</b>	<b>23,656</b>
Male	90,710	10,731	3,139	11,529
Female	95,415	11,288	3,301	12,127
<b>Region 4</b>	<b>178,553</b>	<b>21,123</b>	<b>6,178</b>	<b>22,694</b>
Male	87,983	10,408	3,044	11,183
Female	90,570	10,714	3,134	11,511
<b>Region 5</b>	<b>348,720</b>	<b>41,254</b>	<b>12,066</b>	<b>44,322</b>
Male	172,019	20,350	5,952	21,864
Female	176,701	20,904	6,114	22,459
<b>Region 6</b>	<b>544,761</b>	<b>64,445</b>	<b>18,849</b>	<b>69,239</b>
Male	264,958	31,345	9,168	33,676
Female	279,803	33,101	9,681	35,563

\*Estimates based on total populations 12 years of age and older according to 2000 U.S. Census

\*\* Estimates are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003). The percentages shown are the upper range of the .95 confidence level, results of which were more consistent with SAMSHA admissions data for 2003.

# Respondents to the survey questions may have indicated that they were both alcohol and illicit drug dependent/abusers, but such respondents were only counted once as alcohol OR illicit drug dependent/abusers. Alcohol only dependent/abusers are 9.47%, illicit drug only are .88% and both alcohol and illicit are 2.36% of the total of 12.71%.

<b>State/Regions</b>	<b>Population (12+)</b> (Total Persons)	<b>Stimulant Related</b> [3.46% x .666]
<b>Nebraska</b>	<b>1,419,450</b>	<b>32,709</b>
Male	694,156	15,996
Female	725,294	16,713
<b>Region 1</b>	<b>76,085</b>	<b>1,753</b>
Male	36,626	844
Female	39,459	909
<b>Region 2</b>	<b>85,206</b>	<b>1,963</b>
Male	41,860	965
Female	43,346	999
<b>Region 3</b>	<b>186,125</b>	<b>4,289</b>
Male	90,710	2,090
Female	95,415	2,199
<b>Region 4</b>	<b>178,553</b>	<b>4,115</b>
Male	87,983	2,027
Female	90,570	2,087
<b>Region 5</b>	<b>348,720</b>	<b>8,036</b>
Male	172,019	3,964
Female	176,701	4,072
<b>Region 6</b>	<b>544,761</b>	<b>12,553</b>
Male	264,958	6,106
Female	279,803	6,448

\*Estimates based on total populations 12 years of age and older according to 2000 U.S. Census

\*\* Estimates are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003). The percentages shown are the upper range of the .95 confidence level, results of which were more consistent with SAMSHA admissions data for 2003.

# Respondents to the survey questions may have indicated that they were both alcohol and illicit drug dependent/abusers, but such respondents were only counted once as alcohol OR illicit drug dependent/abusers. Alcohol only dependent/abusers are 9.47%, illicit drug only are .88% and both alcohol and illicit are 2.36% of the total of 12.71%.



<b>State/Regions</b>	<b>Population (12+)</b> (Total Persons)	<b>Meth/Amphetamine Related</b> [3.46% x .456]
<b>Nebraska</b>	<b>1,419,450</b>	<b>22,396</b>
Male	694,156	10,952
Female	725,294	11,443
<b>Region 1</b>	<b>76,085</b>	<b>1,200</b>
Male	36,626	578
Female	39,459	623
<b>Region 2</b>	<b>85,206</b>	<b>1,344</b>
Male	41,860	660
Female	43,346	684
<b>Region 3</b>	<b>186,125</b>	<b>2,937</b>
Male	90,710	1,431
Female	95,415	1,505
<b>Region 4</b>	<b>178,553</b>	<b>2,817</b>
Male	87,983	1,388
Female	90,570	1,429
<b>Region 5</b>	<b>348,720</b>	<b>5,502</b>
Male	172,019	2,714
Female	176,701	2,788
<b>Region 6</b>	<b>544,761</b>	<b>8,595</b>
Male	264,958	4,180
Female	279,803	4,415

\*Estimates based on total populations 12 years of age and older according to 2000 U.S. Census

\*\* Estimates are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003). The percentages shown are the upper range of the .95 confidence level, results of which were more consistent with SAMSHA admissions data for 2003.

# Respondents to the survey questions may have indicated that they were both alcohol and illicit drug dependent/abusers, but such respondents were only counted once as alcohol OR illicit drug dependent/abusers. Alcohol only dependent/abusers are 9.47%, illicit drug only are .88% and both alcohol and illicit are 2.36% of the total of 12.71%.

<b>State/Regions</b>	<b>Population (12+)</b> (Total Persons)	<b>Any Illicit Drug</b> [2.44% SAMHSA]
<b>Nebraska</b>	<b>1,419,450</b>	<b>34,635</b>
Male	694,156	16,937
Female	725,294	17,697
		0
<b>Region 1</b>	<b>76,085</b>	<b>1,856</b>
Male	36,626	894
Female	39,459	963
		0
<b>Region 2</b>	<b>85,206</b>	<b>2,079</b>
Male	41,860	1,021
Female	43,346	1,058
		0
<b>Region 3</b>	<b>186,125</b>	<b>4,541</b>
Male	90,710	2,213
Female	95,415	2,328
		0
<b>Region 4</b>	<b>178,553</b>	<b>4,357</b>
Male	87,983	2,147
Female	90,570	2,210
		0
<b>Region 5</b>	<b>348,720</b>	<b>8,509</b>
Male	172,019	4,197
Female	176,701	4,312
		0
<b>Region 6</b>	<b>544,761</b>	<b>13,292</b>
Male	264,958	6,465
Female	279,803	6,827

\*Estimates based on total populations 12 years of age and older according to 2000 U.S. Census

\*\* Estimates are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003). The percentages shown are the upper range of the .95 confidence level, results of which were more consistent with SAMSHA admissions data for 2003.

# Respondents to the survey questions may have indicated that they were both alcohol and illicit drug dependent/abusers, but such respondents were only counted once as alcohol OR illicit drug dependent/abusers. Alcohol only dependent/abusers are 9.47%, illicit drug only are .88% and both alcohol and illicit are 2.36% of the total of 12.71%.

<b>State/Regions</b>	<b>Population (12+)</b> (Total Persons)	<b>Stimulant-Related</b> [2.44% x .666]
<b>Nebraska</b>	<b>1,419,450</b>	<b>23,067</b>
Male	694,156	11,280
Female	725,294	11,786
<b>Region 1</b>	<b>76,085</b>	<b>1,236</b>
Male	36,626	595
Female	39,459	641
<b>Region 2</b>	<b>85,206</b>	<b>1,385</b>
Male	41,860	680
Female	43,346	704
<b>Region 3</b>	<b>186,125</b>	<b>3,025</b>
Male	90,710	1,474
Female	95,415	1,551
<b>Region 4</b>	<b>178,553</b>	<b>2,902</b>
Male	87,983	1,430
Female	90,570	1,472
<b>Region 5</b>	<b>348,720</b>	<b>5,667</b>
Male	172,019	2,795
Female	176,701	2,871
<b>Region 6</b>	<b>544,761</b>	<b>8,853</b>
Male	264,958	4,306
Female	279,803	4,547

\*Estimates based on total populations 12 years of age and older according to 2000 U.S. Census

\*\* Estimates are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003). The percentages shown are the upper range of the .95 confidence level, results of which were more consistent with SAMSHA admissions data for 2003.

# Respondents to the survey questions may have indicated that they were both alcohol and illicit drug dependent/abusers, but such respondents were only counted once as alcohol OR illicit drug dependent/abusers. Alcohol only dependent/abusers are 9.47%, illicit drug only are .88% and both alcohol and illicit are 2.36% of the total of 12.71%.

<b>State/Regions</b>	<b>Population (12+)</b> (Total Persons)	<b>Meth/Amphetamine-Related</b> [2.44% x .456]
<b>Nebraska</b>	<b>1,419,450</b>	<b>15,793</b>
Male	694,156	7,723
Female	725,294	8,070
<b>Region 1</b>	<b>76,085</b>	<b>847</b>
Male	36,626	408
Female	39,459	439
<b>Region 2</b>	<b>85,206</b>	<b>948</b>
Male	41,860	466
Female	43,346	482
<b>Region 3</b>	<b>186,125</b>	<b>2,071</b>
Male	90,710	1,009
Female	95,415	1,062
<b>Region 4</b>	<b>178,553</b>	<b>1,987</b>
Male	87,983	979
Female	90,570	1,008
<b>Region 5</b>	<b>348,720</b>	<b>3,880</b>
Male	172,019	1,914
Female	176,701	1,966
<b>Region 6</b>	<b>544,761</b>	<b>6,061</b>
Male	264,958	2,948
Female	279,803	3,113

\*Estimates based on total populations 12 years of age and older according to 2000 U.S. Census

\*\* Estimates are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003). The percentage shown are the upper range of the .95 confidence level, results of which were more consistent with SAMSHA admissions data for 2003.

# Respondents to the survey questions may have indicated that they were both alcohol and illicit drug dependent/abusers, but such respondents were only counted once as alcohol OR illicit drug dependent/abusers. Alcohol only dependent/abusers are 9.47%, illicit drug only are .8% and both alcohol and illicit are 2.36% of the total of 12.71%.

<b>State/Regions</b>	<b>Population (12+)</b> (Total Persons)	<b>Any Illicit Drug</b> [3.24% SAMSHA]
<b>Nebraska</b>	<b>1,419,450</b>	<b>45,990</b>
Male	694,156	22,491
Female	725,294	23,500
		0
<b>Region 1</b>	<b>76,085</b>	<b>2,465</b>
Male	36,626	1,187
Female	39,459	1,278
		0
<b>Region 2</b>	<b>85,206</b>	<b>2,761</b>
Male	41,860	1,356
Female	43,346	1,404
		0
<b>Region 3</b>	<b>186,125</b>	<b>6,030</b>
Male	90,710	2,939
Female	95,415	3,091
		0
<b>Region 4</b>	<b>178,553</b>	<b>5,785</b>
Male	87,983	2,851
Female	90,570	2,934
		0
<b>Region 5</b>	<b>348,720</b>	<b>11,299</b>
Male	172,019	5,573
Female	176,701	5,725
		0
<b>Region 6</b>	<b>544,761</b>	<b>17,650</b>
Male	264,958	8,585
Female	279,803	9,066

\*Estimates based on total populations 12 years of age and older according to 2000 U.S. Census

\*\* Estimates are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003). The percentages shown are the upper range of the .95 confidence level, results of which were more consistent with SAMSHA admissions data for 2003.

# Respondents to the survey questions may have indicated that they were both alcohol and illicit drug dependent/abusers, but such respondents were only counted once as alcohol OR illicit drug dependent/abusers. Alcohol only dependent/abusers are 9.47%, illicit drug only are .88% and both alcohol and illicit are 2.36% of the total of 12.71%.

<b>State/Regions</b>	<b>Population (12+)</b> (Total Persons)	<b>Stimulant-Related</b> [3.24% x .666]
<b>Nebraska</b>	<b>1,419,450</b>	<b>30,629</b>
Male	694,156	14,979
Female	725,294	15,651
<b>Region 1</b>	<b>76,085</b>	<b>1,642</b>
Male	36,626	790
Female	39,459	851
<b>Region 2</b>	<b>85,206</b>	<b>1,839</b>
Male	41,860	903
Female	43,346	935
<b>Region 3</b>	<b>186,125</b>	<b>4,016</b>
Male	90,710	1,957
Female	95,415	2,059
<b>Region 4</b>	<b>178,553</b>	<b>3,853</b>
Male	87,983	1,899
Female	90,570	1,954
<b>Region 5</b>	<b>348,720</b>	<b>7,525</b>
Male	172,019	3,712
Female	176,701	3,813
<b>Region 6</b>	<b>544,761</b>	<b>11,755</b>
Male	264,958	5,717
Female	279,803	6,038

\*Estimates based on total populations 12 years of age and older according to 2000 U.S. Census

\*\* Estimates are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003). The percentages shown are the upper range of the .95 confidence level, results of which were more consistent with SAMSHA admissions data for 2003.

# Respondents to the survey questions may have indicated that they were both alcohol and illicit drug dependent/abusers, but such respondents were only counted once as alcohol OR illicit drug dependent/abusers. Alcohol only dependent/abusers are 9.47%, illicit drug only are .88% and both alcohol and illicit are 2.36% of the total of 12.71%.

r)

<b>State/Regions</b>	<b>Population (12+)</b> (Total Persons)	<b>Meth/Amphetamine-Related</b> [3.24% x .456]
<b>Nebraska</b>	<b>1,419,450</b>	<b>20,972</b>
Male	694,156	10,256
Female	725,294	10,716
<b>Region 1</b>	<b>76,085</b>	<b>1,124</b>
Male	36,626	541
Female	39,459	583
<b>Region 2</b>	<b>85,206</b>	<b>1,259</b>
Male	41,860	618
Female	43,346	640
<b>Region 3</b>	<b>186,125</b>	<b>2,750</b>
Male	90,710	1,340
Female	95,415	1,410
<b>Region 4</b>	<b>178,553</b>	<b>2,638</b>
Male	87,983	1,300
Female	90,570	1,338
<b>Region 5</b>	<b>348,720</b>	<b>5,152</b>
Male	172,019	2,541
Female	176,701	2,611
<b>Region 6</b>	<b>544,761</b>	<b>8,049</b>
Male	264,958	3,915
Female	279,803	4,134

\*Estimates based on total populations 12 years of age and older according to 2000 U.S. Census

\*\* Estimates are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003). The percentages shown are the upper range of the .95 confidence level, results of which were more consistent with SAMSHA admissions data for 2003.

# Respondents to the survey questions may have indicated that they were both alcohol and illicit drug dependent/abusers, but such respondents were only counted once as alcohol OR illicit drug dependent/abusers. Alcohol only dependent/abusers are 9.47%, illicit drug only are .88% and both alcohol and illicit are 2.36% of the total of 12.71%.

Appendix D: Table XVII. Drug Dependence/Abuse Estimates in Nebraska by Age Cohorts\* (2003)\*\*  
(Illicit Drugs in Past Year)

	<b>Population (12+)</b> <b>(Total Persons)</b>	<b>Age 12-17</b> <b>(Total Persons)</b>	<b>Age 18-25</b> <b>(Total Persons)</b>	<b>26 or older</b> <b>(Total Persons)</b>
<b>NEBRASKA</b>	<b>1,419,450</b>	<b>158,429</b>	<b>197,185</b>	<b>1,063,836</b>
Male	694,156	81,191	100,729	512,236
Female	725,294	77,238	96,456	551,600
<b>DEPENDENT/ABUSERS</b>				
<b>Any Illicit Drug</b>	<b>49,113</b>	<b>10,936</b>	<b>16,089</b>	<b>22,088</b>
<b>[% Total Population]</b>	<b>[3.46%]</b>	<b>[4.60-7.58%]</b>	<b>[5.50-8.96%]</b>	<b>[1.11-2.28%]</b>
<b>Stimulant-Related***</b>	<b>32,709</b>	<b>7,283</b>	<b>10,715</b>	<b>14,711</b>
<b>Meth/Amphetamine-Rel***</b>	<b>22,396</b>	<b>6,930</b>	<b>10,242</b>	<b>12,603</b>

\*Estimates based on population by age group and the proportions of male and female persons in each according to 2000 U.S. Census. Columns may not add due to rounding.

\*\*Estimates of drug dependent/abusers are based on results of 2002 and 2003 National Surveys on Drug Use and Health (NSDUHs) as reported by SAMHSA in "State Estimates of Substance Use" (2003) using Alternative Estimate B. (see Tables 11-13), a mid-point (not exact due to rounding) between Base Estimate A. and Alternative Estimate C.

\*\*\*Based on 2003 SAMHSA data 66.6% of non-alcohol only admissions were stimulant-related and 45.6% were Methamphetamine/Amphetamine-related.



## ***Appendix E: Explanation of the TEDS and NSSATS***

### **THE TREATMENT EPISODE DATA SET**

**The Treatment Episode Data Set (TEDS)** is maintained by the **Office of Applied Studies, Substance Abuse and Mental Health Services Administration (SAMHSA)**. The TEDS system includes records for some 1.5 million substance abuse treatment admissions annually. While TEDS does not represent the total national demand for substance abuse treatment, it does comprise a significant proportion of all admissions to substance abuse treatment, and includes those admissions that constitute a burden on public funds.

TEDS comprises data that are routinely collected by States in monitoring their individual substance abuse treatment systems. In general, facilities reporting TEDS data are those that receive State alcohol and/or drug agency funds (including Federal Block Grant funds) for the provision of substance abuse treatment. However, differences in State systems of licensure, certification, accreditation, and disbursement of public funds affect the scope of facilities included in TEDS. Treatment facilities that are operated by private for-profit agencies, hospitals, and the State correctional system, if not licensed through the State substance abuse agency, may be excluded from TEDS. TEDS does not include data on facilities operated by Federal agencies (the Bureau of Prisons, the Department of Defense, and the Veterans Administration).

The data reported below represent the latest full calendar year data available for each State from the TEDS system. Total numbers and percent distribution are reported by sex, age, and race/ethnicity for each of 15 categories of primary substance of abuse.

#### **Limitations of TEDS data**

TEDS is an exceptionally large and powerful data set. Like all data sets, however, care must be taken that interpretation does not extend beyond the limitations of the data. Limitations fall into two broad categories: those related to the scope of the data collection system, and those related to the difficulties of aggregating data from the highly diverse State data collection systems.

Limitations to be kept in mind while analyzing TEDS data include:

- TEDS is an admission-based system, and TEDS admissions do not represent individuals. An individual admitted to treatment twice within a calendar year would be counted as two admissions. Most States cannot, for reasons of confidentiality, identify clients with a unique ID assigned at the State level. Consequently TEDS is unable to follow individual clients through a sequence of treatment episodes.
- TEDS attempts to enumerate treatment episodes by distinguishing the initial admission of a client from his/her subsequent transfer to a different service type (for example, from residential treatment to outpatient) within a single continuous treatment episode. However, States differ greatly in their ability to identify transfers; some can distinguish

transfers within providers but not across providers. Some admission records may in fact represent transfers, and therefore the number of admissions reported probably overestimates the number of treatment episodes.

- The number and client mix of TEDS admissions does not represent the total national demand for substance abuse treatment, nor the prevalence of substance abuse in the general population.
- The primary, secondary, and tertiary substances of abuse reported to TEDS are those substances which led to the treatment episode, and not necessarily a complete enumeration of all drugs used at the time of admission.
- In reporting TEDS data, SAMHSA must balance timeliness of reporting with completeness of the data set. States rely on individual facilities to report in a timely manner. States then bundle the data and report them to SAMHSA at regular intervals. Admissions from facilities that report late to the States may appear in a later data submission to SAMHSA. However, the additional submissions are unlikely to have a significant effect on the percentage distributions that are the basis of these tables.
- States continually review the quality of their data processing. When systematic errors are identified, States may revise or replace historical TEDS data files. TEDS continues to accept data revisions for admissions occurring in the previous five years. While this process represents an improvement in the data, the numbers of admissions reported here may differ slightly from those in earlier or subsequent reports and tables.

Considerations specific to these tables include:

- The tables include admissions records that were received and processed by SAMHSA through the date noted at the bottom of each table.
- The tables focus on treatment admissions for substance abusers. Thus admissions for treatment as a codependent of a substance abuser are excluded. Records for identifiable transfers within a single treatment episode are also excluded.
- Records with partially complete data have been retained. Where records include missing or invalid data for a specific variable, that record is excluded from tabulations of that variable. The total number of admissions on which a percentage distribution is based is reported in each table.
- Primary alcohol admissions are characterized as Alcohol only or Alcohol with secondary drug. Alcohol with secondary drug indicates a primary alcohol admission with a specified secondary or tertiary drug. All other alcohol admissions are classified as Alcohol only.
- Cocaine admissions are classified according to route of administration as Smoked and Other route. Smoked cocaine primarily represents crack or rock cocaine, but can also include cocaine hydrochloride (powder cocaine) when it is free-based. Non-smoked

cocaine includes cocaine admissions where the route of administration is not reported, and thus the TEDS estimate of the proportion of admissions for smoked cocaine is conservative.

- Methamphetamine/amphetamine admissions include admissions for both methamphetamine and amphetamine, but are primarily for methamphetamine. Four States (Arkansas, Connecticut, Oregon, and Texas) do not distinguish between methamphetamine and amphetamine admissions. However, for the States that make this distinction, methamphetamine constitutes about 95 percent of combined methamphetamine/amphetamine admissions.

Source: <http://www.dasis.samhsa.gov/webt/information.htm>

## **THE NATIONAL SURVEY OF SUBSTANCE ABUSE TREATMENT SERVICES**

**The National Survey of Substance Abuse Treatment Services (N-SSATS)** is maintained by the **Office of Applied Studies, Substance Abuse and Mental Health Services Administration (SAMHSA)**. The N-SSATS is designed to collect data on the location, characteristics, services offered, and number of clients in treatment at alcohol and drug abuse facilities (both public and private) throughout the 50 States, the District of Columbia, and other U.S. jurisdictions.<sup>1</sup>

N-SSATS is designed to collect information from all facilities<sup>2</sup> in the United States, both public and private, that provide substance abuse treatment. N-SSATS includes some 13,000 facilities with about 1.1 million clients in treatment on the survey reference date.

N-SSATS provides the mechanism for quantifying the dynamic character and composition of the U.S. substance abuse treatment delivery system. The objectives of N-SSATS are to collect multipurpose data that can be used to:

- assist SAMHSA and State and local governments in assessing the nature and extent of services provided in State-supported and other treatment facilities and in forecasting treatment resource requirements;
- update SAMHSA's Inventory of Substance Abuse Treatment Services (I-SATS), which includes all known drug and alcohol abuse treatment facilities;
- analyze general treatment services trends and conduct comparative analyses for the nation, regions, and States; generate the National Directory of Drug and Alcohol Abuse Treatment Programs, a compendium of facilities approved by State substance abuse agencies for the provision of substance abuse treatment; and update the information in SAMHSA's Substance Abuse Treatment Facility Locator, a searchable database of facilities approved by State substance abuse agencies for the provision of substance abuse treatment. The Facility Locator is available on the Internet at: <http://findtreatment.samhsa.gov>

## **Limitations of N-SSATS**

As with any data collection effort, certain procedural considerations and data limitations must be taken into account when interpreting N-SSATS data. Some of these are outlined below.

- N-SSATS attempts to obtain responses from all known treatment facilities, but it is a voluntary survey. There is no adjustment for the approximately 4 percent facility non-response.
- N-SSATS is a point-prevalence survey. It provides information on the substance abuse treatment system and its clients on the reference date. Client counts reported here do not represent annual totals. Rather, N-SSATS provides a "snapshot" of substance abuse treatment facilities and clients on an average day.
- Multiple responses were allowed for certain variables (e.g., services provided and specialized programs). Tabulations of these variables include the total number of facilities reporting each response.

1 The jurisdictions include the territories of American Samoa and Guam, the Federated States of Micronesia, the Republic of Palau, the Commonwealth of Puerto Rico, and the Virgin Islands of the United States.

2 In this report, entities responding to N-SSATS are referred to as "facilities". A "facility" may be a program-level, clinic-level, or multi-site respondent.

Source: <http://www.dasis.samhsa.gov/webt/nssatsinfo.htm>

# Index

- Addiction Severity Index**, 6, 10, 101, 111, 114, 115
- Alcohol, 4, 6, 8, 9, 15, 16, 17, 19, 21, 26, 31, 32, 38, 39, 40, 43, 49, 50, 51, 53, 58, 75, 78, 80, 82, 83, 92, 96, 103, 111, 118, 120, 126, 128, 129, 160, 161, 162, 163
- Assessment Services, 28
- Behavioral Health, 4, 26, 27, 28, 31n, 33, 40, 41, 79, 93, 94, 95, 117, 123, 125, 126, 127, 141
- Behavioral Health Reform, 28, 40, 94, 95, 126
- Behavioral Health Regions, 4, 26, 33
- Best Practices, 2, 5, 6, 25, 28, 38, 41, 48, 62, 70, 74, 76, 77, 78, 79, 82, 83, 84, 86, 88, 91, 96, 97, 99, 101, 106, 111, 140, 141
- Case Management, 3, 48, 54, 55, 56, 70, 95, 116
- Case Plans*, NOTHING FOUND
- Center for Substance Abuse Treatment, 6, 15, 49, 51, 126, 127, 128, 129, 130
- Centralized Data Base*, 31
- Centralized Treatment Center, 70, 119
- Certified Alcohol/Drug Abuse Counselor, 6
- Child Care*, 63, 69, 74, 76, 90, 108
- Coerced Treatment, 18, 56, 57, 58, 61, 117, 126
- Cognitive Behavioral Treatment, NOTHING FOUND
- Community Based Services, 27, 123
- Community Corrections, UNDER COMM. CORR. COUNCIL
- Community Corrections Council, 11, 12, 22, 28, 115, 141
- Community Support, 50, 94, 95, 97, 103, 113
- Community Support Providers, 4, 5, 25, 72, 73, 74, 76, 77, 78, 79, 82, 83, 84, 86, 87, 88, 90, 91, 94, 95, 96, 97, 99
- Comprehensive Adolescent Severity Inventory**, 6, 10, 101, 111, 114, 115
- Continuum of Care, 2, 9, 28, 30, 70, 71, 94, 95, 97, 110, 121
- Co-Occurring Methamphetamine Expanded Treatment, 6, 53, 127
- Co-pay per visit, NOTHING FOUND
- Crosswalk of Substance Abuse Services*, 3, 132
- Cultural Sensitivity, 69, 71
- Data, 3, 4, 6, 10, 17, 21, 22, 25, 26, 27, 31, 31n, 34, 35, 38, 40n, 42n, 43, 54, 56, 59, 85, 99, 100, 101, 103, 115, 116, 119, 121, 122, 125, 160, 161, 162, 163, 164
- Day/night Reporting Centers**, 10, 101, 103, 104, 122
- Department of Correctional Services, 3, 6, 10, 17, 27, 35, 101, 109, 117, 118, 119, 122
- Drug Abuse Resistance Education, 80
- Drug Abuse Treatment Cost Analysis Program, 6, 15, 25
- Drug Court**, 3, 10, 27, 34, 36, 59, 84, 93, 98, 99, 103, 114, 118, 120, 125, 127, 128, 130
- Dual Diagnosis, 69, 70, 82, 84
- Education, 5, 6, 9, 27, 42, 49, 50, 56, 60, 61, 66, 83, 84, 86, 87, 92, 93, 94, 95, 96, 97, 98, 107, 108, 109, 111, 112, 118, 125, 126, 127, 128
- Emergency Protective Custody, 86
- Empirically-Based Behavioral Change, 38
- Evaluations of the Matrix Model, 38, 40
- Family Support, 63
- Group Therapy, 39
- Hastings Correctional Center, 6, 14
- Hastings Regional Center, 6, 14
- Hotline, 73, 89
- Housing, 52, 61, 62, 64, 65, 78
- Individualized Treatment, 9, 60, 64, 67, 76
- Intake, 37, 63, 64
- Iowa, 37, 44, 46, 47, 81
- Iowa Adult Methamphetamine Treatment Project –Report 2003*, 47
- Iowa Substance Abuse Report (1998)*, 37
- Joint Commission on Accreditation of Health Care Organizations, 6
- Justice Professionals, 9, 13, 17, 46, 73, 77, 81, 85, 91
- Justice Substance Abuse Subcommittee, 6, 95, 96
- Justice System, 35, 77
- Juvenile, 31, 63, 76, 77, 79, 95
- Juvenile Methamphetamine Users, 76
- Length of Treatment, 56, 73, 98
- Levels of Care**, 6, 16, 17, 19, 34, 67, 69, 111, 112
- Licensed Alcohol and Drug Abuse Counselor, 6, 73, 84
- Licensed Mental Health Professionals, 6, 30, 84, 99
- Licensing, 32, 83, 84, 85, 90
- Lincoln, 13, 14, 59, 132
- Literature Review, 13, 23, 97
- Matrix Model, 96
- Medicaid, 62, 63, 64, 65, 67, 69, 70, 75, 76, 84, 86
- Medical Issues related to MA, 69, 73, 74, 75, 76
- Medication Therapy, 43
- Mental Health Treatment, 16, 69, 113
- Methadone, 27
- Methamphetamine, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 14, 17, 18, 19, 21, 22, 24, 26, 27, 28, 31, 33, 43, 44, 45, 48, 49, 51, 52, 53, 54, 56, 58, 67, 68, 73, 78, 87, 92, 100, 101, 102, 103, 104, 108, 109, 110, 111, 113, 114, 115, 116, 117, 118, 119, 120, 125, 126, 127, 128, 129, 130, 160, 163
- Mobile Reporting Center*, 92, 93
- National Center on Addiction and Substance Abuse, 31
- National Center on Addiction and Substance Abuse at Columbia University, 6, 15, 31
- National Institute on Drug Abuse, 6, 25, 37, 38, 42, 43, 51, 116, 119
- National Survey of Substance Abuse Treatment Services, 6, 15, 26
- Nebraska Health and Human Services System, 4, 6, 10, 26, 34, 35, 36, 37, 38, 40, 41, 45, 46, 47, 73, 95, 97, 101, 102, 114, 115, 118, 140, 141
- Nebraska State Budget, 14, 31
- Nebraska State Budget, 31
- Norfolk Regional Center, 14, 94, 97, 99, 132
- North Platte, 62, 75
- Omaha, 59, 61, 63, 77, 79
- Outpatient, 17, 27, 45, 64
- Parole**, 10, 98, 112
- Patient Goals, 39
- Paying for Treatment, 63
- Pharmacotherapy, 37, 43, 44, 51, 75, 76
- Post Traumatic Stress Disorder, 6, 77
- Pre-Sentence Investigation, 65, 66, 101
- Prevention*, 7, 80, 102
- Principles of Drug Addiction Treatment, A Research-based Guide (1999)*, 37

# Methamphetamine Treatment Study Final Report

- Probation, 10, 24, 67, 86, 92, 93, 95, 96, 101, 131, 132  
Recovery Support, 9, 16, 17, 92, 96, 102  
Recovery Support and Relapse Prevention, 17  
Region 1, 29, 30  
Region 2, 29, 30  
Region 3, 29, 30  
Region 4, 29, 30  
Region 5, 29, 30  
Reimbursement, 9, 28, 71, 73, 76, 88, 91, 93, 94, 95, 96, 97, 110, 111, 112  
Relapse Prevention, 3, 5, 8, 9, 28, 29, 49, 50, 53, 66, 67, 83, 84, 86, 106, 107, 108, 114, 117, 119  
Residential Facilities, 17, 67  
Reunification Planning, 95  
*Roster of Substance Abuse Treatment Center Roster*, 15  
Roundtable Discussions, 13, 14, 27, 30, 58, 131  
Rural Communities, 78  
Secondary Drug Use, 54, 71  
Sexual Addicts, 77  
Sexually Transmitted Diseases, 69  
Shortage Capacity, 9, 10, 30, 48, 62, 82, 84, 86, 88, 90, 91, 92, 93, 98, 99, 102, 114  
Site Visits, 13, 14  
State Estimates of Substance Use from the 2002-2003 National Surveys on Drug Use and Health, 20  
State Incentive Cooperative Agreement, 80  
Substance Abuse Officer, 81  
Substance Abuse and Mental Health Services Administration, 4, 6, 15, 21, 25, 26, 27, 31, 37, 38, 39, 48, 49, 51, 53, 63, 125, 128, 129, 130, 160, 161, 162, 163, 164  
Substance Abuse Officer, 6, 61, 81  
Substance Abuse Recovery Home, 27  
Substance Abuse Reform, 7, 9  
*Substance Abuse Treatment Facility Locator Lists*, 15  
Telehealth, 82, 85  
Terminal Status, 35  
The Therapist as Coach and Teacher, 38  
Therapeutic Community, 48, 50  
Transitional Residential, 17  
Transportation, 55, 63, 70, 72, 73, 74, 76, 85, 94, 97, 103, 104  
Treatment, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27, 28, 29, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 125, 126, 127, 128, 129, 130, 161, 162, 163, 164  
Treatment Accountability and Safer Communities, 6, 47  
Treatment Admissions, 15, 20, 37, 116, 152, 153  
**Treatment Episode**, 6, 20  
Treatment Episode Data Set, 6, 20, 152, 153, 154  
Treatment Facilities, 2, 4, 27, 36, 37, 38, 39, 41, 48, 70, 76, 83, 112, 122, 161, 163, 164  
*Treatment Improvement Protocol*, 6, 19, 25, 63, 64, 65, 66, 67, 68, 69, 70, 72, 76, 77, 78, 79, 80, 81, 82, 83, 87, 101, 129  
treatment professionals, 64, 73, 81, 84, 85, 90, 91  
Treatment Providers, 3, 4, 5, 9, 10, 15, 16, 17, 18, 19, 21, 23, 24, 25, 38, 39, 62, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 103, 108, 110, 111, 112, 114, 115, 116, 117, 119  
Unmet Treatment Demand, 23  
Unmet Treatment Need, 15  
Urinalysis/Breath Test, 38, 39, 40, 48, 53, 55, 68, 72  
Violent Behavior, 57, 95  
*Voucher Funds*, 101, 102, 113  
Wait list for treatment, 64  
Women, Infants and Children Program, 85  
**Work Ethic Camp**, 6, 10, 87, 89, 93, 99, 112, 113