Co-Occurring Substance Use and Mental Disorders: Epidemiology and Evidenced/Consensus-Based Treatment

Jorielle Brown, PhD
COCE Federal Project Officer
Co-Occurring and Homeless Activities Branch
SAMHSA/CSAT/DSCA
Prevalence & Epidemiology

Screening, Assessment & Treatment

Evidence & Consensus Based Program Components

Lessons Learned
Thrills, Invincibility, Risk Taking
Brain maturation is from back to the front

Judgment

Emotion

Motivation

Physical coordination & sensory processing

Prefrontal cortex

Amygdala

Nucleus accumbens

Cerebellum

Ken Winters, Ph.D. Collaborating Investigator, Treatment Research Institute, Professor, Department of Psychiatry, University of Minnesota, November 23, 2004
The Beginning: Onset of Brain Disorders

- Infancy to 5 Years
  - Autism
  - Attention Deficit Hyperactivity Disorder
- 5 – 10 Years
  - Anti-social Behavior
  - Conduct Disorder
  - Depression
  - Anxiety
- 10 – 13 Years
  - Eating Disorders
  - Obsessive Compulsive Disorders
- 13 – 20 Years
  - Social Phobias
  - Panic Disorder
  - Bipolar Disorder
- Alcohol and Drug Use Disorders

Brain Disorders

COCE
SAMHSA's Co-Occurring Center for Excellence
Prevalence & Epidemiology
DATA SOURCES
SAMHSA’S Office of Applied Studies (OAS)

- National Survey on Drug Use and Health (NSDUH)
  - Prevalence and correlates of substance use

- Drug Abuse Warning Network (DAWN)
  - Emergency room and medical examiner data

- Drug and Alcohol Services Information System (DASIS):
  Treatment facilities, admissions, and discharges
  - Treatment Episode Data Set (TEDS)
  - National Survey of Substance Abuse Treatment Services (NSATS)
  - Inventory of Substance Abuse Treatment Services (I-SATS)
National Survey on Drug Use and Health (NSDUH)
- Sponsored by SAMHSA
- Provides annual national and state level estimates of alcohol, tobacco, illicit drugs, non-medical prescription drug use, serious mental illness, related problems and treatment in the U.S..
- Prior to 2002, called National Household Survey on Drug Abuse (NHSDA).
- Conducted periodically since 1971; annually since 1991
DATA SOURCES

- National Comorbidity Survey (NCS)
- National Comorbidity Study-Replication (NCS-R)
- National Epidemiological Study on Alcohol and Related Conditions (NESARC)
Lifetime Prevalence and Age of Onset of Psychiatric Disorders

NCS-R, 2005

- Prevalence declines age 60+
- High risk age range is 18 to 44
- Females have higher rates of mood & anxiety disorders
- Males have higher rates of substance abuse and impulse disorders.

June 6, 2005 issue of the Archives of General Psychiatry by Ronald Kessler, Ph.D., et al
http://www.nimh.nih.gov/healthinformation/ncs-r.cfm
Half of all lifetime mental illness cases begin by the age of 14.

3/4ths have begun by age 24.

Long delays in getting treatment—sometimes decades.

Untreated, it can lead to more severe and difficult to treat illness, and to the development of co-occurring mental illnesses.
Mental disorders are the chronic diseases of the young.
Anxiety disorders often begin in late childhood.
Mood disorders in late adolescence.
Substance abuse in early 20's.
Prevalence of serious psychological distress in the past year among adults aged 18 or older, by age: 2005-2006

(NSDUH)
Major Depressive Episode in the Past Year among Adults Aged 18 or Older, by Age and Gender: 2005-2006

(NSDUH)
Prevalence of Major Depressive Episode (MDE) Youths Aged 12-17: 2006

- 7.9% (2.0 million) had MDE in the past year--
  - 4.0% for 12 year olds
  - 11.1% for 16 year olds
  - 10.3% for 17 year olds
  - 11.8% female vs. 4.2% male

NSDUH, 2006
MDE Among Youths Aged 12 to 17 by Race/Ethnicity

2006 (NSDUH)

Rate of MDE in Past Year:
- Hispanics: 8.0%.
- Non-Hispanics: 7.9%

Rate of MDE at some time during lifetime
- Reporting two or more races: 13.0%
- American Indians or Alaska Natives: 9.3%
- Whites: 8.1%
# Idaho State Level Data

**Had at Least One Major Depressive Episode in Past Year, Percentages, Annual Averages**

## 2005 (NSDUH)

<table>
<thead>
<tr>
<th>STATE</th>
<th>TOTALS</th>
<th>12-17</th>
<th>18-25</th>
<th>26 &amp; older</th>
</tr>
</thead>
<tbody>
<tr>
<td>All States</td>
<td>7.65</td>
<td>8.88</td>
<td>9.93</td>
<td>7.25</td>
</tr>
<tr>
<td>Idaho</td>
<td>8.47</td>
<td>10.37</td>
<td>12.48</td>
<td>7.66</td>
</tr>
</tbody>
</table>

http://www.oas.samhsa.gov/2k5State/AppB.htm#TabB.24
STATE LEVEL DATA

Had at Least One Major Depressive Episode in Past Year among Persons Aged 18 to 25: Percentages, Annual Averages

2005 (NSDUH)
STATE LEVEL DATA

Had at Least One Major Depressive Episode in Past Year
among Youths Aged 12 to 17: Percentages, Annual Averages

2005 (NSDUH)

http://www.oas.samhsa.gov/2k5State/Ch6.htm#Fig6.5

NSDUH 2004, 2005
According to the Centers for Disease Control and Prevention, suicide is the third leading cause of death among 10 to 24 year old Americans,\(^1\)

For Idahoans aged 10 to 34 it is the second leading cause of death, exceeded only by accidents (2002 to 2004 data).\(^2\)


Suicidal Thoughts by Gender for Youths aged 12-17 with MDE in their Lifetime

<table>
<thead>
<tr>
<th>Gender</th>
<th>Better if Dead</th>
<th>Think about Killing Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Females</td>
<td>13.7</td>
<td>11.2</td>
</tr>
<tr>
<td>Males</td>
<td>4.8</td>
<td>3.9</td>
</tr>
</tbody>
</table>

NSDUH, 2005
Rates of ED Visits Involving Drug-related Suicide Attempts

DAWN Report 2005

Source: Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Drug Abuse Warning Network, 2007
Suicide and Substance Use

The Centers for Disease Control and Prevention (CDC) sponsored a study\(^1\) of suicide cases in which toxicological tests were performed on the victims. Of those tested:

- 33.3% were positive for alcohol
- 16.4% were positive for opiates.
- Similar percentages tested positive for alcohol or other drugs—with the exception of opiates—in cases of suspected intentional overdoses as well as non-poisoning suicides

Past Month Use of Selected Drugs, Persons Aged 12 or Older, by Gender

2005 (NSDUH)

Percent Using in Past Month

- Marijuana: Male 8.1%, Female 4.1%
- Psychotherapeutics: Male 3.2%, Female 2.5%
- Pain Relievers: Male 2.5%, Female 1.7%
- Cocaine: Male 1.4%, Female 0.6%
- Tranquilizers: Male 0.8%, Female 0.6%
- Stimulants: Male 0.5%, Female 0.5%
- Hallucinogens: Male 0.5%, Female 0.3%
- Inhalants: Male 0.4%, Female 0.2%
- Methamphetamine: Male 0.4%, Female 0.2%
Past Month Use of Selected Illicit Drugs among Youths Aged 12 to 17: 2002-2006

2006 (NSDUH)

<table>
<thead>
<tr>
<th>Drug</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td>8.2+</td>
<td>7.9+</td>
<td>7.6+</td>
<td>6.8</td>
<td>6.7</td>
</tr>
<tr>
<td>Psychotherapeutics</td>
<td>4.0+</td>
<td>4.0+</td>
<td>3.6</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Inhalants</td>
<td>1.2</td>
<td>1.3</td>
<td>1.2</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>1.0+</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
</tr>
</tbody>
</table>
Marijuana is the Most Commonly Used Drug Among Adolescents:

**2005 (NSDUH)**

- “Blunts” -- Replacement of tobacco in cigars with marijuana
- Marijuana use increased with age
- More males than females (7.5 vs. 6.2)
- More common among Alaskan Native or American Indian
- Asians less likely to use

<table>
<thead>
<tr>
<th></th>
<th>A Average</th>
<th>B Average</th>
<th>C Average</th>
<th>D Average or Lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td>3.1</td>
<td>6.4</td>
<td>10.0</td>
<td>17.9</td>
</tr>
<tr>
<td>Blunts</td>
<td>1.4</td>
<td>3.1</td>
<td>5.2</td>
<td>10.9</td>
</tr>
</tbody>
</table>

http://oas.samhsa.gov/2k7/mjBlunts/mjBlunts.htm
% of Past Month Marijuana & Blunt Use Among Youths Aged 12 to 17, by Age Group

**2005 (NSDUH)**

Blunts Associated With:
- Male
- Metropolitan Area
- Lower Grade Point
- Average
- Truancy

![Bar Chart](http://oas.samhsa.gov/2k7/mjBlunts/mjBlunts.htm)

**Marijuana**
- Aged 12 or 13: 0.9%
- Aged 14 or 15: 5.9%
- Aged 16 or 17: 13.6%

**Blunts**
- Aged 12 or 13: 0.3%
- Aged 14 or 15: 2.7%
- Aged 16 or 17: 7.6%

http://oas.samhsa.gov/2k7/mjBlunts/mjBlunts.htm
% of Past Month Marijuana & Blunt Use among Youths Aged 12 to 17, by Age Group by Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Marijuana Use</th>
<th>Blunt Use</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent</td>
<td>SE**</td>
</tr>
<tr>
<td>White</td>
<td>7.2</td>
<td>0.27</td>
</tr>
<tr>
<td>Black</td>
<td>7.2</td>
<td>0.61</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>14.9</td>
<td>3.45</td>
</tr>
<tr>
<td>Asian</td>
<td>1.5</td>
<td>0.51</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>6.8</td>
<td>1.19</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6.3</td>
<td>0.64</td>
</tr>
</tbody>
</table>

SE--Standard Error
http://oas.samhsa.gov/2k7/mjBlunts/mjBlunts.htm
Alcohol Use in Youths
Underage Drinking

2005 (NSDUH)
Most Widely Abused Drug in 12-20 year olds

- 1/3rd of underage drinkers begin before age 13
- 10% of 9-10 year olds are drinking
- 80% of college students drink

Alcohol consumption escalates by age in Youths
  - 2.3% age 12
  - 56.3% age 20
  - 70% age 21

DHHS SAMHSA, A Comprehensive plan for preventing and reducing underage drinking, 1/2006
Current, Binge, and Heavy Alcohol Use among Persons Aged 12 or Older, by Age

2006 (NSDUH)
Heavy Alcohol Use among Adults Aged 18 to 22, by College Enrollment: 2002-2006

2006 (NSDUH)

Percent Using in Past Month

- Enrolled Full Time in College
  - 2002: 18.8
  - 2003: 17.6
  - 2004: 18.6
  - 2005: 19.5
  - 2006: 19.0

- Not Enrolled Full Time in College
  - 2002: 13.4
  - 2003: 13.4
  - 2004: 13.5
  - 2005: 13.0
  - 2006: 13.3
Underage Emergency Department (ED)  

Drug Abuse Warning Network (DAWN) 2006

DAWN Report, January 2006  

Rate per 100,000 population

<table>
<thead>
<tr>
<th>Category</th>
<th>12-17</th>
<th>18-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol alone</td>
<td>160</td>
<td>461</td>
</tr>
<tr>
<td>Alcohol with Other drug(s)</td>
<td>77</td>
<td>208</td>
</tr>
</tbody>
</table>

A Life in the Community for Everyone
SAMHSA
Substance Abuse and Mental Health Services Administration
U.S. Department of Health and Human Services

COCE
SAMHSA's Co-Occurring Center for Excellence
STATE LEVEL DATA
Illicit Drug Use in Past Month among Persons Aged 12 or Older, by State: Percentages, Annual Averages

2005 (NSDUH)

http://www.oas.samhsa.gov/2k5State/Idaho.htm
STATE LEVEL DATA
Illicit Drug Use in Past Month among Youths Aged 12 to 17 by State: Percentages, Annual Averages

2005 (NSDUH)
Idaho: *Alcohol Dependence or Abuse in Past Year, by Age Group and State: Percentages, Annual Averages*

<table>
<thead>
<tr>
<th>State</th>
<th>Total</th>
<th>12-17</th>
<th>18-25</th>
<th>26 &amp; older</th>
</tr>
</thead>
<tbody>
<tr>
<td>All States</td>
<td>7.71</td>
<td>5.78</td>
<td>17.47</td>
<td>6.27</td>
</tr>
<tr>
<td>Idaho</td>
<td>7.82</td>
<td>7.05</td>
<td>16.34</td>
<td>6.19</td>
</tr>
</tbody>
</table>

http://www.oas.samhsa.gov/2k5State/AppB.htm#TabB.16
### Idaho: Substance Use in Past Month, by Age Group: Percentages

#### Illicit Drug Use

<table>
<thead>
<tr>
<th>State</th>
<th>Total</th>
<th>12-17</th>
<th>18-25</th>
<th>26 &amp; older</th>
</tr>
</thead>
<tbody>
<tr>
<td>All States</td>
<td>8.02</td>
<td>10.25</td>
<td>19.76</td>
<td>5.65</td>
</tr>
<tr>
<td>Idaho</td>
<td>6.98</td>
<td>9.30</td>
<td>16.32</td>
<td>4.72</td>
</tr>
</tbody>
</table>

#### Alcohol Use in Past Month

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>12-17</th>
<th>18-25</th>
<th>26 &amp; older</th>
</tr>
</thead>
<tbody>
<tr>
<td>All States</td>
<td>51.05</td>
<td>17.06</td>
<td>60.69</td>
<td>54.03</td>
</tr>
<tr>
<td>Idaho</td>
<td>46.43</td>
<td>15.88</td>
<td>53.80</td>
<td>49.53</td>
</tr>
</tbody>
</table>

SAMHSA, OAS 2005 State Estimates
Co-Occurrence of SPD and Substance Use Disorder in the Past Year Among Adults Aged 18 or Older: 2005 and 2006

**2005**

- Substance Use Disorder (SUD) Only: 14.9 Million
- Serious Psychological Distress (SPD) Only: 5.2 Million
- Co-Occurring SUD and SPD: 5.6 Million

**2006**

- Substance Use Disorder (SUD) Only: 19.4 Million
- Serious Psychological Distress (SPD) Only: 5.6 Million
- Co-Occurring SUD and SPD: 15.0 Million

Substance Use among Adults Aged 18 or Older, by Major Depressive Episode in the Past Year

2006 (NSDUH)

- Past Year Illicit Drug Use:
  - Had Major Depressive Episode in the Past Year: 27.7%
  - Did Not Have Major Depressive Episode in the Past Year: 12.9%

- Daily Cigarette Use in Past Month:
  - Had Major Depressive Episode in the Past Year: 29.7%
  - Did Not Have Major Depressive Episode in the Past Year: 16.0%

- Past Month Heavy Alcohol Use:
  - Had Major Depressive Episode in the Past Year: 8.6%
  - Did Not Have Major Depressive Episode in the Past Year: 7.3%
Substance Use among Youths Aged 12 to 17, by Major Depressive Episode in the Past Year:

2006 (NSDUH)

Percent Using Substance

- Past Year Illicit Drug Use: 34.6%
  - Had Major Depressive Episode in the Past Year
  - Did Not Have Major Depressive Episode in the Past Year: 18.2%
- Daily Cigarette Use in Past Month: 5.2%
  - Had Major Depressive Episode in the Past Year
  - Did Not Have Major Depressive Episode in the Past Year: 2.5%
- Past Month Heavy Alcohol Use: 4.5%
  - Had Major Depressive Episode in the Past Year
  - Did Not Have Major Depressive Episode in the Past Year: 2.2%
Adolescents and COD

2006 Study

- “Diagnostic Orphans”-meet few criteria for alcohol dependence and no abuse criteria.

- Adolescents with SUD have higher rates of other psychiatric disorders.

Adolescents with SUD are more likely to have a history of trauma and physical and/or sexual abuse.

Other Psychiatric D/Os often predate the SUD

Once the SUD develops, the other Psychiatric D/Os are often further exacerbated

Co-occurring Psychiatric Problems

- Conduct Disorder: 54%
- Attention Deficit/Hyperactivity Disorder: 45%
- Major Depressive Disorder: 37%
- Traumatic Stress Disorder: 26%
- General Anxiety Disorder: 17%
- Physical, Sexual or Emotional Victimization: 59%
- High severity victimization: 47%
- Homeless or Runaway: 31%
- Homicidal/suicidal thoughts past year: 25%
- Self Mutilation: 16%

Source: 2006 CSAT AT Outcome Data Set (n=9,276 adolescents)
Past Year Violence & Crime

*Dealing, manufacturing, prostitution, gambling (does not include simple possession or use)

Source: 2006 CSAT AT Outcome Data Set (n=9,276 adolescents)
Multiple Co-occurring Problems are the Norm and Increase with Level of Care

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Outpatient</th>
<th>Long Term Residential</th>
<th>Short Term Residential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct Disorder</td>
<td>56</td>
<td>68</td>
<td>80</td>
</tr>
<tr>
<td>ADHD</td>
<td>44</td>
<td>47</td>
<td>65</td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td>21</td>
<td>35</td>
<td>52</td>
</tr>
<tr>
<td>Generalized Anxiety Disorder</td>
<td>25</td>
<td>43</td>
<td>52</td>
</tr>
<tr>
<td>Traumatic Stress Disorder</td>
<td>21</td>
<td>36</td>
<td>44</td>
</tr>
<tr>
<td>Any Co-Occurring Disorder</td>
<td>70</td>
<td>78</td>
<td>88</td>
</tr>
</tbody>
</table>

Source: CSAT’s Cannabis Youth Treatment (CYT), Adolescent Treatment Model (ATM), and Persistent Effects of Treatment Study of Adolescents (PETS-A) studies; 8/2005
Past Year Treatment among Adults Aged 18 or Older with Both Serious Psychological Distress and a Substance Use Disorder

2006 (NSDUH)

- Treatment for Mental Health Problems Only: 39.6%
- Treatment for Both Mental Health and Substance Use Problems: 8.4%
- Treatment for Substance Use Problems Only: 2.8%
- No Treatment: 49.2%

5.6 Million Adults with Co-Occurring SPD and Substance Use Disorder
Past Year Treatment for Mental Health Problems among Youths Aged 12 to 17, by Gender: 2002-2006

2006 (NSDUH)

+Among all youth, differences between the 2006 estimate and the 2002 and 2004 estimates were statistically significant.
+Among males, difference between 2006 and 2002 was statistically significant.
+Among females, difference between 2006 and the 2002 and 2004 estimates was statistically significant.
Mental Health Treatment of Youths aged 12-17 years old in the Past Year: 2006

Mental Health

- Rate of illicit drug use was 28.8% for those who received treatment for mental health problems.
- Rate of illicit drug use was 17% for those who did not receive treatment for mental health problems.

NSDUH, 2007
Co-Occurring & Juvenile Justice

- Criminal Justice is the most common source of referrals for adolescent admission\(^1\)
  - Most common source of referral for COD admissions—48%\(^1\)

- Nearly 2/3rds of incarcerated youth with SUD have at least one other mental health disorder.

\(^1\) DAWN Report on COD, 2005 http://www.oas.samhsa.gov/2k5/youthMH/youthMH.htm
Co-occurring Substance Use and Mental Health Disorders in Adolescents; Trainer’s Manual, Feb., 2006,
Northeast Addiction Technology Transfer Center, Anderson, Taylor B.; McNelis, Donna N.
As many as 50% of substance abusing juvenile offenders have ADHD.

Among incarcerated youth with SUD, nearly 33% have a mood or anxiety disorder.

Those exposed to high levels of traumatic violence might experience symptoms of posttraumatic stress as well as increased rates of substance abuse.

Co-occurring Substance Use and Mental Health Disorders in Adolescents; Trainer’s Manual, Feb., 2006, Northeast Addiction Technology Transfer Center, Anderson, Taylor B.; McNelis, Donna N.
Juvenile offenders with SUD have greater additional psychopathology than non-SUD offenders.

Child or adolescent psychopathology is associated with early age of onset for SUD.

Females with conduct d/o have a worse course of SUD than males and progress faster to SUD than males.

Screening, Assessment & Treatment
Screening for Co-Occurring Disorders

- Screen for the other disorder
- Referral screening process for further assessment
- Referral access to assessment with other providers
- Communication between other providers handled
Assessment Domains (Tip 42)

- History of Substance Use
- Medical, Family, & Sexual Histories
- Strengths and Resources
- Developmental Issues
- Mental Health History
- School, Vocational, Juvenile Justice Histories
- Peer Relationships and Neighborhood
- Leisure-time interests, Hobbies, Activities

Six Guiding Principles for Integrated Treatment

- Employ a recovery perspective
- Adopt a multi-problem viewpoint
- Develop a phased approach to treatment

(SAMHSA, 2005); NEATTC Adolescent Training Manual
Six Guiding Principles for Integrated Treatment

- Address specific real-life problems early in treatment
- Plan for cognitive and functional impairments
- Use support systems to maintain and extend treatment effectiveness

(SAMHSA, 2005); NEATTC Adolescent Training Manual
Motivational Interviewing with Teens

Study funded by National Institute of Alcohol Abuse and Alcoholism (NIAAA)-Published 2006

- Indications from clinical studies show that motivational interviewing can be effective in decreasing alcohol consumption and the negative consequences from alcohol use.

- Need for early alcohol and substance use screening and education.

- Need for early alcohol and substance abuse intervention with adolescents.

Hingson, Ralph W.; Heeren, Timothy; Winter, Michael R.; Arch Pediatric Adolescent Med, 2006; 160:739-746 Age at Drinking Onset and Alcohol Dependence; http://archpedi.ama-assn.org/cgi/reprint/160/7/739
Stages of Treatment & Stages of Change

Engagement ↔ Pre-Contemplation
Persuasion ↔ Contemplation
Active Treatment ↔ Action
Relapse Prevention ↔ Maintenance

Principles of Stagewise Treatment
(IDDT Toolkit, Evidence Based Practices)

**Engagement**—Practical help-basic needs, crisis intervention, establish an alliance, education to reduce risk

**Persuasion**—Education, increase awareness of problem(s), family and peer supports, set goals

**Active Treatment**—Substance Abuse & Mental Health Counseling, skills training, self-help and family groups.

**Relapse Prevention**—Relapse prevention, skills training, recovery is incorporated into all life areas.
Evidence Based Program Components

Lessons Learned
Evidence Based Practice

Association of Children’s Mental Health, 2004

- Scientific knowledge about treatment practices and their impact on children with emotional and behavior disorders.

- Interventions, treatment approaches, and services that have been researched and shown to make a positive difference in children.

- National Registry of Evidence-based Programs and Practices (NREPP)

http://www.modelprograms.samhsa.gov
Research Based Interventions & Program Design

Motivational Enhancement → Stage-Matched
Family Based → Family Education, Parent training
Cognitive Behavioral → +/- Reinforcements
Community Reinforcement Approach → Skills-life areas

Co-Occurring Substance Use and Mental Health Disorders in Adolescents; Northeast ATTC; 2/2006; Modules 6,7
Key Elements of Research Based Interventions

- Assessment and Treatment Matching
- Comprehensive Integrated Treatment Approach
- Family Involvement
- Developmentally Appropriate
- Engagement and Retention
- Qualified Staff
- Gender and Cultural Competence
- Continuing Care
- Treatment Outcomes

Co-Occurring Substance Use and Mental Health Disorders in Adolescents; Northeast ATTC; 2/2006; Modules 6,7
What is NREPP?

- A searchable online registry of mental health and substance abuse interventions that have been reviewed and rated by independent reviewers.

- Purpose: To assist the public in identifying evidence-based approaches to preventing and treating mental and/or substance use disorders that can be readily disseminated to the field.

- Intervention developers elect to participate. Not all interventions are submitted to NREPP; not all that are submitted are necessarily reviewed.

http://www.modelprograms.samhsa.gov
National Registry of Evidence-based Programs and Practices (NREPP)

What Information Does NREPP Provide?

Each intervention summary includes:

- Descriptive information about the intervention and its targeted outcomes
- Quality of Research and Readiness for Dissemination ratings
- A list of studies and materials submitted for review
- Contact information for the intervention developer

http://www.modelprograms.samhsa.gov
NREPP Model Programs

Family Behavior Therapy

- **Purpose:** Reduce drug & alcohol use in adults and youth along with common co-occurring problems (e.g., depression, family discord, school and work attendance, and conduct problems in youth).

- **Settings:** Home, Inpatient, Outpatient

- **Intervention Strategies:**
  - Participants attend sessions with significant other (parent or cohabitating partner).
  - Behavioral contracting to establish facilitating environment for reinforcement of behaviors associated with abstinence from drugs.
  - Skill-building
    - Psychosocial: spending less time with persons and situations involving drug use and other problem behaviors.
    - Coping: Decreasing urges to use drugs and other impulsive behavior problems.
    - Communications: To establish social relationships with persons who do not use substances.
    - Skills associated with getting a job and/or attending school.

- **Duration:** 15 sessions over 6 months; initially 90 minutes weekly; gradually decreasing to 60 minutes monthly as Tx progresses.

NREPP Model Programs

Trauma Recovery and Empowerment Model (TREM)

- **Purpose:** Facilitate trauma recovery among young adult and adult women, from diverse racial and ethnic populations, with histories of exposure to sexual and physical abuse.

- **Settings:** mental health & substance abuse Tx settings, criminal justice.

- **Intervention Strategies:**
  - Gender-Specific
  - Fully manualized
  - Group-based
  - Cognitive restructuring,
  - Psychoeducation, and skills-training techniques,
  - Emphasizes the development of coping skills and social support.
  - Addresses both short- and long-term consequences of violent victimization, esp. PTSD, depression, and substance abuse.

- **Duration:** 24-29 sessions

NREPP Model Programs

Multisystemic Therapy (MST) for Juvenile Offenders

- Purpose: Decrease rates of antisocial behavior and other clinical problems among youth from diverse ethnic/racial populations; improve functioning (e.g., family, school), while reducing out-of-home placements (e.g., incarceration, residential Tx, hospitalization).

- Settings: Youth’s home, school, community.

- Intervention Strategies:
  - Focus on factors in each youth’s social network that contribute to antisocial behavior.
  - Individualized, comprehensive, and integrated.
  - Behavioral.
  - Cognitive behavioral,
  - Pragmatic family therapies.
  - Enable families to enhance protective factors.

- Duration: approximately 4 months, with multiple therapist-family contacts occurring weekly

NREPP Model Programs

Chestnut Health Systems - Bloomington Adolescent Outpatient (OP) and Intensive Outpatient (IOP) Treatment Model

- Designed for youth between the ages of 12 and 18 who meet ASAM's criteria for Level I or Level II treatment placement.

- Intervention Strategies:
  - Blended therapeutic approach (Rogerian, behavioral, cognitive, and reality).
  - Individualized treatment plan includes family unit as well as the adolescent.
  - Skill-building groups cover 14 different topics weekly (e.g., relapse prevention, life skills, self-esteem, family issues, recovery lifestyle). Number and type of skill-building groups assigned is based on individualized Master Treatment Plan (MTP).
  - Group counseling sessions
  - Group sessions offered both in evening and morning to accommodate adolescent school and work schedules.

- Duration: Each type of skill building group is comprised of at least 12 different presentations, 35-40 minutes long, and repeating in continuous cycle. Program offered at various dose levels with different components depending on needs of individual client.

http://www.nrepp.samhsa.gov/programfulldetails.asp?PROGRAM_ID=120
NREPP Model Programs
Dialectical Behavior Therapy

- Treatment of co-occurring and mental health disorders of young adults and adults from diverse ethnic/racial populations

- Treatment Approach:
  - Cognitive-behavioral with two key characteristics:
    - Behavioral, problem-solving focus blended with acceptance-based strategies,
    - Emphasis on dialectical processes. "Dialectical" refers to the issues involved in treating patients with multiple disorders and to the type of thought processes and behavioral styles used in the treatment strategies.

- Intervention Strategies:
  - Capability enhancement (skills training);
  - Motivational enhancement (individual behavioral treatment plans);
  - Generalization (access to therapist outside clinical setting, homework, and inclusion of family in treatment);
  - Structuring of the environment (programmatic emphasis on reinforcement of adaptive behaviors);
  - Capability and motivational enhancement of therapists (therapist team consultation group).

DBT emphasizes balancing behavioral change, problem-solving, and emotional regulation with validation, mindfulness, and acceptance of patients. Therapists follow a detailed procedural manual.

Seeking Safety is a present-focused treatment for clients (adolescents, young adults, and adults from diverse ethnic/racial populations) with a history of trauma and substance abuse. Safety is the overarching goal -- helping clients attain safety in their relationships, thinking, behavior, and emotions.

The treatment was designed for flexible use: group or individual format, male and female clients, and a variety of settings (e.g., outpatient, inpatient, residential).

Intervention Strategies:
- Focus on coping skills and psychoeducation
- Integrated treatment (working on both PTSD and substance abuse at the same time);
- Focus on ideals to counteract the loss of ideals in both PTSD and substance abuse;
- Four content areas: cognitive, behavioral, interpersonal, and case management;
- Attention to clinician processes (helping clinicians work on countertransference, self-care, and other issues).

Evidence-Based Models
Other Resources

FAMILY BASED

- Brief strategic family therapy¹
- Functional Family Therapy (FFT)²
- Multidimensional Family Therapy³
- Strengths Oriented Family Therapy (SOFT)⁴


Evidence-Based Models
Other Resources

- MOTIVATIONAL ENHANCEMENT\(^5,6\)
- COGNITIVE BEHAVIORAL\(^5,6,7,8,9,10\)


Evidence-Based Models

Other Resources

- INTEGRATED TREATMENT\textsuperscript{11,12}

- AFTER CARE\textsuperscript{13}


Coordination of Care & Co-Occurring Disorders

- SUD intakes had higher rates of depression, anxiety, eating disorders, ADHD, conduct d/o.

- 31% had psychiatric services in the 6 months after intake.
  - Higher abstinent rates from both alcohol and drugs with psychiatric services.
Substance Abuse Treatment with Psychiatric Component

6 months of treatment with psychiatric services included increased abstinence rates.

CA study, 2005, of 419 adolescents seeking substance abuse treatment.

Increased rates of abstinence with co-located services for adolescents with COD.

Sub-group of CA study, 2005, of 419 adolescents seeking substance abuse treatment.

http://www.drugabuse.gov/NIDA_Notes/NNVol20N6/Numbers.html
Implementation is Essential

( Reduction in Recidivism from .50 Control Group Rate )

<table>
<thead>
<tr>
<th>Program Type Grouped by Rank</th>
<th>Low</th>
<th>Medium</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1 (best)</td>
<td>24%</td>
<td>34%</td>
<td>46%</td>
</tr>
<tr>
<td>Group 2</td>
<td>16%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Group 3</td>
<td>6%</td>
<td>20%</td>
<td>32%</td>
</tr>
<tr>
<td>Group 4 (poorest)</td>
<td>0%</td>
<td>12%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Source: Adapted from Lipsey, 1997, 2005

The effect of a well implemented weak program is as big as a strong program implemented poorly.

Thus one should optimally pick the strongest intervention that one can implement well.

The best is to have a strong program implemented well.
High Risk Recovery Environments

Regular alcohol use

- In home: 29%
- Among work/school peers: 52%
- Among social peers: 61%

Regular drug use

- In home: 17%
- Among work/school peers: 67%
- Among social peers: 79%

Source: 2006 CSAT AT Common GAIN Data set
Participation in Activities

- Approximately 91% of youths 12-17 participated in one or more school-based, community-based, faith-based or other activity in the past year.

- Youth participation decreased with age.

- Females were more involved than males.

- Youths aged 12 to 17 who participated in activities during the past year were less likely to have used cigarettes, alcohol, or illicit drugs in the past month.

NSDUH, 2003
### Past Month Use of Marijuana or Any Illicit Drug Other Than Marijuana among Youths Aged 12 to 17, by Participation Status in the Past Year and Type of Activity: 2003

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>No Activity</th>
<th>1 or More Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td>11.6%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Any Illicit Drug Other Than Marijuana</td>
<td>7.6%</td>
<td>5.3%</td>
</tr>
<tr>
<td>School-Based Activities</td>
<td>10.2%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Community-Based Activities</td>
<td>7.2%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Church- or Faith-Based Activities</td>
<td>11.4%</td>
<td>6.3%</td>
</tr>
<tr>
<td>Other Activities</td>
<td>6.7%</td>
<td>5.2%</td>
</tr>
<tr>
<td>Drug Other Than Marijuana</td>
<td>8.8%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Other Activities</td>
<td>6.0%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

NSDUH, 2003
Past Month Cigarette or Alcohol Use Youths Aged 12 to 17, by Participation Status in the Past Year and Type of Activity: 2003

NSDUH, 2003
Family Context: Set the Stage for Change

- Create family recovery environment
- Re-establish hierarchy and boundaries
- Decrease family conflicts
- Rebuild bonds and relationships
- Increase positive family communication
- Increase supervision and monitoring
- Collaborative Problem Solving (Greene & Ablon)
Parental Influence on Substance Use in Youths 12 to 17 years old

2003 (NSDUH)

- 59%, 14.6 million, of youths who talked to a parent about alcohol, drugs, tobacco reported less use of these substances in the past month.

- Perceived parental disapproval of substance use were less likely to use that substance.
  - Tobacco use-- 7.9% parental disapproval vs. 40.5% somewhat disapproval/neutral
  - Marijuana use--4.6% vs. 27%
Past Month Parent Involvement with Youths Aged 12-17 Reduced Their Substance Use: 2005

2006 (NSDUH)

Youths had lower rates of illicit drug use, cigarettes, and alcohol when parent always or sometimes monitored behaviors than those who seldom or never monitored--

- Drug use--8.1% vs. 17.4%
- Cigarettes--9.3% vs. 17.7%
- Alcohol--14.5% vs. 27.2%
Peer Support

- Alumni Group
- Aftercare Group
- Client Advisory Group
- Client Co-Leaders for engagement & preparation groups, milieu
- NAMI Peer Groups
- NAMI In Our Own Voice Presentations
- 12 Step groups
Community Supports & Linkages for Individuals & Family

- National Alliance for the Mentally Ill (NAMI) Groups: Family to Family, Peer to Peer, Care Groups, In Our Own Voice
- Al Anon, Families Anonymous
- Multi-Family Group by Staff on-site
- Dual Diagnosis Anonymous (DDA)
- Dual Recovery Anonymous (DRA)
- Double Trouble
- Program Alumni
- Compeer
Key Systems

EDUCATION
- Balancing youth’s educational needs with school rules & safety
- Increase the youth and family’s connection with the school
- Provide technical assistance to teachers and administrators
- Assist in the development of adaptive school environments
- Be on-call to the school for stabilization of youth

JUVENILE JUSTICE
- Balancing accountability, safety & illness
- Clinically informed decision making
- Communication and collaboration
- Building program credibility: Risk comfort level
- Community ownership and monitoring

A Life in the Community for Everyone
Substance Abuse and Mental Health Services Administration
U.S. Department of Health and Human Services
Long Term Supports

12 Step Groups-
Dual Diagnosis Anonymous [http://www.ddaworldwide.org](http://www.ddaworldwide.org)
Families Anonymous [http://www.familiesanonymous.org/content/about.htm](http://www.familiesanonymous.org/content/about.htm)

National Alliance for the Mentally Ill (NAMI)-
Peer to Peer and NAMI Care Groups, “In Our Own Voice”,
Family to Family Groups

SAMHSA Family Education Toolkit

Community Contacts, Work/Education Opportunities
COD in the Adolescent Population

Concluding Remarks:

- Adolescents vs adults
  - Consideration for the developing brain

- COD the exception not the rule
  - Consideration for screen across various systems

- Psychiatric d/o’s predate SUDs
  - Consideration for prevention and early intervention
COD in the Adolescent Population

Concluding Remarks:

- Treatment works
  - Consideration for the continuum of care model

- The earlier the treatment the better the outcome
  - Identify multiple diagnosis, trauma exposure, learning disabilities

- Care coordination
  - Motivation to change is systemic
  - Consideration for services and systems integration
The Co-Occurring Center for Excellence (COCE), launched by The Substance Abuse and Mental Health Services Administration (SAMHSA) in September 2003, is the first national resource for the field of co-occurring mental health and substance use disorders (COD).

**Featured Highlights**

- COCE Overview Papers
- Monthly Review of Co-Occurring Disorders (COD) Research and Resources
- COD Bibliographic Database
- State Action Plans to Address COD

**Core Content Areas**

- Definitions, Terminology, Classification
- Screening and Assessment
- Treatment Planning and Approaches
- Evidence and Consensus Based Practices
- Workforce Development and Training
- Services Integration

http://www.samhsa.coce.gov/
Co-Occurring Center for Excellence

- Technical Assistance Phone Line: 301-951-3369
- Technical Assistance Email Address: coce@samhsa.hhs.gov
- Web site address: www.coce.samhsa.gov
SAMHSA/CSAT Information

- www.samhsa.gov

- SHIN 1-800-729-6686 for publication ordering or information on funding opportunities
  - 800-487-4889 – TDD line

- 1-800-662-HELP – SAMHSA’s National Helpline
  (average # of TX calls per mo. - 24,000)

- Co-Occurring Center for Excellence
  www.coce.samhsa.gov
For More Information

Jorielle R. Brown, Ph.D.
Public Health Advisor, COCE Federal Project Officer
SAMHSA Co-occurring and Homeless Activities Branch

(240) 276-1176
jorielle.brown@samhsa.hhs.gov
www.samhsa.gov