Southeastern Regional Action Council (SERAC)

Epidemiologic Profile of Substance Use, Suicide & Problem Gambling

December 2012
Contributors

Michele Devine, MA: Executive Director
Angela Rae Duhaime, MA: Community Coordinator
Christine Miskell DVM, MPH
Community Needs Assessment Workgroup

Abbreviations

CDC Centers for Disease Control
CNAW Community Needs Assessment Workgroup
COPD Chronic Obstructive Pulmonary Disease
CT Connecticut
DAWN Drug Abuse Warning Network
DESPPP Department of Emergency Services and Public Protection
DHHS Department of Health and Human Services
DMHAS Department of Mental Health and Addiction Services
DPH Department of Public Health
DPS Department of Public Safety
DUI Driving Under the Influence
HIV Human Immunodeficiency Virus
LPC Local Prevention Council
MVA Motor Vehicle Accident
NHTSA National Highway Transportation Safety Administration
NIDA National Institute on Drug Abuse
NSDUH National Survey of Drug Use and Health
PSA Public Service Announcement
RAC Regional Action Council
SAMHSA Substance Abuse and Mental Health Service Administration
SDE State Department of Education
SEOW State Epidemiologic and Outcomes Workgroup
SERAC Southeastern Regional Action Council
SPF Strategic Prevention Framework
US United States
YPLL Years of Potential Life Lost
YRBSS Youth Risk Behavior Surveillance System
# Table of Contents

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Summary</td>
<td>7</td>
</tr>
<tr>
<td>Body</td>
<td>9</td>
</tr>
<tr>
<td>Alcohol</td>
<td></td>
</tr>
<tr>
<td>-Alcohol Use in the United States, Connecticut and Sub-Region 3B</td>
<td>10</td>
</tr>
<tr>
<td>-Attitudes and Perceptions Related to Alcohol Use Among High School Youth in Sub-Region 3B</td>
<td>10</td>
</tr>
<tr>
<td>-Driving Under the Influence Arrests (Age 10 and older, Rate per 10,000)</td>
<td>11</td>
</tr>
<tr>
<td>-Motor Vehicle Accidents Under the Influence of Alcohol in Connecticut and Sub-Region 3B</td>
<td>11</td>
</tr>
<tr>
<td>Tobacco</td>
<td></td>
</tr>
<tr>
<td>-Recent Cigarette Use in the United States</td>
<td></td>
</tr>
<tr>
<td>-Attitudes and Practices Regarding Cigarette Use Among High School Youth in Sub-Region 3B</td>
<td></td>
</tr>
<tr>
<td>-Percent of Tobacco Retailers Non-Compliant (2008-2010)</td>
<td></td>
</tr>
<tr>
<td>Prescription Drugs</td>
<td></td>
</tr>
<tr>
<td>-Lifetime Prescription Drug Misuse Among Youth in Grades 9-12</td>
<td></td>
</tr>
<tr>
<td>-Misuse of Various Types of Prescription Drugs Among Youth in Grades 9-12 in Sub-Region 3B</td>
<td></td>
</tr>
<tr>
<td>Marijuana</td>
<td></td>
</tr>
<tr>
<td>-Marijuana Use Among High School Youth (2011)</td>
<td></td>
</tr>
<tr>
<td>-Trends in Attitudes and Behavior Regarding Marijuana Use Among Youth in Grades 9-12 in Sub-Region 3B (2010-2012)</td>
<td></td>
</tr>
<tr>
<td>Heroin</td>
<td></td>
</tr>
<tr>
<td>Lifetime Heroin Use Among High School Youth (2011)</td>
<td></td>
</tr>
<tr>
<td>-Lifetime Heroin Use Among High School Youth in Sub-Region 3B</td>
<td></td>
</tr>
<tr>
<td>-Rate of Illegal Drug Related Suspensions and Expulsion (2010-2011)</td>
<td></td>
</tr>
<tr>
<td>Cocaine</td>
<td></td>
</tr>
<tr>
<td>Lifetime Cocaine Use Among High School Youth (2011)</td>
<td></td>
</tr>
<tr>
<td>Lifetime Cocaine Use Among High School Youth in Sub-Region 3B</td>
<td></td>
</tr>
<tr>
<td>-Rate of Illegal Drug Related Suspensions and Expulsion (2010-2011)</td>
<td></td>
</tr>
<tr>
<td>Problem Gambling</td>
<td></td>
</tr>
<tr>
<td>-Past Year Gambling Behavior Among Connecticut High School Youth</td>
<td></td>
</tr>
<tr>
<td>-Problem Gambling Indicators Among High School Youth in Sub-Region 3B (2012)</td>
<td></td>
</tr>
<tr>
<td>Suicide</td>
<td></td>
</tr>
<tr>
<td>-Suicidal Behavior (2011)</td>
<td></td>
</tr>
<tr>
<td>Appendices</td>
<td></td>
</tr>
<tr>
<td>Appendix 1: Data Sources</td>
<td></td>
</tr>
</tbody>
</table>
Introduction

Purpose of the profile
Southeastern Regional Action Council (SERAC) is one of 13 Regional Action Councils that support prevention, health promotion and recovery services in Connecticut. SERAC serves Sub-Region 3B which includes the following 20 communities located in Southeastern Connecticut: Bozrah, Colchester, East Lyme, Franklin, Griswold, Groton, Ledyard, Lisbon, Lyme, Montville, New London, North Stonington, Norwich, Old Lyme, Preston, Salem, Sprague, Stonington, Voluntown and Waterford  Since 2004, Connecticut Department of Mental Health and Addiction Services (DMHAS) has practiced the United States Substance Abuse and Mental Health Service Administration’s (SAMHSA) Strategic Prevention Framework (SPF) at the State, sub-regional, and community levels. The SPF is a five-step, data-driven process known to promote youth development and prevent problem behaviors across the life span. SERAC has produced this Epidemiologic Priority Profile with assistance from community members in support of the DMHAS SPF process and to facilitate a data driven analysis of the magnitude and impact of the following 8 priority issues of concern in Connecticut and within Sub-Region 3B: alcohol use, tobacco use, prescription drug use, marijuana use, heroin use, cocaine use, problem gambling suicide.

Description of the RAC region
According to estimates in the 2008-2010 American Community Survey prepared by the US Census Bureau in 2011, the SERAC region includes a total of 104,413 households representing 266,747 individuals. This corresponds to about 7.5% of the population of the State of Connecticut. Individual community populations range from about 2,600 in Bozrah to about 40,000 in Norwich and Groton. Within Sub-Region 3B, 8.6% of residents describe themselves as Hispanic compared to a statewide average of 13.4% and 77.9% of residents describe themselves as White, non-hispanic compared to a statewide average of 71.2%. The median household income for the sub-region ($32,958) is below the state average of $43,324. Median household income for individual communities ranges from a low of $31,181 to a high of $54,400. The percentage of residents within the sub-region living below the poverty level (7.5%) is below the state average of 9.2%. Rates within individual communities range from 1.4% to 17.3%

Although the sub-region is largely rural or suburban, it does include two urban cities (Norwich and New London). The sub-region includes a Naval Submarine Base 5 colleges. The sub-region also includes two Native American Tribal Nations, each of which has casino.

Sources of data
The data used to compile this report have been drawn from a variety of sources including the following:
- **Youth Surveys**: Since 2006, SERAC has been working in partnership with local prevention coalitions and school districts throughout the sub-region in order to conduct surveys aimed at ascertaining prevalence, attitudes, behaviors and perceptions among youth in grades 6-12 with regard to substance use and related behaviors.
- **National and State Surveys**: Including National Survey of Drug Use and Health, Youth Risk Behavior Surveillance System, Connecticut School Health Survey
- **Secondary Data**: Including arrests, motor vehicle accidents and fatalities, treatment admissions, school suspensions and expulsions compiled by DMHAS and the State Epidemiologic and Outcomes Workgroup (SEOW) from state and federal sources.
- **Community Needs Assessment Workgroup**: participants reviewed compiled data, provided ranking input and also provided anecdotal information and feedback about priority issues from a local perspective.

Strengths and limitations of the profile
This profile attempts to summarize data collected at the National, State and local level. Although the data are believed to be reliable, valid and relevant, due to space limitations, it is neither practical nor possible to include all available data. Also, for some relevant indicators (such as treatment admissions related to heroin and cocaine) current data are not available.

Methods
Development of this profile was a multi-step process. First, available data relevant to the 8 statewide priorities were compiled, tabulated and summarized. Next, a Community Needs Assessment Workgroup was convened with the purpose of reviewing the profiles for each if the statewide priorities and for ranking their importance within the Sub-Region. In developing their rankings, CNAW members were asked to consider not only the sheer magnitude of individual priorities but also the impacts or consequences associated with that priority as well and the changeability of that priority.
<table>
<thead>
<tr>
<th>CNAW Member</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michelle Hamilton</td>
<td>Ledge Light Health District/GASP Coalition</td>
</tr>
<tr>
<td>Cassie Falvey</td>
<td>New London Community and Campus Coalition</td>
</tr>
<tr>
<td>Kimberly Grant</td>
<td>Montville Youth Services Bureau</td>
</tr>
<tr>
<td>Kerensa Mansfield</td>
<td>Ledge Light Health District/ Ledyard Safe Teens Coalition</td>
</tr>
<tr>
<td>Jennifer Sloat</td>
<td>Colchester Youth Services Bureau</td>
</tr>
<tr>
<td>Paris Athenian</td>
<td>Reliance House</td>
</tr>
<tr>
<td>Karen Fischer</td>
<td>Community Action for Substance Free Youth</td>
</tr>
<tr>
<td>Kate Sikorski</td>
<td>Ledyard Youth and Family Services</td>
</tr>
<tr>
<td>Justin Sleeper</td>
<td>William W. Backus Hospital</td>
</tr>
</tbody>
</table>
### Summary

#### Priority Ranking

<table>
<thead>
<tr>
<th>PROBLEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
</tr>
<tr>
<td>Prescription Drug Misuse</td>
</tr>
<tr>
<td>Suicide</td>
</tr>
<tr>
<td>Marijuana</td>
</tr>
<tr>
<td>Tobacco</td>
</tr>
<tr>
<td>Heroin</td>
</tr>
<tr>
<td>Cocaine</td>
</tr>
<tr>
<td>Problem Gambling</td>
</tr>
</tbody>
</table>
### CNAW Priority Ranking Matrix - Aggregate Scores

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>MAGNITUDE</th>
<th>IMPACT</th>
<th>CHANGEABILITY</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>36</td>
<td>36</td>
<td>29</td>
<td>12.62</td>
</tr>
<tr>
<td>Tobacco</td>
<td>20</td>
<td>23</td>
<td>30</td>
<td>9.13</td>
</tr>
<tr>
<td>Marijuana</td>
<td>34</td>
<td>34</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>Prescription Drug Misuse</td>
<td>31</td>
<td>33</td>
<td>25</td>
<td>11.13</td>
</tr>
<tr>
<td>Heroin</td>
<td>22</td>
<td>29</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Cocaine</td>
<td>21</td>
<td>25</td>
<td>22</td>
<td>8.63</td>
</tr>
<tr>
<td>Problem Gambling</td>
<td>23</td>
<td>26</td>
<td>19</td>
<td>8.5</td>
</tr>
<tr>
<td>Suicide</td>
<td>27</td>
<td>34</td>
<td>28</td>
<td>11.13</td>
</tr>
</tbody>
</table>

**SCALE:** 1=Lowest  2=Low  3=Medium  4=High  5=Highest
Alcohol

Magnitude

Alcohol is the most widely used and abused substance in the United States. Current national data suggest that alcohol use rates in Connecticut are higher than national averages. According to the National Survey on Drug Use and Health (NSDUH), 51.8% of all Americans and 59.4% of Connecticut residents aged 12 or older reported being current drinkers in 2010. According to the Youth Risk Behavior Surveillance System (YRBSS), the rate of recent alcohol use among Connecticut high school youth (41.5%) was higher than the national average (38.7%) in 2011. In 2011, the rate of recent use among youth in the Sub-region (28.9%) was below both the State and National averages from YRBSS.


Recent alcohol use among high school youth in the Sub-region has remained relatively steady from 2008 to 2011. Also between 2008 and 2011, the percentage of high school youth in Sub-Region 3B who report that there is moderate or great harm associated with alcohol use rose from 68.4% to 78.9%.

Impact

The consequences and impacts of alcohol use, abuse and dependence include increased crime, long and short term negative health effects and unintentional injury and death. According to the US Centers for Disease Control (CDC):

- Excessive alcohol use is the 3rd leading lifestyle-related cause of death in the US.
- Excessive alcohol use is responsible for 2.3 million years of potential life lost (YPLL) annually.

In Sub-Region 3B:

- In 2010, the rate of liquor law arrests age 10 and older (1.3 per 10,000) was the third lowest among all Regional Action Councils (RACs) and was below the state average of 3.9 per 10,000 (CT Department of Emergency Services and Public Protection, DESPP).
- For the 2010-2011 school year, the rate of alcohol-related suspensions and expulsions (8.6 per 10,000) was slightly lower than the state average of 9.4 per 10,000 (CT State Department of Education, CT SDE).
- From 2007-2009, 14 individual communities (70%) had crude alcohol-induced death rates above the state average of 6.1 per 100,000 (range 6.4 - 22.5; CT Department of Public Health, DPH).
Sub-Region 3B Epidemiologic Profile 2012

- In 2010, the rate of driving under the influence (DUI) arrests for individuals 10 and older (59.6 per 10,000) was the highest among all RACs and was about 1.7 times the state average (34.8 per 10,000; CT DESPP).

Source: CT Department of Emergency Services and Public Protection (2010)

- In 2010, the rate of motor vehicle accidents (MVA) under the influence of alcohol (11 per 10,000) was the highest among all 14 RACs and was nearly twice the average for Connecticut (6.6 per 10,000; National Highway Transportation Safety Administration, NHTSA).

- In 2010, the rate of fatal motor vehicle accidents under the influence of alcohol (4.4 per 100,000) was the fifth highest among all RACs and was above the state average (3.2 per 100,000; NHTSA). The rates in 9 of 20 individual communities (45%) were also above the state average.

Motor Vehicles Accidents Under the Influence of Alcohol in Connecticut and Sub-Region 3B


Capacity
According to the 2012 Connecticut Community Readiness Assessment for Substance Abuse Prevention, the overall readiness for Substance Abuse Prevention in Sub-Region 3B is 4.84. This means that the Sub-Region is somewhere between recognizing the existence of a substance abuse problem (4.0) and planning practical details of substance abuse prevention efforts (5.0). The statewide average level of readiness is 5.08. Among the Sub-Region 3B residents who participated in the assessment, the largest numbers of individuals in all age groups regard alcohol as a "significant problem" compared to other substances including tobacco, marijuana, other illicit drugs and prescription drugs. Overall, participants feel that the residents of Sub-Region 3B are neutral (average rating = 2.45, 2=somewhat disagree, 3= somewhat agree) with regard to being concerned about preventing alcohol abuse. Respondents feel that 1) a lack of volunteers, 2) limited financial resources, 3) lack of community buy-in about substance abuse and 4) the perception that substance abuse is a personal problem are the largest barriers to substance abuse prevention activities within the sub-region. Key informants feel that the community is most ready to collect data about substance abuse problems and is least ready to allocate funds for substance abuse prevention.
Throughout the region, there is long standing awareness of and support for the prevention of alcohol abuse, especially among youth. Most communities have school resource officers and drug and alcohol prevention programming in the schools. Many communities have a history of local programs such as mock crashes and alcohol free graduation parties aimed at reducing alcohol-related accidents and consequences around prom and graduation time.

Recently, SERAC has begun offering seller-server training to employees of alcohol retailers throughout the region. Several Local Prevention Councils have written strategic plans that include the reduction of youth alcohol use as a priority. Some specific activities of these local organizations include the development of media campaigns about social and coordination of Sticker Shock campaigns aimed at reducing the likelihood that adults will buy alcohol for minors. SERAC has also partnered with the Connecticut State Police to conduct "shoulder taps" in several communities throughout the sub-region.

Additional resources are needed to promote continued awareness about the dangers of alcohol use for all ages, not just youth and to continue to raise awareness about social hosting laws in Connecticut.
Tobacco

Magnitude

After alcohol, tobacco is the second most commonly used substance in the United States. According to the National Survey of Drug Use and Health (NSDUH), the percentage of Americans aged 12 or older reporting recent cigarette use declined from 26.0% in 2002 to 23.0% in 2010. Since 2008, the rates of recent cigarette use in Connecticut tend to be similar to or lower than the national rates.

In Sub-Region 3B, recent cigarette use among high school youth declined steadily from 2008 to 2011. During the same period, perceived harm for cigarette use remained relatively stable.

Impact

According to the US Surgeon General, of every three young smokers, one will quit and one will die of tobacco related causes. Nearly all tobacco use begins in childhood and adolescence. In fact, 80% of adult cigarette smokers who smoke daily, report that they started smoking by the age of 18.

The US Centers for Disease Control report the following:

- Each year in the United States, adverse health effects from cigarette smoking account for an estimated 443,000 deaths.
More deaths are caused each year by tobacco use than by HIV, illegal drug use, motor vehicle injuries, suicides and murders combined.

Smoking causes and estimated 90% of all lung cancer deaths among men and 80% of all lung cancer deaths among women.

Compared to nonsmokers, smokers are at increased risk of coronary heart disease, stroke, lung cancer and COPD.

In Sub-Region 3B

In 2008-2010, the percentage of tobacco retailers who were non-compliant (12.7%) was below the state average of 13.3% (CT Department of Mental Health and Addiction Services, DMHAS). Six individual communities in Sub-Region 3B had non-compliance rates above the state average. Those rates ranged from 13.5% to 33.3%.

The rate of tobacco related suspensions and expulsions (26.3 per 10,000 students) in 2010 was higher than the state average of 21.0 per 10,000 students (CT State Department of Education, SDE). Overall, 40% of suspensions and expulsions in the Sub-Region were tobacco related compared to 37% in Connecticut (CT SDE).

Thirteen of twenty communities (65%) had crude lung cancer death rates above the state average of 49.9 per 100,000 in 2007-2009 (CT Department of Public Health, DPH).

Capacity

According to the 2012 Connecticut Community Readiness Assessment for Substance Abuse Prevention, the overall readiness for Substance Abuse Prevention in Sub-Region 3B is 4.84. This means that the Sub-Region is somewhere between recognizing the existence of a substance abuse problem (4.0) and planning practical details of substance abuse prevention efforts (5.0). Respondents feel that 1) a lack of volunteers, 2) limited financial resources, 3) lack of community buy-in about substance abuse and 4) the perception that substance abuse is a personal problem are the largest barriers to substance abuse prevention activities within the sub-region. Key informants feel that the community is most ready to collect data about substance abuse problems and is least ready to allocate funds for substance abuse prevention.

Although there has long been widespread awareness about the risks and dangers of tobacco use, new opportunities and collaborations continue to emerge. ACHIEVE is a newly formed coalition focused broadly on promoting health and wellness in New London County. It has set the prevention/reduction of tobacco use as one of its priority issues. Working with the local prevention council in New London, ACHIEVE successfully advocated for passage of new local legislation prohibiting smoking within 30 feet of a building entrance and restricting smoking in parks to designated smoking areas.
Prescription Drugs

Magnitude
The US Centers for Disease control reports that prescription drug abuse is the fastest growing drug problem in the United States. Many individuals who misuse prescription drugs mistakenly believe that these substances are safer than illicit drugs because they are prescribed by healthcare professionals. According to the National Institute on Drug Abuse, data from several national surveys suggest that prescription medications, including those used to treat pain, attention deficit disorders and anxiety are being abused at a rate second only to marijuana among illicit drug users. According to data from the Youth Risk Behavior Surveillance System (YRBSS), lifetime prescription drug misuse among high school youth was relatively constant in the United States between 2009 and 2011. Rates were 20.2% and 20.7% in 2009 and 2011, respectively. According to the CT School Health Survey, the rate in Connecticut was also constant during that time (9.6% in both years). Youth survey data indicate that the local rates of lifetime prescription medication misuse among high school youth in Sub-Region 3B are higher than the state average and increased from 14.5% to 18.1% between 2009 and 2011.

Impact
The Drug Abuse Warning Network (DAWN), which monitors emergency department visits across the nation, reported that in 2010 that 1.3 million emergency department visits could be attributed to prescription drug misuse or abuse. Emergency department visits involving misuse or abuse of pharmaceutical products increased 115% between 2004 (626,000 visits) and 2010 (1.3 million visits).

In Sub-Region 3B:
- The rate of pharmaceutical related suspensions and expulsions (3.0 per 10,000 students) in 2010-2011 was higher than the state average of 2.0 per 10,000 students (CT State Department of Education, SDE).
- Overall, 5% of suspensions and expulsions in the Sub-Region were pharmaceutical related compared to 4% in Connecticut (CT SDE).
- From 2010-2012, 17% of high school youth report ever having misused a prescription medication in their lifetime. Recent misuse is reported by 5.5%.
- The most commonly misused class of prescription medication is pain medications.

Source: Youth Risk Behavior Surveillance System, CT School Health Survey, SERAC

Misuse of Various Types of Prescription Drugs
Among Youth in Grades 9-12 in Sub-Region 3B

Source: Southeastern Regional Action Council (2010-2012)
Capacity
According to the 2012 Connecticut Community Readiness Assessment for Substance Abuse Prevention, the overall readiness for Substance Abuse Prevention in Sub-Region 3B is 4.84. This means that the Sub-Region is somewhere between recognizing the existence of a substance abuse problem (4.0) and planning practical details of substance abuse prevention efforts (5.0). Respondents feel that 1) a lack of volunteers, 2) limited financial resources, 3) lack of community buy-in about substance abuse and 4) the perception that substance abuse is a personal problem are the largest barriers to substance abuse prevention activities within the sub-region. Key informants feel that the community is most ready to collect data about substance abuse problems and is least ready to allocate funds for substance abuse prevention.

Awareness about prescription drug misuse and the willingness to address the issue are rising within the sub-region. However, there is still much work to be done. Many residents of the sub-region are still under the false impression that misuse of prescription medications is not as dangerous as the use of illicit drugs. In the past couple of years, SERAC has worked with law enforcement in several communities to coordinate Prescription Drug Take Back Days. The growing support for this movement is evidenced by the fact that local police in at least 6 communities have placed permanent collection containers in their stations. We have also received a grant from Purdue Pharma to provide information to High school and Recreational coaches on prescription drug misuse.

SERAC’s Regional Prevention Committee has begun to expand it membership to include treatment professionals based upon a common goal of reducing the impact of prescription medication misuse.
Marijuana

Magnitude
Marijuana is the most commonly abused illicit drug in the United States. According to the National Survey of Drug Use and Health (NSDUH), in 2010 there were 2.4 million Americans aged 12 or older who used marijuana for the first time in the past 12 months. That corresponds to about 6,600 new users every day. This estimate was similar to the estimates from 2008 and 2009 but higher than the estimates for 2002-2007. Among all youth ages 12-17, an estimated 5.2% had used marijuana for the first time in the past year. This rate was similar to the rate in 2009 (5.4%).

According to the YRBSS, after increasing between 1991 and 1999, the national rates for lifetime and recent marijuana use among high school youth declined between 1999 and 2009 (lifetime: 47.2% to 36.8%; recent: 26.7% to 20.8%). However, both rates increased in 2011 to 39.9% (lifetime) and 23.1% (recent). In 2011, the rates of lifetime (39.6%) and recent (24.1%) marijuana use among CT high school youth were similar to the national averages.

Trends in Attitudes and Behavior Regarding Marijuana Use
Among Youth in Grades 9-12 in Sub-Region 3B
(2010-2012)

Source: Youth Risk Behavior Surveillance System

Local survey data show that between 2010 and 2012, among high school youth in Sub-Region 3B the rates of recent marijuana use, perceived harm of marijuana use and perceived parental disapproval of marijuana use have all tended to decline.

Source: Southeastern Regional Action Council
Impact
The short term effects of marijuana intoxication include distorted perceptions, impaired coordination, difficulty with thinking, problem solving, learning and memory (National Institute on Drug Abuse, NIDA). A meta-analysis of 48 studies found that marijuana use was associated with reduced educational attainment (lower grades and chances of graduation). In another study, heavy marijuana users had lower college completion rates and were more likely to have an annual household income of less than $30,000. Heavy users also reported a negative impact of marijuana use on physical and mental health, cognitive abilities, social life and career status. Other studies have linked marijuana use with increased absenteeism, tardiness, accidents, workers' compensation claims and job turnover. Studies have also shown an association between chronic marijuana use and increased rates of anxiety, depression and schizophrenia but it is not clear at this time if marijuana use actually causes mental health problems, makes them worse or is indicative of attempts at self-medication and management of existing symptoms.

According to the University of Washington Alcohol and Drug Abuse Institute, driving under the influence of marijuana increases the risk of motor vehicle crashes by a factor of 2 or 3.

In Sub-Region 3B:
- In 2009, 4 individual communities (20%) had rates of marijuana dependence treatment admissions (range 11.5 to 19.3 that were higher than the state average of 11.3 per 10,000 (CT Department of Mental Health and Addiction Services, DMHAS).
- Specific data regarding marijuana related school suspensions and expulsions are not available. However, because marijuana is the most commonly abused illicit drug, it might be assumed that marijuana use contributes to a large percentage of the illegal drug related school suspensions and expulsions each year. The rate of illegal drug related suspensions and expulsions (27.5 per 10,000 students) in the Sub-Region in 2010-2011 was higher than the state average of 24.1 per 10,000 students (CT State Department of Education, SDE). Rates in 9 individual school districts that serve Sub-Region 3B (range 25.1 to 106.2) were above the state average.
- Overall, 42% of suspensions and expulsions in the Sub-Region were related to illegal drugs compared to 43% in Connecticut (CT SDE).
- In 2010, the rate of fatal motor vehicle accidents under the influence of drugs (0.8 per 100,000) was lower than the state average of 1.6 per 100,000 (National Highway Transportation Safety Administration). The rate in 18 individual communities was 0. The rates in the remaining 2 communities (Ledyard and Colchester) were approximately 4 times the state average. The rates in those communities were 6.8 and 6.9, respectively.

Capacity
According to the 2012 Connecticut Community Readiness Assessment for Substance Abuse Prevention, the overall readiness for Substance Abuse Prevention in Sub-Region 3B is 4.84. This means that the Sub-Region is somewhere between recognizing the existence of a substance abuse problem (4.0) and planning practical details of substance abuse prevention efforts (5.0). Respondents feel that 1) a lack of volunteers, 2) limited financial resources, 3) lack of community buy-in about substance abuse and 4) the perception that substance abuse is a personal problem are the largest barriers to substance abuse prevention activities within the sub-region. Key informants feel that the community is most ready to collect data about substance abuse problems and is least ready to allocate funds for substance abuse prevention.

Local partners recognize that marijuana is the most commonly abused illicit drug in the sub-region. In 2010, SERAC’s Prevention Committee identified marijuana as a significant concern among the youth population throughout the Sub-Region. As a result, SERAC worked with local partners to develop a regional media campaign, Weeding Out the Truth, which has been use throughout the Sub-Region. In 2011, SERAC worked with several partners to promote the passage of local ordinances making the sale of drug paraphernalia illegal. Unfortunately, Those activities were unsuccessful in light of the move on the part of the Connecticut Legislature to decriminalize possession of small amounts of marijuana and to legalize the use of marijuana for certain medical diagnoses. In response to the passage of this legislation, SERAC an several partners have organized a grassroots group focused on minimizing the misuse of medical marijuana.
Heroin

Magnitude
According to the National Survey of Drug Use and Health (NSDUH), in 2010, 140,000 people ages 12 or older had used heroin for the first time in the past 12 months. This number is similar to but lower than the number in 2009 (180,000) and similar to but higher than those from between 2002 to 2008 which ranged from 91,000 to 118,000 per year.

Nationwide, 2.9% of high school youth report ever having used heroin in their lifetime. This rate remained steady from 1999-2011 (Youth Risk Behavior Surveillance System, YRBSS). In 2011, the rate of lifetime heroin use among CT high school youth was also 2.9%.

Local youth survey data show the following:
1) The lifetime rate of heroin use among high school youth in Sub-Region 3B was below the state average in 2011.
2) The lifetime rate of heroin use among high school youth in Sub-Region 3B has remained relatively steady from 2010-2012.

Source: Youth Risk Behavior Surveillance System

Impact
For many, heroin addiction is a lifelong battle characterized by repeated cycles of drug use and abstinence. Users are at increased risk for crime, incarceration, health problems and death. In one 33 year long longitudinal NIDA (National Institute on Drug Abuse)-supported study conducted at University of California at Los Angeles, the death rate among a group of heroin addicts was 50-100 times the rate in the general population (NIDA NOTES, Vol. 16, No. 4, October, 2001).

Heroin use is associated with serious health consequences including collapsed veins, bacterial infections, viral infections (including HIV Hepatitis), liver and kidney disease, spontaneous abortion, depressed breathing and fatal overdose (NIDA). Regular users often have difficulty concentrating and staying awake. The need to obtain heroin and get high can lead to lateness, absenteeism, poor performance and possible job loss. When finances are insufficient to support the addict’s need, family stability and housing can be threatened and the need to resort to criminal activity to support the addiction may arise.

In Sub-Region 3B
- In 2010, the rate of fatal motor vehicle accidents under the influence of drugs (0.8 per 100,000) was lower than the state average of 1.6 per 100,000 (National Highway Transportation Safety Administration). The rate in 18 individual communities was 0. The rates in the remaining 2 communities (Ledyard and Colchester) were approximately 4 times the state average. The rates in those communities were 6.8 and 6.9, respectively
- In 2010, 6 individual communities (30%) had juvenile (age 10 to 17) drug arrest rates higher than the state average of 42.3 per 10,000. (CT Department of Emergency Services and Public Protection, DESPP)
The rate of illegal drug related suspensions and expulsions (27.5 per 10,000 students) in the Sub-Region in 2010-2011 was higher than the state average of 24.1 per 10,000 students (CT State Department of Education, SDE). Rates in 9 individual school districts (45%) that serve Sub-Region 3B (range 25.1 to 106.2) were above the state average.

### Rate of Illegal Drug Related Suspensions and Expulsions (2010-2011)

<table>
<thead>
<tr>
<th></th>
<th>Connecticut</th>
<th>Sub-Region 3B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate per 10,000</td>
<td>24.1</td>
<td>27.5</td>
</tr>
</tbody>
</table>

Source: CT State Department of Education

Overall, 42% of suspensions and expulsions in the Sub-Region were related to illegal drugs compared to 43% in Connecticut (CT SDE).

**Capacity**

According to the 2012 Connecticut Community Readiness Assessment for Substance Abuse Prevention, the overall readiness for Substance Abuse Prevention in Sub-Region 3B is 4.84. This means that the Sub-Region is somewhere between recognizing the existence of a substance abuse problem (4.0) and planning practical details of substance abuse prevention efforts (5.0). Respondents feel that 1) a lack of volunteers, 2) limited financial resources, 3) lack of community buy-in about substance abuse and 4) the perception that substance abuse is a personal problem are the largest barriers to substance abuse prevention activities within the sub-region. Key informants feel that the community is most ready to collect data about substance abuse problems and is least ready to allocate funds for substance abuse prevention.

Although most people seem to be aware of the dangers of heroin use, many residents of the sub-region seem unaware of or in denial of the existence of illicit drug use (in general) and heroin use (in particular). Many seem to feel that heroin is a problem in larger cities. Awareness is slowly increasing due, in part, to media coverage of several recent arrests and overdoses in the area. Also, as awareness about prescription drug misuse rises, awareness of the danger of transition from pain medications to heroin seems to be following. At this point, prevention activities are focused primarily on raising awareness and building partnerships.
Cocaine

Magnitude
According to National Survey of Drug Use and Health (NSDUH), in 2010, 637,000 people ages 12 or older used cocaine for the first time in the past year. This corresponds to 1,700 new users every day in 2010. The number of new cocaine users declined from 1,000,000 in 2002 to 637,000 in 2010. The number in 2010 was similar to the numbers in 2008 (722,000) and 2009 (617,000).

According to data from the 2011 Youth Risk Behavior Surveillance System, 6.8% of high school youth nationwide reported lifetime use of cocaine while 3% reported recent use of cocaine. Among CT high school youth, the rate of lifetime cocaine use (5.0%) was lower than the national average. Local survey data show that the rate of lifetime cocaine use among high school youth in Sub-Region 3B in 2011 (3.3%) was lower than national and state averages.

Lifetime Cocaine Use Among High School Youth (2011)

Source: Youth Risk Behavior Surveillance System, Southeastern Regional Action Council

However, local data also show that the rate of lifetime cocaine use among high school youth in Sub-Region 3B has been increasing in recent years.

Lifetime Cocaine Use Among High School Youth in Sub-Region 3B

Source: Southeastern Regional Action Council

Impact
Cocaine can be taken in a variety of ways including orally, by snorting and by injection. There is no safe way to use cocaine (National Institute on Drug Abuse, NIDA). Any route of exposure can result in absorption of toxic amounts of cocaine which can lead to cardiovascular and/or cerebrovascular emergencies, seizures and death. Other adverse effects of cocaine use include loss of sense of smell, problems swallowing, irritation of the nasal septum, gangrene of the bowel, infection (bacterial and viral) weight loss and malnourishment.
According to the National Survey of Drug Use and Health (NSDUH), in 2010 approximately 1 million people met the criteria for cocaine dependence or abuse in the past 12 months. This number has been declining since 2006 when it was 1.7 million. The Drug Abuse Warning Network (DAWN), which monitors emergency department visits across the nation, reported that in 2010 there were 488,101 emergency department visits attributed to cocaine abuse.

In Sub-Region 3B:

- The rate of illegal drug related suspensions and expulsions (27.5 per 10,000 students) in the Sub-Region in 2010-2011 was higher than the state average of 24.1 per 10,000 students (CT State Department of Education, SDE). Rates in nine individual school districts that serve Sub-Region 3B (range 25.1 to 106.2) were above the state average.

![Rate of Illegal Drug Related Suspensions and Expulsions](chart.png)

**Source: CT State Department of Education**

- Overall, 42% of suspensions and expulsions in the Sub-Region were related to illegal drugs compared to 43% in Connecticut (CT SDE).
- In 2010, the rate of fatal motor vehicle accidents under the influence of drugs (0.8 per 100,000) was lower than the state average of 1.6 per 100,000 (National Highway Transportation Safety Administration). The rate in 18 individual communities was 0. The rates in the remaining 2 communities (Ledyard and Colchester) were approximately 4 times the state average. The rates in those communities were 6.8 and 6.9, respectively.
- In 2010, 6 individual communities (30%) had juvenile (age 10 to 17) drug arrest rates higher than the state average of 42.3 per 10,000. (CT Department of Emergency Services and Public Protection, DESPP)

**Capacity**

According to the 2012 Connecticut Community Readiness Assessment for Substance Abuse Prevention, the overall readiness for Substance Abuse Prevention in Sub-Region 3B is 4.84. This means that the Sub-Region is somewhere between recognizing the existence of a substance abuse problem (4.0) and planning practical details of substance abuse prevention efforts (5.0). Respondents feel that 1) a lack of volunteers, 2) limited financial resources, 3) lack of community buy-in about substance abuse and 4) the perception that substance abuse is a personal problem are the largest barriers to substance abuse prevention activities within the sub-region. Key informants feel that the community is most ready to collect data about substance abuse problems and is least ready to allocate funds for substance abuse prevention.

As with heroin, most people seem to be aware of the dangers of cocaine use, but many residents of the sub-region seem unaware of or in denial of the existence of illicit drug use (in general) and cocaine use (in particular). Many seem to feel that cocaine use is only a problem in larger cities. Awareness is slowly increasing due, in part, to media coverage of several recent arrests and overdoses in the area. At this point, prevention activities are focused primarily on raising awareness and building partnerships.
Problem Gambling

Magnitude
According to the CT Council on Problem Gambling, problem gambling is a disorder or addiction characterized by obsession or loss of control with regard to gambling behavior such that the gambling behavior interferes with the individual's normal activities and responsibilities and negatively impacts personal relationships, finances, school or work performance and health. Pathological gambling is the most severe form of problem gambling. According to the CT School Health survey, in 2011 25.2% of high school students had gambled for money or possessions in the past 12 months compared to 26.6% in 2009. In both years, the rate among males was significantly higher than the rate among females.

Past Year Gambling Behavior
Among Connecticut High School Youth

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>26.6</td>
<td>25.2</td>
</tr>
<tr>
<td>Males</td>
<td>39.2</td>
<td>38.1</td>
</tr>
<tr>
<td>Females</td>
<td>13.7</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Source: CT School Health Survey

It is estimated that 4% of US adults meet the criteria for problem gambling and 6% of Connecticut residents meet the criteria. Local survey data from high school youth in Sub-Region 3B show that in 2012, 7.6% of youth reported ever having been untruthful about their gambling while 6.0% reported ever having thought or been told that they might have a problem with gambling. Overall, 10.2% of youth answered yes to at least one of those questions.

Problem Gambling Indicators
Among High School Youth in Sub-Region 3B
(2012)

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untruthful about gambling</td>
<td>7.6</td>
<td>6.4</td>
<td>6.1</td>
</tr>
<tr>
<td>Thought or told you might have a problem</td>
<td>5.9</td>
<td>6.4</td>
<td>6.1</td>
</tr>
<tr>
<td>Either indicator</td>
<td>10.2</td>
<td>10.0</td>
<td>10.9</td>
</tr>
</tbody>
</table>

Source: Southeastern Regional Action Council

Impact
According to the CT Council on Problem Gambling:
- Gambling often occurs in association with psychiatric problems and other addictive behaviors.
- Problems gamblers may resort to crime in order to get more cash. Most of these crimes do not involve violence but some, such as robbery and breaking and entering may result in serious injury.
- 20% of pathological gamblers have attempted suicide.
- We are located in the region with the 2 casino’s and anecdotally are very aware that problem gambling has on our community.
Capacity
According to the 2012 Connecticut Community Readiness Assessment for Substance Abuse Prevention, the overall readiness for Substance Abuse Prevention in Sub-Region 3B is 4.84. This means that the Sub-Region is somewhere between recognizing the existence of a substance abuse problem (4.0) and planning practical details of substance abuse prevention efforts (5.0). Respondents feel that 1) a lack of volunteers, 2) limited financial resources, 3) lack of community buy-in about substance abuse and 4) the perception that substance abuse is a personal problem are the largest barriers to substance abuse prevention activities within the sub-region. Key informants feel that the community is most ready to collect data about substance abuse problems and is least ready to allocate funds for substance abuse prevention.

Because of the presence of two casinos in the Sub-Region, SERAC and local community officials are acutely aware of the impacts of problem gambling on the Sub-Region. However, until recently problem gambling prevention has not a primary focus of most local prevention activities. In order to raise awareness among local partners, SERAC is working to incorporate problem gambling awareness into existing prevention programming. To raise awareness in the community, SERAC has also worked with a local corporate partner, BigY Supermarkets, to produce a Problem Gambling public service announcement which is shown in closed circuit televisions in local BigY stores. SERAC has also partnered with Chelsea Groton Bank to provided financial Literacy programs to youth called, Bank on your Future. The program includes information on problem gambling.
Suicide

Magnitude
Nationwide, the percentage of high school youth who had seriously considered attempting suicide in the past 12 months declined from 29.0% in 1991 to 13.8% in 2009 and increased again to 15.8% in 2011 (Youth Risk Behavior Surveillance System, YRBSS, 2011). The 2011 rate in CT was 14.6%. Between 1991 and 2011, there was an overall significant decrease in the national prevalence of high school youth who had made a suicide plan from 18.6% to 12.8%. However, the prevalence did increase from 10.9% in 2009 to 12.8% in 2011. Nationwide, 7.8% of high school youth had attempted suicide one or more times in the past 12 months. The rate in CT was 6.7%. Overall, the national prevalence of having attempted suicide decreased between 2001 and 2009 from 8.8% to 6.3% and increased from 2009 to 2011 from 6.3% to 7.8%.

Suicidal Behavior (2011)

Source: Youth Risk Behavior Surveillance System

Impact
According to the US Centers for Disease Control (CDC), suicide is the 10th leading cause of death in the United States. In 2010, more than 38,000 people dies by suicide and more than 1 million individuals reported having attempted suicide in the past year. CDC also reports on average a single suicide costs $1.1 million. One study estimated that approximately 7% of Americans knew someone who died of suicide in the past 12 months. Surviving the loss of a family member of friend to suicide is a risk factor for suicide. In 2011, CDC reported that overall suicide rates tend to rise and fall along with the economy. From 1928-2007, the largest increase in overall suicide rate occurred in the Great Depression. This is important to keep in mind given the current state of the economy.

In Sub-Region 3B:
- From 2007-2009, the suicide rate in 14 individual communities was above the state average of 8.2 per 100,000. In two of those communities, the rate was more than 4 times the state rate.

Capacity
Suicide is a topic that many continue to be hesitant to address. Awareness about the magnitude and impact of suicide in the Sub-Region remains low. Attention is episodic and is focused around media coverage of individual incidents. In October 2012, SERAC sponsored a QPR (Question, Persuade, Refer) training to local prevention partners. SERAC is also working with the Connecticut Suicide Advisory Board in order to raise awareness, provide training and build capacity of local partners in conjunction with the 1 Word, 1 Voice, 1 Life : Suicide Is Preventable Campaign. These recent activities have lead to the identification to dedicated and motivated local partners with whom SERAC is working to reduce the stigma associated with the topic of suicide and to raise awareness about link between suicide and mental health disorders and substance use.
Appendices

Appendix 1: Data Sources

CT Department of Emergency Services and Public Protection
CT Department of Mental Health and Addiction Services
CT Department of Public Health
CT Department of Public Safety
Drug Abuse Warning Network
National Institute on Drug Abuse
National Survey of Drug Use and Health
National Highway Transportation Safety Administration
Substance Abuse and Mental Health Service Administration
State Department of Education
State Epidemiologic and Outcomes Workgroup
Southeastern Regional Action Council Youth Survey Data
US Census Data
Youth Risk Behavior Surveillance System