

**Concord Carlisle  
Substance Use Assessment  
Fall 2017-Spring 2018**

**Conducted by  
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## INTRODUCTION

In the Fall of 2017, the Concord Board of Health and Concord Carlisle Youth Services received a CHNA-15 grant to hire a consultant to conduct a substance use assessment to evaluate the prevalence of alcohol and substance misuse in Concord and Carlisle, Massachusetts. The purpose of this document is to describe the findings from a quantitative and qualitative data collection process to help inform community decision making for preventing and addressing substance use issues particular to the towns of Concord and Carlisle. This report highlights the most compelling data on alcohol and drug challenges in youth and adults, but does not include all of the data collected. We obtained data from many sources and encourage those reading the report to review the PowerPoint slides on the Concord Board of Health's website and the Youth Risk Behavior Survey results on the Concord Carlisle Regional School (CCRS) district website.

## EXECUTIVE SUMMARY

- Concord and Carlisle have comparable rates of abuse of alcohol and marijuana, and other substances, to other parts of Massachusetts. (Table 1)
- Concord and Carlisle youth who use substances, most often use marijuana and alcohol, and the use of electronic cigarettes (vaping) has grown.
- There is a significant increase in alcohol and marijuana use from 8<sup>th</sup> to 10<sup>th</sup> grade.
- Young adults who remain in Concord or Carlisle after high school may be at risk for substance abuse.
- Adults in both towns most often abuse alcohol.
- Both towns have low rates of opioid abuse. However, Middlesex County has the highest rate of opioid deaths in the state.
- In order to keep opioid abuse low, and reduce abuse of other substances, the towns need to remain vigilant with substance use prevention efforts.
- Substance use data is difficult to obtain because of multiples data sources, non-existent data collection systems, and the difficulty of pulling the data from existing records. Because substance use often occurs in private spaces and is not documented, the quantitative data collected represents a partial view of substance use in Concord and Carlisle.

Table 1. Key Findings on Substance Use in Concord and Carlisle		
Youth	Adults	Seniors
Underage drinking	Excessive Drinking	Excessive Drinking
Marijuana Use		
Prescription Medication Abuse		

## BACKGROUND

The first step to create systems change in the ways communities address substance use prevention is to perform an assessment of substance use in the community. A CHNA-15 grant was allocated to hire a consultant to research available public health and public safety data on substance use of all types in Concord and Carlisle. The larger project goal is to use the data and

narrative to frame the issue and engage community partners to create a substance use prevention task force. This assessment provides baseline data to create a shared understanding among community partners of the nature/scope of the problem and factors driving the problem, which can then be used to begin to explore best practice interventions to reduce substance use. The hope is that this assessment will be part of a larger “systems change” model to create a multi-partner community network that uses continuous learning and collaborative solution development to create sustainable change to reduce substance use.

## **METHODOLOGY**

An independent consultant, Louisa Bell Paushter, MPH, was hired to conduct this assessment in September 2017. Jennifer Clarke, Concord Carlisle’s Youth Services Coordinator, Susan Rask, Concord’s Board of Health Director, and Linda Fantasia, Carlisle’s Health Agent guided Paushter on potential sources of data. Sources of data were also identified from state of Massachusetts and public health websites and from qualitative data sources. Key informants were interviewed, and some were asked to provide data. The data collection process varied, depending on the source of the data.

### **Data Limitations**

Documentation of substance use presents many challenges in towns with relatively small populations, where reporting of small numbers may be suppressed to protect confidentiality. Additional challenges to data review are multiple data sources and inconsistency of reporting periods, making it difficult to identify trends or patterns; inconsistent data collection systems; and the difficulty of pulling the data from existing records.

### **Data Sources**

#### Quantitative Data Sources:

- Concord Youth Risk Behavior Survey 2012, 2014, 2016
- Concord Carlisle Youth Risk Behavior Survey 2012, 2014, 2016
- Concord Police
- Carlisle Police
- Carlisle EMS/Fire
- Concord EMS/Fire
- Emerson Hospital Emergency Room
- West Concord Pharmacy
- Concord Carlisle Regional School District
- Concord Public Schools
- Eliot Health Center’s Regional Jail Diversion Program
- Massachusetts Department of Public Health: Quarterly Report on the Opioid Epidemic
- Massachusetts Department of Public Health: MA Opioid-Related EMS Incidents
- Massachusetts State Police CrimeSOLV
- Center for Disease Control and Prevention
- Substance Abuse and Mental Health Services Administration
- William James College INTERFACE Referral Service
- Concord Town Clerk
- Carlisle Town Clerk
- Lahey Clinic

- Massachusetts Department of Elementary and Secondary Education
- Tufts Health Plan Foundation Healthy Aging Data
- U.S. Department of Health and Human Services (HHS), Office of the Surgeon General, Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health. Washington, DC: HHS, November 2016.

Qualitative Data Sources:

- Jennifer Clarke, Concord-Carlisle Youth Services Coordinator
- Susan Rask, Concord Public Health Director
- Linda Fantasia, Carlisle Health Agent
- Kristen Herbert, CPS and CCRSD Director of Teaching and Learning
- Concord Carlisle High School Guidance Department
- Lisa Koski, RN CCRSD
- Concord Middle School Guidance Department
- Kathy Horan, RN, Carlisle Public School
- Kim Reid, Carlisle Public School Psychologist
- Sandra Meyerson, MD, Harvard Vanguard Pediatrics
- Jon Cohan, CADC, LADC
- William J. A. O'Brien, Psy.D
- James Hannon, PhD, LADC-I
- Deborah Garfield, Director of Clinical Services, Eliot Health Center
- Dudley Goar, Attorney at Law
- Peter Cullinane, Carlisle Council on Aging
- Ginger Quarles, Concord Council on Aging
- Tom Judge, Concord Fire Chief
- Burt Rubenstein, Carlisle Fire Department
- Joseph O'Connor, Concord Police Chief
- John Fisher, Carlisle Police Chief
- National Institute of Health/National Institute on Drug Abuse
- Mara Briere, MA, Founder, Grow a Strong Family

## Data Review: Youth

According to the Town census, Concord's population under 20 years old is 25 % or 3,873 (2017). According to the Town census, Carlisle's population under 20 years old is 28%, or 1,420 (2017).

### Youth Risk Behavior Survey (YRBS)

The Concord Public Schools and the Concord Carlisle Regional School District (CCRSD) administer the Youth Risk Behavior Survey (YRBS) in conjunction with Emerson Hospital to students in grades 6, 8, 9, 10, 11, and 12 every other year. The Carlisle Middle School is considering administering this survey, or a similar survey, in the future. It is the most reliable data to measure youth substance use in the Concord Middle Schools (CMS) and CCRSD. The Center for Disease Control and Prevention has conducted reliability studies of national YRBS surveys, and reviewed literature to assess the validity of adolescent self-reporting of behaviors. In both cases, the CDC determined that the YRBS provides statistically valid results.

Significant findings relating to substance use include that Concord and CCRSD students most often use alcohol and marijuana. In addition, the use of electronic cigarettes (vaping) is increasing.

Of particular note is the increase in alcohol and marijuana use from 9<sup>th</sup> grade to 12<sup>th</sup> grade.

- In 2016, the percentage of students who had an alcoholic drink for other than religious reasons increased from 33% in 9<sup>th</sup> grade to 78% in 12<sup>th</sup> grade. Binge drinking also increased from 5% in 9<sup>th</sup> grade to 36% in 12<sup>th</sup> grade.
- In 2016, the percentage of students using alcohol in the 30 days before the survey was administered jumped from 15% in 9<sup>th</sup> grade to 58% in 12<sup>th</sup> grade.
- The percentage of students ever using marijuana increased from 1% in 9<sup>th</sup> grade to 52% in 12<sup>th</sup> grade.
- In 2016, the percentage of students using marijuana in the 30 days before the survey was administered jumped from 5% in 9<sup>th</sup> grade to 30% in 12<sup>th</sup> grade.

This increase of use of alcohol, marijuana, and vaping from 9<sup>th</sup> to 12<sup>th</sup> grade is consistent with past YRBS results. This clearly highlights the need for increased efforts to delay or prevent first use of all substances.

Other significant findings pertain to the decrease in cigarette use and the increase in electronic cigarette use. Student use of electronic cigarettes (vaping) increased from 5% in 9<sup>th</sup> grade to 25% in 12<sup>th</sup> grade, which is an increase from 2014 (7% in 9<sup>th</sup> grade and 21% in 12<sup>th</sup> grade).

The recent increase in vaping is of concern because e-cigarette use among youth and young adults may be associated with initiating use of other tobacco products. The concern is that e-cigarettes are re-normalizing smoking behavior among youth, introducing many of them to nicotine, and potentially causing nicotine addiction. The popularity of e-cigarettes has the potential of reversing the downward smoking trends that have been observed for two decades.

In addition, some evidence suggests that e-cigarette use may be linked to the use of alcohol and other substances such as marijuana; (U.S. Surgeon General, 2016; National Academy of Sciences 2017)). Vaping devices can be used to deliver drugs such as marijuana and there is

an increasing trend in youth to vape marijuana (or use marijuana edibles), rather than smoke marijuana.

On a positive note, cigarette use continues to decline. In 2014, 7% of 9<sup>th</sup> graders and 30% of 12<sup>th</sup> graders had ever smoked a cigarette. In 2016, that decreased to 5% in 9<sup>th</sup> grade and 20% in 12<sup>th</sup> grade. (Table 2.) Reported cigarette use within the past 30 days has declined from 6% of grades 9-12 in 2014 to 4% in 2016.

Table 2. 2016 YRBS Data: Substance Use						
	6th	8th	9th	10th	11th	12th
Ever had a drink of alcohol for non-religious reasons	2	11	33	52	67	78
Ever smoked marijuana	0	1	1	15	37	52
Ever had 5 or more alcoholic drinks in a row*			5	12	16	36
Ever used an electronic cigarette	0	2	5	11	23	25
Ever smoked a cigarette	0	2	5	9	18	20
Ever used synthetic marijuana*			2	4	10	12
Ever used prescription medication not prescribed to them	2	3	5	7	9	9
Ever used prescription opioid not prescribed to them	0	1	1	3	6	4
Ever used "other type" of drug such as LSD< PCP, mushrooms, Ketamine, Rohypnol, or GHB*			1	1	4	4
Ever used cocaine*			1	1	2	3

\*Not asked to 6<sup>th</sup> and 8<sup>th</sup> graders

Other data indicates that by 12<sup>th</sup> grade, 17% of students have offered, sold, or been given an illegal drug on school property. CCRSD reports that over the past four years, they suspended an average of 6 students per year for drug/alcohol/drug paraphernalia offenses. During the first half of the 2017-2018 school year, CCRSD reports that they have suspended 12 students due to electronic cigarette use. (Table 3.)

Table 3. Massachusetts Department of Elementary and Secondary Education  
 CCRSD Student Discipline Data

	2013-2014	2014-2015	2015-2016	2016-2017	2017-1/2018
Alcohol Use	3	1	0	8	
Alcohol Possession	0	1	0	0	
Marijuana Use	5	4	0	0	
Marijuana Possession	0	0	0	1	
Possession of other illegal Substance	1	0	0	0	
Illegal Use of Other Substance	1	0	0	0	12
<b>Total Students*</b>	<b>10</b>	<b>5</b>	<b>0</b>	<b>9</b>	<b>12</b>

\*May differ from total of discipline actions

CMS and Carlisle Middle School have not administered any drug related consequences over the past four years. School personnel suspect that use is more widespread than what the discipline data indicate, but do not have any data to qualify it.

Starting in the 2017-1018 school year, Massachusetts public schools are mandated to conduct screening for risk for substance use related problems, and brief intervention strategies to address concerns at an early stage in adolescents. The CCRSD school nurses are conducting a Screening, Brief Intervention, and Referral to Treatment (**SBIRT**) survey with each freshman. As of January 2018, they have administered the survey to half the freshmen.

The schools work diligently to reduce risk factors for substance abuse, and to thoroughly educate their students. Kristin Herbert, the CPS and CCRSD Director of Teaching and Learning, states "After a thorough examination of our health curriculum program just last year, I can say with confidence that our students have health class more than any other students in the state. I can also say that our curriculum aligns with the state standards and that our health curriculum is responsive to developing trends (for example, opioid abuse). We have multiple initiatives to address stress and mental illness ("Challenge Success," "Mindfulness," etc.), which could lead to substance use and abuse if left unchecked. We have and will continue to bring in outside speakers for students ("If Only" movie for example) and for parents ("In Plain Sight" for example). We also work collaboratively with the Center for Parents and Teachers to bring in more education. Student Success Teams meet at each building to monitor at risk students. Administrators, counselors, and school nurses work collaboratively with the Concord Police in addressing individual students and families as necessary."

## School Guidance Departments

Paushter met with the guidance departments of both CMS and CCRSD, and the Carlisle Middle School nurse and psychologist, to discuss risk factors and preventative factors, along with ideas for reducing substance use. The risk factors for substance use in Concord and Carlisle are listed in Table 4.

Table 4. Youth Substance Abuse Risk Factors Identified by Carlisle Middle School, CMS and CCRSD Guidance Departments

- |  |
|--|
| • <b>Access to prescription medication</b>             |
| • <b>Biological predisposition to addiction</b>        |
| • <b>Sports injury</b>                                 |
| • <b>Family members with substance use issues</b>      |
| • <b>Kids who are not connected to peers or adults</b> |
| • <b>General anxiety</b>                               |
| • <b>Social anxiety</b>                                |
| • <b>Depression</b>                                    |
| • <b>Learning differences</b>                          |
| • <b>ADD/ADHD</b>                                      |
| • <b>Lack of supervision at home</b>                   |
| • <b>High stress level</b>                             |
| • <b>Family stress</b>                                 |
| • <b>Not performing well academically</b>              |
| • <b>Impulsive</b>                                     |
| • <b>Feeling of invincibility</b>                      |
| • <b>High risk peer group</b>                          |
| • <b>Perceived lack of consequences</b>                |
| • <b>Financial means to purchase substances</b>        |

All of the guidance departments, nurses and psychologists discussed protective factors in the schools and the communities. (Table 5)

Table 5. Carlisle Middle School, CMS and CCRSD Guidance Departments: Protective Factors Identified
• <b>Carlisle Middle School, CMS and CCRSD make an effort to ensure that every student has a trusted adult at the school</b>
• <b>Health education programs are well received and well attended</b>
• <b>Schools are quick to put out education to the parents when issues arise</b>
• <b>In 2016-2017 a CCRSD district-wide health curriculum review was performed, and the content and materials were upgraded</b>
• <b>Involvement in clubs and sports, or extra curricular activity</b>
• <b>Parent education programs are available through the school parent groups and the Center for Parents and Teachers</b>
• <b>Involved and educated parents</b>
• <b>Substances are controlled within Concord and Carlisle. To purchase nicotine or alcohol you have to be 21</b>
• <b>All schools have a good working relationship with each other, and law enforcement</b>
• <b>CCRSD describes their culture of wanting to help, not punish, if students are struggling. CCRSD is well staffed and works collaboratively to engage, not exclude kids</b>
• <b>The schools work proactively to identify and assist struggling students</b>
• <b>Good family relationships</b>
• <b>Low population of people ages 20-30</b>

They had recommendations for substance use prevention. (Table 6)

Table 6. Carlisle Middle School, CMS and CCRSD Guidance Departments: Prevention Ideas
• <b>Middle school parents check child's social media</b>
• <b>Streaming parent education programs</b>
• <b>Determine reasons for early self-medication</b>
• <b>Pay attention to first signs of risk taking</b>
• <b>Parents need to be receptive to feedback from the school</b>
• <b>Work together as a family to address issues</b>

## Therapists

Paushter interviewed three local therapists who work with Concord and Carlisle adolescents and adults around the issues of substance abuse: Jon Cohan, CADC, LADC, James Hannon, PhD, LADC-I, and William J. A. O'Brien, Psy.D. They described their youth patients as often having a dual diagnosis of a mental health issue and a substance use disorder. Their patients try to escape their frustrations through substance use, starting with marijuana and alcohol, which can evolve into stronger substances. They see vaping marijuana as an increasingly significant problem in their teenage patients. They are seeing an increase frequency of use, sometimes because the lack of odor while using the vaping device often makes the use not detectable.

In addition to the risk factors that the schools provided, they mentioned other issues. (Table 7) They stated that legalization of marijuana is sending a message to youth that it is not harmful. Their patients often think marijuana is less risky and less harmful than alcohol. The National Institute for Health's National Institute on Drug Abuse has documented these attitudes.

Table 7. Therapists: Summary of Youth Patient Issues
• <b>Mental health diagnosis along with substance use issues</b>
• <b>Often use more than one substance</b>
• <b>Substance use begins with marijuana and/or alcohol and evolves into stronger substances</b>
• <b>Marijuana vaping</b>
• <b>Sleep deprivation</b>
• <b>Concussions</b>
• <b>Desire to be close to peers</b>
• <b>Relaxed parental attitudes towards alcohol and marijuana use</b>
• <b>Access to financial resources</b>
• <b>Lack of parental supervision at parties</b>
• <b>Perceived lack of consequences</b>

Drivers of substance use were another topic of conversation with the therapists. These are circumstances that increase the risk of youth substance use. (Table 8.)

Table 8. Therapists: Drivers of Youth Substance Use
• <b>Social pressure with peers</b>
• <b>Feeling unsuccessful in school academically and/or socially</b>
• <b>Acrimonious home life</b>
• <b>Future path unclear</b>
• <b>Too much free time</b>
• <b>Don't fit in</b>
• <b>Desire to be close to peers</b>

The therapists also had some ideas to share to help communities reduce substance use. (Table 9)

Table 9. Therapists: Youth Substance Use Prevention Ideas
• <b>Parents: Be aware, keep relationships open, take action, and provide safeguards</b>
• <b>Start therapy early: determine the reasons behind the substance use</b>
• <b>Community: Clear out medicine cabinets</b>
• <b>Schools: Find solutions other than suspensions, such as writing a paper about the substance that was abused</b>

### **Police, EMS and Hospital Quantitative Data**

Concord Police report 2-3 emergency calls for youth drug overdoses, and about 2 youth alcohol overdoses, a year. In Carlisle, emergency calls for youth overdoses are low, with one being reported in 2014 and none being reported in 2012-2013, or 2015-2017.

Emerson Hospital treats on average three drug overdoses in youth from Concord and Carlisle in their Emergency Department each year. These patients have tested positive for cannabis, benzodiazepines, amphetamines, and/or MDMA. The Lahey Hospital and Medical Center Emergency Department reports one youth alcohol poisoning in a Concord or Carlisle resident over the last four years, in 2016.

Concord Police report that there are on average less than one marijuana arrest per year in youth. They do not issue marijuana citations. Carlisle police have made no marijuana youth arrests in the past three years, but have issued one citation in 2016, and two citations in 2017. Police rarely see anyone smoking marijuana in public. Citations have limited effect, because there is no recourse available to collect the fine as the Massachusetts statute is written.

### **Police Qualitative Data**

The Concord Police Chief states that Concord's arrest numbers for substance use are low. The statistics are not necessarily representative of what occurs, because the rural nature of Concord means that much of what happens takes place in private spaces. Police enforce the law in public spaces, and only at a private property when called. In addition, youth are not usually committing crimes to fund substance purchases, and parents can often afford private treatment. Thus, the police have a limited knowledge of the extent of substance use in Concord and Carlisle.

The Concord Police Department (CPD) is very concerned with youth safety. They understand the development of teenage brains and that teenagers may not make good decisions. The CPD tries to help them make better decisions, rather than penalize. The CPD has a CCRSD school resource officer who maintains relationships with school administrators and students. He is available to provide referrals and assistance to students and families.

The CPD is focused on linking individuals who may have substances abuse disorders with services rather than placing them into the court system. The CPD is providing all officers crisis intervention training, focusing on substance use and mental health crises. This is consistent with the current approach of treating substance misuse as a public health rather than criminal issue.

The Carlisle Police Chief finds that youth and marijuana is an issue. They are also concerned with youth safety. The Police Department put an emphasis on being courteous to youth, and emphasize being supportive. Because of the rural nature of Carlisle, substance use happens in private spaces and is difficult to detect.

For the past two years, the two communities have had access to a Jail Diversion Coordinator, through Eliot Community Human Services and the Central Middlesex Police Partnership (CMPP). The coordinator can assist youth and families in getting mental health or substance use treatment referrals. In 2016, she assisted three youths, and in 2017, she has assisted one youth from Concord and/or Carlisle. The charges against the youth were not released, so it is unknown if they are related to substance use.

In the Fall of 2017, the CMPP has hired a part time recovery coach (through the Police Assisted Addiction and Recovery Initiative, PAARI), who provides ongoing support and referrals to treatment for people dealing with addiction, and their families.

Neither police department nor EMS has had to use naloxone (brand name Narcan), the overdose reversal drug, on a youth to treat an opioid overdose. In Concord, all officers and the Fire Department are trained to administer naloxone. All officers on patrol carry it. In Carlisle, all EMTs are trained and authorized to use naloxone. It is carried in the ambulance and back up vehicle. They are looking to expand training to non-EMT firefighters next year.

**William James College INTERFACE Referral Service**

The Concord Public Schools and Concord Carlisle Regional School District fund the William James College INTERFACE Referral Service Helpline. It is available to all residents of Concord and Carlisle of any age. This service connects clients with appropriate mental health services. Most of the callers looking for resources for adolescents ask for help with anxiety, depression, and family issues, all high risk factors for substance use. (Table 10)

Table 10. William James College INTERFACE Referral Service: Concord and Carlisle Youth Referrals			
Age	2015	2016	Jan-June 2017
0-5	1	0	1
6-12	21	31	13
13-17	23	18	5

**Local Pediatrician**

Sandra Meyerson, MD is a pediatrician at Harvard Vanguard Pediatrics in Concord. She treats patients from both Concord and Carlisle age infant to 23. Her practice is concerned with opioid abuse. For the most part, her practice has ceased prescribing cough syrup with codeine and

benzodiazepines. She states that pediatricians have a chance to pick up on opioid abuse when one of their patients gets an opioid prescription from another provider. For instance, a patient might have been prescribed an opioid for a surgical procedure and the potential for dependence exists. The pediatrician will follow-up and prevent or discover opioid abuse. She says parents need more education on the risk factors of opioids prescribed to injured student-athletes and dental surgery patients.

She sees the effect of legalizing marijuana on youth attitudes. Some of her patients see marijuana as “no big deal”. It is often used in social situations. Of greater concern is use when alone. She reports that she has seen youth marijuana use a stepping-stone to riskier behaviors: although marijuana has not been proven to be a biological gateway to other drugs, it can be a gateway to riskier behaviors. Youth learn the behaviors necessary to get substances, then might want something stronger, and have already learned the behaviors needed to obtain it.

## Data Review: Adults

Town census data indicates that Concord’s population age 20-60 is 44%, or 6,905 (2017), and over age 60 is 31%, or 4,816. According to Town census data, Carlisle’s population age 20-60 years old is 46%, or 3,856, and over 60 is 26% or 1,319.

According to Concord and Carlisle Police Departments, Emerson Emergency Room, the Jail Diversion Coordinator, and Concord and Carlisle Councils on Aging, the biggest concern with substance use in adults is alcohol. There is concern, with legalization, that marijuana will become more of an issue. Opioids, and other substances, are abused in small, but concerning, numbers. Carlisle has given 6 marijuana citations to adults in 2015, 1 in 2016, and 2 in 2017.

According to the Tufts Health Plan Foundation Healthy Aging Data, 10.4% of Concord and Carlisle residents are excessive drinkers. In Concord, there are an average of 45 adult alcohol-related arrests per year of Concord residents. In Carlisle, the numbers are smaller, with an average of 2.5 Carlisle residents arrested per year.

The Jail Diversion program reports that in 2016, 3 Carlisle adults and 32 Concord adults were referred to the program for assistance. In through November 2017, 4 Carlisle adults and 17 Concord adults were referred. The causes of referral were not stated, but the coordinator states that the most common cases referred to her are adults in their 50s for alcohol abuse. She provides mental health or substance use treatment referrals, or supports families in providing care.

According to the Massachusetts Department of Public Health, there were 17 opioid-related EMS calls in Concord in 2015, 18 in 2016, and under 7 (small numbers are not reported) in 2017. Concord Police report one opioid death in 2016 and one opioid death in 2018; both in males age 20. Concord Police report administering six doses of Naloxone in 2016: all to adults. Carlisle EMS reports administering Naloxone to three people through November 2017, two for intentional opioid use, and one for accidental overdose after surgery.

The Emerson Emergency Department reports, on average, 13 overdoses each year in adults from Concord and Carlisle. The majority of patients test positive for cannabis and benzodiazepines (Xanax, Klonopin, Valium). Other substances that patients have tested positive for are opioids, cocaine, amphetamines, and/or MDMA. Most patients test positive for one or two substances, but some people test positive for three or four.

The Lahey Hospital and Medical Center Emergency Department reports administering one dose of naloxone to an adult and one drug overdose discharge of a Concord adult in 2016. They report one overdose discharge of an adult from Carlisle in 2016. There was one adult alcohol poisoning in Concord in 2015. There are multiple alcohol poisonings in the same Carlisle adult over the past three years.

The Concord Public Schools and Concord Carlisle Regional High School pay for access to the William James College INTERFACE Referral Service Helpline. It is available to all residents of Concord and Carlisle of any age. This service connects clients with appropriate mental health services. The service is used infrequently to get assistance for adults, less than 20 times a year. (Table 10)

<b>Table 10. William James College INTERFACE Referral Service: Concord and Carlisle Adult Referrals</b>			
<b>Age</b>	<b>2015</b>	<b>2016</b>	<b>Jan-Jun 2017</b>
<b>18-24</b>	2	3	0
<b>25-59</b>	6	13	7
<b>60+</b>	1	0	2

### **Therapists**

Paushter spoke with Jon Cohan, CADC, LADC, James Hannon, PhD, LADC-I, and William J. A. O'Brien, Psy.D. about adult risk factors and protective factors for substance abuse. (Table 11)

<b>Table 11. Therapists: Adult Substance Abuse Risk Factors</b>
Biological tendency
Long term use
Emotional repression
Family trouble/stress
As the body ages, harder to handle drinking
Adjusting to life after children leave for college

## **Physician**

Concord has had two deaths from opioids (one in 2016, and one in 2018). Both were both 20-year-old males. Transition age young adults who are struggling to find their post secondary footing and remain in Concord and Carlisle, are of great concern to Dr. Meyerson, who sees patients until they turn 24. Some of these young adults struggle, and feel lost and deserted. Some have mental health diagnoses and substance abuse issues. Depression resources are lacking, and these young adults can be at a higher risk for suicide and substance abuse. Mental health diagnoses can prevent these young adults from working or other activities, which feeds into a sense of failure and despair. They no longer have the school community as a resource, but are often not ready for, or do not know how to figure out, their next step.

Once young adults turn 18, parents no longer have access to their medical records. Dr. Meyerson says that parents are often at a loss, and there are limited resources. There is a lack of mental health programming for young adults, and no community support such as job placement, support groups, or other community involvement. She suggests that these young adults could be considered to have emotional disabilities, which would qualify them to get SPED services from the public school, which technically can service students until they turn 21. She also suggests that a support group for parents of substance users would be beneficial.

## Other Data

### PHARMACY DATA

There are four pharmacies in Concord, and none in Carlisle. All pharmacies were contacted. One of the pharmacies, West Concord Pharmacy, was able to provide data on prescriptions for the month of November for four consecutive years. The data gives an example of how many prescriptions for medications that could be potentially abused are given to Concord and Carlisle patients. Note, this table shows the number of prescriptions, not the number of individual pills. (Table 12)

Table 12. West Concord Pharmacy Prescriptions Novembers 2014-2017						
	Number of Opioid RX	MD Prescribing Opioid RX	DMD Prescribing Opioid RX	Number of Benzo-diazapine RX	Number of Stimulant RX	Number of Sleep Aid RX
2014	88	79	8	128	104	62
2015	96	86	4	140	133	59
2016	78	73	4	149	135	63
2017	86	117	12	140	146	52

Notes:

Opioid RX: Buprenorphine, Tramadol, and Robitussin with codeine not included

Sleep Aid RX include: zolpidem, temazepam, oxazepam, eszopiclone

The West Concord Pharmacy is committed to educating their customers about their prescriptions and risks of abuse. Pharmacists at Rite Aid, CVS, and Harvard Vanguard indicated that they are also committed to this education with a consultation at prescription pick up.

## Current Substance Abuse Resources in Concord and Carlisle

The Towns of Concord and Carlisle currently have many excellent resources in place to reduce substance use. Through interviews, it is clear that some groups communicate and coordinate efforts, but there is no one organization responsible for overall coordination.

### **Education:**

- Center for Parents and Teachers
- Concord Carlisle Youth Services
- Concord Board of Health
- Carlisle Board of Health
- Carlisle School Health Education Program
- Concord Middle School Health Education Program
- Concord Carlisle Regional School District Health Education Program
- School Guidance Counselors
- Pharmacies
- School Parent Groups

### **Public Safety Resources:**

- Concord Police
- Concord Fire
- Carlisle Middle School and CCRSD school resource officer
- Carlisle Police
- Carlisle Fire
- Jail Diversion Coordinator
- Police Assisted Addiction and Recovery Initiative Recovery Coach

### **Health/Mental Health Resources:**

- Eliot Community Health Center
- Emerson Hospital
- Private Therapists
- Primary Health Care Providers
- Pharmacists
- William James College INTERFACE Referral Service Referral Helpline
- Grow A Strong Family

## Recommendations

### Action Items:

- Establish a Substance Use Prevention Abuse Task Force: Coordinate the efforts of current organizations to share information, coordinate and maximize the effect of substance use efforts and reduce duplication.
- Coordination of Data Collection: Develop a substance use data collection system with police, EMS and Emerson ER. Coordinating data collection will enhance the understanding of substance use in Concord and Carlisle.
- Continued Education on Medication Storage and Disposal: Towns need to continue to educate citizens about proper medication storage and disposal opportunities at the police station and Concord's Drop Off/Swap Off days, and Carlisle's annual Hazardous Waste Day.
- Parent Education: While there are many opportunities for parental education in Concord and Carlisle, often the parents who need it the most do not attend. It would be helpful to develop short parent education programs to include at Back-To-School nights or other annual school events. In addition, bring back Preventing and Postponing First Use, a program geared towards parents to educate them about how to help their children postpone substance use, at Concord Middle School, and offer it at the Carlisle Middle School.
- Publicize the William James College INTERFACE Referral Service Referral Helpline to the COA, the medical community (who can refer their patients), and the general populations of Concord and Carlisle.
- Promote the Massachusetts Substance Abuse Helpline: 800-327-5050 for help with accessing treatment resources, and publicize the State Without Stigma campaign to help remove one of the barriers to addressing substance use disorders.

### Additional Research:

- Parental Attitude Survey: To have an effective, comprehensive substance abuse program, it is important to understand the attitudes, perceptions, and misperceptions of parents.
- Survey of Parents of Substance Users: This could provide unique insight into the realities of substance use in Concord and Carlisle. It could also highlight where support for these families could improve.
- Private School Data: There are 6 private schools in Concord: Concord Academy, The Fenn School, The Guild for Human Services, Middlesex School, Nashoba Brooks School, and the Walden Street School. These schools serve 1,520 students. For a more

complete picture of substance use in Concord, it would be helpful to have data from these schools.

- Add an alcohol question to the YRBS: In order to determine the extent of alcohol use in the schools. A question asking about use on campus should be added.
- Add a drug question to the YRBS: Where do students get drugs?
- Research utilizing the Search Institute's 40 Developmental Assets model with youth in Concord and Carlisle: These are building blocks of healthy development that help youth grow up healthy, caring and responsible. The now defunct Alliance for Teen Safety worked with this model in Concord in the early 2000's.