



2016 Community Health Needs Assessment & Implementation Plan: Adolescent Substance Use and Mental Health



Massachusetts General Hospital
Prepared by the Center for Community Health Improvement



MASSACHUSETTS
GENERAL HOSPITAL

CENTER FOR COMMUNITY HEALTH IMPROVEMENT

CCHI's Mission:

To improve the health and well-being of the diverse communities
we serve

About Us:

Working with our community and hospital partners, the
Massachusetts General Hospital Center for Community Health
Improvement brings together the people and resources needed
to address challenging health problems—and promote policy and
systemic change that will foster measurable and sustainable
improvement.

Table of Contents

Introduction	4
Executive Summary.....	5
Our Commitment to the Community.....	7
Purpose of the 2016 Community Health Needs Assessment	8
The Data: Adolescent Mental Health and Substance Use	9
Factors Associated with Adolescent Substance Use and Mental Health Issues	14
Positive Relationships with Adults	15
Parental & Peer Disapproval of Substance Use	16
Accessible Extracurricular Activities	19
Access to Substances	20
Perception of Harm from Substances	22
Stress.....	23
Prioritization of Factors to Address in Prevention Strategy	25
Strategies	27
Community Health Implementation Plan	28
Appendix A: Methodology	31
Appendix B: References	33

Introduction

This Community Health Needs Assessment (CHNA) focuses on the factors contributing to adolescent substance use and mental health in the communities Massachusetts General Hospital (MGH) serves: Chelsea, Revere, Charlestown, and East Boston.

Approximately 90% of Americans who meet the criteria for addiction started using substances (tobacco, alcohol, or other drugs) before age 18 (CASA, 2011). The total cost of substance use is at least \$468 billion per year in America (CASA, 2009). And yet, adolescent substance use, which has consequences including injuries, depression and anxiety, reduced educational attainment, and criminal involvement, is preventable. Likewise, issues surrounding adolescent mental health can disrupt school performance, harm relationships, and lead to substance use disorders and suicide. According to the 2015 National Survey on Drug Use and Health (Center for Behavioral Health Statistics and Quality, 2016), 12.5 percent of adolescents aged 12 to 17 nationally had a major depressive episode in the past year. This percentage has been increasing over the past 15 years. Additionally, the percentage of the adolescents who used substances in the past year was higher among those with a major depressive episode than among those without (31.5 vs. 15.3) nationally.

This report reviews data on the status of mental health and substance use among youth in our communities, the factors that contribute to this problem, the process by which our communities prioritized these factors, and the strategies the MGH Center for Community Health Improvement (CCHI) and its multi-sector community coalitions will employ to prevent and reduce adolescent substance use and address issues related to mental health.

This report was reviewed and approved by the MGH Trustee Board Committee on Community Health on September 30, 2016.

Executive Summary

Problem

The 2015 MGH Community Health Needs Assessment (CHNA) indicated increased community concern about adolescent substance use and mental health. This concern is verified by quantitative data that indicates, in particular, significantly higher rates of adolescent depression in the MGH communities of Charlestown, Chelsea, East Boston, and Revere than other communities statewide. Given high rates of opioid use among older teens and young adults, and the link between mental health issues and substance use, communities felt an urgent need to understand the problem better and to go upstream to develop a comprehensive prevention plan.

Approach

Beginning February, 2016, MGH CCHI worked with its multi-sector community coalitions to review and analyze quantitative data. MGH CCHI then conducted interviews and focus groups with over 200 youth, mental health experts, and those working with youth to provide insight into the issues. We brought that data back to the coalitions and researched the factors in the public health literature that create risk or protection for or against substance use and depression. We then asked the communities over the course of two meetings to prioritize the factors most relevant in their communities. Based on those factors, the coalitions developed strategies to either strengthen the protective factors or reduce the risk factors.

Findings

All Factors in the Public Health Literature that Contribute to Preventing Adolescent Substance Use and Mental Health Issues

Positive Relationships with Adults

Parental & Peer Disapproval of Substance Use

Accessible Extracurricular Activities

Lack of Access to Substances

Perception of Harm from Substances

Addressing & Managing Stress

Factors Prioritized by MGH CCHI and the Coalitions to address:

Positive Relationships with Adults

Accessible Extracurricular Activities

Perception of Harm from Substances

Addressing & Managing Stress

Executive Summary

Strategies to Address Prioritized Factors



Increase job shadowship programs and youth jobs



Enhance adult capacities for informal and formal mentorships and communication with youth



Collaborate with organizations to advocate for age-appropriate youth activities in each community



Engage youth as part of each community coalition



Increase coping skills of youth and adults to positively manage and reduce stress



Implement social marketing campaign to increase perception of harm of adolescent marijuana use



Collaborate with schools and organizations to incorporate a curriculum that addresses substance use and mental well-being

Our Commitment to the Community

MGH has a long legacy of caring for the underserved in the local community. Founded in 1811 to care for the “sick poor,” MGH demonstrates that same commitment today by supporting four community health centers (which we have done for almost 50 years), and enlisting a comprehensive approach to addressing the social determinants of health. MGH Trustees affirmed this commitment in 2007 by expanding the hospital’s mission to include “...improve the health and well-being of the diverse communities we serve.”

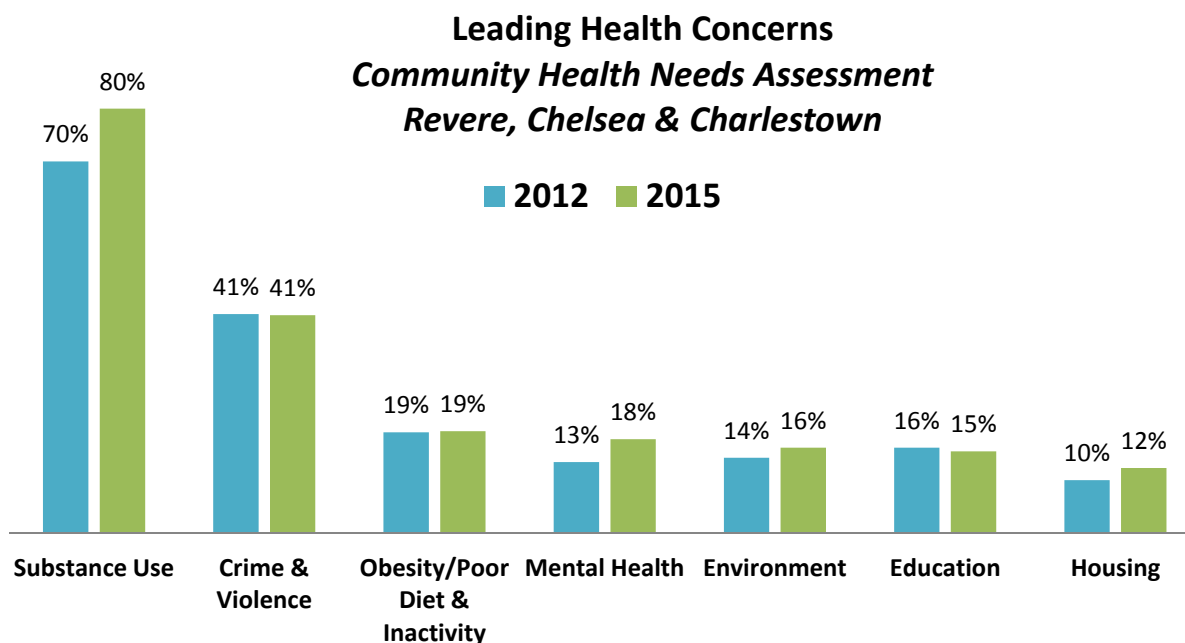
MGH recognizes that access to high quality health care is necessary, but by no means sufficient, to improving health status. We must also engage in deep and transformative relationships with local communities to address the social determinants of health. MGH created the Center for Community Health Improvement (CCHI) in 1995, with the mission of collaborating with communities to achieve measurable, sustainable improvements to key indicators of the communities’ health and well-being. Since 1995, MGH has partnered with the low income neighboring communities of Revere, Chelsea, and Charlestown, and more recently East Boston, to make measurable improvements in health. We have done this by routinely conducting health needs assessments and by partnering with leaders of local government, public health officials, schools, police departments, community-based nonprofits, faith based organizations, community development corporations, and community residents. Today, our work is focused on addressing the social determinants of health along the Health Impact Pyramid, developed by the U.S. Centers for Disease Control & Prevention, using the following three approaches:

- ***Building and sustaining multi-sector coalitions in Charlestown, Chelsea, Revere, and East Boston to change policies and systems with a focus on preventing and reducing substance use disorders and obesity***
- ***Developing the assets of almost 1,000 Boston, Chelsea, and Revere public school students by offering opportunities in STEM***
- ***Improving access to care for vulnerable patients through community health workers, navigators, home visitors, and others***

MGH’s investment in this work runs deep. We invest more than \$15 million in community programs, not accounting for the new substance use disorder initiative (annualized at about \$2 million) or the contributions of clinical departments. In total and according to the Massachusetts Attorney General’s definition, MGH’s investment in community benefits is 5.4% of patient care related expenses. An additional \$2 million in grants and gifts is also raised to supplement, never supplant, our ongoing investment to the community. The work is designed to build community and health system capacity, leadership, and to change policies and systems, all of which lead to sustainability.

Purpose of the 2016 Community Health Needs Assessment

In 2015, MGH CCHI conducted its triennial Community Health Needs Assessment (CHNA), which found many of the same concerns as the 2012 CHNA (see previous Community Health Needs Assessment reports). MGH CCHI identified three reasons to conduct another CHNA on the heels of the 2015 assessment.



Source: Quality of Life Survey, MGH CCHI, 2012 & 2015

1. A Growing Concern

The 2015 CHNA identified an increased concern in our communities around adolescent substance use and mental health issues. A goal of that implementation plan was to further explore the reasons associated with this concern.

2. The Benefit of a Regional Approach with Coalitions

The MGH CCHI is the backbone organization for four multi-sector community coalitions in the cities of Revere and Chelsea, as well as Charlestown and East Boston, two neighborhoods of Boston. All four coalitions have a focus on changing policies, systems, and the environment to prevent or intervene early on in substance use disorders. With the hypothesis that youth across these communities are experiencing the same factors that cause substance use and mental health issues, the assessment took a regional approach so the coalitions could work together to employ strategies, thus making a larger impact.

Additionally, as the communities are contiguous, many of the coalitions partner with the same organizations, working across community borders. This provided a seamless way to conduct the assessment as well as an opportunity to identify common strategies.

The four coalitions were an integral part of carrying out the assessment (see Appendix A) and will be responsible for creating work plans with their respective communities to implement the strategies prioritized through this process.

3. Greater Impact by Aligning with Other Boston Hospitals

There are many hospitals in the Boston area, most of which must also complete a CHNA every three years. MGH is a member of the Conference of Boston Teaching Hospitals (COBTH) and several years ago, through COBTH's Community Benefits Committee, committed to working together on community health needs assessments. The hospitals recognized that in many instances they were assessing the needs of the same neighborhood(s) and there would be real benefit, for both the hospitals and the community, to working together. MGH was on a CHNA schedule that differed by one year from most COBTH hospitals. Thus, by conducting a CHNA in 2016, MGH is now on the same schedule as other Boston teaching hospitals. The goal is that by conducting the CHNAs together, the hospitals can identify one to two common areas on which to work. By selecting common issues and strategies, COBTH hospitals could potentially have a greater impact on the Boston area.

A Note about data in this report

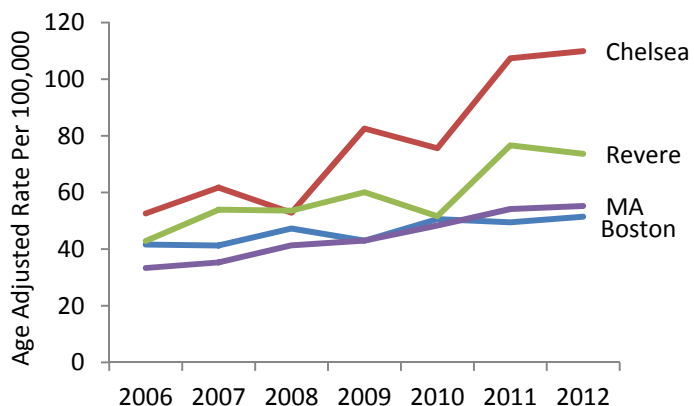
Data in this report are from three main sources: Massachusetts Department of Education, Massachusetts Department of Public Health MassCHIP database, and the Youth Risk Behavior Survey (YRBS) for each community. Due to processes beyond our control, data can be a few years old, and data specific to neighborhoods of Boston are difficult to obtain. In Revere and Chelsea, YRBS is collected every two years in both the middle and high school populations. In Charlestown, it is only collected on middle students every two years. For East Boston, 2015 was the first year we were able to collect data from the East Boston High School. Data presented are the latest available.

The Data: Adolescent Mental Health and Substance Use

Adolescent substance use and mental health issues were identified as a growing concern in the 2015 assessment, and a plan was made to better understand the contributing factors. As a result, quantitative data were gathered and analyzed more closely.

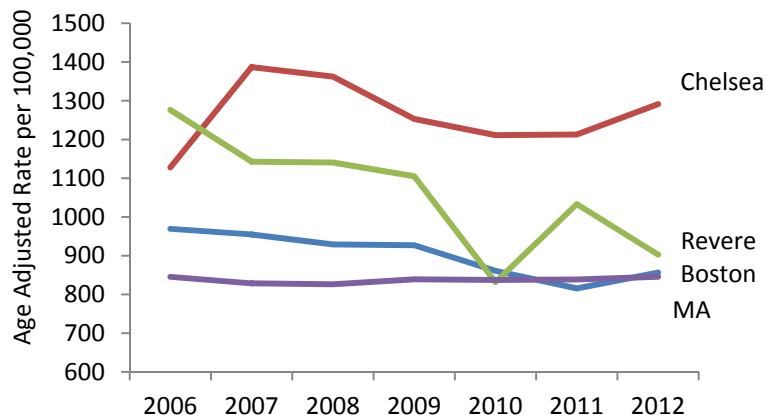
Data from the Massachusetts Department of Public Health indicate that adult hospitalizations and mortality associated with mental health disorders are significantly higher in Chelsea and Revere than in Boston or Massachusetts overall, indicating an opportunity to go upstream and work to prevent these issues before they become so serious.

Adult Mental Disorder Mortality



Source: MassCHIP

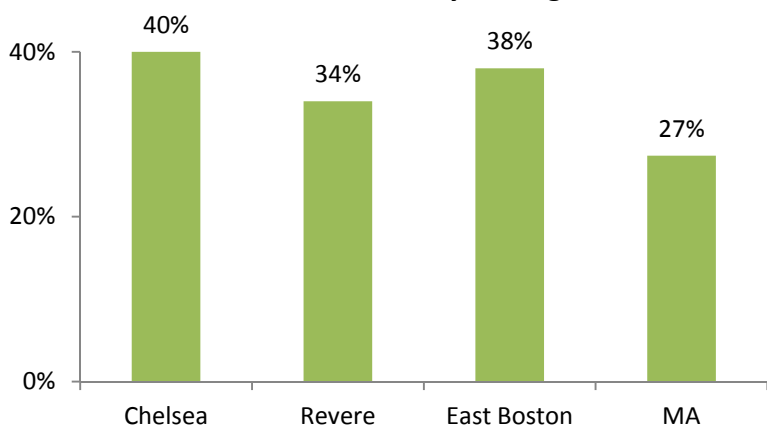
Adult Mental Disorder Hospitalization



Source: MassCHIP

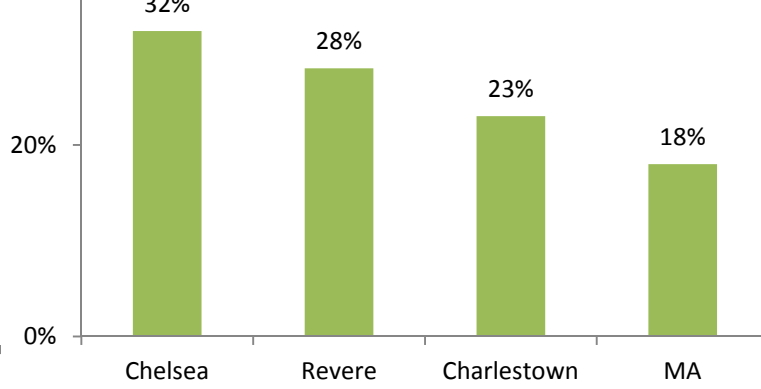
Responses to questions on the Youth Risk Behavior Survey (YRBS) indicated young people feeling depressed at significantly higher rates in Chelsea, Charlestown, East Boston, and Revere than in the state overall. Suicidality, particularly in middle school youth, raises serious concern.

Youth reporting feeling sad or hopeless for two or more weeks in last year, High School



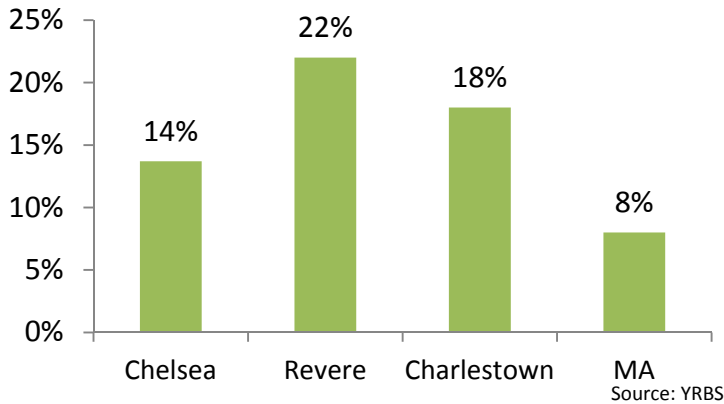
Source: YRBS

Youth reporting feeling sad or hopeless for two or more weeks in last year, Middle School

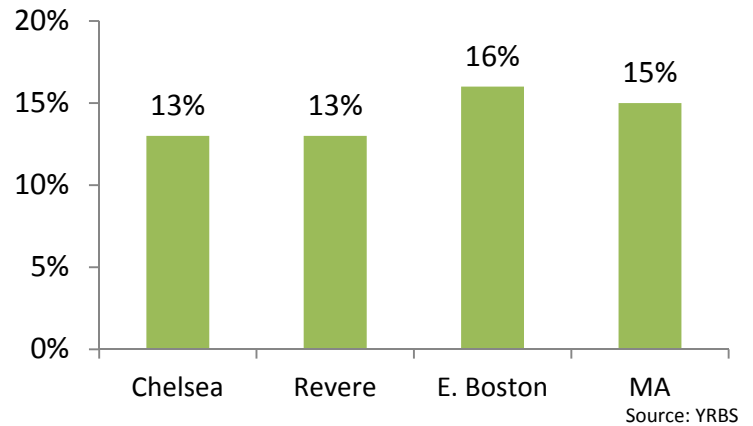


Source: YRBS

Seriously Considered Suicide in the Past Year, Middle School

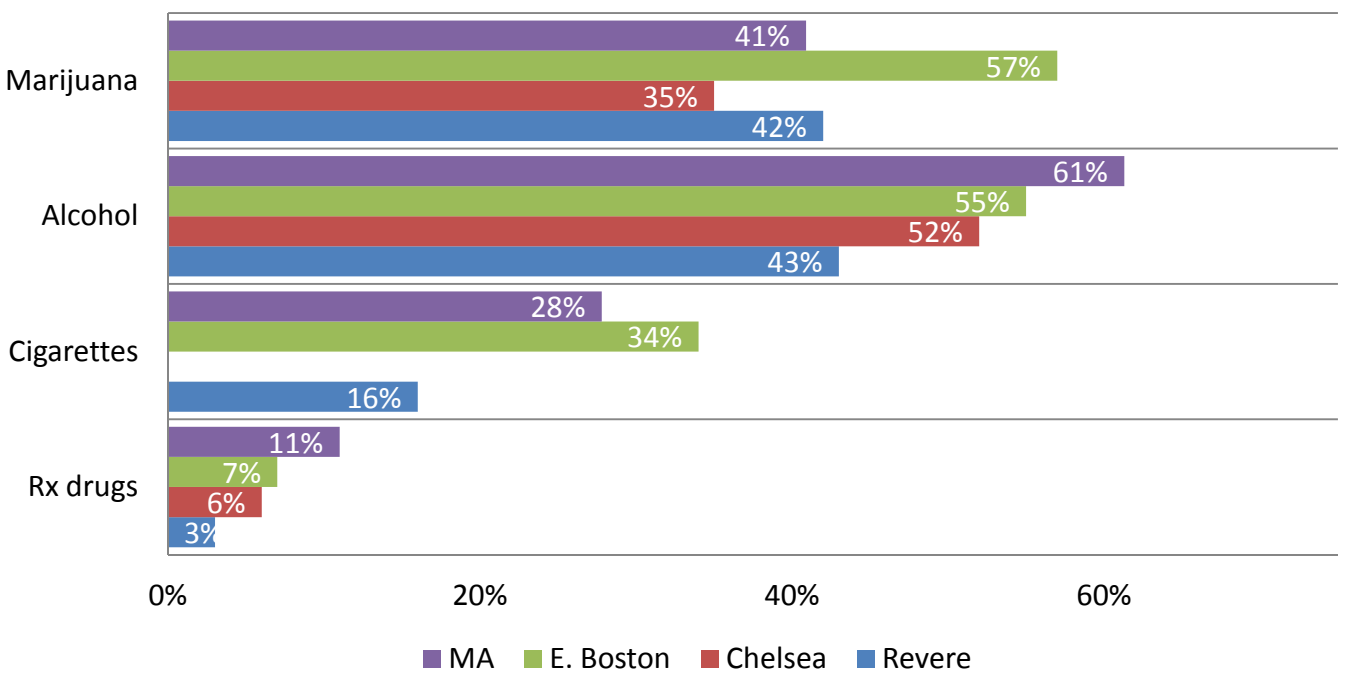


Seriously Considered Suicide in the Past Year, High School



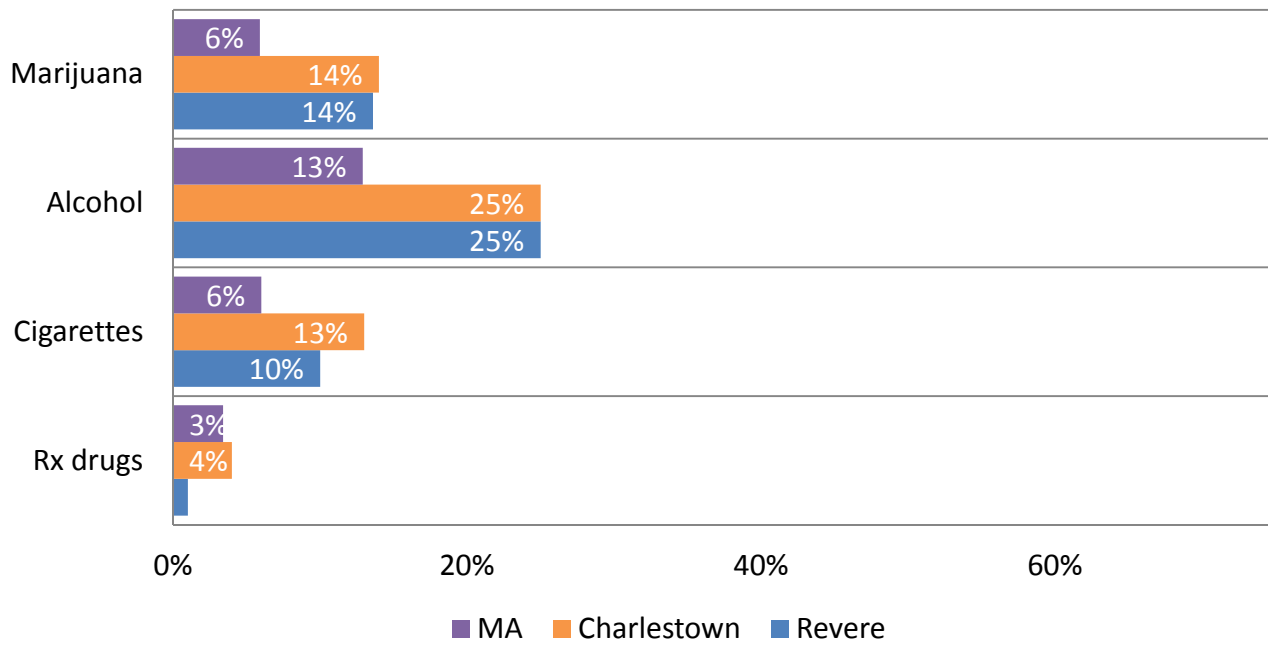
Regarding substance use, high school students are at or below the state for the most common substances, with the exception of marijuana and cigarettes in East Boston. A key factor is most likely the work of the MGH-supported community coalitions to reduce teen substance use. Twenty years ago, Revere had rates of teen substance use, particularly alcohol, far above the state average. Reports of both lifetime and current substance use for middle school youth, however, are significantly higher than state rates. Given the severity of the opioid epidemic in these communities, which usually begins in the late teens, coupled with the increase in mental health issues and suicidality in middle school youth, communities are even more committed to focusing on prevention and early intervention.

Lifetime Youth Substance Use, High School



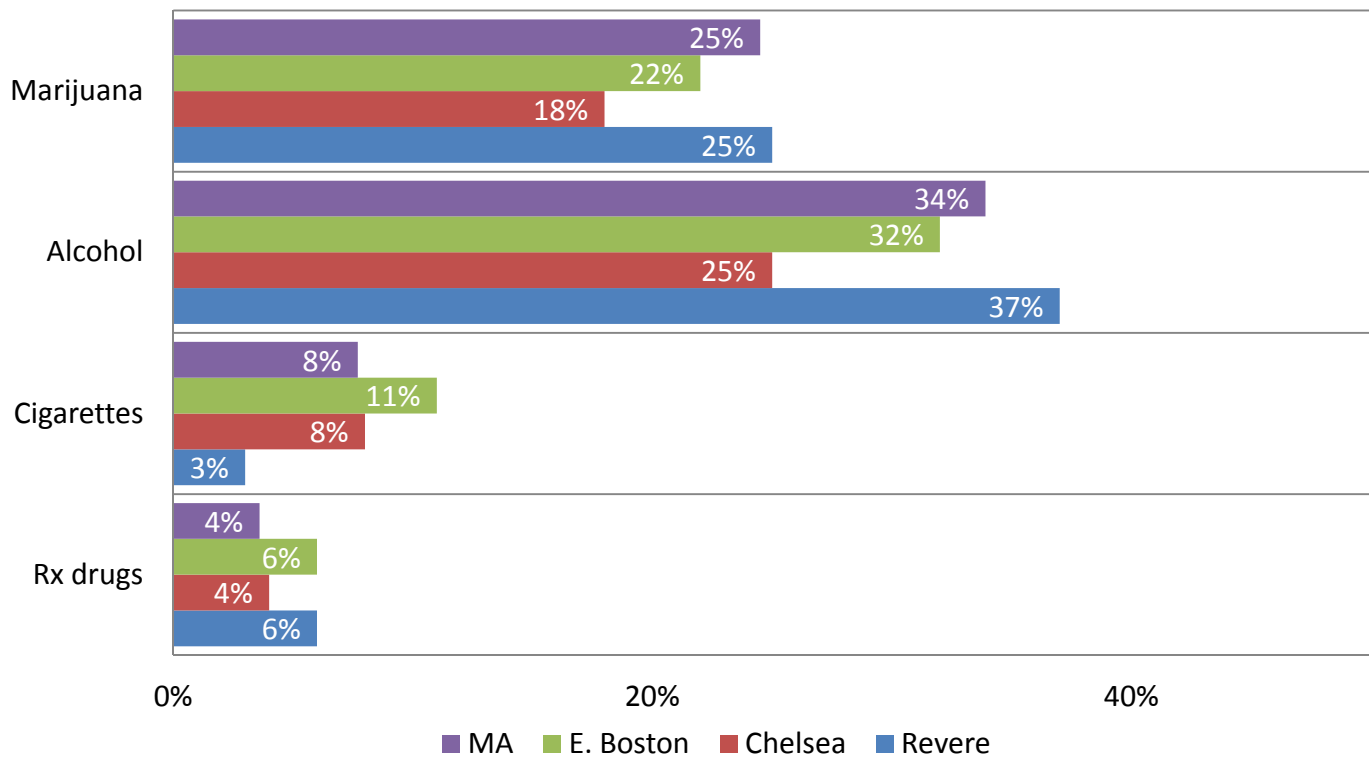
Source: YRBS

Lifetime Youth Substance Use, Middle School



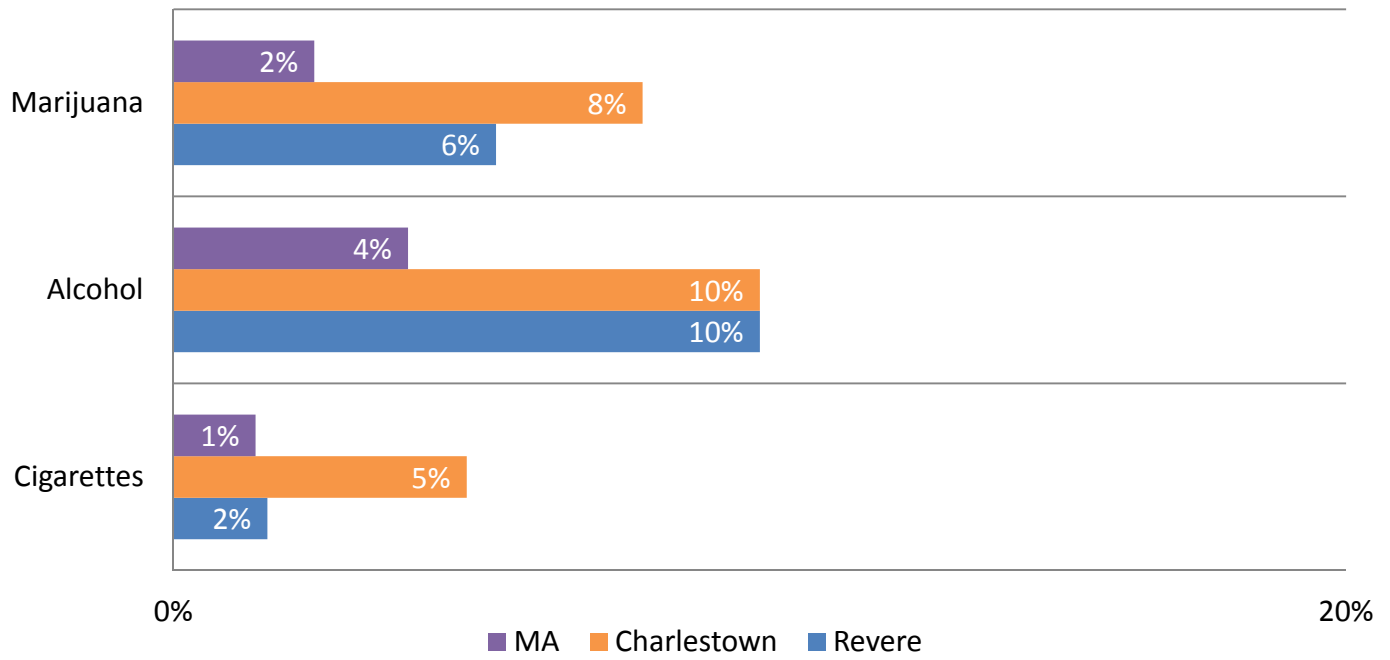
Source: YRBS

Past 30-Day Youth Substance Use, High School



Source: YRBS

Past 30-Day Youth Substance Use, Middle School



Source: YRBS

Factors Associated with Adolescent Substance Use and Mental Health Issues

Risk and Protective Factors are a common language among public health experts. A protective factor can be defined as “a characteristic at the biological, psychological, family, or community (including peers and culture) level that is associated with a lower likelihood of problem outcomes or that reduces the negative impact of a risk factor on problem outcomes.” Thus, a risk factor would contribute to problem outcomes. The following table contains the most widely recognized risk and protective factors that contribute to youth using substances and mental health issues.

Risk Factors	Protective Factors
Chaotic Home environment	Strong Family bonds
Ineffective parenting	Parental engagement in child’s life
Little mutual attachment and nurturing	Clear parental expectations and consequences
Inappropriate, shy, or aggressive classroom behavior	Academic success
Academic Failure	Strong bonds with adults & pro-social institutions
Low academic aspirations	Conventional norms around drugs and alcohol
Poor social coping skills	
Affiliations with deviant peers	
Perceived external approval of drug use (peer, family, community)	
Parental substance use or mental illness	

Source: SAMHSA, 1997

There were specific risk and protective factors associated with substance use and mental health issues among young people that our communities chose to focus on. The following pages will review each factor and the supporting data.

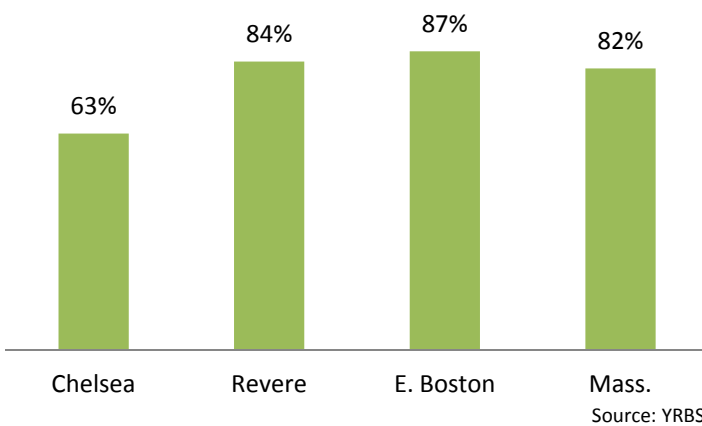
These data on risk and protective factors were gathered from secondary sources, such as the YRBS, as well as primary data collection through interviews and focus groups. Over 200 individuals participated in the CHNA to identify these factors as well as the strategies to address them. See Appendix A for more in-depth methodology.

Research suggests that young people thrive and flourish when there is one or more caring adult in their lives (Scales, P. C., & Leffert, N., 1999).

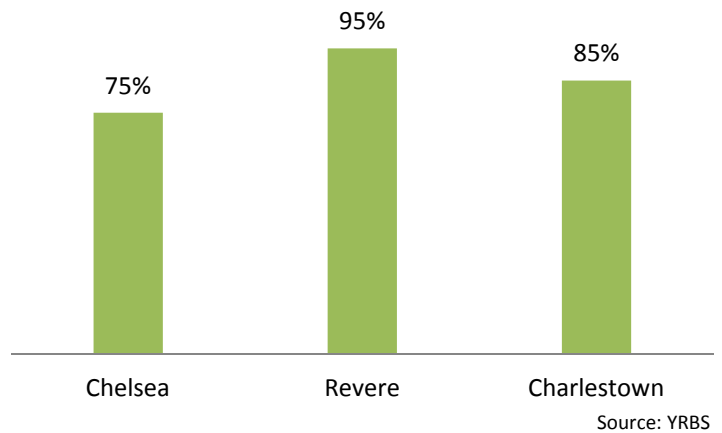
Positive Relationships with Adults

When young people in our focus groups were asked to whom they turn in times of stress, they often mentioned an adult in their lives. This was most often a parent, but teachers, counselors, and coordinators of clubs or after school activities were also mentioned. As seen below, the data on positive adult relationships is favorable for our communities. This is a strength that the implementation plan can harness and build upon.

Youth have at least 1 adult (family or non-family) to talk to, High School



Youth have at least 1 adult (family or non-family) to talk to, Middle School



“My dad is my motivation; my mom is my inspiration.”

When talking to medical doctors, mental health professionals, social workers, school personnel, and other people who work with youth, many also acknowledged the importance of trusting adults in the lives of young people. Since this is a strength in these communities, there is a base to build upon. There is opportunity to build the skills of adults to work with youth, formally or informally, and to increase the number and effectiveness of adults working with youth. This is especially essential for new immigrant youth resettling in MGH communities, many of whom have experienced trauma in the immigration process, a major risk factor for depression and substance use.

For those who use substances or have mental health issues, the absence of positive relationships with an adult was identified as a risk factor. Qualitative data suggest that without adults to turn to in times of need to help problem solve, adolescents might turn to substances to self-medicate, most often marijuana and prescription drugs.

“Parents need to know how to talk to their kids about drugs at any age.”

Parental & Peer Disapproval of Substance Use

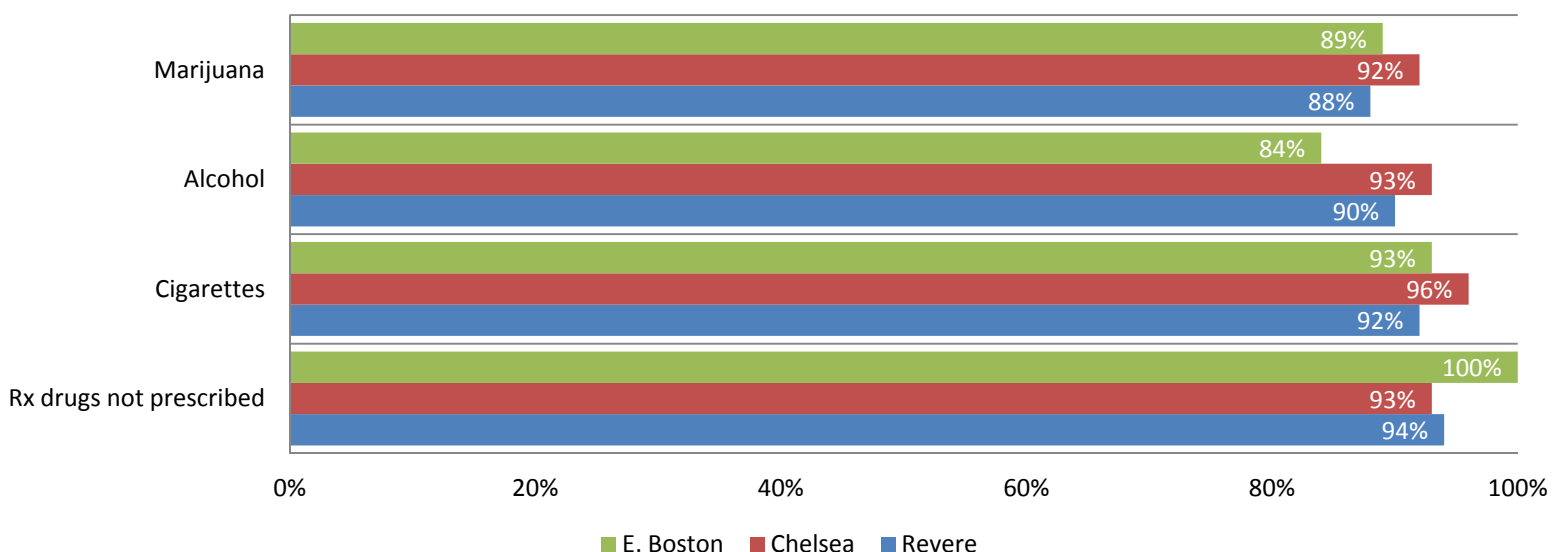
In interviews and focus groups with professionals who work with youth and family members of those in recovery, participants identified parents’ inability to talk to their children about substances as a major factor contributing to adolescent substance use. Not knowing what to say, how to say it, or at what age to start was confusing for parents. Many reported that parents feel they have no control over their children beyond a certain age, and just “throw their hands up.”

Additionally, interviewees reported that many young people live in households where family members might be using alcohol and marijuana, and they are getting mixed messages about what is harmful, allowed, or normalized.

Research suggests that as young people move from middle to high school, peers also have a strong influence on what behaviors youth might engage (Sawyer, T.M., & Stevenson, J.F., 2008). The youth participants in the focus groups reported that marijuana is pervasive and “everyone is doing it.” They agreed that there was pressure to smoke marijuana to fit in. However, as seen in the Past 30-Day Use graph above, it does not appear from the quantitative data that everyone is smoking marijuana. Parsing out facts from perception will be key in moving forward among the coalitions when developing strategies in these communities.

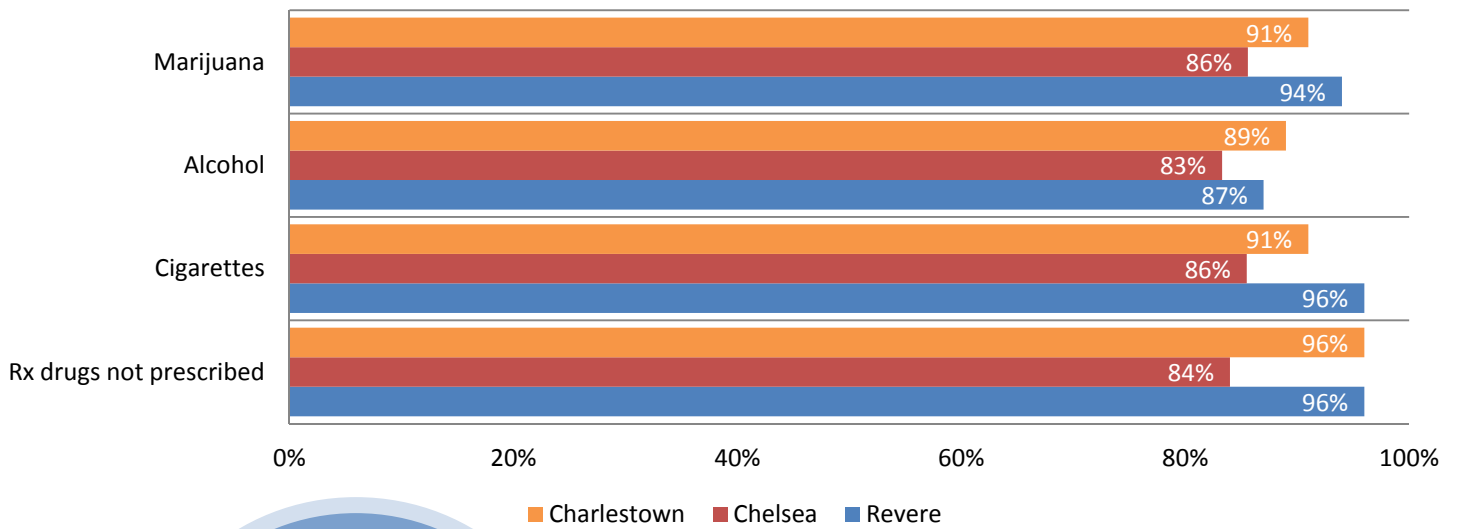
Parental disapproval is a strong predictor of drug use intentions (Sawyer, T.M., & Stevenson, J.F., 2008).

Perceived Parental Disapproval: Wrong or Very Wrong to Use Substances, High School



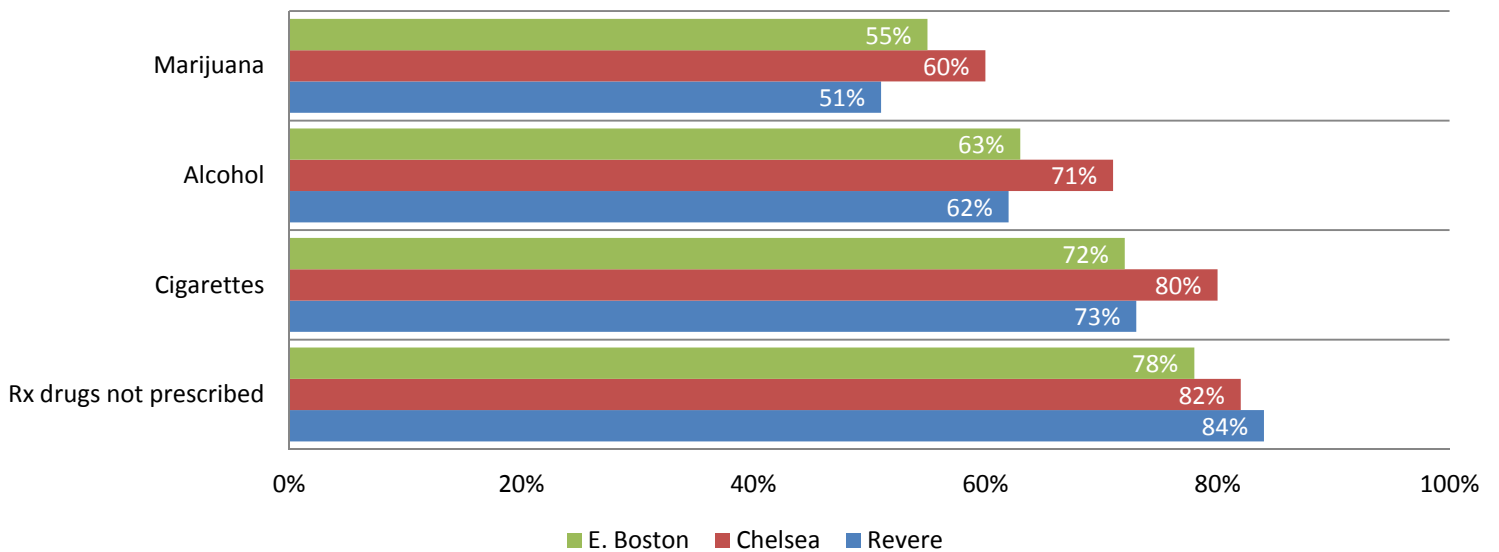
Source: YRBS

Perceived Parental Disapproval: Wrong or Very Wrong to Use Substances, Middle School



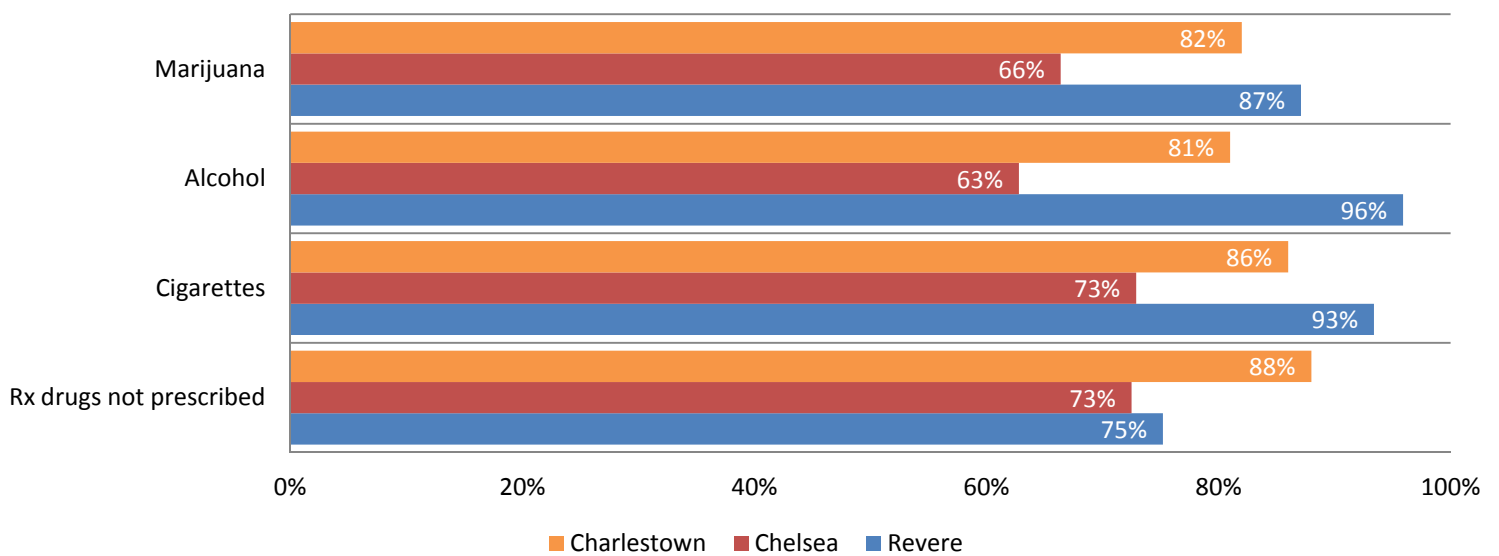
"I have to find new friends to hang out with if I were to stop smoking [marijuana]."

Perceived Peer Disapproval: Wrong or Very Wrong to Use Substances, High School



Source: YRBS

Perceived Peer Disapproval: Wrong or Very Wrong to Use Substances, Middle School



Source: YRBS

From the data above, young people perceive that their parents disapprove more of their using substances than their peers. For high school students, peers are less likely to disapprove of marijuana use than any other substance. In fact, they are more likely to disapprove of alcohol and tobacco, which might contribute to the perception that smoking marijuana is pervasive among young people.

Accessible Extracurricular Activities

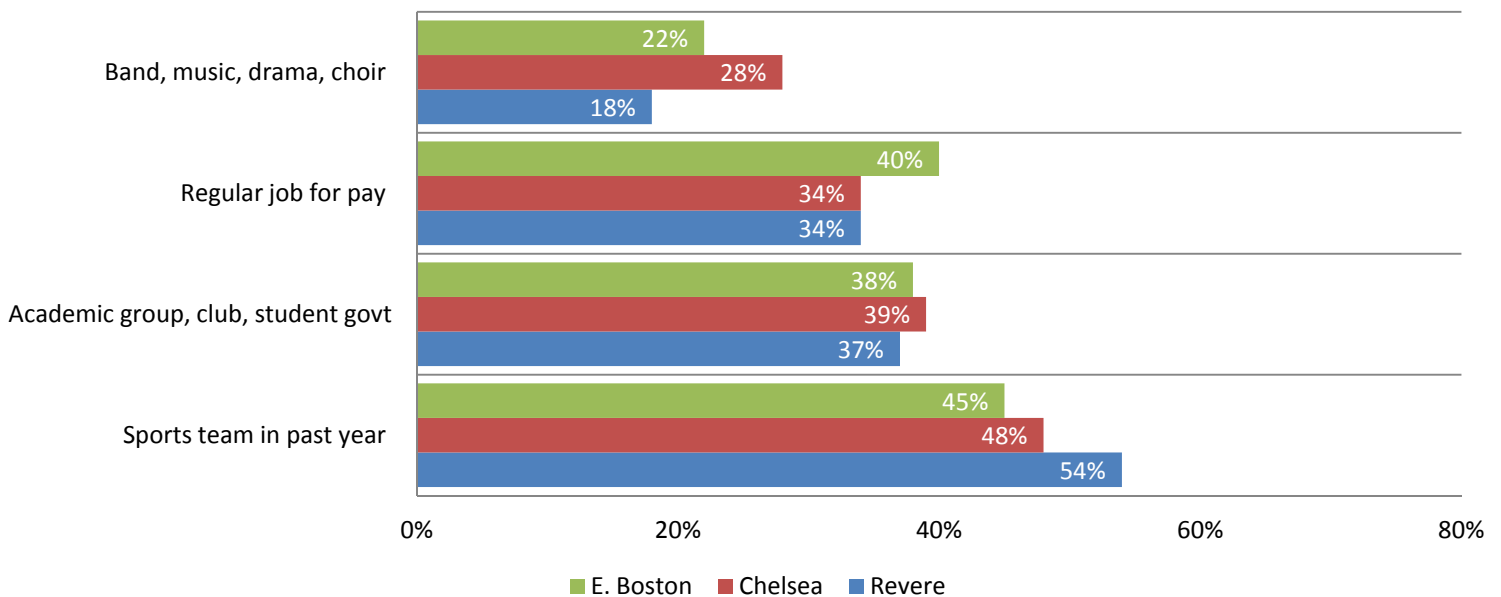
Mentioned overwhelmingly in all focus groups and interviews was the need for healthy, pro-social activities and experiences which would keep young people safe and engaged, while reducing negative emotions and isolation. Participants reported that of the out-of-school activities offered, many were expensive, at capacity, or transportation was not readily available.

Many youth, particularly those who participated in the focus groups through the Boys and Girls Clubs or another after school program, reported that the program gave them a safe place to engage with adults and peers. Youth at the Boys and Girls Clubs reported going to the club directly after school and staying there through the evening until a parent or family member picked them up. Unfortunately, not all of our communities have a Boys and Girls Club or comparable organization.

Professionals reported the need for activities to help youth with aggression, refusal skills, positive interactions with adults, and to help build job and vocational skills. Youth reported they want jobs, which would give them something to do, money (for themselves or family), and help build their resumes.

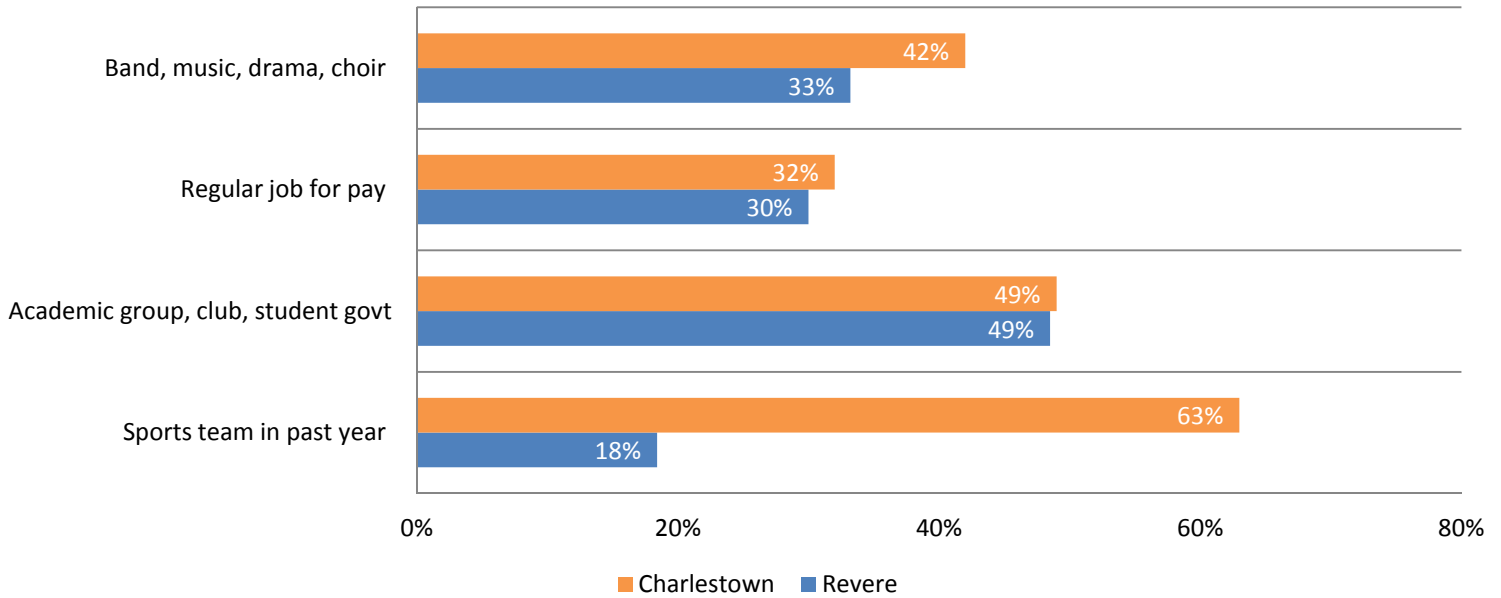
Several studies have found that adolescents who are more likely to be without adult supervision after school have significantly higher rates of alcohol, tobacco, and marijuana use than do adolescents receiving more adult supervision (Mulhall et al. 1996; Richardson et al. 1993).

Student Participation in Extracurricular Activities in Past Year, High School



Source: YRBS

Student Participation in Extracurricular Activities in Past Year, Middle School



Source: YRBS

Older youth also reported wanting internships and help with college prep, including financial aid and financial literacy.

Access to Substances

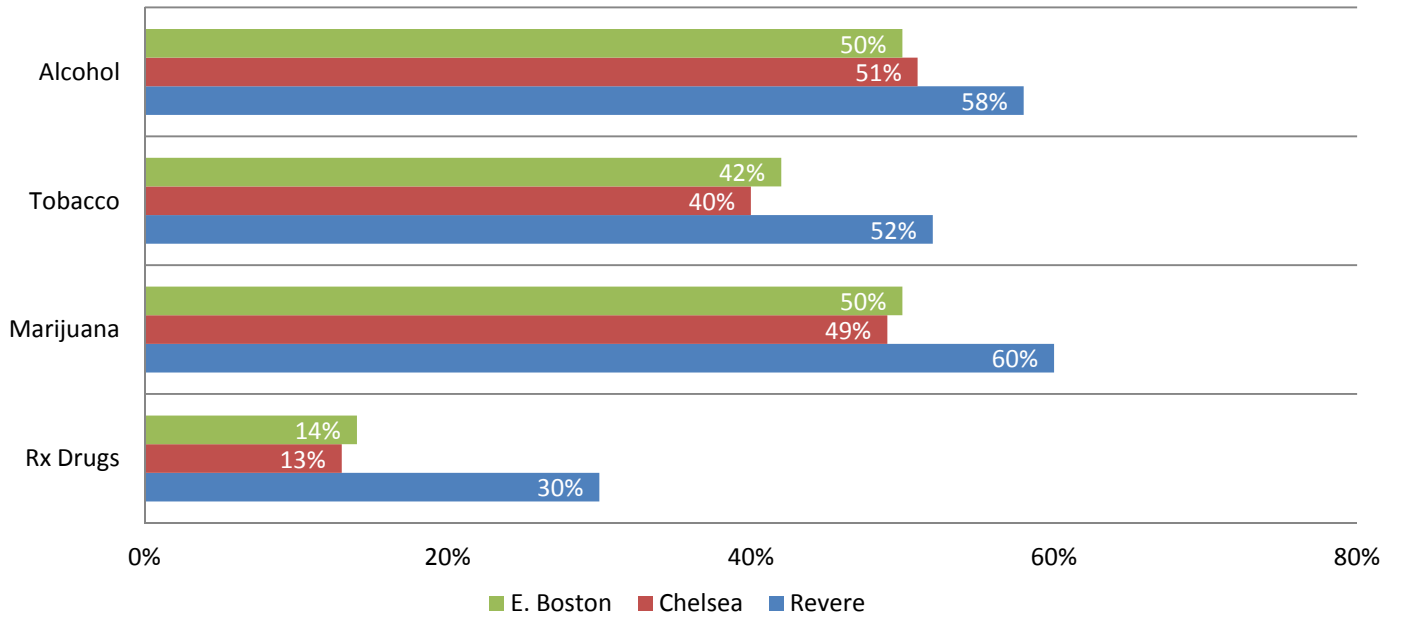
“Marijuana is easier to get than alcohol; I don’t have to get an adult to buy it for me.” This sentiment was pervasive among the youth focus group participants, and many professionals also agreed that for adolescents, marijuana is the drug of choice and very easy to obtain. This is confirmed in the data below from the Youth Risk Behavior Survey where youth in all communities report that marijuana is almost as easy, if not easier, to get than alcohol.

Professionals reported that youth are getting marijuana from friends, dealers, or stealing it from their parents.

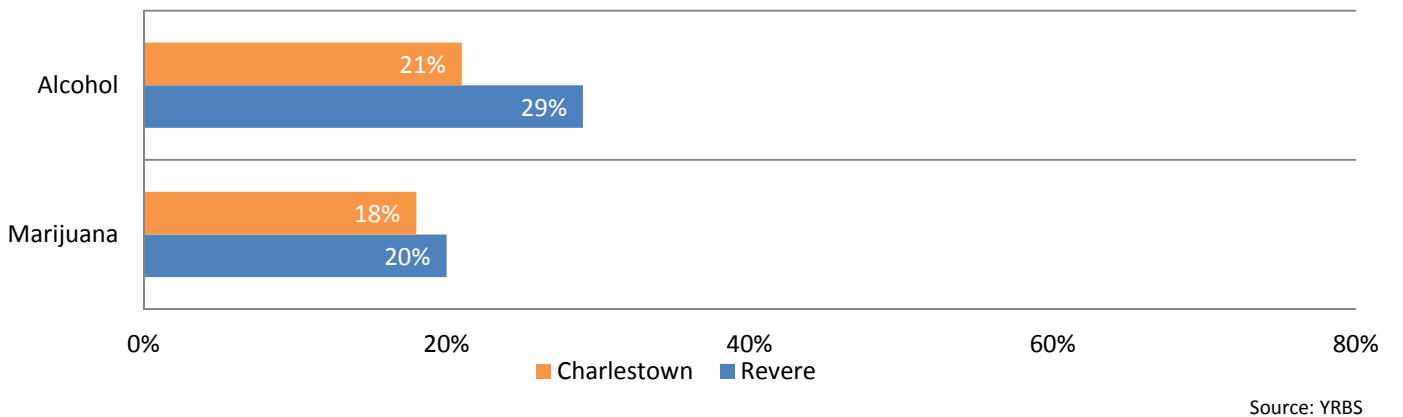
Young people also identified prescription drugs as easy to get, although more prevalent among older adolescents.

Youth are more likely to use substances that they perceive as easy to obtain (King, K.A, Vidourek, R. A., Hoffman, A.R., 2012).

Perception of Ease of Obtaining Substances— Fairly or Very Easy, High School



Perception of Ease of Obtaining Substances— Fairly or Very Easy, Middle School



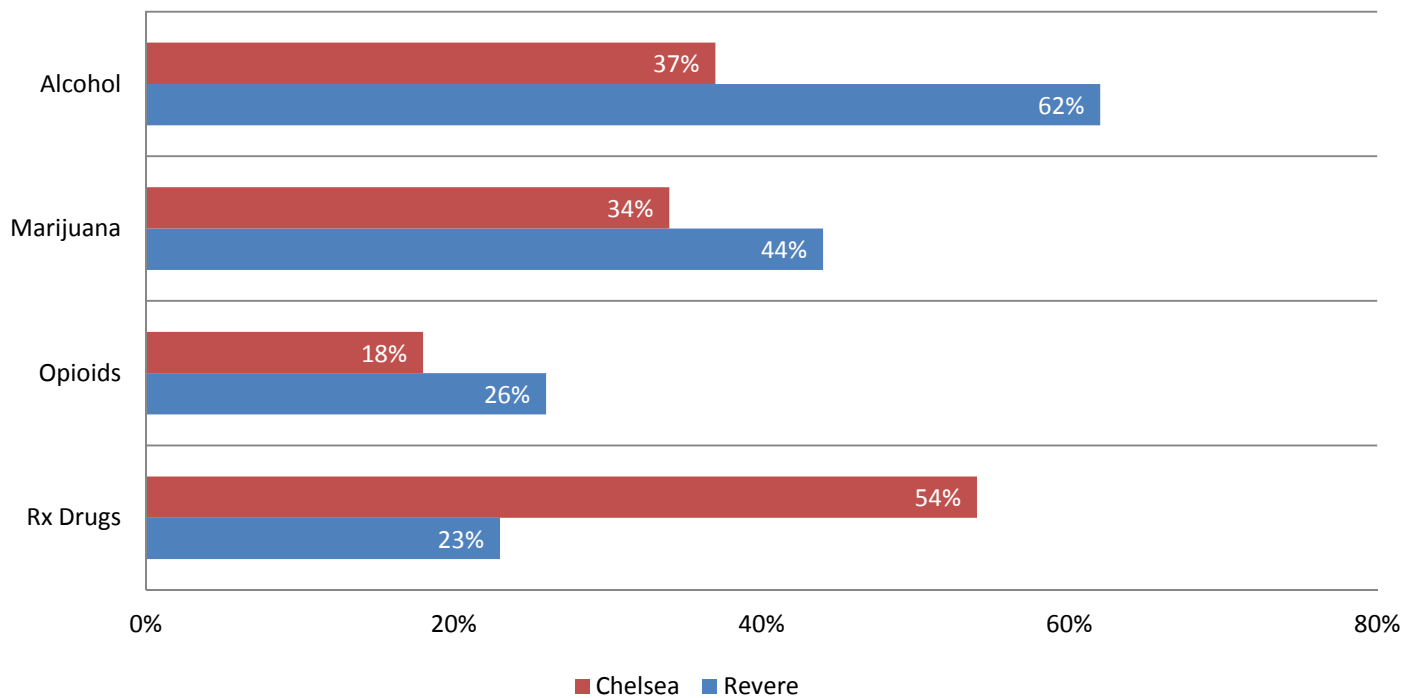
Youth are more likely to use substances that they perceive as less harmful (King, K.A, Vidourek, R. A., Hoffman, A.R., 2012).

Perception of Harm from Substances

Youth are getting mixed messages about the dangers of marijuana; as legislation changes, youth do not see marijuana as illegal or dangerous and think it is socially acceptable. When asked what drugs they know people use, youth seemed to dismiss marijuana and not think it was a big deal. “Marijuana is more casual now, like smoking a cigarette.” As the data below show, about one-third of the youth perceive marijuana to be of little or no risk. Of even greater concern is the proportion of youth who report opioid or prescription drugs as having little or no risk.

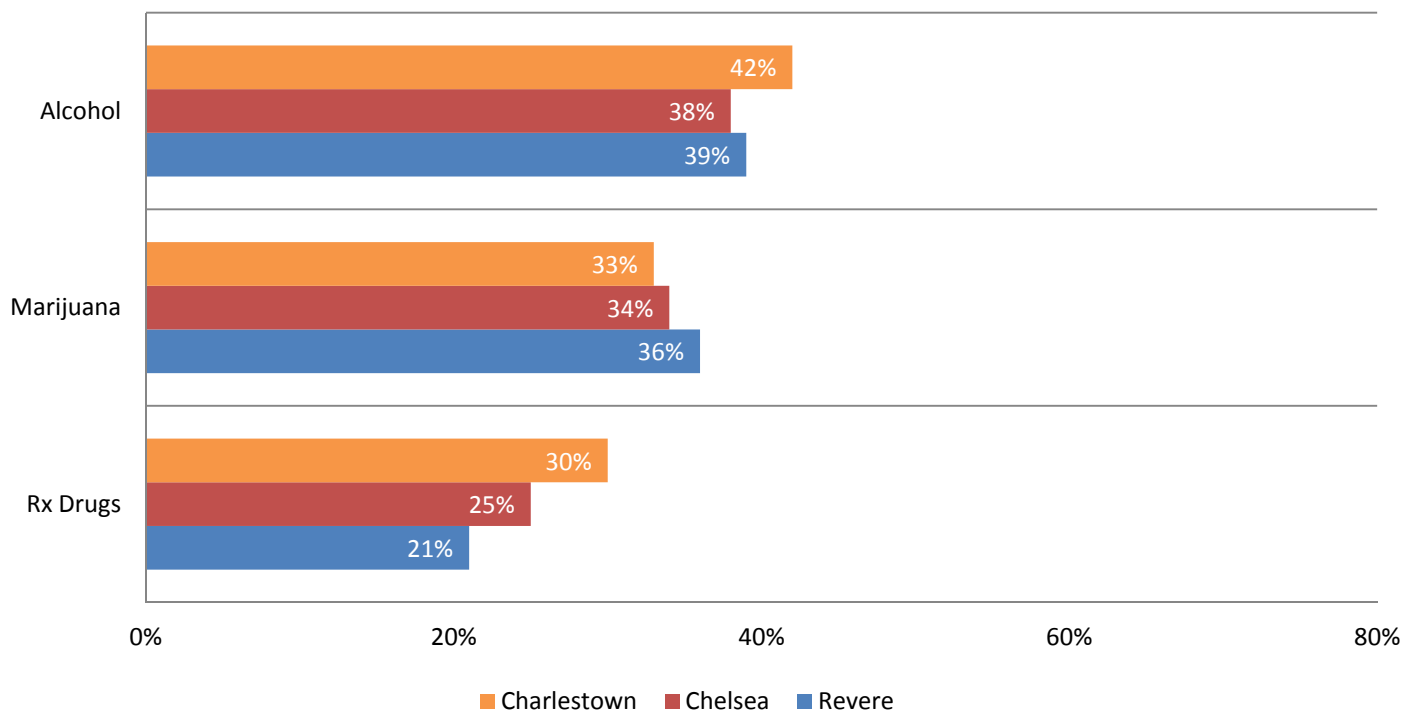
Even the professionals interviewed were confused about what to say in terms of use and harms of substances, especially around marijuana and prescription drugs, as those can be prescribed by a doctor and are viewed as helping people.

Perceived Risk of Substance Use—No or Small Risk, High School



Source: YRBS

Perceived Risk of Substance Use—No or Small Risk, Middle School



Source: YRBS

“A large percentage of families are experiencing stress and trauma at the same time.”

Stress

When asked what stresses them out, youth promptly listed school, peer pressure and fitting in, personal safety, bullying, and homework.

The pressure to do well in school was mentioned in all youth focus groups. Many reported that this pressure might lead to depression and using drugs, especially if a youth does not have someone to talk to. Some youth admitted to using marijuana in the mornings before school, “to take the edge off.” Additionally, youth want to fit in, so they succumb to peer pressure to smoke marijuana or take pills with friends. Youth admitted they are not sure how to positively deal with stress and that talking to mental health counselors can lead to being labeled as “crazy.”

Bullying in school and on-line are very real stressors as well. Youth reported they see it happen more often in middle school, and bullying can lead to depression and suicide.

Younger youth and young women in the focus groups mentioned a fear of safety when out in their communities, especially after dark. Professionals agreed that many youth do not feel safe in their

communities after dark, and this limits opportunities for activities that might run late, causing stress for youth who need to leave a program before sunset.

Having a current diagnosis for depression is associated with increased risk of prescription opioid misuse (Ford, & Rigg, 2015).

Professionals reported they see many youth dealing with family trauma, especially families in Chelsea, Revere, and East Boston where there has been an increase in unaccompanied minors from Central America. These youth have experienced multiple traumas, including violence while crossing the border and having to live with unknown family members. Some youth reported being worried that their parents or family members might be deported. Additionally, some youth are approached by gang members and pressured to join gangs that are associated with their home countries.

This stress can lead to depression, other mental health issues, and drug use.

Summary of Factors that Prevent Adolescent Substance Use and Mental Health Issues:

Positive Relationships with Adults
Parental & Peer Disapproval of Substance Use
Accessible Extracurricular Activities
Lack of Access to Substances
Perception of Harm from Substances
Reducing & Managing Stress

Prioritization of Factors to Address in Prevention Strategy

Presentations of the above factors took place with each community coalition, as well as any organizations who requested a presentation, including the Community Health Improvement Team at MGH Chelsea HealthCare Center. Participants at each presentation were divided into groups to prioritize the factors for their communities. Prioritization was based on the importance of the factor to the community and how changeable the factor was, given the readiness and resources of the community.

To help prioritize, participants were given the following grid to use and asked to discuss amongst themselves how they viewed each factor in the context of their community.

Prioritization Matrix		Changeability	
		High	Low
Importance	High		
	Low		

Each group reported out what factors ended up as both High Importance and High Changeability. Factors were tallied, and agreement was sought from the group that the prioritized factors were indeed the ones the communities wanted to work on.

Not surprisingly, as the factors are similar across Revere, Chelsea, Charlestown, and East Boston, so, too, were the top prioritized factors from each community.

Below are the prioritized factors from each presentation.

Revere Cares	Healthy Chelsea	The Charlestown Coalition	EASTIE Coalition	MGH Chelsea CHI Team	MGH CCHI Coalition Staff
Adult Relationships	Adult Relationships	Adult Relationships	Adult Relationships	Adult Relationships	Adult Relationships
Extracurricular Activities	Extracurricular Activities	Extracurricular Activities	Extracurricular Activities	Extracurricular Activities	Extracurricular Activities
Stress	Stress	Perception of Harm from Substances	Perception of Harm from Substances	Perception of Harm from Substances	Stress

Factors to be addressed by MGH CCHI & Coalitions:

Adult Relationships

Extracurricular Activities

Stress

Perception of Harm from Substances

Strategies

Participants were then asked to review each prioritized factor and consider strategies that they could implement across the region. Participants were asked to take into account feasibility, reach and populations affected, and buy-in when considering strategies. Below are the overall strategies to address the prioritized factors for adolescent substance use and mental health.

Factor	Strategy
Adult Relationships	Increase job shadowship programs and youth jobs
	Enhance adult capacities for informal and formal mentorships and communication with youth
Extracurricular Activities	Build infrastructure to connect youth and families to activities
	Collaborate with organizations to advocate for age-appropriate youth activities in each community
	Strengthen youth component of each community coalition
Stress	Increase coping skills of youth and adults to positively manage and reduce stress
	Create youth photo voice project to highlight positive stress management
Perception of Harm from Substances	Implement social marketing campaign to increase perception of harm of adolescent marijuana use
	Collaborate with schools and organizations to incorporate an evidence-based curriculum that addresses substance use and mental health

Community Health Implementation Plan

The following implementation plan is part of a larger strategic plan the MGH Center for Community Health Improvement has completed. The larger strategic plan takes into account previous CHNAs and other community needs that have been identified in the communities MGH serves. What is presented here is only in response to the 2016 Community Health Needs Assessment on Adolescent Substance Use and Mental Health.

The Community Health Implementation Plan (CHIP) was created from plans each of the four coalitions created based on their own capacity, community readiness, partnerships, and resources. Although the goals, objectives, and strategies are the same for each community, activities might be slightly different depending on the criteria previously mentioned. For detailed work plans for each coalition, please contact CCHI.

CCHI Goal: Collectively assess and address our local communities' and Boston's most pressing health concerns (opioids, substance use disorders, violence, trauma, mental health obesity, etc.) in collaboration with hospitals, community partners and coalition staff.

CHNA Sub-Goal: Prevent and reduce adolescent substance use and mental health issues

Objective 1: Decrease the number of youth feeling sad or down in the last two weeks by 5%

Objective 2: Reduce adolescent substance, particularly marijuana use, and increase perception of harm from substances by 10%.

Strategy 1: Increase job shadowship programs and youth jobs

Activities

- Connect schools and organizations with professionals to expose youth to careers and educational opportunities throughout the communities
- Work with MGH Youth programs to support summer jobs for youth from Chelsea, Revere, Charlestown, and E. Boston

Strategy 2: Enhance adult capacities for informal and formal mentorships and communication with youth

Activities

- Educate parent/guardian on substances and use as well as their skills in communicating with their child(ren) about the dangers of substances, and setting expectations and rules
- Use existing groups as a place to build bonds with adults (Charlestown 02129 youth group, Boys and Girls Clubs, after school programs)

Strategy 3: Collaborate with organizations to advocate for age-appropriate youth activities in each community

Activities

- Support the expansion of after school programming and activities to provide youth with healthy activities that develop pro-social skills, resilience, and other core developmental assets
- Partner to organize activities for youth, designed by youth

Strategy 4: Engage youth as part of each community coalition

Activities

- Support strong youth groups for each coalition
- Present assessment findings to youth to prioritize activities
- Support youth group to create social media campaign in each community (see below)
- Support and guide youth to make positive differences in their communities

Strategy 5: Increase coping skills of youth and adults to positively manage and reduce stress

Activities

- Support schools to offer stress-management skill building to students
- Support coalition youth group to create stress management opportunities with their peers.

Strategy 6: Implement social marketing campaign to increase perception of harm of adolescent marijuana use

Activities

- Develop and implement original media campaign about local youth substance use issues, including local YRBS data, education on recreational marijuana, increasing awareness of marijuana use and its effects on the developing teen brain
- Create and maintain social media accounts to promote youth campaign and other youth-related community & coalition activities (Instagram, Facebook, Twitter)

Strategy 7: Collaborate with schools and organizations to incorporate a curriculum that addresses substance use and mental well-being

Activities

- Investigate current health prevention curricula in schools & community; communicate results to all stakeholders
- Identify opportunities to strengthen/increase implementation of evidence-based prevention curricula and health education in schools, after-school programs, and community organizations

Appendix A: Methodology

This CHNA includes both quantitative and qualitative data sources. Quantitative data from the 2015 Youth Risk Behavior Survey (YRBS) and the Quality of Life Survey from the 2015 CHNA were gathered and reviewed, in addition to community data from sources such as the Boston Public Schools, the American Community Survey, and the Massachusetts Department of Public Health. Data from these sources were utilized to create data placemats that visually depicted community-specific demographic information, educational attainment, poverty rates, and substance use and mental health indicators. The data placemats were brought to interviews and focus groups to provide community context and frame conversations about adolescent substance use and mental health with both professional and youth participants.

Qualitative data were collected through interviews and focus groups. Interview and focus group guides were created for facilitators and note takers with standard questions for both professional and youth participants. CCHI coalition staff reviewed initial questions in February and provided feedback. After the interview and focus group guides were finalized in March, CCHI evaluators traveled to each community to facilitate data collection with coalition staff.

Coalition staff identified focus group and interview participants from relevant community and youth groups, as well as organizations who work with youth in schools, health centers, and non-profit organizations. A total of 19 focus groups and 8 interviews were completed between April and June with a combined total of 235 professionals, young people, people in recovery, and families of people in recovery across Charlestown, Chelsea, Revere, East Boston, and Roxbury. Each interview/focus group lasted approximately 45 to 60 minutes. Youth participants received a \$20 gift card at the end of the focus groups as compensation for their participation.

During interviews and focus groups, participants were asked about substance use and mental health among adolescents, as well as the strengths and available resources in their communities. Upon completion of all focus groups and interviews, the notes were reviewed and categorized to identify common themes regarding substance use and mental health among youth across all communities, particularly to inform risk and protective factors associated with adolescent substance use and mental health issues.

The next page summarizes the interviews and focus groups conducted.

Interview/Focus Group	Type	Who	Number of Participants
Interview	Professional	East Boston High School Nurse	1
Interview	Professional	Clinical Director, Youth Connect	1
Interview	Professional	Social Worker at Seacoast Alternative School, Revere	1
Interview	Professional	Nurse Practitioner, Revere School Based Health Center	1
Interview	Professional	Community Based Clinician, North Suffolk Mental Health	1
Interview	Professional	Social Workers at Garfield Middle School, Revere	2
Interview	Professional	Superintendent, Revere Schools	1
Interview	Professional	Administrative Director of Mental Health & Mental Health Clinician at School Based Health Center, East Boston	2
Interview	Professional	Medical Director, MassGeneral Hospital for Children	1
Focus Group	Professional	Charlestown Child Team	10
Focus Group	People in Recovery	Young Adults in Recovery, Charlestown	7
Focus Group	Youth	Turn it Around Basketball Tournament Participants	75
Focus Group	Professional	Family Support Circle Task Force, Charlestown	4
Focus Group	Professional	Chelsea High School Social Workers	5
Focus Group	Professional	Chelsea School Based Health Center Staff	4
Focus Group	Youth	Chelsea Boys and Girls Club	7
Focus Group	Youth	Roca Participants, Chelsea	12
Focus Group	Professional	Roca Staff, Chelsea	5
Focus Group	Youth	REACH, Chelsea	10
Focus Group	Professional	Behavioral Health Staff, MGH Chelsea	20
Focus Group	Youth	Salesian Boys & Girls Club Middle School Boys, East Boston	6
Focus Group	Youth	Salesian Boys & Girls Club Teen Girls, East Boston	6
Focus Group	Youth	Salesian Boys and Girls Club Teen Boys, East Boston	10
Focus Group	Families of those in Recovery	North Suffolk Mental Health Support Group, East Boston	20
Focus Group	Youth	Yawkey Boys and Girls Club Young Men	14
Focus Group	People in Recovery	Recovery Community in Revere	6
Focus Group	Youth	Seacoast High School Students, Revere	5
Focus Group	Professional	North Suffolk Mental Health Staff	4

Appendix B: References

- Center for Behavioral Health Statistics and Quality. (2016) Key Substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health (HHS Publications No. SMA 16-4984, NSDUH Series H-51).
- Ford, Jason A., & Rigg, Khary K. (2015). Racial/Ethnic Differences in Factors That Place Adolescents at Risk for Prescription Opioid Misuse. *Prevention Science*, 16, 633-641.
- King, K.A., Vidourek, R.A., & Hoffman, A. (2012). Sex and Grade Level Differences in Marijuana Use Among Youth. *Journal of Drug Education*, 42, 361-377.
- Mulhall, P.F., Stone, D., & Stone, B. (1996). Home Alone: Is It a Risk Factor for Middle School Youth and Drug Use? *Journal of Drug Education*, 26, 39-48.
- The National Center on Addiction and Substance Abuse (CASA) (2009). *The Impact of Substance Abuse on State Budgets*. Columbia University, New York, NY.
- The National Center on Addiction and Substance Abuse (CASA) (2011). *Adolescent Substance Use: America's #1 Public Health Problem*. Columbia University, New York, NY.
- Richardson, J.L., Radziszewska, B., Dent, C.W., & Flay, B.R. (1993). Relationship Between After-School Care of Adolescents and Substance Use, Risk Taking, Depressed Mood, and Academic Achievement. *Pediatrics*, 92, 32-38.
- Sawyer, Thomas M., & Stevenson, John F. (2008). Perceived Parental and Peer Disapproval Toward Substances: Influences on Adolescent Decision-Making. *The Journal of Primary Prevention*, 29, 465-477.
- Scales, P.C., & Leffert, N. (1999). *Developmental Assets: A Synthesis of the Scientific Research on Adolescent Development*. Minneapolis, Minnesota: Search Institute.