



YOUTH SUBSTANCE USE PREVENTION STRATEGIC PLAN

Mayor Martin J. Walsh

FOREWORD FROM THE MAYOR

My fellow Bostonians,

In recent years, an epidemic of substance use disorder has harmed all of our communities. That's why one of my first steps as Mayor was creating the nation's first municipal Office of Recovery Services (ORS). Over the last three years, ORS has expanded access to care, enhanced the treatment continuum, and strengthened recovery support services in the city. But as we promote recovery, we also must do whatever we can to help young people avoid going down these damaging pathways in the first place.

Problematic substance use hurts young people's health, relationships, education, career prospects, and overall wellbeing. It undermines their progress into adulthood and robs families and communities of their full potential. For some, it can even mean the loss of life itself. It is vital that we equip the next generation with the skills and supports they need to avoid these devastating consequences.

That is the goal of this *Youth Substance Use Prevention Strategic Plan*. Produced by ORS in partnership with the Blue Cross Blue Shield of Massachusetts Foundation, it examines strengths in our existing prevention efforts, it highlights areas in need of improvement, and it offers a blueprint for moving forward.

Traditionally, substance disorder prevention strategies have not been planned at the municipal level, but we recognized the need for a highly localized and holistic plan. Each Boston neighborhood has its own set of challenges relating to substance use that require a versatile approach to finding solutions. Communities that face disparate levels of poverty, trauma, discrimination, and violence are especially in need of tailored, comprehensive support. Many of Boston's young people are struggling to cope with various sources of hardship and pain, which puts them at risk for unhealthy behaviors. To fully address substance use in Boston, we developed a strategic plan that responds to this lived reality.

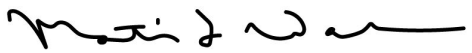
I want to thank everyone who contributed to this report: our Oversight Committee, an Advisory Group comprised of youth experts, dozens of stakeholders who sat for interviews, and hundreds of youth who completed surveys. I am grateful to the young people, families, coalitions, providers, and the City's largest youth-serving agencies—Boston Public Schools, Boston Centers for Youth & Families, and Boston Public Health Commission—for their collaboration.

The youth in our city deserve a community that unites behind them. By implementing the recommendations outlined in the *Youth Substance Use Prevention Strategic Plan*, we can make a lasting difference for them. It is vital that we support Boston's youth by having open conversations about safe coping strategies, preparing them to better judge risks, and helping them get the resources they need.



As the plan makes clear, we cannot do this work alone. I invite everyone in our city to do their part to put this plan into action.

Sincerely,

A handwritten signature in black ink, appearing to read "Martin J. Walsh". The signature is fluid and cursive, with a long horizontal stroke at the end.

Mayor Martin J. Walsh



PLAN SUMMARY

In 2015, Mayor Martin J. Walsh created the Mayor's Office of Recovery Services (ORS) to lead efforts to strengthen existing resources within the city, create new pathways to services, convene partners, and facilitate communication across departments and sectors. During its first two years, ORS initiated city-wide recovery efforts that focused on expanding access to care and building partnerships.

Through its work addressing the opioid epidemic, ORS received countless requests from families and the wider community to examine how the City supports young people and their families in preventing substance use, misuse, and addiction. While there is consensus that it is imperative to initiate substance use prevention education as early as possible, the strategic planning for this report reflects a deliberate focus on the needs of middle and high school aged youth and their families with specific consideration given to targeting high-risk youth and addressing racial, ethnic, gender, and economic inequities.

To initiate this process, ORS partnered with the Blue Cross Blue Shield of Massachusetts Foundation (BCBSMAF) to conduct a youth substance use prevention needs assessment and strategic planning process. ORS engaged coalitions, families, youth, providers, and the City's largest youth-serving agencies - Boston Public Schools (BPS), Boston Centers for Youth & Families (BCYF), and Boston Public Health Commission (BPHC) - in developing actionable recommendations to strengthen the City's existing infrastructure and fill gaps in prevention services to better support Boston youth.

The planning process has provided a unique opportunity to initiate important, cross-sector collaborations throughout the city. Current youth substance use prevention efforts have developed with funding from federal, state, and local grants working in neighborhoods and schools, and often without effective communication channels between agencies and communities. There is a clear need for tighter coordination among and between public and private agencies to address the combination of social factors that foster and contribute to youth substance use. These include: adverse childhood experiences, trauma, perceived disparity, and social isolation. Substance use is often a coping strategy in response to these risk factors. Manifested, these challenges significantly impact youth and their families. Combined, they contribute to immense challenges within our community, the health system, schools, public safety, and child welfare agencies.

Youth Development & Social Determinants

Globally and locally, information is more accessible to young people today than ever before. Technology, like social media and on-demand entertainment, offer youth a wide array of messaging, including information about both risky and healthy behaviors. Continuous and unfiltered information streams require creative



approaches to reach youth with positive messages, especially since news, advertising and media outlets frequently support, encourage, and normalize alcohol and drug use. This new information landscape has the power to help youth learn and develop coping skills, but it can also reinforce risky behaviors and increase anxiety. For this reason, an effective prevention effort must be positioned to harness the platforms and mediums that youth use to maximize healthy behaviors and support pro-social engagement and activities.

Prevention efforts often target particular drugs such as alcohol, tobacco, or opioids, but miss the mark on reaching youth in a holistic way. This narrow approach is understandable, given perceptions of drug use in the United States have been at least partially shaped by “War on Drugs” era policies that focused primarily on curbing drug use through prohibition and punishment. However, to be effective, prevention efforts must address and attempt to better understand the *social determinants of substance use*, rather than simply pursue stricter methods of discipline. Indeed, most of the youth we surveyed in Boston mention marijuana and alcohol as the primary substances that are used by peers, often to cope with stress or trauma. While the the anti-drug advertising and media campaigns of the early aughts would have us focus on influencing youth perceptions of drug use by condemning certain behaviors as illicit and destructive, a social determinants approach points us towards the factors that motivate drug use, which require altogether different interventions. This lens is particularly important given the shifting legal

landscape of marijuana use at both the national and local levels. The Commonwealth’s decision to legalize medical marijuana in 2012, and recreational marijuana in 2016, may have the effect of reinforcing a perception of social acceptability and, therefore, low to no risk for young people. In addition to easier access, different consumption methods, such as smoking, vaporizing and edibles, facilitate ease of use. The purpose of this report is not to adjudicate the merits of marijuana legalization or to offer policy recommendations for regulation. On the contrary, as City, County, and state officials work to regulate an emerging industry, local health and school officials are tasked with addressing marijuana use among middle and high school students, and young people broadly. In this report, we make the case for employing a more holistic, social determinants driven approach to accomplishing this latter task.

By focusing on the social determinants of health, we can better identify and treat undiagnosed trauma and mental illness, increase employment opportunities,

Strategic Plan Goals:

- *Assess the capacity of existing youth substance use prevention services.*
- *Identify gaps and best practices for expanding youth prevention service capacity.*
- *Develop actionable recommendations for future investments in youth substance use prevention services that are culturally competent and linguistically appropriate.*



facilitate opportunities for stable housing, and promote overall wellness. Adults need information and support to engage in difficult conversations with young people. Youth need to be provided with opportunities throughout their day to develop comfortability with healthy decision making and positive coping skills. Together young people and the adults, caregivers, teachers, and positive role models in their lives can build strong, supportive, and positive relationships. Youth reported that schools are where they receive the vast majority of information about drugs and alcohol. As such, it is a focus of this report to identify youth serving systems, such as schools and afterschool programming, as primary institutions that need to build capacity to offer creative, comprehensive, prevention strategies to reach youth.

The time to act is now. The approach taken to develop this plan, including more data and information received directly from Boston youth, families, providers and advocates, is described in the full report and attachments. The recommendations outlined below are intended to help guide youth substance use prevention efforts in Boston for the next several years.

Strategic Recommendations

In order to address the complex needs of young people in Boston, particularly with respect to substance use prevention, stakeholders from multiple sectors will need to collaborate in developing and expanding initiatives that engage young people across a variety of platforms and media. The recommendations presented in this report are meant to stimulate this collaborative, multi-sector approach to youth substance prevention. Recommendations fall within five broad strategic areas:

1. Expanding leadership and coordination,
2. Increasing prevention work in all City agencies,
3. Using consistent messaging,
4. Improving pathways to care, and
5. Engaging with academic and other philanthropic organizations.

We further classify each recommendation as either *City-owned*, *City-led* or *City-catalyzed* to indicate how recommendations can be most effectively implemented (See pg. 30). In some cases, recommendations are best implemented by a particular City department or group of departments; however, in many cases, partners in other sectors are best positioned to carry out the actions associated with a particular recommendation with support from the City. Taken together, the recommendations reflect a holistic approach to youth substance use prevention that acknowledges the social determinants of substance use, the diverse needs of young people in Boston and the innovative, collaborative solutions that are necessary to meet them fully.



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1. INTRODUCTION

In 2014, Mayor Walsh partnered with the Blue Cross Blue Shield Foundation of Massachusetts (BCBSMAF) to conduct an analysis of the City of Boston’s (the City) addiction recovery supports and service gaps. This process led to the creation of the Mayor’s Office of Recovery Services (ORS) in 2015. In collaboration with other City departments, ORS has worked to build partnerships with state and federal entities, local service providers, and the recovery community to coordinate substance use treatment and recovery strategies in Boston. During its first two years, ORS initiated city-wide recovery efforts that focused on expanding access to care and building partnerships. Through its work addressing the opioid epidemic, ORS received countless requests from families and the wider community to examine how the City supports young people and their families in preventing substance use, misuse, and addiction.

In 2017, ORS partnered with BCBSMAF for a second time to conduct a youth substance use prevention needs assessment and strategic planning process, in collaboration with an Oversight Committee and Advisory Board. ORS engaged youth, families, coalitions, providers, and the City’s largest youth-serving agencies - Boston Public Schools (BPS), Boston Centers for Youth & Families (BCYF), and Boston Public Health Commission (BPHC) - in developing actionable recommendations to strengthen the City’s existing infrastructure and fill gaps in prevention services to better support Boston youth. While there is consensus that it is imperative to initiate substance use prevention education as early as possible, the strategic planning for this report reflects a deliberate focus on the needs of middle and high school aged youth and their families with specific consideration given to targeting high-risk youth and addressing racial, ethnic, gender, and economic inequities.

Planning process goals were to:

- 1) **Assess the capacity of existing youth substance use prevention services in the City of Boston.***
- 2) **Identify gaps and best practices for expanding youth prevention service capacity for the City of Boston.***
- 3) **Develop actionable recommendations for future investments in youth substance use prevention services that are culturally competent and linguistically appropriate.***

The goal of this report is twofold. First, the report seeks to better understand the landscape of youth substance use prevention efforts. The planning process included an assessment of the existing youth-focused substance use prevention initiatives within the city and built upon existing assessments, including the Massachusetts General Hospital’s (MGH) Center for Community Health Improvement’s 2016 *Community Health Needs Assessment & Implementation Plan: Adolescent Substance Use and Mental Health*.² Having assessed strategies being employed to address youth substance use, the report then seeks to develop actionable recommendations that build on existing infrastructure and fill gaps in services. Specifically, ORS

¹ https://www.cityofboston.gov/news/uploads/7551_21_20_25.pdf, accessed 2/8/18.

² http://www.massgeneral.org/cchi/assets/pdf/MGH%20CHNA%202016_Final_ForWeb.pdf, accessed 2/8/18.



sought to identify current prevention service capacity as well as gaps in services, to ensure that prevention strategies are culturally competent, linguistically appropriate, and equitably accessible to the diverse neighborhoods and demographics that comprise Boston.

Local substance use prevention and education efforts have historically developed in isolation, often without clear communication among agencies and programs funded by different federal, state and local grants. The planning process provided a unique opportunity to initiate cross-sector collaboration and to engage the community about critical issues that will shape prevention efforts. There is an urgent need to improve coordination and implement city-wide strategies to address youth trauma, mental health, the impact of adverse childhood experiences, and youth substance use. The planning process highlighted the need to pay special attention to communities who have been historically underserved, particularly people of color and those living in poverty.

2. A CONTEMPORARY APPROACH TO SUBSTANCE USE PREVENTION EFFORTS

Substance use prevention must be part of a broader effort to address the social determinants of health. For the last several decades, federal and state grant initiatives have circumscribed the focus of local substance use prevention efforts, including grants that restrict funds for specific target populations and substances, such as opioids. However, Boston youth are using a range of substances, including marijuana, alcohol, and over-the-counter codeine (referred to as 'lean'), in much greater frequency than they use prescription opioids. Substance use prevention efforts must address a range of substances and the likelihood of poly-substance use, rather than focus exclusively on individual substances. Studies show that youth who use tobacco products are at greatest risk for substance use disorders,³ yet to date, tobacco cessation efforts do not address other youth substance use.³ Many Boston youth also face an extensive array of risk factors linked to increased rates of youth substance use including poverty, violence, trauma, and undiagnosed and untreated mental illness. Substance use is often a coping strategy in response to trauma or other risk factors. It is increasingly essential for staff and teachers in the City of Boston to have open and sometimes difficult conversations with youth about the impact of all substances, while preparing youth to better judge risks, identify the signs of misuse and addiction, and access services and supports when needed. Interagency collaboration is instrumental to this effort, as is a coordinated strategic city-wide approach with consistent messaging designed to reduce substance use

³ <https://www.ncbi.nlm.nih.gov/pubmed/24717237>, accessed 2/8/18.



risk factors, promote protective factors, and holistically address the social determinants of health on a system-wide level. As such, this planning process viewed youth behavioral health holistically, with an understanding that preventing youth substance use requires efforts to improve overall youth wellness, develop coping skills, and increase access to supportive and positive influences.

3. RACE, JUVENILE JUSTICE, AND SUBSTANCE USE

Numerous studies have examined the impact of race and ethnicity on rates of diversion, arrest, detention, and sentencing for youth using illegal substances. Minority youth in the juvenile justice system who use substances are more likely to receive punitive sanctions, as compared to their White peers.⁴ Furthermore, youth of color are less likely to receive appropriate and effective substance use treatment than their White counterparts.⁵ One report indicates that the “majority of studies (69%) published in the past 20 years found at least some race effect in the decision to refer youth to services.”⁶ In 2000, the United State Census Bureau revealed that Boston had become a majority-minority city, completing a dramatic transition from 1970, when Boston was 70% White.⁷ Among Boston Public School students, 86% are children of color.⁸

The Office of Recovery Services and its partners firmly believe that substance use prevention activities must reflect the diverse communities in which they occur and the unique needs and concerns of the populations being served. In addition, ORS acknowledges the disadvantages that youth of color experience in accessing substance use treatment and support services. ORS and its partners sought to

⁴ Spinney, E., Yeide, M., Feyerherm, W., Cohen, M., Stephenson, R., & Thomas, C. (2017). Racial Disparities in Juvenile Justice Referrals to Mental Health and Substance Abuse Services. *Focal Point: Youth, Young Adults, and Mental Health*, 31, 7-11. Portland, OR: Research and Training Center for Pathways to Positive Futures, Portland State University. Cochran, Joshua C., and Daniel P. Mears. 2015. “Race, Ethnic, and Gender Divides in Juvenile Court Sanctioning and Rehabilitative Intervention.” *Journal of Research in Crime and Delinquency* 52(2):181-212.

⁵ Cummings, J. R., Wen, H., & Druss, B. G. (2011) “Racial/Ethnic Differences in Treatment for Substance use Disorders Among U.S. Adolescents,” *Journal of the American Academy of Child & Adolescent Psychiatry* Vol. 50; 12: 1265-74.

Fader, J. J., Kurlychek, M. C., & Morgan, K. A. (2014) “The color of juvenile justice: racial disparities in dispositional decisions,” *Social Science Research* 44: 126-40. Haughwout, S. P., Hartford, T. C., Castle, I. P., & Grant, B. F. (2016) “Treatment Utilization Among Adolescent Substance Users: Findings from the 2002 to 2013 National Survey on Drug Use and Health,” *Alcoholism: Clinical and Experimental Research* Vol. 40; 8: 1717-27. DOI: 10.1111/acer.13137 Mansion, A. D. & Chassin, L. (2016) “The effect of race/ethnicity on the relation between substance use disorder diagnosis and substance use treatment receipt among male serious adolescent offenders,” *Children and youth Services Review* 61: 237-44.

⁶ Spinney, E., Yeide, M., Feyerherm, W., Cohen, M., Stephenson, R., & Thomas, C. (2017). Racial Disparities in Juvenile Justice Referrals to Mental Health and Substance Abuse Services. *Focal Point: Youth, Young Adults, and Mental Health*, 31, 7-11. Portland, OR: Research and Training Center for Pathways to Positive Futures, Portland State University. <https://www.pathwaysrtc.pdx.edu/focal-point-S1703>, accessed 2/8/18.

⁷ <http://www.bostonplans.org/getattachment/5b407528-bf69-4c01-83b9-d2b757178e47/>, accessed 2/8/18.

⁸ https://www.bostonpublicschools.org/cms/lib/MA01906464/Centricity/Domain/238/BPS%20at%20a%20Glance%202016-17_online.pdf, accessed 2/8/18.



highlight the multi-faceted risk factors that drive youth substance use, particularly among youth of color, and propose recommendations that simultaneously address many of these factors. Enhanced substance use surveillance techniques are necessary to identify trends in youth substance use by age, race, gender, and neighborhood and to ensure that prevention, intervention, and treatment resources target needs. A coordinated cross-sector approach, stemming from a well-developed partnership among ORS, BPHC, and BPS, will ensure that surveillance data and identified substance use trends inform future prevention efforts.

4. MARIJUANA LEGALIZATION AND ITS IMPACT ON YOUTH

In 2012, the Commonwealth of Massachusetts passed legislation legalizing medical marijuana. In 2016, Commonwealth voters approved a ballot measure legalizing recreational marijuana. The legislature has since signed into law Bill H.3818: An Act to ensure safe access to marijuana,⁹ with additional modifications still forthcoming. While the passage of recreational marijuana legislation solely permits usage for individuals ages 21 and older, marijuana legalization conveys an undeniable message of social acceptability. Legalization also paves the way for the emergence of a rapidly growing marijuana industry, and like the tobacco and alcohol industries, one that stands to profit from use by youth. Local health and school officials are tasked with addressing rising marijuana use among middle and high school students bolstered by ease of access and complicated by a diversity of consumption methods, such as edibles, vaporizers, among others.

There is a critical need for clearly articulated policies addressing youth marijuana use and for consistent and broadly disseminated messaging around the impact. National research indicates that as the perception of risk continues to decline for marijuana, communities can anticipate increased rates of marijuana use by adolescents.¹⁰ Stakeholders repeatedly stated the need for a common language to discuss youth substance use, particularly around those substances that are legal and more socially acceptable, such as alcohol and now marijuana. As such, it is incredibly timely for Boston's youth serving agencies to jointly address youth perceptions of harm and engage in a robust strategic plan to prevent negative outcomes related to chronic marijuana and other substance use.

⁹ <https://malegislature.gov/Bills/190/H3818>, accessed 2/8/18.

¹⁰ National Institute on Drug Abuse. Monitoring the Future 2013 Survey Results.

<https://www.drugabuse.gov/related-topics/trends-statistics/infographics/monitoring-future-2013-survey-results>, accessed 2/8/18.



5. METHODS

The Mayor's Office of Recovery Services established a Project Team to lead the strategic planning process and contracted with DMA Health Strategies (DMA) for support in designing, conducting, and synthesizing the process and its findings. The Project Team convened an Oversight Committee that met throughout the process and an Advisory Board that gathered for three working meetings. *Appendix 1 provides a detailed description of the Advisory Board activities and process.* Between January and July 2017, DMA conducted qualitative and quantitative data collection activities, including key informant interviews, focus groups, surveys, and informal discussions with affiliated community agencies and service providers. The Office of Recovery Services sought to ensure broad stakeholder participation by identifying and engaging stakeholders from all youth-serving sectors, as well as from youth and parents, to develop a holistic perspective. The Project Team met with BPS leaders, including the Assistant Superintendent, the Executive Director of Health and Wellness for the Office of Social Emotional Learning and Wellness, and the Senior Director of Health Services. DMA also conducted several interviews with BPS staff. Additionally, three BPS leaders along with the Director of Research and Evaluation at the Boston Public Health Commission presented updates to the Advisory Board. BCYF leaders participated in key informant interviews and played a critical role on the Advisory Board, as well as providing an update at an Advisory Board meeting. *Appendix 2 and 3 provide a complete list of stakeholder agencies that participated in the planning process and in the Advisory Board meetings.*

In total, DMA conducted qualitative interviews with 21 key informants. DMA led focus groups with substance use coalition directors, faith-based leaders, high-risk youth providers, and afterschool and extracurricular providers, and conducted several targeted meetings with researchers, prevention experts, and other individuals involved in youth risk reduction and substance use prevention. The Project Team also convened a youth focus group event for youth affiliated with BPHC's Child Adolescent Family Health Bureau. In addition to the youth focus group event, the Project Team developed a youth survey based on the focus group data and conducted the survey during the City's Youth Enrichment Day. The Project Team sought parent input through a survey distributed in English and Spanish, first in-person during a Parent University workshop and then via email with a link to a modified version available through SurveyMonkey. Respondents provided their perspectives on types of substances youth use, factors that drive youth to use, noticeable trends surrounding youth substance use, and perceived existing prevention capacity in efforts to determine gaps and areas for improvement. *Appendix 1 provides a detailed description of the youth focus group event demographics as well as the parent and youth survey demographics.*

To assess effective national prevention programs that may be effective in Boston, DMA conducted a review of evidence-based and promising prevention practices researched through the Substance Abuse and Mental Health Services



Administration's (SAMHSA) National Registry of Evidence-based Programs and Practices, the Washington State Institute for Public Policy, and Blueprints Programs. DMA assessed implementation factors and cost, evidence for diverse populations, and applicable geographies for implementing the programs. Lastly, DMA in conjunction with BPHC's Research and Evaluation Office completed a quantitative review of existing substance use surveillance data, including the Youth Risk Behavior Survey (YRBS) data and the Center for Health Information and Analysis (CHIA) substance use disorder hospital patient encounter (HPE) case mix data. *Appendix 4 provides a list of evidence-based substance use prevention curricula currently used among City of Boston agencies and community partners.*

6. SELECT DEMOGRAPHICS

The City of Boston is home to a socioeconomically, linguistically, ethnically, and racially diverse population. The following sections describe the demographics of Boston in comparison to neighboring cities, and where the data are available, to Suffolk County. BPS is a large, urban school district with 125 schools, including six stand-alone middle schools (grades 6-8), 33 combined elementary and middle schools (grades K-8), four combined middle and high schools (grades 6-12), one K-12 school, and 21 high schools. As of March 2016, BPS estimated that 77,841 school-aged youth resided within the City, of whom approximately 73% were enrolled in BPS for the 2016-2017 school year.¹¹ In contrast to BPS, the other Suffolk County school districts are significantly smaller: the Revere Public School District consists of 11 schools, including three middle and two high schools; the Chelsea Public School District consists of nine schools, including three middle and one high school; and, the Winthrop Public School District consists of four schools, including one middle and one high school. The sections that follow provide a racial/ethnic, socioeconomic, and linguistic profile of City of Boston and Suffolk County youth.

I. RACE AND ETHNICITY

Throughout Suffolk County, with the exception of Winthrop, the public school districts are majority non-White, most notably in Chelsea, where 94% of the students are non-White. In Boston, Chelsea, and Revere, Hispanic students outnumber any other ethnic group. **Table 1** describes the racial and ethnic diversity of each Suffolk County district, including Boston youth not attending BPS.¹²

¹¹ According to BPS At A Glance, among Boston youth who did not attend BPS, 45% attended public charter schools, 21% parochial schools, 19% private schools, 12% attended suburban schools through METCO, 2.5% are placed by BPS Special Education Department in non-BPS schools, while the remainder were home schooled.

¹² <http://profiles.doe.mass.edu/general/general.aspx?topNavId=1&leftNavId=100&orgcode=00570000&orgtypecode=5>, accessed 2/8/18.



Table 1: Race and Ethnicity of Suffolk County Youth

	Number of Students	Asian	Black	Hispanic	White	Multi-Race / other
Boston Public Schools	55,843	9%	32%	42%	14%	3%
Boston youth not in BPS¹³	21,390	4%	45%	18%	30%	3%
Chelsea Public Schools	6,338	1%	6%	85%	6%	1%
Revere Public Schools	7,451	5%	4%	51%	37%	2%
Winthrop Public Schools	1,971	1%	1%	13%	82%	2%

II. POVERTY

According to *The Health of Boston's Children: Child Health Assessment Mapping Project (CHAMP)*, the overall poverty rate for Boston children under the age of 18 from 2008 to 2012 was just under 2.5 times the Massachusetts rate, at 27%; however, the percentage of Boston children living in poverty varied dramatically by neighborhood. In Hyde Park, the five year combined rate was as low as 13%. By contrast, in Roxbury, South Boston, and Charlestown, the poverty rate exceeded 40%, with a high of 49% in Roxbury, over four times the statewide rate.¹⁴ According to *Boston Public Schools at a Glance 2016-2017*, 70% of BPS students were identified as economically disadvantaged,^{15 16} which is more than double the Massachusetts rate (30.2%).¹⁷ Among students enrolled in Chelsea Public Schools for 2016-2017, 55.1% were identified as economically disadvantaged, as compared to 42% in Revere Public Schools, and only 26.7% in the Winthrop Public School District.¹⁸ **Table 2** illustrates three other poverty measures for Massachusetts, Suffolk County, Boston, Chelsea, Revere and Winthrop.

¹³Op. cit., *Boston Public Schools at a Glance, 2016-2017*.

¹⁴ *Health of Boston's Children: Child Health Assessment Mapping Project*, Boston Public Health Commission, Research and Evaluation Office, Boston, Massachusetts, 2015.

http://www.bphc.org/whatwedo/childrens-health/boston-child-health-study/Documents/CHAMP_web_final_2015.pdf, accessed 2/8/18.

¹⁵Op. cit., *Boston Public Schools at a Glance, 2016-2017*.

¹⁶ Economically disadvantaged is indicated by participation in one or more state administered programs, such as the Supplemental Nutrition Assistance Program, the Transitional Aid to Families with Dependent Children program, the Department of Children and Families Foster Care program, and MassHealth.

¹⁷ <http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=00000000&orgtypecode=0&leftNavId=305&>, accessed 2/8/18.

¹⁸ <http://profiles.doe.mass.edu/general/general.aspx?topNavId=1&leftNavId=100&orgcode=02480000&orgtypecode=5>, accessed 2/8/18.

Table 2: Poverty Measures¹⁹

	Boston	Chelsea	Revere	Winthrop	Suffolk County	Massachusetts
Overall poverty rate	21.5%	20.9%	15.6%	8.6%	20.7%	11.6%
12-month poverty rate for children under 18	29.8%	28.5%	23.3%	9.8%	28.7%	15.2%
Children living in households that received public assistance during past 12 months	43.1%	49.8%	30.4%	n/a	42.0%	n/a

III. LANGUAGE AND LEARNING

According to BPHC’s *Health of Boston’s Children* report, with combined 2008 to 2012 data, 11.8% of all households in Boston were linguistically isolated, meaning that there was no one in the household aged 14 or over who spoke English only or very well. In East Boston, the percentage of linguistically isolated households is significantly higher, at 29.7%, with the majority of those homes speaking Spanish or Spanish Creole. Rates of linguistically isolated households were also well above the city-wide rate in the South End (18.1%), North Dorchester (16.3%), and Roxbury (15.1%). **Table 3** illustrates three other language and learning measures for Massachusetts, Suffolk County, Boston, Chelsea, Revere and Winthrop.

In Boston and Chelsea, 30% of students were described as English language learners, more than three times the statewide rate. Over 80% of children enrolled in Chelsea Public Schools reported having a first language other than English and 75% of students were classified as 'high needs.'^{*}

* According to the Massachusetts Department of Education, high needs is defined as "A student is high needs if he or she is designated as either low income (prior to School Year 2015), economically disadvantaged (starting in School Year 2015), or ELL, or former ELL, or a student with disabilities."

¹⁹ U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates.



Table 3: Student Language and Learning Measures

	Boston Public Schools ²⁰	Chelsea Public Schools ²¹	Revere Public Schools ²²	Winthrop Public Schools ²³	Massachusetts ²⁴
First language other than English	45.0%	81.4%	58.0%	18.7%	20.1%
English language learners	30.0%	30.6%	19.1%	7.2%	9.5%
Students with disabilities	20.0%	13.3%	15.3%	17.0%	17.4%
High Needs	74.4% ²⁵	75.3%	61.7%	43.0%	45.2%

7. PREVALENCE OF ADOLESCENT SUBSTANCE USE

The Project Team reviewed two primary data sources to assess prevalence of youth substance use: The Youth Risk Behavior Survey (YRBS) and Hospital Patient Encounter data. The YRBS is a biennial self-reported survey, administered by school districts in partnership with the Centers for Disease Control and Prevention. The CHIA Hospital Patient Encounter Data for the City of Boston, reviewed by BPHC’s Research and Evaluation Office, includes acute care hospital emergency department visits, inpatient discharges, and observational stay discharges. These two surveillance data sources paint a picture of youth substance use over time, by geography, gender, race, age, and grade. See Appendix 5 for a detailed summary of *Surveillance Data Sources and Limitations*.

I. YOUTH RISK BEHAVIOR SURVEY DATA

The YRBS is the primary means by which to assess rates of substance use within an area. Given the size of BPS as well as resource constraints, BPS administers the survey to a sample of schools. The 2015 YRBS was completed by 1,669 students in 33 public and vocational high schools in Boston during the spring of 2015. BPS did not conduct a middle school YRBS in 2015 due to insufficient resources, though it

²⁰ Op. cit., Boston Public Schools at a Glance, 2016-2017.

²¹ <http://profiles.doe.mass.edu/general/general.aspx?topNavId=1&leftNavId=100&orgcode=00570000&orgtypecode=5>, accessed 2/8/18.

²² Ibid.

²³ Ibid.

²⁴ <http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=00000000&orgtypecode=0&leftNavId=305&>, accessed 2/8/18.

²⁵ Ibid.



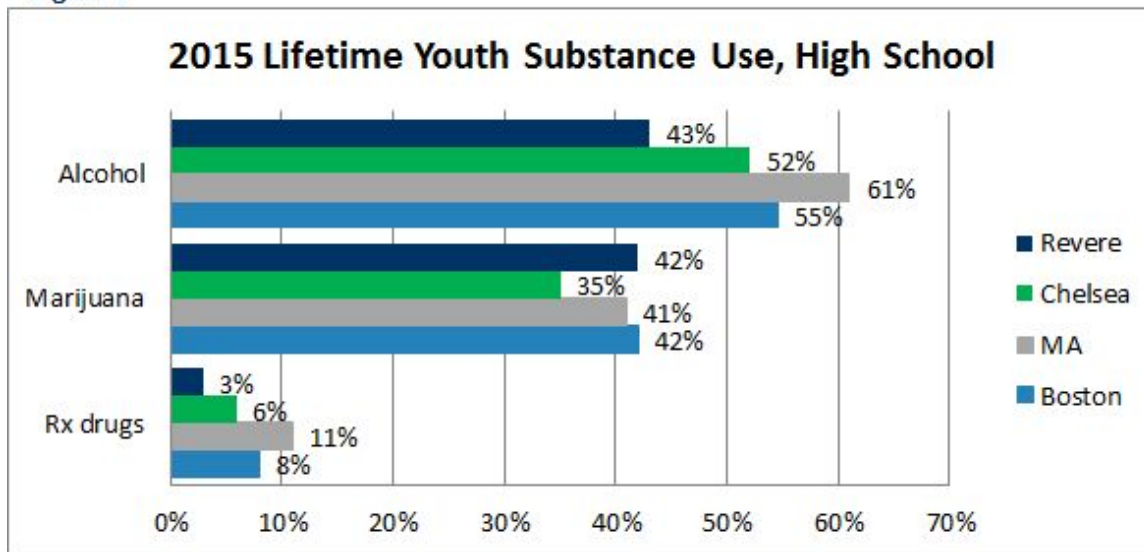
resumed the middle school survey in 2017. Lastly, since BPS administers the YRBS in Boston, middle and high school residents who attend private and parochial schools are not reflected in the survey findings.

Prevalence of Substance Use in Suffolk County

Between 2001 and 2015, lifetime and current alcohol use declined significantly among BPS high school students; however, current and binge use rates among select groups remain substantially higher than the overall rates. Lifetime and current marijuana use among BPS high school students has remained virtually unchanged and comparable to the statewide rate, while the rate of current marijuana use is substantially higher among students with poor academic performance, students who identified as gay, lesbian and bisexual (GLB), and White males.

According to 2015 YRBS data, lifetime alcohol and prescription drug use was lower in Suffolk County communities than in the state overall (**Figure 1**). By contrast, lifetime marijuana use in Boston and Revere (42%) were comparable to the statewide rate (41%). Within Suffolk County, Revere had notably lower alcohol and prescription drug use, while Chelsea had the lowest rate of marijuana use (35%).

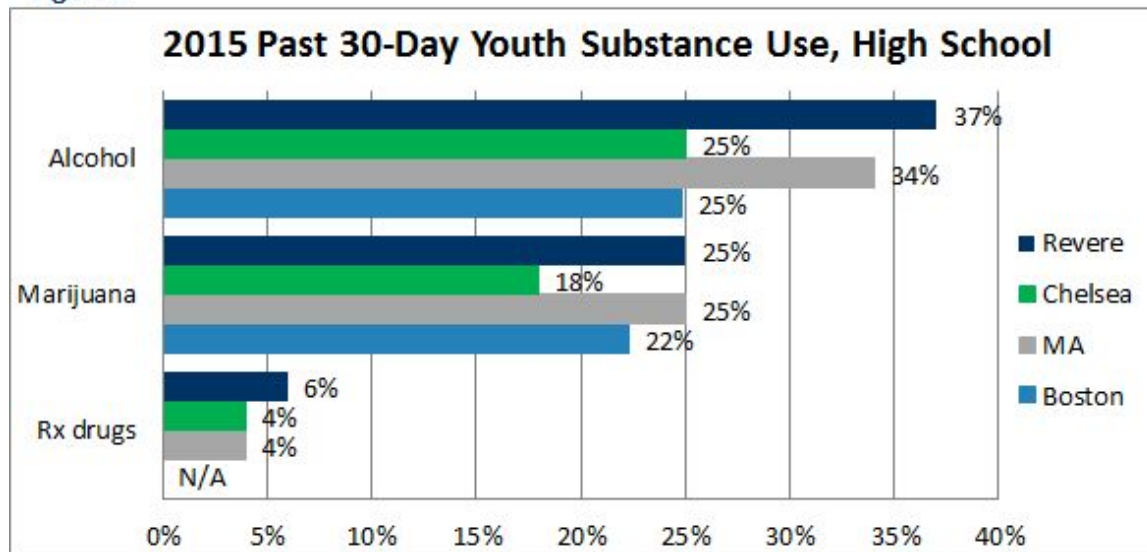
Figure 1



Despite Revere’s lower lifetime rate of alcohol use, the rates of current or past month²⁶ marijuana and prescription drug use were slightly higher than other Suffolk County areas, while the rate of current alcohol use was noticeably higher (**Figure 2**). In Boston, current alcohol use was lower than the state rate (25% compared to 34%), while the rate of current marijuana use was comparable to the state (22% compared to 25%).

²⁶ Current use and past month use are interchangeable terms.

Figure 2



Substance Use Trends among Boston Youth: 2001-2015

According to Boston’s YRBS data, lifetime alcohol use among BPS high school students declined significantly from 2001 to 2015, from 74% to 55%, as did the rate of current alcohol use, which declined from 42% to 25%. In contrast, lifetime marijuana use has increased slightly among BPS high school students, from 40% in 2001 to 42% in 2015, while past month marijuana use remains the same at 22%, despite some minor variations over the years.²⁷ The percentage of BPS students who drank alcohol before age 13 dropped from 31% in 1993 to 17% in 2015 and was comparable to the 2015 statewide (13%) and national (17%) rates. Moreover, the percentage of students who were offered, sold, or given an illegal drug on school property in the past year declined from 29% in 2005 to 21% in 2015.²⁸

Substance Use by Grade among Boston Youth

The 2015 rates of current alcohol, binge alcohol, and current marijuana use were significantly higher among 12th graders as compared to 9th graders (**Table 4**). In addition, 11th and 12th graders were significantly more likely than 9th graders to receive an offer for an illegal drug on school property in the past year (25.8% and 21.2%, respectively, compared to 14.7%).²⁹

²⁷ Boston Youth Risk Behavior Surveillance System, Boston Public Schools and Centers for Disease Control.

Analysis: Boston Public Health Commission Research and Evaluation Office.

<http://www.bphc.org/healthdata/Pages/Boston-Behavioral-Risk-Factor-Surveillance-System.aspx>, accessed 2/8/18.

²⁸ 2015 Boston High School Youth Risk Behavior Survey, What Youths Told Us Results and Fact Sheets. (2016). Boston Public Schools Focus on Children.

²⁹ Ibid.

Table 4: 2015 BPS Students Current Substance Use by Grade

Past 30-Day Use of Substances	9th Grade	12th Grade
Alcohol	18%	35%
Binge Alcohol	8%	16%
Marijuana	14%	29%

Substance Use by Race and Gender among Boston Youth

The 2015 rate of current alcohol use among White BPS students (35.4%) was significantly higher than the rates among Black (18.1%) and Asian students (14.5%), and similar to the rate among Latino students (31.8%).³⁰ Lifetime non-prescribed prescription drug use for 2013 and 2015 combined was also highest among White BPS students (12%), which was comparable among Latino BPS students (9%), but was significantly lower among Black (6%) and Asian (5%) students.

For binge alcohol and current marijuana use rates (**Table 5**), White male students had higher reported combined rates of past month binge alcohol use and current marijuana use compared to other races, with White female students having the second highest binge alcohol rate.³¹ Latino female students had the highest combined rate of current marijuana use among BPS female students, though comparable to the rates among White and Black students, while the rate was significantly lower among Asian female students. Current alcohol use, not displayed below, was significantly higher among females (28.4%) than males (21.3%).³² Furthermore, the 2011 to 2015 combined current binge alcohol use rate among White BPS males (30%) and females (24%) far exceeded the statewide and national rates (18%).³³

**Table 5: Past Month Substance Use by Gender and Race
Boston Public High School Students, 2011, 2013, 2015 combined**

	Male		Female	
	Binge Alcohol	Current Marijuana	Binge Alcohol	Current Marijuana
Asian	7%	11%	11%	9%
Black	10%	29%	9%	22%
Latino	15%	28%	19%	27%
White	30%	37%	24%	21%

Note: Bold percentage signifies statistically significant comparison to reference group (i.e., White).

³⁰ Ibid.

³¹ Dooley, D. Substance use disorder among young Boston residents [PowerPoint slides]. Research and Evaluation Office, BPHC. Prepared for the Boston Youth SUD Prevention Advisory Board Meeting. July 13, 2017.

³² Op. cit., 2015 Boston High School Youth Risk Behavior Survey, What Youths Told Us Results and Fact Sheets.

³³ Ibid.



Substance Use and Sexual Orientation among Boston Youth

Substance use was slightly or significantly higher among students who identified as Gay, Lesbian, or Bisexual (GLB) on the 2015 YRBS as compared to students who identified as heterosexual. Among students who identified as GLB:³⁴

- Current alcohol use was 47.4%, over twice the rate among heterosexual BPS students (23.3%), 1.9 times greater than the overall BPS rate, and well above the statewide and national rates (34% and 33%, respectively).
- Current marijuana use (39.6%) was nearly twice the overall BPS rate (22%).

Substance Use and Academic Performance among Boston Youth

YRBS data indicate an association between poorer academic performance and likelihood to use substances. According to the 2015 BPS YRBS, students who get mostly C's and D's/F's are:³⁵

- Almost twice as likely to currently use alcohol as those who get A's;
- More than twice as likely to binge drink than those who get A's;
- Between 2.6 and 4.7 times more likely to currently use marijuana than those who get A's; and,
- Around twice as likely to take a prescription drug without a doctor's prescriptions, as compared to students who get A's or B's.

II. HOSPITAL PATIENT ENCOUNTER DATA

Hospital patient encounters indicate more serious substance use among residents. High hospital use rates are important indicators of serious need, but they do not report on access to essential community services and supports. The data is based on the International Statistical Classification of Diseases and Related Health Problems, otherwise known as the ICD-9, codes for abuse, dependence, and unintentional and intentional poisoning/overdose. Appendix 5 provides a detailed description of surveillance data sources and limitations.

According to the HPE data, White 12-17 year-olds showed higher alcohol rates for the age group, but rates for Black 18-24 year-olds were dramatically higher than the rates for 12-17 year-olds. The shift in race and age-related alcohol and drug use encounters is also visible in the neighborhood distribution of encounters. The change is likely attributed to the demographic shift that occurs between the two age groups, with the in-migration of predominantly White and Asian college age students and young professionals to specific neighborhoods in Boston.

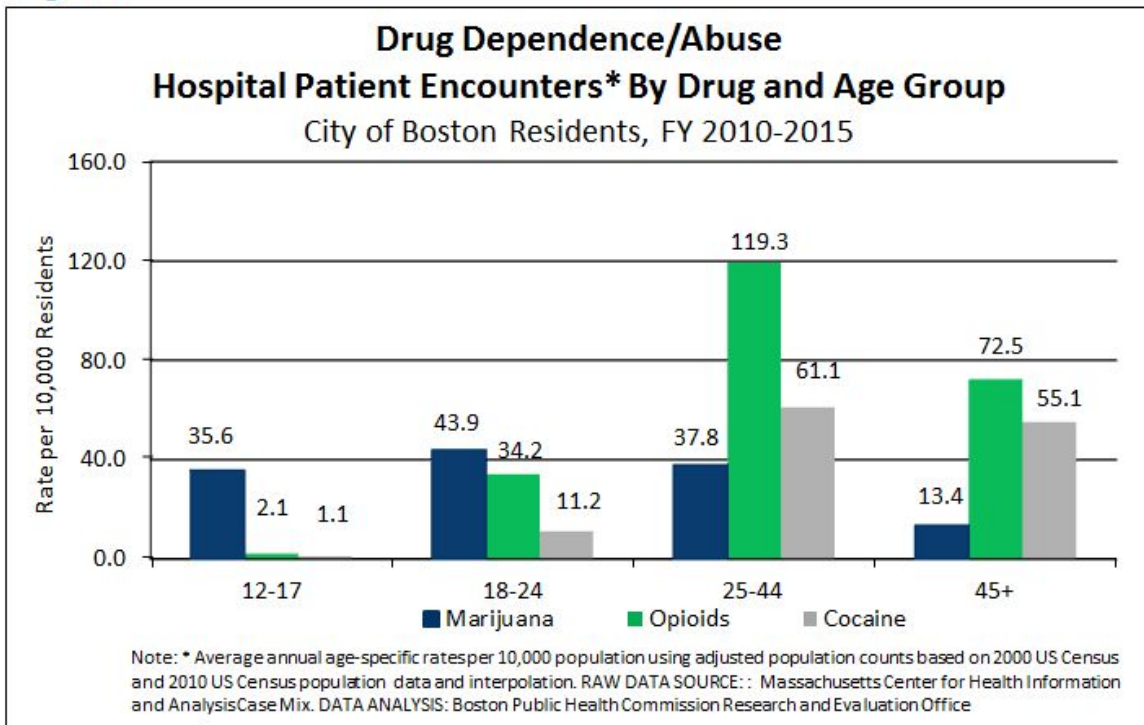
Boston Substance Use Hospital Patient Encounters by Age Cohorts

Among City residents from fiscal year (FY) 2010-2015, **Figure 3** shows the HPE data by drug and age. The rate of marijuana-related HPEs was higher than the rate for opioids or cocaine among 12-17 and 18-24 year-olds, however HPE rates for other drugs increased markedly across the older age groups.

³⁴ Ibid.

³⁵ Ibid.

Figure 3:



Among 25-44 year-olds, the rate for cocaine and opioid related drug dependence or abuse HPEs increased 5.5 and 3.5 times, respectively, while the marijuana HPE rate showed a slight decline.³⁶

Figures 4, 5, and 6 illustrate a dramatic shift in hospital encounters for alcohol and drug use disorders and marijuana dependence and abuse by age, race and ethnicity. White 12-17 year-olds showed higher alcohol HPE rates for the age group, but rates for Black 18-24 year-olds were dramatically higher than the rates for 12-17 year-olds.³⁷ This shift in age-related alcohol use and drug use disorder HPEs is also reflected in the distribution of HPEs by neighborhood among the two age cohorts. This change in prevalence is partly attributed to the demographic shift that occurs between the two age groups, with the in-migration of predominantly White and Asian college age students and young professionals to specific neighborhoods. Appendix 6 includes maps of the neighborhood distribution of alcohol and drug use disorder HPEs among 12-17 and 18-24 year-olds, illustrating the aforementioned demographic transition and in-migration.

³⁶ Dooley, D. Substance use disorder among young Boston residents [PowerPoint slides]. Research and Evaluation Office, BPHC. Prepared for the Boston Youth SUD Prevention Advisory Board Meeting. July 13, 2017. RAW DATA SOURCE: Massachusetts Center for Health Information and Analysis Case Mix. DATA ANALYSIS: Boston Public Health Commission Research and Evaluation Office

³⁷ Ibid.

Figure 4:

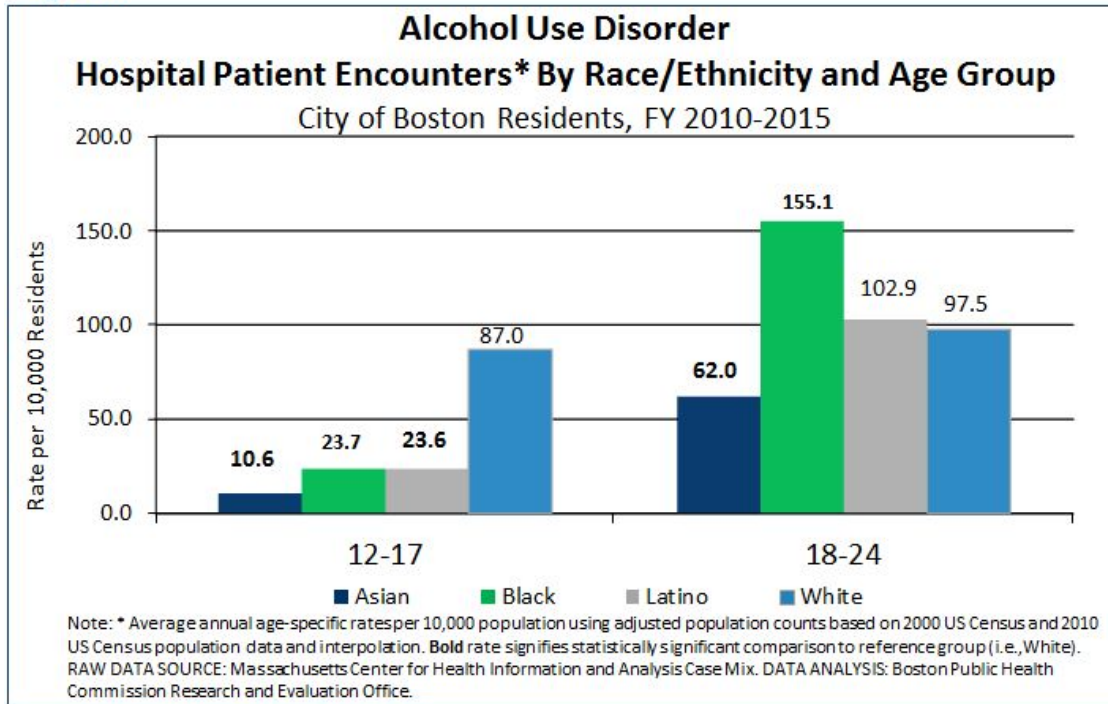


Figure 5:

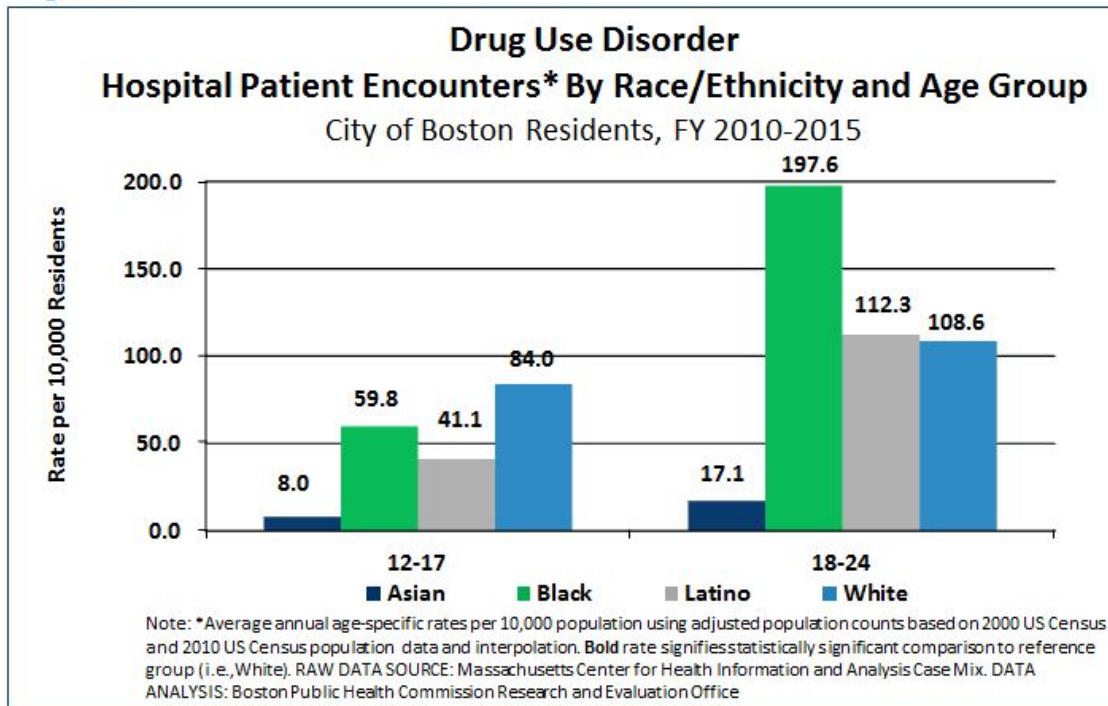
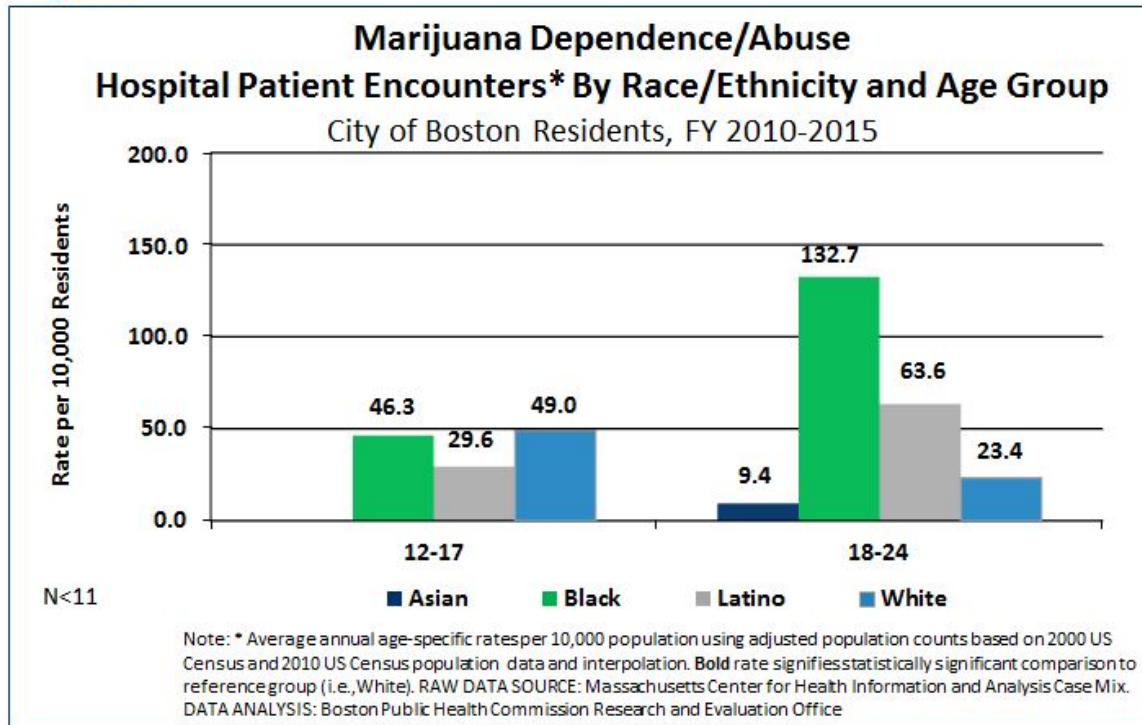


Figure 6:



8. EXISTING SUBSTANCE USE PREVENTION CAPACITY

The City of Boston benefits from a wealth of youth-serving municipal and nonprofit agencies that address youth substance use either directly through education or indirectly through increased protective factors. Despite the multitude of agencies, some communities and populations remain underserved and under-resourced. In addition, many respondents were unable to identify or name a current substance use prevention initiative in the City. Most stakeholders noted a lack of City and County coordination among local, state and federally funded prevention efforts.

The Commonwealth of Massachusetts has long been at the forefront of national efforts to improve health and health care for its residents. Massachusetts is in the process of launching numerous initiatives that have the potential to drastically improve local and statewide substance use prevention efforts. Specifically, the Office of the Attorney General and the General Electric Foundation, along with the Epicenter Experience and The Herren Project, recently launched Project Here, a first-of-its-kind mobile application aimed at bringing substance use prevention to

middle schools across the Commonwealth.³⁸ ORS and its partners recognize the immense wealth of resources and initiatives available throughout the Commonwealth and the tremendous benefit that these initiatives offer to both the youth substance use prevention planning and implementation process.

The City benefits from community coalitions, social service agencies, nonprofit organizations, and faith-based groups that serve as critical partners in the efforts to provide frontline prevention services aimed at reducing youth risk factors and expanding protective factors. Many of these efforts occur in conjunction with substance use prevention and risk reduction efforts conducted and overseen by BPS. Community health centers and primary care providers play a unique role in screening and having discreet conversations with youth for substance use and other risky behaviors, known as Screening and Brief Intervention and Referral to Treatment (SBIRT). Several supplementary programs are available to connect high risk youth and youth who have already begun using substances with brief interventions or treatment referrals. Despite this array of prevention efforts, many stakeholders described the offerings as “scattered” and “siloe,” providing different messages through different mediums. Stakeholders also repeatedly conveyed a need for a coordinated effort with consistent messaging that consciously addresses under-resourced communities and fosters city-wide prevention activities accessible to youth in all neighborhoods. The existing prevention capacity is summarized below, *with a more detailed description in Appendix 8.*

What is Prevention?

According to SAMHSA, substance use prevention initiatives are “intended to prevent or reduce the risk of developing a behavioral health problem, such as underage alcohol use, prescription drug misuse and abuse, and illicit drug use.” Substance use prevention efforts target individuals at different levels of risk and stages of use.

*Notes: SAMHSA 2016. <https://www.samhsa.gov/prevention>
<https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/preventing-drug-abuse-best-strategy>*

I. BOSTON PUBLIC HEALTH COMMISSION

The Boston Public Health Commission’s Bureau of Recovery Services oversees several Bureau of Substance Addiction Services (BSAS) administered and SAMHSA-funded grants that target youth substance use prevention, including youth prescription drug prevention and underage drinking prevention. The grants engage the community in collaborative planning processes that lead to identification of evidence-based practices. Current strategies focus on educating youth in their thoughts and perception related to substance misuse and engaging parents about how they can be influential on the topic. These strategies are largely implemented by substance use coalitions in select neighborhoods. This substance specific

³⁸ <https://www.mass.gov/project-here>, accessed 2/8/18.

approach limits more coordinated, comprehensive efforts to address the myriad of risk and protective factors citywide that either drive youth substance use or reinforce prevention efforts.

The Bureau of Recovery Services' Community Prevention Office currently partners with coalitions to lead the following strategies aimed at addressing youth, parents and their environments. These include:

- Implementing *Botvin LifeSkills*, an evidenced-based substance use prevention curriculum, with select youth in middle and high schools.
- Planning an impactful media campaign addressing the low perception of risk associated with alcohol and prescription drug misuse.
- Engaging parents to provide education about legal consequences of providing alcohol to youth and the importance of storing prescription drugs and alcohol safely.
- Providing opportunities for residents, providers, and youth to participate in planning and implementing these strategies.

In September 2016, ORS partnered with 311, the City's 24/7 constituent call service, to field all substance use recovery related calls. Working with the Bureau of Recovery Services' Providing Access to Addictions Treatment, Hope and Support (PAATHS) program, City residents can now call 311 for 24/7 access to substance use or recovery related requests.

BPHC's Bureau of Child and Family Health oversees seven programs for youth aged 14-19 focused on health education, health services, youth development, and truancy case management. The programming includes:

- Six primary health care centers.
- Mental health supports in Boston Public Schools.
- Educating youth about sexual health, substance use, depression, and anxiety, while providing case management services in 19 BPS schools.
- Introducing inner city teens to careers in health and public health.
- Training teens to lead peer-to-peer workshops in schools and community centers on healthy decision making, sexual health, and substance use, as well as mentoring youth with disabilities.

II. BOSTON PUBLIC SCHOOLS

Boston Public Schools affirmed its commitment to social and emotional learning in 2015, by hiring an Assistant Superintendent of Social Emotional Learning and Wellness, and becoming the first public school district in the country to create such a cabinet-level position.³⁹ Boston Public Schools strives to provide comprehensive health education to all students; however, less than half of BPS schools offered the required health education courses in the 2016-2017 school year due to staffing and funding limitations. In 2016-2017, 40.9% of BPS schools serving grades 6th through

³⁹

<https://www.bostonpublicschools.org/site/default.aspx?PageType=3&DomainID=4&ModuleInstanceID=14&ViewID=047E6BE3-6D87-4130-8424-D8E4E9ED6C2A&RenderLoc=0&FlexDataID=8924&PageID=1>, accessed 2/8/18.



12th offered the required health education courses, which consist of the evidence-based *Michigan Model for Health* curriculum. Of the schools offering the required courses, only 13.6% reported on a Profiles survey that a licensed health education teacher provided the curriculum, and were as such, in compliance with BPS policy. The remaining schools offering the *Michigan Model* used classroom teachers, science teachers, physical education teachers, special education teachers, guidance counselors, social workers, school nurses, and community partners. In addition, health education is often taught as a part of other courses or through assemblies or advisories, making it difficult to estimate exactly how many students are receiving some health education curriculum.⁴⁰ BPS works with BPHC and other community partners to fill the health education gap through peer education programs, a health education center program, health resource centers, school-based health centers, and targeted health education in some schools, using *Life Skills* and other curricula. These programs have limited capacity and are not implemented in a consistent or coordinated manner. BPS values working with community partners and prioritizes collaboration to fill health education gaps.

BPS Model Best Practice
At the Edward M Kennedy Academy for Health Careers, BPS has a highly skilled and qualified health education teacher, licensed by the Department of Elementary and Secondary Education. At the Academy, health education is a graded, stand-alone subject with a dedicated classroom. Health education is a requirement for graduation. The teacher supports her programming by bringing in community partners with specific expertise to augment her curriculum, and people who look like and relate to the kids in her class. The partners supplement the available resources. BPS is striving to replicate this model district-wide.

Boston Public Schools' Safe and Welcoming Schools operates a Substance Abuse Program (SAP) for students who are identified as using substances and the Succeed Boston program for students who have violated the code of conduct. All students referred to SAP receive training in *Botvin* and *Hazelden LifeSkills* curricula. SAP is a voluntary program that lasts for five to 20 days with wraparound services. SAP also offers parents and families support, which may include referrals to community programs or community health centers as well as occasional referrals for a higher level of treatment. The William J. Ostiguy High School, operated by Action for Boston Community Development, Inc. in collaboration with the Gavin Foundation and BPS, is designed for youth who struggle to succeed in conventional school environments due to a history of substance use. Ostiguy High School concentrates on both "a student's recovery as well as their academic attainment."⁴¹ Students can be referred to the school at any time during the calendar year.⁴¹

In March 2016, the Massachusetts Legislature passed Chapter 52, An Act Relative to Substance Use, Treatment, Education and Prevention, which mandates public schools in the Commonwealth to engage in substance use prevention and education.⁴² The legislation also mandates that public schools conduct SBIRT in two

⁴⁰ BPS SY16-17 Comprehensive Health Education document. (2017) Boston Public Schools.

⁴¹ <http://ostiguyhigh.org/>, accessed 2/8/18.

⁴² <https://malegislature.gov/Laws/SessionLaws/Acts/2016/Chapter52>, accessed 2/8/18.

grades throughout the district.⁴³ BPS selected 7th and 9th grade for SBIRT implementation. BPS is working to expand its capacity to meet SBIRT requirements

III. BOSTON CENTERS FOR YOUTH & FAMILIES

Boston Centers for Youth & Families (BCYF) is a City department with a long history of supporting children, youth, and families through a wide range of programs and services across 36 facilities. BCYF aims to provide quality, affordable programs that enrich the lives of residents and meet the needs of the community. Key offerings include after school programs, teen programs, services for young adults with special needs, girls programming, conflict resolution and mediation with youth on the street, aquatics, and summer programs. BCYF's Youth Engagement and Employment program works with a network of community organizations and businesses to provide summer and school year jobs to youth as well as guidance, mentorship, and the skills needed for successful employment. BCYF also helps coordinate the Mayor's Youth Council and organizes an internal Youth Advisory Committee. To date, BCYF has trained 35 youth workers in the evidence-based *Words Can Work* curriculum, which builds the capacity and skills needed to speak with youth about substance use prevention and provides tools for engaging youth in proven substance use prevention activities. Through BCYF's Youth Advisory Committee, youth leaders trained young people around the dangers of substance use and on the benefits of positivity.

IV. NEIGHBORHOODS AND COMMUNITIES

Over the past decade or more, BPHC's Bureau of Recovery Services has used neighborhood-level collaboration and partnerships to prevent and reduce poor health outcomes associated with substance use and misuse. BPHC has received funding from federal and state agencies as well as charitable foundations to support the City's substance use prevention efforts. Through these grants, BPHC has provided support to local substance use prevention coalitions, which have served as key partners in the City's efforts to curtail substance use and misuse particularly amidst a growing local, regional, statewide, and national opioid epidemic. The City's neighborhood-based coalitions are largely funded through BPHC, though select coalitions also receive grant funding from local foundations or through individual hospitals' Determination of Need programs. Many of the local hospitals also operate Community Health Improvement Programs, which provide financial and technical support to the coalitions serving the communities within the hospital's catchment area. Most noteworthy is MGH's support for the Charlestown Coalition, Healthy Chelsea, and Revere Cares. In addition to coalitions, the Boston Alliance for Community Health (BACH), a partnership of numerous community organizations, includes substance use prevention as a cross-cutting theme through their efforts to support racial and ethnic health equity, foster community-based prevention, and build resilience in communities impacted by trauma.

⁴³ Ibid.

V. EXTRACURRICULAR AND AFTERSCHOOL PROVIDERS

Extracurricular and after school programs in the city are plentiful and provide opportunities to engage youth in risk reduction activities, including employment, sports, art, and leadership opportunities. A few programs also deliver evidence-based substance use prevention curricula. After school programs have the potential to promote substance use prevention messages and resources if staff members are trained accordingly and provided with messaging and reference materials. Extracurricular and afterschool programs range in size and impact and are located in various neighborhoods, but there is little coordination among programs and agencies.

VI. PRIMARY CARE PROVIDERS AND COMMUNITY HEALTH CENTERS

Health care providers play an important role in screening and early identification for youth substance use, mental illness and trauma. Primary care providers and community health centers serve as an important link in providing substance use prevention materials as well as treatment referrals. Boston is home to 25 hospitals and 20 community health centers making it a leader in global healthcare. Half of these hospitals are part of the Conference of Boston Teaching Hospitals, a network of Boston-area teaching hospitals that works to advance policies critical to improving patient care and serving vulnerable populations, among other things. Boston also benefits from the Massachusetts League of Community Health Centers, which offers its providers trainings on increasing awareness of substance use and safe prescribing practices.

VII. OTHER PREVENTION RESOURCES

In addition to the aforementioned youth-focused substance use prevention resources, the City, Commonwealth, and several nonprofit and community agencies offer other more broadly focused substance use prevention, trauma response, and treatment resources that have the potential to support or supplement youth prevention efforts. The Massachusetts Substance Use Helpline, operated by Health Resources in Action (HRiA), provides another useful resource, and recently added a youth component. Training, technical assistance, and promotional materials are available through the Massachusetts Health Promotion Clearinghouse, HRiA's Community Health Training Institute and the Massachusetts Technical Assistance Partnership for Prevention (MassTAPP). The City can use the expertise and training opportunities of these existing resources to augment current and future prevention efforts.



9. STAKEHOLDER PERSPECTIVES: YOUTH SUBSTANCE USE TRENDS AND IDENTIFIED NEEDS

Stakeholders provided their perspectives on types and frequency of youth substance use, risk and protective factors that drive or prevent substance use among youth, feedback on unmet needs, and suggestions to fill these service gaps. Appendix 7 provides a more detailed description of stakeholder feedback on risk and protective factors.

Seventy percent of youth survey respondents reported that if young people are using drugs or alcohol, they are using marijuana most often.
– Youth Survey

Eighty percent of parents surveyed responded that the problem of youth substance use has gotten worse.
– Parent Survey

I. SUBSTANCE TYPES AND FREQUENCY OF USE

Youth reported in focus groups that marijuana is the most commonly used substance, while other commonly used substances include alcohol, cough syrup (lean), benzodiazepines (benzos) and other non-opiate pills. Other substances mentioned, but used less frequently, included LSD (acid), MDMA (ecstasy/molly), psilocybin mushroom (‘shrooms), methamphetamines (meth), opioids, heroin, and crack cocaine. Among youth survey participants, 59% reported that youth use at school and 58% reported that youth show up to school high or drunk sometimes or more frequently.

Nearly 60% of youth surveyed reported that they think young people use “to relax,” “to feel good,” or “to have fun.” Over 50% think they use “to experiment,” while 44% of youth reported that they think young people use “to calm down” and nearly 30% think youth use “to not be bored.” When asked to identify when drinking or smoking becomes a problem, 63% of youth surveyed responded ‘if someone does it daily.’ Youth focus group participants said use of drugs and alcohol is a problem when “you can’t control it,” when youth are “changing behaviors,” and when youth are using before or during school.

Adult key informants and focus group participants largely viewed youth substance use as having changed for the worse over the past few years, especially with respect to the availability of marijuana and non-opioid prescription pills. Respondents also described neighborhood differences in both the severity and types of substances used. One key informant posed the question: “How do we work with communities of color around prevention, when there haven’t been any models in the past?”

Several key informants expressed concern that the substances youth “are using are more dangerous now,” adding that the type of marijuana youth are using and the possibility that it is laced with other chemicals may increase the potential for addiction or result in other adverse impacts. One respondent spoke of excessive marijuana use, questioning whether adults should learn to talk about moderation.

II. YOUTH AND PARENT AWARENESS OF SUBSTANCE USE

When asked where youth should get information about drugs and alcohol, 72% of youth and 93% of parents surveyed selected schools as their top choice. Youth surveyed also thought that youth should get information about drugs and alcohol from the doctor’s office (59%), home and family (52%), community centers (46%), after school programs (35%), and the pharmacy (34%). Most youth surveyed report getting information about drugs and alcohol at school (80%), but also from friends (50%), home and family (42%), and music, social media and movies (38%), followed by the doctor’s office (32%). Moreover, 62% of youth surveyed think young people should start learning about drugs and alcohol between 6th and 8th grades, while 51% of parents reported that elementary school is the most appropriate age. In response to a question about whether enough is being done to prevent youth substance use, 68% of parents responded ‘no’ and 21% said ‘not sure.’ Most parents (75%) reported being comfortable or very comfortable seeking help if their child were misusing substances. Asked “what would you do if you thought someone you knew had a problem with drugs or alcohol,” 58% of youth selected that they would talk to the person they were worried about, with 42% selecting that they would tell a teacher or guidance counselor as a second choice. Fifty-four percent of parents surveyed reported not being aware of any efforts to educate parents or youth about substance use, and 72% indicated that they would like more information about how to talk to kids about drugs and alcohol.

III. RISK AND PROTECTIVE FACTORS THAT DRIVE AND PREVENT YOUTH SUBSTANCE USE

“Students are witnessing violence and are on edge all the time. Taking substances helps alleviate some of that pain and fear.” - Youth Serving Agency Respondent

Young people use substances “to feel a certain way... the world has so much going on, and it’s stress.” - Youth Focus Group Participant

“If you think you have a future that’s worth fighting for, you are more likely to seek help and try and get to that goal.” – Key Informant Interview (This quote gets at personal aspirations without sounding stigmatizing)

Stakeholders described a number of risk and protective factors that drive or prevent substance use among Boston youth, many of which were similar to those reported in MGH’s recent CHNA.⁴⁴ Trauma and undiagnosed and untreated mental illness,

⁴⁴ Op. cit., 2016 Community Health Needs Assessment: Adolescent Substance Use and Mental Health.

mainly depression and anxiety, were among the most frequently mentioned risk factors that drive youth substance use. Low self-esteem was also mentioned repeatedly. According to SAMHSA, “effective prevention focuses on *reducing those risk factors, and strengthening protective factors*, that are most closely related to the problem being addressed.”⁴⁵ BSAS categorizes risk and protective factors according to five domains with a range of subdomains, which include: 1) Individual (biological and psychological dispositions, attitudes, values, knowledge, skills, problem behaviors); 2) Peer (norms, activities); 3) Family (function, management, bonding); 4) School (bonding, climate, policy, performance); and, 5) Community/Society (bonding, norms, resources, awareness/mobilization, policy/sanctions).⁴⁶ **Table 6** lists the risk and protective factors that emerged during the planning process data collection activities.

Table 6: Youth Substance Use Risk and Protective Factors

Risk Factors (Aim to Decrease)	Protective Factors (Aim to Increase)
Individual	
<ul style="list-style-type: none"> • Untreated trauma and violence (firsthand and/or secondhand experience) • Stress, depression, anxiety and other undiagnosed and untreated mental illnesses • Low perception of harm (especially for marijuana) • Adverse childhood experiences 	<ul style="list-style-type: none"> • Access to behavioral health services and trauma-informed care • Self-esteem and self-awareness • Personal goals and aspirations • Peer leadership opportunities • Strong pro-social skills
Peer	
<ul style="list-style-type: none"> • Social norms • Social pressure • Peer approval of substance use • Peer acceptance 	<ul style="list-style-type: none"> • Peer leadership opportunities • Peer trainings
Family	
<ul style="list-style-type: none"> • Parental substance use • Parents not equipped to talk with children about substance use • Low parental perception of harm of alcohol and marijuana use • Chaotic or unstable home environment • Concerns and fears among immigrant families 	<ul style="list-style-type: none"> • Family support, bonds and engagement • Positive relationships with adults and peers • Clear parental expectations and consequences • Access to affordable, good quality, stable housing

⁴⁵ <https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/risk-protective-factors>, accessed 2/8/18.

⁴⁶ <http://www.mass.gov/eohhs/gov/departments/dph/programs/substance-abuse/providers/prevention/risk-and-protective-factors.html>, accessed 2/8/18.



School

- Academic pressure
- Academic failure or low academic aspirations
- Supportive academic environment
- Academic enrichment
- Involvement in and availability/proximity of afterschool activities
- Youth employment
- Programming for high-risk youth⁴⁷

Community/Society

- Access to drugs and alcohol
- Gang violence
- Witnessing overdoses
- Marketing, media, and popular culture promoting and normalizing substance use
- Racism
- Poverty
- Environmental conditions (clean, safe, open space, etc.)
- After hour youth activities (i.e. sober parties or places for teens to go at night)
- Restricted access to substances (such as campaigns targeting alcohol retailers)
- Billboards and PSAs with simple, visible messages

IV. IDENTIFIED NEEDS AND SUGGESTIONS

Stakeholders conveyed a range of unmet needs and suggestions pertaining to youth substance use prevention. Their feedback covered numerous discrete yet interconnected categories pertaining to: Coordinating Youth Substance Use Prevention Efforts; Race, Juvenile Justice and Substance Use; Youth Development, Access to Information, Social and Other Risk Factors; Marijuana Legalization and its Impact on Youth; Establishing Comprehensive School and Community Based Substance Use Prevention Education; and Improving Surveillance Data and Early Identification of Substance Use.

Coordinating Youth Substance Use Prevention Efforts

Stakeholders identified a need to improve cross-sector coordination among youth-serving agencies as well as a need for more funding for prevention efforts, noting that the majority of current funding is allocated to treatment. Stakeholders also expressed frustration around how programs are “siloeed” by their funding streams, and often by substance type. This approach impedes efforts to develop coordinated system-wide

Suggestions to promote cross-sector coordination include:

- *Use a **collaborative, multi-sectoral approach** and coordinate efforts to build community capacity to address substance use prevention. – First Advisory Board Meeting*
- *“There is a temptation to start something new, but it’s important to recognize the organizations that are doing good work and **create partnerships** between them, and build capacity.” – Key Informant Interview*

⁴⁷ For additional programs targeting high-risk youth, please refer to Root Cause’s *Mapping Momentum for Boston’s Youth: Programs & Opportunities for Black and Latino Young Men*, available at: <http://www.rootcause.org/resources2/mapping-momentum-for-bostons-youth>, accessed 2/8/18.

prevention initiatives aimed at addressing the many interconnected factors that increase the likelihood of youth substance use. Respondents frequently mentioned the wealth of existing youth-serving organizations in Boston, but identified a need for increased communication and coordination among the City agencies that operate youth councils and peer leadership initiatives. Some lamented the fact that coalitions are primarily organized around neighborhoods and are absent from high-need neighborhoods, emphasizing the need for more equitable distribution and access to prevention resources. Some also expressed concerns that coalitions are limited in their capacity and resources, emphasizing the need for a formal learning collaborative.

Suggestions to fund prevention efforts include:

- *“Resources could be spent bulking up the programs that we know are good. Continue to **bolster programs and nonprofits that work.**” – Key Informant Interview*
- *Leverage **corporate engagement** to help fund and foster prevention activities citywide. –First Advisory Board Meeting*
- *“Provide **funding** to programs that can prevent students from getting addicted to drugs and alcohol.” – Youth Survey Respondent*

One focus group participant said that “there are a lot of services in Boston, but it doesn’t feel like they are integrated.” Another key informant commented that “there are people doing amazing work who don’t talk to each other.” Respondents conveyed a need to create a referral network in addition to building the capacity of existing organizations. When youth focus group participants were asked if there were enough youth programs in Boston, one said: “yeah, there are a lot, but we don’t know about all of them.” Youth requested better advertising for extracurricular programs. Nine parents said that if they were Mayor, they would host public events, forums or workshops for youth and families, using the Mayor’s “convening power” to bring different groups together.

Race, Juvenile Justice, and Substance Use

Stakeholders identified several racial, cultural, and economic inequities that drive youth substance use. They expressed a need to address these barriers while expanding access to after school and peer based programs in all communities. Stakeholders emphasized the need for programs and initiatives that address the array of inequities faced by youth of color and those who identify as LGBTQ, with one respondent commenting that “queer youth need to be involved” in efforts to design culturally competent initiatives. One key informant noted that in order to create more culturally competent programs, youth-serving agencies should strive to gain a deeper understanding of the struggles youth are facing, adding “that’s why [youth] are listening to the people who are

Suggestions to address inequities that drive youth substance use include:

- *Tailor interventions to different **cultures and linguistic groups**. Staff organizations with people who represent the community they serve, which goes beyond race and ethnicity to include varying life experiences. Train educators to see family differences as assets versus deficits. – First Advisory Board Meeting*
- *“**Addiction is addiction**, the prevention efforts could be similar but don’t leave the Black communities out because they have been dying for a while.” – Key Informant Interview*
- *“Life is hard when people are impoverished. Important to support them to get them to a place where they can overcome those challenges. Need **tangible supports** to address the issues they are facing in their lives.” – Key Informant Interview*
- *“Focus on **equity, social and economic justice**, lessen the class divide, lessen racial discrimination etc.” – Parent Survey Respondent*
- *“I would start in **urban places** first because I know that in those areas situations where kids do not have parental support due to mass incarceration of Black and Brown people.” – Youth Survey Respondent*



writing songs that glorify substance use, because they are going through similar experiences.” Some stakeholders noted there should be a greater emphasis on treatment, rather than on punitive measures.

After school and extracurricular program staff expressed a desire for increased capacity, tools, and expertise to talk with youth about substance use, particularly high-risk youth. They expressed a desire to form a learning collaborative aimed at sharing best practices and lessons learned among youth-serving afterschool providers. Several stakeholders also conveyed the need for more peer education and mentorship programs, including an expansion of peer leadership opportunities, particularly those targeting underserved neighborhoods and high-risk youth who would benefit from being linked to job training and other programs that provide a positive vision of the future.

Youth Development, Access to Information, and Risk Factors

Stakeholders reported a need to address underlying risk factors that drive youth to use substances, like trauma, poverty, and unstable home life. They also repeatedly identified a high prevalence of undiagnosed and untreated trauma, with one key informant commenting, “We keep addressing the surface problem instead of the root cause.” Many respondents described the need for improved access and availability to mental health and peer support services, both within BPS and the community at large. Others mentioned needing to expand the use of brief interventions and to improve access to youth treatment and supports, including the formation of a Greater Boston ALATEEN group. Some respondents mentioned that prevention efforts should work on improving self-awareness, self-esteem, and pair best practices to address mental health and the underlying causes of substance use.

Stakeholders identified a need for more and better access to effective after school and peer based programs, to keep youth engaged, build their self-esteem, and give them purpose. One participant said that jobs and afterschool programs “are the most effective ways to prevent substance use.” Another commented that young people need to realize that substance use is getting in the way of their “goals, future

Suggestions to expand youth serving and peer leadership programs include:

- Use **peer-based** strategies including peer-to-peer education, peer mentoring and programming. Build on existing peer leadership programs. – First Advisory Board Meeting
- Provide **simultaneous youth programming for various age groups**, to allow youth with younger siblings to spend time with their peers. – First Advisory Board Meeting
- Encourage youth to be **role models** for younger siblings or a younger child in their community. – First Advisory Board Meeting
- Increase **protective factors**, including jobs/internships, and offer a diverse range of inclusive afterschool activities to give youth hope and make them feel that they are relevant. Work to give youth responsibilities and opportunities for healthy social engagement. **Fill their time** as much as possible. –First Advisory Board Meeting

Suggestions to address untreated and undiagnosed mental health and trauma include:

- Address underlying **trauma** and make behavioral health treatment more widely available. Be sensitive to children who may be vulnerable. Teach youth healthy emotional coping strategies. – First Advisory Board meeting
- “Acknowledge more deeply the **social emotional mental health issues** amongst teens stemming from home and school” – Parent Survey Respondent
- Improve **self-awareness, self-esteem**, and pair best practices to address mental health and the underlying causes of substance use.—Key Informant interview



prospects, and self-esteem.” Youth focus group participants requested more youth employment options and longer employment hours. This same group said that if they were the Mayor, they would bring interesting programs, field trips, and activities to Boston. Parents also said they would create more activities to keep kids busy, including nature, art, sports and jobs (n=14), and four mentioned supporting peer mentors and youth ambassadors. For youth who have begun substance use, respondents described needing to provide alternative activities and develop other affiliations.

Stakeholders identified a need for increased parent and caregiver engagement in promoting youth substance use prevention efforts. Stakeholders also recognized that many parents face enormous daily challenges, particularly immigrant, low-income, and single parent families, while some parents may also be experiencing the same untreated trauma or mental illnesses as their children. They expressed a need to effectively engage parents and caregivers in discussions around substance use, including the need for more culturally competent programs for children and families. In addition, numerous respondents commented that prevention education efforts need to include the entire family including siblings, and parents need basic substance use education training so that they know how to identify signs of early use. Several respondents also wanted to increase awareness among parents and youth around the impact of marijuana on young people’s brains. Of the parents surveyed, 72% (n=70) said they would like more information about how to talk to their kids about drugs and alcohol, and eight parents said if they were the Mayor, they would foster more parent involvement as well as support and education.

Marijuana Legalization and its Impact on Youth

Many stakeholders expressed concern about marijuana legalization and the ease with which youth can obtain marijuana, as well as the related issues of changing social norms around

Suggestions to engage parents and caregivers include:

- *Understand the role that **adults/parents/families** play in the lives of individual youth. Ensure that every youth has an equipped caring adult role model in their life. Identify opportunities to educate those role models on talking to youth about substance use and establishing clear messages. –First Advisory Board Meeting*
- *“Pay attention to households and what parents are experiencing, which leads to youth experiencing.” –Key Informant Interview*
- *“Come up with protocols and trainings that help willing adults conduct one-on-one or group conversations with teenagers that lead to them deciding that substance abuse will thwart their aspirations.” – Key Informant Interview*

Suggestions to change social norms include:

- *Fund a **youth-driven social norms campaign** with a focus on perception of use and portraying healthy alternatives to use as the norm—First Advisory Board Meeting*
- *Establish clear, uniform **messaging** and education strategies throughout the City of Boston, particularly around marijuana. Identify effective prevention messages that resonate with teenagers. – First Advisory Board Meeting*
- *Promote **youth voice** by giving them a platform to speak and be heard in order to understand their life challenges, motivations for substance use, and ideas around prevention. –First Advisory Board Meeting.*
- *Eight parent survey respondents suggested similar ideas for changing public messaging, with one parent writing, “Start a **social media campaign**. Youth are constantly on social media.”*
- *Youth suggested that a campaign should feature people in recovery, produce something that elicits an **emotional reaction**, use actors and rappers, show stats and figures, and use various media platforms like Twitter, Snapchat, music and apps. – Youth Focus Group*



marijuana use and the more urgent need of engaging parents on this issue. Stakeholders also expressed concern about the low perception of harm related to substance use among youth, particularly in light of the Commonwealth's recent marijuana legislation, which has spurred confusion among youth about the implications of the new law. One youth focus group participant exclaimed, "Adults are making it legal now." Stakeholders identified a need to shift social norms, which currently portray substance use as desirable. They also mentioned that youth have easy access to substances both in schools and the community, with youth focus group participants adding that youth come up with creative ways to bring substances into school, like edible marijuana and alcohol accessories. Key informants repeatedly expressed a need for clearer and consistent cross-sector health messaging and policies, particularly around marijuana use, incorporating lessons learned from some of the successful tobacco cessation campaigns, like The 84 and Truth campaigns.

In light of marijuana legislation, numerous respondents mentioned the need for a youth-driven social norms prevention campaign as well as the need for appropriate and effective language to talk about substance use with adults and youth. One described the need to shift prevention efforts from a focus on the adverse health effects to promoting freedom from tobacco and alcohol companies. One respondent described how the alcohol industry is promoting underage drinking,⁴⁸ expressing concerns that "the alcohol industry does not have same negative reputation as tobacco companies, yet they are doing many of the same marketing techniques." At least one study has documented that if youth view themselves as being the target of industry marketing efforts, then they were 14 times less likely to smoke. There is a big prevention opportunity to "harness the power of youth rebellion against... industry."⁴⁹

Establishing Comprehensive School and Community Based Substance Use Prevention Education

Suggestions to establish comprehensive substance use prevention education include:

- *Use **evidence-based practices** and start prevention activities at a young age. – First Advisory Board Meeting*
- ***Integrate prevention education** into other spaces including summer jobs programs, school health services, treatment providers, and violence prevention. –First Advisory Board Meeting*
- *Foster peer-driven strategies that address interconnected **risk taking behaviors**, which lead to substance use, violence and other risky behaviors. – First Advisory Board Meeting*
- *"Make sure that every child of school age has had specific **training around substance use disorder** and how it begins." – Parent Survey Respondent*
- *"Create programs that [will] help the teens gain knowledge about the consequences of substance abuse and how it can affect them **physically and mentally.**" – Youth Survey Respondent*

⁴⁸ Belt, O., Stamatakos, K, Ayers, A. J., Fryer, V., Jernigan, D., & Siegel, M. (2014). Vested interests in addiction research and policy. Alcohol brand sponsorship of events, organizations and causes in the United States, 2010–2013. 109, 1977–1985. doi:10.1111/add.12727.

⁴⁹ Sly, D. F., Hopkins, R. S., Trapido, E., & Ray, S. (2001). Influence of a Counteradvertising Media Campaign on Initiation of Smoking: The Florida "truth" Campaign. *American Journal of Public Health*, Vol. 91, No. 2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1446545/pdf/11211631.pdf>, accessed 2/8/18 and Sly, D. F., Heald, G. R., & Ray, S. (2001). The Florida "truth" anti-tobacco media evaluation: design, first year results, and implications for planning future state media evaluations. *Tobacco Control*. 10:9-15. <http://tobaccocontrol.bmj.com/content/tobaccocontrol/10/1/9.full.pdf>, accessed 2/8/18.

Stakeholders strongly expressed the need for increased capacity and resources to create a comprehensive and consistent health education program with tailored risk reduction and substance use prevention components. They sought to replace the current “fragmented” and “siloed” efforts, in which youth receive small amounts of information from a range of sources. To achieve more consistent messaging and a City-wide approach, respondents encouraged BPHC and BPS to develop a joint vision and policy for addressing chronic marijuana use that informs practice and drives resource allocation. Several others mentioned the need for the school system to implement a relevant, culturally competent, skill-based prevention education program tailored to work with BPS’ culturally, racially, linguistically, and socio-economically diverse population. While the curriculum is important, one key informant urged that “it’s more about the model, having someone not too much older than the high schoolers delivering it is very effective.” In addition, respondents firmly supported initiating education efforts earlier, even during elementary school.

Across the board, respondents also agreed that prevention education efforts must incorporate community or neighborhood organizations, with one respondent saying that substance use education needs to “use people from the community who look like the community to educate them” and include and recognize “people with lived experience” for both youth and parent education efforts. One key informant commented that “we need skilled facilitators who can organize non-judgmental conversations among young people that are effective, [while being] honest about how hard it is.”

Improving Surveillance Data and Early Identification of Substance Use

Stakeholders emphasized a need for comprehensive surveillance data across the City beginning in middle school. Stakeholders also strongly encouraged the adoption of a district-wide YRBS with neighborhood-level identification, since the current data do not allow for neighborhood analysis or for developing data-informed, neighborhood-based initiatives. BPS and other stakeholders identified needing additional capacity to implement SBIRT as required by the recent legislation, M.G.L. c.52. As an unfunded mandate, BPS administrators face substantial logistical and coordination challenges around SBIRT implementation, which requires scheduling and support from each BPS middle and high school principal. BPS administrators conveyed a need for a coordinator to help facilitate SBIRT implementation, which will need to be organized in the same way as school-wide vision, hearing, and Body Mass Index screenings. In addition to logistical challenges, BPS administrators need to establish a public campaign around SBIRT to increase school and parent understanding of the benefits of screening. Beyond BPS, respondents commented that community health centers and primary care physicians will need to play an important role in the SBIRT conversation. BPS administrators want to foster coordination with health care providers in order to ensure that parents and students are hearing the same messages and being offered similar supports and services.



10. STRATEGIC RECOMMENDATIONS

The recommendations fall within five broad strategic areas:

1. Expanding leadership and coordination,
2. Increasing prevention work in all City agencies,
3. Using consistent messaging,
4. Improving pathways to care, and
5. Engaging with academic and other philanthropic organizations.

Suggestions to improve surveillance data and early identification of substance use include:

- *Develop **policies** that help to limit and monitor youth substance use across the age spectrum, including: incentivize prescription buy-back programs; conduct a comprehensive middle school YRBS and improve the sampling methods for the City's high school YRBS and; hire diverse clinicians and staff. –First Advisory Board Meeting*
- *Hire a coordinator to help facilitate **SBIRT implementation** district wide. – Key Informant Interview*

These recommendations are part of an ongoing, collaborative, multi-sector process that builds on the broad stakeholder involvement developed to date. Each recommendation is further classified according to which stakeholders are likely to lead associated initiatives. Some proposed initiatives will be **City-owned**, with City government both leading and implementing the required actions. The implementation of other initiatives will be **City-led**, with City government sharing ownership and implementation with partners in other sectors. Finally, many initiatives will be **City-catalyzed**, for which City government may endorse ideas and in some cases convene stakeholders, but for which it will be more appropriate for other partners to own and lead implementation efforts because their missions, strategic priorities, and existing programming position them to achieve greater impact.

STRATEGIC AREA 1 - Expanding Leadership and Coordination

GOAL - Establish and lead a coordinated Youth Substance Use Prevention Strategy to reach all Boston youth

INITIATIVE	ACTIVITIES
Establish a new position within the Mayor’s Office of Recovery Services to lead and coordinate cross-sector youth wellness and prevention efforts. (City-owned)	<ul style="list-style-type: none"> ● Oversee holistic, cross-discipline youth wellness efforts with other youth serving programs, including prevention of substance use, violence, dating violence, commercial sexual exploitation, and other efforts. ● Serve on a newly established City-wide Youth Prevention Collaborative. ● Partner with ORS to undertake the City’s youth prevention efforts.



	<ul style="list-style-type: none"> • Host events for young people that provide opportunities for learning and pro-social activities.
<p>Expand the role of the City's existing substance use prevention office to lead new youth substance use prevention initiatives, coordinate with other youth-serving agencies, and be a resource for the community. (City-owned)</p>	<ul style="list-style-type: none"> • Hire additional staff to lead youth substance use prevention initiatives. • Provide technical assistance and training across youth-serving agencies to train their staff in facilitating difficult conversations about substance use between youth and families. • Assist ORS with coordination and policy guidance for other state and local prevention efforts. • Work with BPS to develop policy and program guidance around prevention, screening and brief intervention. • Conduct annual youth and parent surveys to gauge knowledge of substance use prevention. • Provide staff support for the newly established City-wide Youth Prevention Collaborative. • Collaborate with violence prevention and neighborhood trauma teams.
<p>Establish a City-wide Youth Prevention Collaborative, a high-level interdisciplinary working group that will advise policy and drive the implementation of youth prevention strategies. (City-led)</p>	<ul style="list-style-type: none"> • Recruit a broad range of representatives, including youth and families, to participate in the Youth Prevention Collaborative. • Target underserved areas of the City with purposeful outreach and programming. • Identify and implement strategies for more intensive education and outreach to high risk youth and other special populations, like LGBTQ youth, and their caregivers. • Hold special training events for government and community leaders on topics such as youth substance use prevention, trauma, wellness, and youth resilience. • Share agenda with senior governmental leaders, including the Mayor, on a quarterly basis.
<p>Build and sustain partnerships with neighborhood coalitions, treatment providers, recovery support organizations, and other youth-serving organizations, with a focus on low resource neighborhoods. (City-led)</p>	<ul style="list-style-type: none"> • Facilitate cross sector learning collaboratives for agencies supporting youth prevention, treatment, recovery, and neighborhood development to establish standard practices, engage the community, and create a referral system. • Increase access to programs designed to build youth self-awareness, self-esteem, and sense of purpose. • Strengthen existing minority run community partners in low resource neighborhoods, including support for summer jobs and youth employment training programs.

STRATEGIC AREA 2 - Increasing Prevention Work in All City Agencies

GOAL - Increase the capacity of the City's youth-serving agencies to address prevention

INITIATIVE	ACTIVITIES
<p>In coordination with BPS, work to fulfill BPS' wellness policy, including comprehensive health education, expanded data collection via the Youth Risk Behavior Survey, and full implementation of Screening, Brief Intervention and Referral to Treatment (SBIRT). (City-led)</p>	<ul style="list-style-type: none"> ● Implement a district-wide, comprehensive, culturally-competent behavioral health education curriculum with licensed health education teachers, such as the Michigan Model, Life Skills or similar curricula. Over time, support the implementation of elementary, middle and high-school curricula. ● Work with community partners to implement targeted, culturally competent youth substance use prevention curricula, such as LifeSkills, and curricula endorsed by Project Here. ● Expand YRBS in schools to include census sampling for all middle and high schools. Consider adapting approaches like the MetroWest Community Foundation's Adolescent Health survey. ● Implement SBIRT in accordance with the recent state legislation, M.G.L. c.52. ● Convene a working group led by the Assistant Superintendent of Social Emotional Learning and Wellness to identify goals and objectives related to youth substance use prevention and present district recommendations to the Superintendent's leadership team. ● Conduct staff trainings on substance use awareness and how use impacts student outcomes. ● Develop substance use policies and procedures and implement across all BPS schools. ● Stock naloxone in all schools as a standard of practice for use on-site or as a first responder. ● Build capacity of the Safe and Welcoming Schools initiative and increase prevention



	<p>education and other engagement opportunities for youth and families.</p> <ul style="list-style-type: none"> ● Share substance use prevention materials with private and parochial schools.
<p>Develop opportunities for peer leadership and expand forums to discuss substance use and healthy choices with youth and families. (City-catalyzed)</p>	<ul style="list-style-type: none"> ● Develop new peer leadership opportunities and target high risk and underserved youth. ● Expand and promote forums to discuss substance use and healthy choices with youth and families. ● Develop engagement strategies that effectively address substance use prevention with youth and families. ● Develop fun alcohol and drug-free socialization activities, especially after school and on weekends. ● Expand night and weekend hours for recreation and socialization activities. ● Increase wellness, arts, recreation, and sports activities in underserved communities. ● Expand mixed gender and age programming as well as programs for high risk youth. ● Implement targeted, culturally competent substance use prevention curricula for after-school.
<p>Support expansion of youth employment, peer education, and youth engagement opportunities with other youth-serving organizations. (City-catalyzed)</p>	<ul style="list-style-type: none"> ● Expand existing initiatives that provide opportunities for youth ambassadors, leadership, and empowerment. ● Expand summer jobs and youth employment training programs. ● Support high risk youth providers in engaging youth through community events, training, and outreach to schools and faith-based groups.

STRATEGIC AREA 3 - Using Consistent Messaging

GOAL - Use consistent messaging across youth-serving agencies to address prevention

INITIATIVE	ACTIVITIES
<p>Develop and launch a comprehensive youth substance use prevention media campaign using multiple platforms. (City-led)</p>	<ul style="list-style-type: none"> ● Engage youth in developing a campaign that resonates with youth, using strategies from successful tobacco campaigns, like The 84 and Truth campaigns. ● Develop and maintain a social media campaign using Twitter, Facebook and other platforms.
<p>Disseminate educational materials and toolkits to youth, parents, and youth serving agencies. (City-catalyzed)</p>	<ul style="list-style-type: none"> ● Develop uniform messaging that addresses marijuana use, clarity on the law, effects of early marijuana use, and perceptions of risk. ● Using existing resources from MassTAPP, the Massachusetts Clearinghouse, and Project Here, disseminate a toolkit with guidance on listening, talking to youth about substance use, recognizing signs of misuse, and motivational interviewing for parents of high risk youth. ● Disseminate weekly automated text messages to parents/caregivers to encourage conversations about healthy choices, and offer tips on navigating difficult conversations.
<p>Develop a Speakers Bureau comprised of experts in youth substance use and related fields to be a resource for schools and community. (City-led)</p>	<ul style="list-style-type: none"> ● Identify expert speakers covering a range of topics to present to youth, families, and staff from youth-serving agencies. ● Rotate locations of Speakers Bureau presentations to cover all Boston neighborhoods.



STRATEGIC AREA 4 - Pathways to Care

GOAL - Build and improve pathways to care

INITIATIVE	ACTIVITIES
<p>Create a resource directory that maps prevention, intervention, and support resources for youth and families. (City-owned)</p>	<ul style="list-style-type: none"> ● Develop a communications campaign to promote resource directory throughout all Boston neighborhoods, youth-serving agencies, primary care providers, and community health centers ● Make resource directory available in print and online formats.
<p>Provide a central access point for family and community requests for youth prevention, intervention and recovery support. (City-owned)</p>	<ul style="list-style-type: none"> ● Through 311 for Recovery Services, the partnership between the City’s constituent service hotline and BPHC, increase the Providing Access to Addictions Treatment, Hope and Support (PAATHS) team’s capacity to respond to calls with questions and resource requests about youth substance use. ● Pilot a PAATHS satellite office at a BCYF location, family resource center, or health center staffed with a SUD counselor.
<p>Support the use of screening tools, brief intervention, and referral techniques with youth serving agencies. (City-catalyzed)</p>	<ul style="list-style-type: none"> ● Identify screening and brief intervention roles as well as protocols for referring youth. ● Develop policies and procedures for identifying and referring youth suspected of substance use for more specialized prevention and intervention efforts.

STRATEGIC AREA 5 - Academic and Philanthropic Engagement

GOAL - Engage academic institutions, foundations, and public and private sectors to strengthen prevention efforts

INITIATIVE	ACTIVITIES
<p>Create cross sector capacity for rigorous data collection, research and evaluation. (City-led)</p>	<ul style="list-style-type: none"> ● Support the work of BPHC's Research & Evaluation Office and other organizations to conduct data collection, analysis, and research around youth substance use prevention to inform quality improvement efforts and identify emerging trends. ● Support research on the associations between adolescent substance use, race/ethnicity, and the juvenile justice system, and other research gaps.
<p>Work with foundations and private sectors to increase their support of substance use prevention efforts in the City. (City-owned)</p>	<ul style="list-style-type: none"> ● Seek foundation support to implement specific components of the youth substance use prevention strategic plan. ● Obtain private sector support for targeted expertise in implementing specific recommendations, such as media and communications.
<p>Collect and share innovative standards and promising practices from across the City, state, and nation. (City-led)</p>	<ul style="list-style-type: none"> ● Continuously strengthen prevention efforts by collecting innovative standards and promising practices that address social determinants of health. ● Share findings with partners to maintain standard of high quality efforts across Boston. ● Seek channels to disseminate successful prevention efforts across the state and nation.

A strong response requires effective collaboration and coordination among the City and its many youth-serving agencies. Sustaining the interest and enthusiasm generated during the planning process is critically important to the next generation of engaged and motivated youth and families working with our agencies to prevent substance use. The Mayor's Office of Recovery Services and its partners are eager to implement this plan's multi-faceted, cross-sector recommendations.



APPENDIX 1: DETAILED DATA COLLECTION ACTIVITIES AND DEMOGRAPHICS

Advisory Board Meetings

ORS convened a broad-based Advisory Board and held three working Advisory Board meetings between March and July 2017. Each of the Advisory Board meetings provided an opportunity for stakeholders to offer both verbal and notecard feedback in response to questions about priority areas for action. Mayor Walsh set the tone for the first Advisory Board on March 23, 2017 urging participants to think outside the box and create simple ideas that germinate throughout the community. He stressed the idea that one person can make a difference in the lives of youth, and we have a unique opportunity to move forward with a diverse range of willing partners. Stakeholders proceeded to discuss unmet needs for youth and strategies to fulfil those. The second Advisory Board meeting on May 2, 2017 consisted of group discussions in response to a question asking stakeholders to provide tangible ideas on the greatest opportunities for progress within each sector: Schools; After School Programming; Home, Neighborhoods, Community; and Media, Communications and Education Campaigns. The third Advisory Board meeting on July 13, 2017 included a review of stakeholder recommendations, a presentation from BPHC's Director of Analysis and Surveillance as well as three presentations from BPS representatives.

Youth Focus Group Event

ORS conducted a *youth focus group event* on May 5th, 2017. Forty-two youth ages 14-19 attended. Participants were affiliated with BPHC's Child Adolescent Family Health Bureau. Among participants, 68% identified as female, and 80% identified as African American or Black. Participants identified with several different ethnicities, often more than one, including Haitian (24%), Hispanic (12%), Jamaican (10%), Vietnamese (7%), and Afro-Caribbean (7%). Participants reported living in 12 different City neighborhoods and attending 19 different schools, with the majority living in Dorchester (48%) and attending John D. O'Bryant School of Mathematics and Science (21%).

Youth Survey

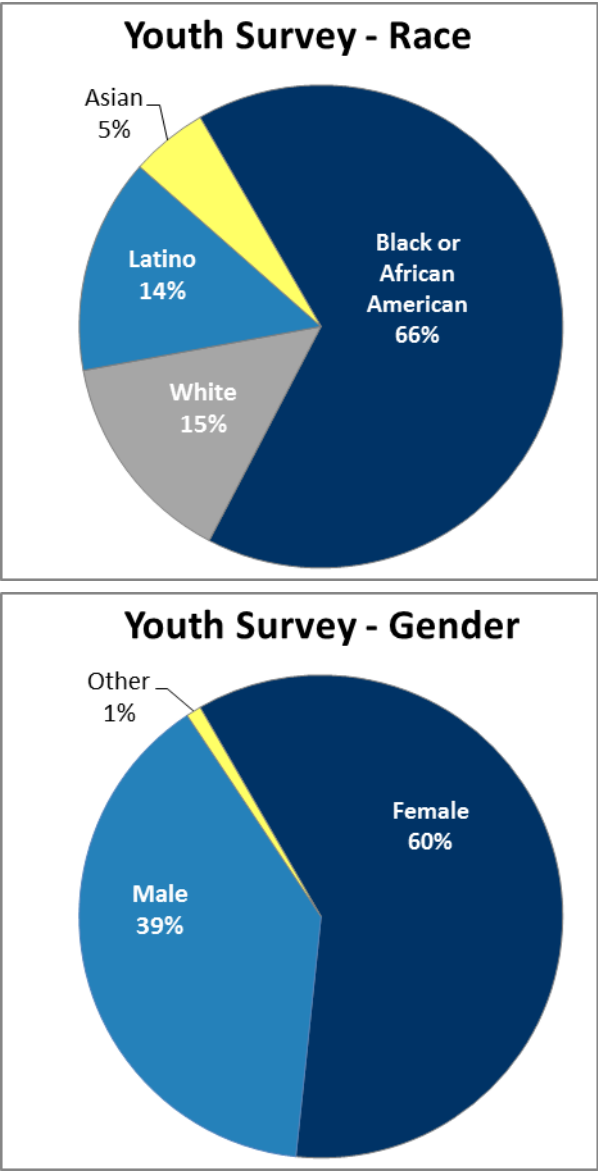
ORS also conducted a *youth survey* during the City of Boston's 2017 Youth Enrichment Day and raffled an iPad to all youth who completed the survey during the event. In total, 188 youth completed the survey on Enrichment Day and 23 youth



during their summer work hours. Among respondents, 64% identified as Black or African American, 14% as White, 14% as Latino, and 5% as Asian. The majority identified as female (60%), and 12% identified as LGBTQ. (See Figure 1-1 for more detail on the youth survey race and gender data.) Youth surveyed reported living in 16 different neighborhoods, with most living in Dorchester (38%), followed by Mattapan (12%), Roxbury (11%), and Hyde Park (10%). Participants spoke 11 different languages; most commonly English (77%), followed by Haitian Creole (7%) and Spanish (6%), and identified with several different ethnicities, most commonly African American (29%), Haitian (18%), White or European, Jamaican, Hispanic and Dominican (6% each).



Figure 1-1: Youth Survey Race and Gender Data



Parent Survey

ORS conducted a *parent survey* between April and July 2017. In total, 103 parents completed the survey. During a BPS Parent University event on April 29, 2017, 29 parents completed the survey in English and 19 in Spanish. Parents who completed the survey during the event received a \$10 Stop and Shop gift card. In June, ORS distributed a modified version of the survey online using SurveyMonkey to BPHC

employees. East Boston Coalition also distributed the survey at a parent event. Overall, 52 parents completed the English version online and three in Spanish. The majority of respondents identified as female (86%). Among respondents (n=94), 32% identified as White, 24% Black or African American, 22% multi-race, 14% Latino/Hispanic, 6% Asian/Pacific Islander, and one American Indian or Alaskan Native. The type of school their children attended, and neighborhood lived in was only asked on the online survey. Among the SurveyMonkey responses, 63% of parents reported that their children attended public schools (n=33), 17% private (n=9), 14% charter schools (n=7), and 6% parochial schools (n=3). Parents lived in 13 different neighborhoods, with the majority in South Boston and Dorchester (each 21%), followed by East Boston (18%).



APPENDIX 2: STAKEHOLDER AGENCIES INCLUDED IN THE PLANNING PROCESS

Organization	Title
Boston Alliance for Community Health	Director
Boston Centers for Youth and Families	Deputy Commissioner, Programming and Development
Boston Public Health Commission	Director, Division of Child and Adolescent Health
Boston Public Health Commission	Director, Division of Violence
Boston Public Health Commission	Manager, Peer Leadership Institute
Boston Public Schools	Senior Director, Behavioral Health Services
Boston Public Schools	Health Education Director, Health and Wellness Department
Boston Public Schools	Senior Director, Safe and Welcoming Schools
Boston University School of Public Health	Professor, Community Health Sciences
Bureau of Substance Addiction Services	Director, Prevention
Bureau of Substance Addiction Services	Acting Director, Office of Youth and Young Adult Services
Center for Community Health Education Research and Service, Inc.	Executive Director
City of Boston, Office of Public Safety	Director
John Snow Institute	Senior Consultant
Massachusetts General Hospital	Associate Director, Center for Community Health Improvement
Massachusetts General Hospital	Director, Center for Addiction Medicine
Peer Health Exchange	Assistant Vice President, Programs and Strategic Partnerships
Private Industry Council	Executive Director
Wediko Children Services	Director, MassSTART



Discussion Groups

Organization	Number of Participants
Boston Public Schools:	
<ul style="list-style-type: none"> Health and Wellness Health Services Social Emotional Learning Departments 	3
City of Boston, Safe City Coop Meeting	80
Massachusetts Technical Assistance Partnership for Prevention (Mass TAPP) Education Development Center, Inc.	3
Massachusetts General Hospital:	
<ul style="list-style-type: none"> Center for Addiction Medicine Addiction Recovery Management Service Recovery Research Institute 	7

Focus Groups

	Participant Organizations
Substance Use Disorder Prevention Coalitions	<ul style="list-style-type: none"> South Boston Community Action Network Allston/Brighton Substance Abuse Task Force Charlestown Coalition Brigham and Women's Faulkner Hospital Boston Asian Youth Essential Services Dorchester Substance Abuse Coalition Project RIGHT EASTIE Coalition
Youth	<ul style="list-style-type: none"> Peer Leadership Institute (42 youth) ROCA
Youth Providers	<ul style="list-style-type: none"> South Boston Community Action Network Hispanic Black Gay Coalition My Life My Choice Project RIGHT ABCD – Changing Tracks
Youth Providers (After School)	<ul style="list-style-type: none"> East Boston YMCA Paraclete Tenacity YMCA of Greater Boston YouthConnect



APPENDIX 3: STAKEHOLDER AGENCIES INCLUDED IN ADVISORY BOARD MEETING

Organization	Name/Title
ABCD/Ostiguy Recovery High School	Principal
Allston Brighton Substance Abuse Taskforce	Director
Allston Brighton Substance Abuse Taskforce	Coordinator of Youth and Community Programs
Blue Cross Blue Shield Foundation of Massachusetts	Senior Director of Communications & Administration
Blue Cross Blue Shield Foundation of Massachusetts	Senior Director of Grantmaking
Boston Alliance for Community Health	Director
Boston Centers for Youth & Families	Deputy Commissioner of Programming and Development
Boston Centers for Youth & Families	Commissioner
Boston Medical Center	Instructor of Medicine
Boston Office of Public Safety	Director
Boston Police Department	Police Sergeant
Boston Police Department Office of Research and Development	Director
Boston Public Health Commission, Community Initiatives Bureau	Director
Boston Public Health Commission, Office of Research and Evaluation	Director, Analysis and Surveillance
Boston Public Schools, Health and Wellness Department	Health Education Director
Boston Public Schools, Health Services	Senior Director
Boston Public Schools, Safe and Welcoming Schools/ Succeed Boston	Senior Director
Bureau of Substance Addiction Services	Partnerships for Success Coordinator
Bureau of Substance Addiction Services	Director of Prevention Services
Bureau of Substance Addiction Services	Acting Director, Office of Youth and Young Adult Services
Bureau of Substance Addiction Services	Program Coordinator/Contract Manager
Children's Services of Roxbury	Manager of Community Support and Outpatient Substance Program



City of Boston Office of Immigrant Advancement	Chief of Staff/ Resource Development Manager
Dorchester Youth Collaborative	Executive Director
East Boston Coalition/ East Boston Neighborhood Health Center	Coordinator
East Boston Neighborhood Health Center	Psychiatric Nurse Practitioner
Health Resources in Action	Director of Community Engagement
John Snow Inc., Boston Health Services	Director
Massachusetts Department of Youth Services	Assistant Commissioner of Program Services
Massachusetts League of Community Health Centers	Director of Health Affairs and Special Initiatives
Massachusetts Organization for Addiction and Recovery	Communications Coordinator
Massachusetts Organization for Addiction and Recovery	Director
MGH Center for Community Health Improvement	Vice President for Community Health
MGH Center for Community Health Improvement	Associate Director
MGH Center for Community Health Improvement	Project Managers (2)
MGH Healthy Chelsea	Director
Office of Youth and Young Adult Services	Young Adult System Specialist
Project RIGHT	Community Coordinator
Revere CARES coalition	ATOD and Communications Manager
Sociedad Latina	Executive Director
South Boston CAN Coalition	Director
South Boston Community Health Center	Director of the Institute for a Healthier Community
South Boston Community Health Center	Staff Members
The Charlestown Coalition	Director
YMCA of Greater Boston	President & CEO
YMCA of Greater Boston	Senior Vice President, Operations
Youth Opportunities	Deputy Director
Youth Options Unlimited	Program Coordinator of Career Development



APPENDIX 4: EVIDENCE-BASED SUBSTANCE USE PREVENTION CURRICULA USED IN BOSTON

EBP	Description	Who's implementing	Benefits and Limitations
All Stars ⁵⁰	<ul style="list-style-type: none"> • School & community based program for middle school age youth. • Thirteen, 45-minute sessions delivered weekly. • Small group activities, discussions, art, and games. • Supplemental parenting information available. 	Five YMCAs in Boston.	<ul style="list-style-type: none"> • High chance (99%) benefits will be greater than the costs⁵¹ • Promising for: improving school engagement and knowledge, attitudes and beliefs about substance use and reducing general substance use and disruptive behavior • Limitation: No formal adaptation for high school age youth
Drugs4Real ⁵²	<ul style="list-style-type: none"> • Online program for youth 12-14 years old. • Motivational feedback, interactive games, stories and quizzes. 	The BPHC Division of Child and Adolescent Health staff uses	<ul style="list-style-type: none"> • Evidence for improved prevention knowledge and intentions to avoid substances • Limitations: Not included in NREPP and lack of evidence for diverse populations
Guiding Good Choices ⁵³	<ul style="list-style-type: none"> • Five sessions for parents of children in grades 4-8 • Addresses preventing substance use disorder in the family, setting clear expectations, avoiding trouble, managing conflict and strengthening family bonds. 	Allston-Bright on Coalition was implementing	<ul style="list-style-type: none"> • Evidence for lowering risk of alcohol use disorder, reporting drunkenness or illicit drug use, and having alcohol related problems in young adulthood • Limitations: Expensive program costs

⁵⁰ <http://nrepp.samhsa.gov/ProgramProfile.aspx?id=120#hide1>

⁵¹ <http://www.wsipp.wa.gov/BenefitCost/Program/405>

⁵² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4119795/>

⁵³ <http://legacy.nreppadmin.net/ViewIntervention.aspx?id=302>



Family Nurturing ⁵⁴ 55	<ul style="list-style-type: none"> • Parents and youth together build skills for healthy development and discipline. • Parents and youth meet separately and together 	Program exists in Boston	<ul style="list-style-type: none"> • Evidence for improved parenting attitudes, knowledge, beliefs and behaviors, and family interaction • Limitation: not a universally available program
Life Skills Training ⁵⁶	<ul style="list-style-type: none"> • School program delivered to middle and high school age youth • Facilitated discussion, structured group activities and role-playing scenarios • Addresses risk and protective factors and teaches social skills 	Coalitions are implementing in Boston Public Schools	<ul style="list-style-type: none"> • Strong chance (66%) benefits will be greater than costs⁵⁷ • Reduces substance use, violence and delinquency, and normative expectations • Enhances refusal skills • Limitations: not as well designed for diverse urban population and lacking in creativity
Michigan Model for Health ⁵⁸	<ul style="list-style-type: none"> • Classroom teacher implements comprehensive health education curriculum • Incorporates skills, knowledge, self-efficacy and environmental support strategies 	Boston Public Schools implement	<ul style="list-style-type: none"> • Evidence for lower alcohol use and intention to use and decreased aggression scores • Evidence for increased social and emotional health skills • Limitations: not a large focus on substance use
Screening, Brief Intervention, and Referral to Treatment (SBIRT) ⁵⁹	<ul style="list-style-type: none"> • Screening, Brief Intervention, and Referral to Treatment is conducted as a 10-minute interview with necessary follow-up • Used to identify, reduce, and prevent problematic use, misuse, and dependence on alcohol and illicit drugs. 	Boston School Based Health Center staff is trained. And Boston Public Schools are implementing	<ul style="list-style-type: none"> • Quickly assesses severity of substance use and identifies appropriate treatment • Increases awareness about substance use and motivation to change • Refers to treatment and specialty care • Limitations: Mandated but not funded to deliver to all students
Words can Work ⁶⁰	<ul style="list-style-type: none"> • DVDs and booklets with stories and discussions about youth substance use. • Offers communication strategies for making smart choices. 	BCYF had 35 Street workers trained	<ul style="list-style-type: none"> • Evidence for improving alcohol-related attitudes • Limitation: lack of evidence for diverse populations and limited research on effectiveness overall

⁵⁴ <http://legacy.nreppadmin.net/ViewIntervention.aspx?id=171>

⁵⁵ <http://www.familynurturing.org/programs/teen-parent-nurturing-program>

⁵⁶ <http://legacy.nreppadmin.net/ViewIntervention.aspx?id=109>

⁵⁷ <http://www.wsipp.wa.gov/BenefitCost/Program/37>

⁵⁸ <http://legacy.nreppadmin.net/ViewIntervention.aspx?id=214>

⁵⁹ <https://www.samhsa.gov/sbirt>

⁶⁰ <http://legacy.nreppadmin.net/ViewIntervention.aspx?id=232>

APPENDIX 5: SURVEILLANCE DATA - SOURCES AND LIMITATIONS

Youth Risk Behavior Survey

The Youth Risk Behavior Survey is a biennial self-reported survey, administered by school districts in partnership with the Centers for Disease Control and Prevention (CDC). The CDC analyzes the survey data as part of its Youth Risk Behavior Surveillance System. For most municipalities, the school district assumes responsibility for administering the survey at two-year intervals to public students enrolled within the district. Among 16 Greater Boston communities plus the 25 communities served by the MetroWest Health Foundation, all communities conduct some form of youth risk survey among middle and high school students. Due to insufficient resources, BPS did not conduct a middle school YRBS in 2015, though it plans to resume the middle school survey in 2017.

In most school districts within the Greater Boston Area, the YRBS is conducted in each of the middle and high school within the school district. The Boston YRBS provides point estimates of the BPS high school student population⁶¹ based on a random probability sample of approximately 1,200 respondents (range 1,013-1,899 since 2001) per survey year. The survey is conducted every other year with most public high schools in the city represented (range 20-31 schools per year since 2001). The number of classrooms sampled varies from year to year and from school to school. Lastly, since BPS administers the Boston YRBS, middle and high school City residents who attend private and parochial schools are not reflected in the survey findings.

Center for Health Information and Analysis Hospital Patient Encounters Case Mix Data

The substance use disorder (SUD) hospital patient encounter (HPE) case mix data includes acute care hospital emergency department visits, inpatient discharges, and observational stay discharges. The data is based on ICD 9 CM codes identifying abuse, dependence, unintentional (including unknown intentional) poisoning/overdose of typical drugs of abuse (opioids, sedatives, anxiolytics, cocaine, amphetamine, other stimulants, marijuana, hallucinogens). Nondependent abuse of drugs defined as “cases where a person, for whom no other diagnosis is possible, has come under medical care because of the maladaptive effect of a drug on which he is not dependent and that he has taken on his own initiative to the

⁶¹ There are approximately 20,000 Boston public high school students in any given year.

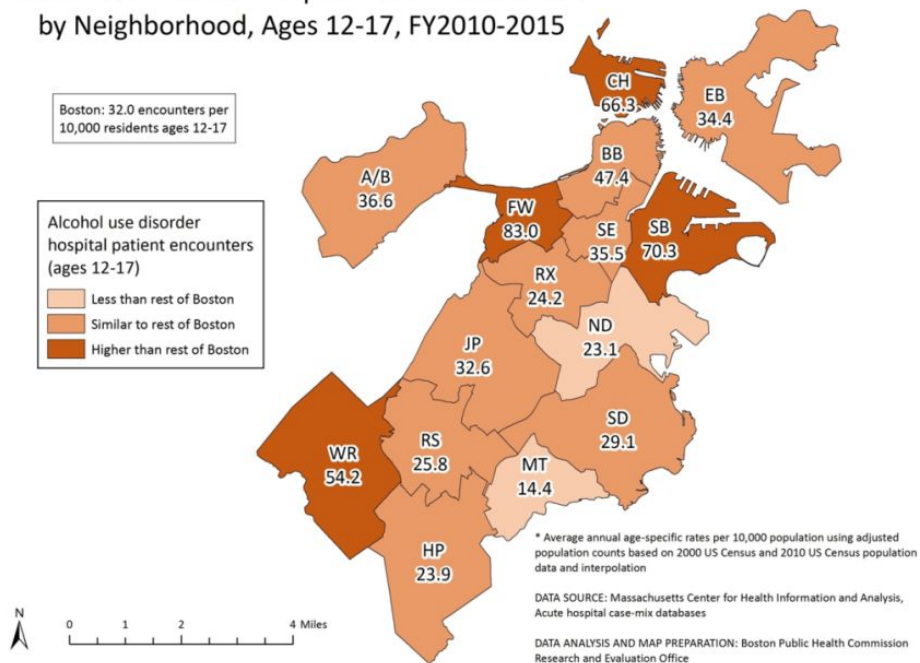
detriment of his health or social functioning.”⁶² Lastly, since the SUD HPE case mix data provides a record of hospital encounters, individuals with multiple encounters over the course of a fiscal year will be counted more than once.

⁶² <http://www.centralx.com/diseases/icd278.htm>

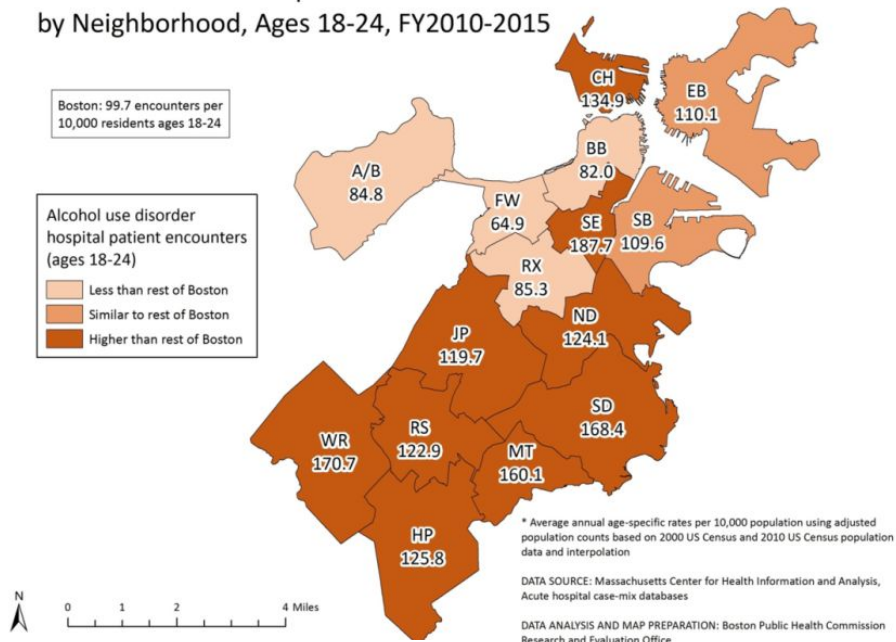


APPENDIX 6: SUBSTANCE USE IN PREVALENCE CHARTS

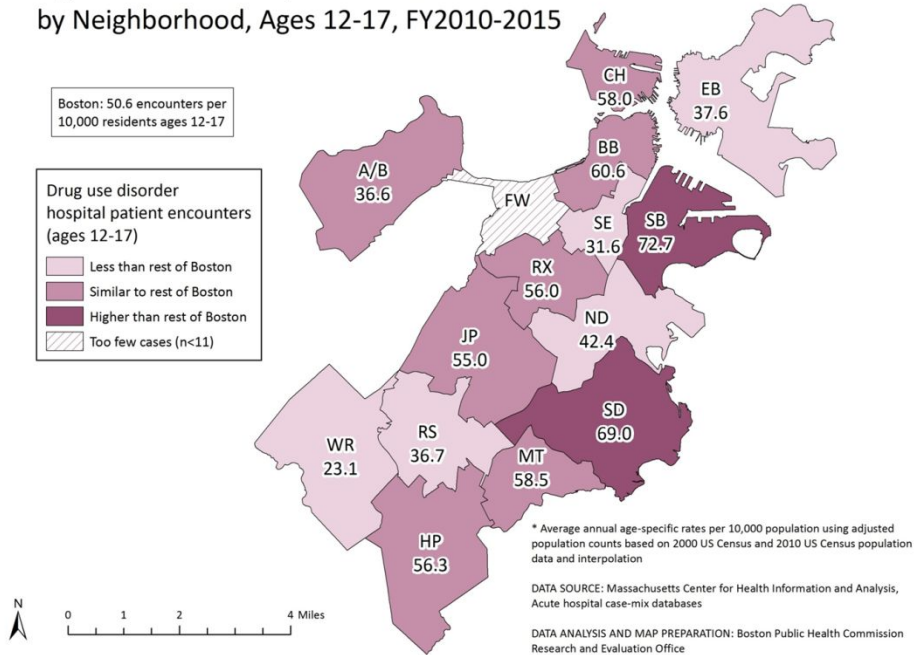
Alcohol Use Disorder Hospital Patient Encounters*
by Neighborhood, Ages 12-17, FY2010-2015



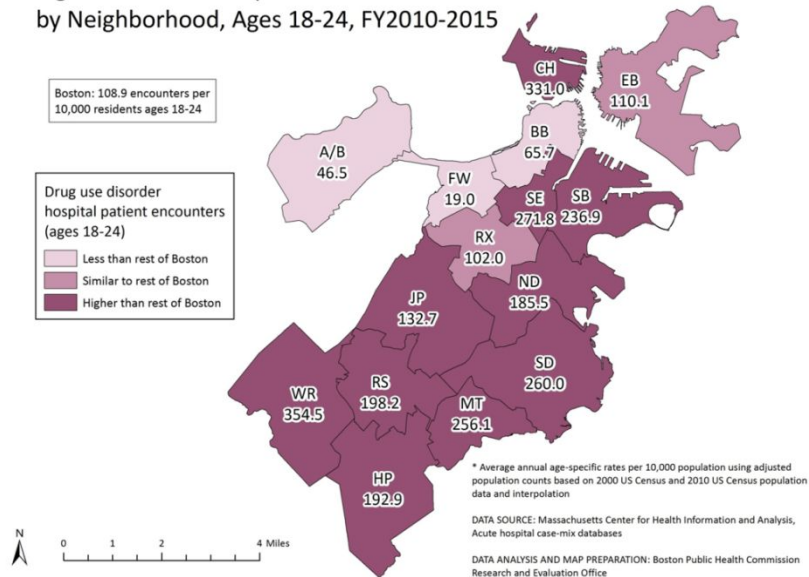
Alcohol Use Disorder Hospital Patient Encounters*
by Neighborhood, Ages 18-24, FY2010-2015



Drug Use Disorder Hospital Patient Encounters* by Neighborhood, Ages 12-17, FY2010-2015



Drug Use Disorder Hospital Patient Encounters* by Neighborhood, Ages 18-24, FY2010-2015



APPENDIX 7: STAKEHOLDER PERSPECTIVES - RISK AND PROTECTIVE FACTORS THAT DRIVE YOUTH SUBSTANCE USE

Stakeholders described an array of risk factors that drive youth substance use (**Table 6**), with undiagnosed and untreated mental illness and trauma among the most frequently mentioned. One respondent described how students are dealing with friends passing away due to violence, saying that someone was shot right in front of his school. Stakeholders also commented on the intersection between substance use and stress, anxiety and depression, often resulting in youth using substances to self-medicate and relieve tension. Youth in focus groups reported that young people use substances “to feel a certain way... the world has so much going on, and it’s stress,” when they “may have family issues like divorce” and as a result “desire to escape from their problems.” These youth also said people use harder drugs “because nothing else is working.” Some youth who suffer from diagnosed mental illnesses often choose marijuana, rather than their prescribed medications. One focus group participant commented that “substance use happens when trying to block feelings.”⁶³

Several key informants discussed the social determinants of health, including access to housing, employment, education, and racial equity as underlying risk factors for substance use. Other environmental factors include the constant sound of sirens. Other stakeholders mentioned that substance use and trauma is generational and that households often have parents with untreated trauma whose behavior negatively impacts their children. Stakeholders also described parental and caregiver substance use, with some reporting that parents come to pick-up their children or attend meetings either high or smelling of marijuana.

Stakeholders commented that youth substance use occurs when youth believe that they have nothing to risk, due to low self-esteem or lack of personal aspirations. During the self-esteem component of *LifeSkills*, one instructor found that kids had no answer when asked “why do you matter?” Many stakeholders described that youth turn to substance use when they have nothing better to do with their lives or time. Youth in focus groups commented that the media and celebrities promote usage and add to peer pressure to experiment, with some saying that youth “want to seem cool, fit in, and experiment,” and that the media “makes it seem like you feel so good.” In addition, some commented that if “they don’t use, they may be seen as lame.”

⁶³ High risk provider focus group participant.

APPENDIX 8:

ACKNOWLEDGEMENTS

The City of Boston and Mayor Martin J. Walsh would like to thank the members of the Youth Substance Use Prevention Strategic Plan Project Team and the Oversight Committee for their commitment to this plan. They would also like to thank the parents and young people who participated in focus groups and surveys (Appendix 1), the stakeholder agencies included in the planning process (Appendix 2), the stakeholder agencies included in the Advisory Board (Appendix 3), DMA Health Strategies, and the Blue Cross Blue Shield Foundation of Massachusetts for their important contributions to this project. Finally, they would like to thank Boston Public Schools, the Boston Public Health Commission, and Boston Centers for Youth and Families for their continued service to Boston’s young people.

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