# Using Data to Support Efforts to

# Prevent Substance Use and Misuse

Guidance for schools and districts on how state and local data can be used for substance use prevention.

# Introduction

The following guidance is a product of the Substance Use Prevention Education and Screening (SUPES) interagency working group convened in 2018 with the filing of the CARE Act[[1]](#footnote-1). It was developed to foster a stronger emphasis on usage and understanding of relevant data as a means of strengthening and expanding school-based efforts to prevent and reduce substance use. Data can help us focus on the particular needs of our community to ensure appropriate strategies are implemented and improve the likelihood of success. The goal of this guidance is to support schools and school districts in understanding how to more effectively use data to inform and monitor efforts to prevent substance use disorder for local and statewide impact.

# Setting the Context: Statewide Data and Research

Research[[2]](#footnote-2) has identified an array of risk and protective factors that may contribute to youth substance use and misuse. Utilizing available research the SUPES narrowed and ranked by importance a list of indicators which the State could monitor for progress toward reducing overall misuse of opioids and other substances amongst school-age youth and young adults. As identified by the SUPES, the Commonwealth is focused on the following behaviors and factors that can influence initiation and progress of substance use among adolescents statewide (see Figure 1). Attention to these five factors can assist in setting the context for local efforts and align to overall statewide goals. Through alignment of statewide efforts and supports, our goal is to reduce risk factors and increase protective factors to prevent and reduce substance use and misuse.

**Figure 1: Statewide Priority Monitoring Indicators[[3]](#footnote-3)**

Protective

Factors

Risk Factors

***TIP:*** It is important to note that there is not a straight line to be drawn between any of these data points and subsequent substance use disorder; however, there is important information in the data we have that can guide our work. In prevention work, the focus is on correlation versus causation.

# Data Inquiry Cycle Overview:

The following steps will assist school districts in obtaining and using data to inform action planning related to substance use and misuse prevention and targeted interventions that align to statewide priorities. This guidance combines and condenses elements of several prevention planning and data inquiry models[[4]](#footnote-4) and can be a primer for further inquiry and action. Data inquiry should be an ongoing process that helps to inform when, how and what data are used to inform and monitor substance use and misuse prevention efforts. Data use should be more than just a one-time endeavor. Note that while presented step by step linearly, data inquiry is a continuous cyclical process.

**Figure 2: Data Inquiry Cycle to Align to Statewide Priorities**

## Get Organized: Build your team

A crucial first step in this process is to create a multi-disciplinary team in order to lay the groundwork for success. The team should be comprised of members with a broad spectrum of knowledge, expertise and points of views to help - collect, analyze and interpret the right information. This team could be a sub-committee or an expansion of existing teams within the district that focus on health and health-related subjects such as a School Health Council/Wellness Committee, District/School Improvement teams or the System for Student Success team. Where possible, districts should connect to existing health promotion and prevention efforts by including individuals involved with these initiatives as part of their teams or as advisors to their teams. In particular, districts should seek to collaborate with the following district and/or community level efforts as either advisors to or formal members of their teams:

| **Suggested Collaborative Group/Individuals/Initiatives** | **Group Description and Value to Your Team** |
| --- | --- |
| District/School Wellness Advisory Committees | As mandated by Section 223 of Chapter 111 of the Massachusetts Generals Laws, districts are required to establish School Wellness Advisory Committees. (Schools/districts may operate this group under a different name such as School Health Advisory Council, School Health Committee, District Wellness Advisory Council or Wellness Committee). These committees are intended to ensure that each public school district has an established group of school staff and concerned community representatives to develop, review, and help implement school district policies addressing school nutrition, nutrition education, physical activity, and related issues that affect student health.  Information regarding committee members and contacts is made available within each district. |
| District Data Team | In order to establish, grow, and maintain a culture of inquiry and data use that can inform decisions that impact teaching and learning, and ultimately improve the achievement of all students, districts are encouraged to establish a district data team. The district data team is composed of a cadre of staff who are collectively responsible for the technical, organizational, and substantive aspects of data use. These team members must be data literate and able to lead the collaborative inquiry process with both district and school staff. District data teams not only bring expertise in understanding data but can be an important resource in connecting to relevant academic data and outcomes.  Inquire with your district office whether a district data team has been established and how to connect. |
| District/School Personnel Implementing the Massachusetts Screening, Brief Treatment and Referral to Treatment (SBIRT) | In March 2016, the Massachusetts legislature enacted An Act Relative to Substance Use, Treatment, Education and Prevention (STEP Act - Mass. General Laws chapter 71, section 97) which requires public schools in the Commonwealth to conduct substance use screening and education.  Inquire with your district for identified contact. DPH recommends this be coordinated by a nurse leader, when possible. More information about MA SBIRT: <http://www.masbirt.org/schools> |
| Substance Abuse Prevention Collaborative (SAPC) Local Team | The purpose of the Substance Abuse Prevention Collaborative (SAPC) grant program is to prevent underage drinking and other drug use across the Commonwealth. Additionally, this grant program serves to increase both the number and capacity of municipalities across the Commonwealth addressing these issues. The Substance Abuse Prevention Collaborative (SAPC) grant program is part of a comprehensive approach to substance use disorder prevention in Massachusetts, which includes the Massachusetts Opioid Abuse Prevention Collaborative (MOAPC) and SAMHSA’s Partnerships for Success 2015 (PFS 2015) grant programs.  These programs emphasize the integration of SAMHSA’s Strategic Prevention Framework (SPF) model into local prevention systems - a planning process for preventing substance use and misuse - to ensure the use of a consistent data-informed planning process across the Commonwealth focused on implementing effective and measurable efforts to prevent and reduce substance use disorders and their related issues  For more information on BSAS funded programs and communities: <https://www.mass.gov/files/documents/2017/01/wc/bsas-prevention-unit-programs-and-resources-overview.pdf>  If you are interested in contacting your local prevention program please contact the Bureau of Substance Addiction Services at DPH – (617)-624-5111 |

This team will operate most efficiently and progress through the data inquiry most effectively when there is a person or persons designated to 1) lead the team and facilitate the process and 2) manage the data.

***TIP:*** Establishing a diversified and collaborative team will help ensure buy-in and support for later efforts (actions and outcomes determined in Step D “Action Planning and Implementation”).

## Take Stock: Determine and Gather Relevant Data and Information

Before the team can dive into setting outcomes, determining and implementing appropriate strategies to achieve outcomes, and monitoring progress towards outcomes, it must first take stock of available local data and determine what (if any) additional data are needed. The statewide data above is a starting point to explore this and additional relevant data sources to identify areas of particular need in your community. Local data will not only assist the team in better understanding the factors influencing substance use and misuse in the district but also in knowing how local problems compare to and impact issues statewide. When embarking on the data inventory, teams should seek to gather additional data related to the five statewide indicators to keep the task focused and manageable. While the team data manager will decide on the best format for cataloging the data; the data inventory at a minimum should include:

* Data Element (risk and protective factors)
* Data Source (existing or new)
* When the data are available
* How data can be accessed by the team
* How data are currently being used

Additionally, teams should not think of data as just numbers and keep in mind that evidence can come from a number of sources both quantitative and qualitative.

**Figure 3. Taking stock using qualitative and quantitative, local and statewide data**

The following two tables provided to get you started on your data inventory. The table in Figure 4 provides information and links to relevant statewide data sources and resources. For each of the outcomes we are working towards, we have provided suggested additional data sources (that districts may or may not have) that can help you to deepen your understanding of the issues, which is outlined in Figure 5.

**Figure 4: Existing and Potential Data Sources and Resources for Relevant Statewide Data**

| **Source** | **Resource** |
| --- | --- |
| Youth Risk Behavior Survey/Youth Health Survey | Middle School and High School Surveys conducted biennially among a random sample of middle and high schools:  Reports, data tables and data briefs produced by the Department of Elementary and Secondary Education (DESE) & DPH are available on the websites. |
| Locations:  MA YRBS: <http://www.doe.mass.edu/sfs/yrbs/>  MA YHS: <https://www.mass.gov/lists/massachusetts-youth-health-survey-myhs> | |
| Youth Online | Interactive system by which individuals can analyze state data from the YRBS and allows for comparisons across years and with national data and data from other states |
| Location: <https://nccd.cdc.gov/youthonline/App/Default.aspx> | |
| DESE: Data and Accountability | DESE collects a wide range of data to help improve teaching and learning in Massachusetts schools. The state also uses school and student data to inform our accountability system, which targets resources and assistance where they are needed most.  Student-, school-, and district-level data, as well as information on MA accountability system, laws, and regulations are available on the website. |
| Location: <http://www.doe.mass.edu/DataAccountability.html> | |
| MassCHIP | MassCHIP provides community-level data to assess health needs, monitor health status indicators, and evaluate health programs. Health care providers, state and federal agencies, universities, community health centers, and local boards of health can all find information relevant to their fields by using MassCHIP. |
| Location: <http://www.mass.gov/eohhs/researcher/community-health/masschip/> | |
| Massachusetts Technical Assistance Partnership for Prevention (MassTAPP) | The MassTAPP supports communities across the Commonwealth of Massachusetts in addressing substance abuse prevention. Expert staff offers technical assistance, capacity building, and resources to BSAS-funded programs and other communities across the state.  The website houses various guidance, resources, etc. on substance use/misuse in MA. |
| Location: <http://masstapp.edc.org/> | |

***TIP:*** For communities that are recipients of DPH BSAS and/or other federal grants, much data collection and inventorying may have already been done and could be leveraged. District teams should inquire about existing data collection and analysis processes which can be used to inform school/district planning.

**Figure. 5: Statewide Indicators and Suggested Associated Local Data Sources**

| **Risk and Protective Factors** | **Potential Data Sources** | |
| --- | --- | --- |
| **Data source you likely have** | **Data source you may have or want** |
| Chronic Absenteeism | * Student attendance records * Behavioral records * Teacher progress reports * Letters or notes from family * Nurse referrals * Discipline referral | * Reasons for absences * Student’s living situations (e.g. homelessness, foster care, etc.) * Transportation challenges * Observational data * Teacher * School counselor, social worker or psychologist |
| Use of Marijuana Prior to Age 13 | * Nurse Referrals * Discipline referrals | * Local YRBS[[5]](#footnote-5) or other student surveys * Medical Reports * Treatment or treatment referral * Police Department data: * Liquor law violation * Drunk and disorderly conduct * Drug possession * Intent to sell drugs * Operating under the influence * Highway safety data * Drug and alcohol related crashes |
| Current Alcohol Use |
| Adult at school can talk to about problem, | * [VOCAL Student Survey](http://www.doe.mass.edu/research/vocal/) * Teacher reports | * Local YRBS or other student surveys * Student rosters * School climate surveys * Parent surveys * Parent involvement data * Attendance at events * Conferences |
| Parent of family member at home can talk to about something important |
| The above list of suggested and associated resources is by no means comprehensive of all available and potential relevant data sources. It is a list of known sources with information directly correlated to the statewide priorities. It is intended to be a primer into understanding how various sources of data can be used to indicate and or foster a deeper understanding of each of the statewide priorities and give a jumpstart to your inventory. Other suggested data and sources to consider and explore for relevancy can be found:   * **MassTAPP:** <http://masstapp.edc.org/sites/masstapp.edc.org/files/Archival%20and%20Survey%20Data%20Sources%20for%20Underage%20Drinking.docx#overlay-context=sapc-planning-tool/worksheets-and-resources> * **SAMHSA:** <https://www.samhsa.gov/capt/practicing-effective-prevention/epidemiology-prevention/finding-data> | | |

***TIP:*** If after taking stock; it is determined that there is a need to collect additional local data, teams should keep in mind that survey development and administration is more than just putting questions on paper and soliciting responses. Teams should seek to use currently existing surveys that demonstrate reliability and validity in collecting appropriate and relevant data and follow associated survey administration protocols. Engaging in a survey development and administration process is time intensive and costly and if done without proper technical precision can result in misinformation and do more harm than good.

## Dig Deeper: Explore Underlying Causes Using Additional Data

At this stage, the team explores the potential underlying reasons for substance use and misuse by analyzing data collected. Digging deeper will help achieve a more solid understanding of correlations related to risk and protective factors for substance use and misuse locally. It also will inform action planning for and or modification to substance use and misuse prevention efforts.

When digging into these data, some questions to ask include:

* **What does the data tell you?**
* **How does your local data compare to the overall state?**
* **How does the data differ by student subgroups?**
* **Are different subgroups experiencing risk and protective factors disproportionately?**
* **Are differences significant? (e.g. local vs. state data, subgroup vs. all students, subgroup vs. subgroup etc.)**
* **What are some emerging trends or patterns of behavior?**
* **What needs are evident?**
* **What prevention strategies and actions are currently being implemented? Are these appropriately addressing evident needs?**

**Figure 5: Correlation between Risk and Protective Factors and Substance Use and Misuse**

|  |
| --- |
| Risk Factor: Chronic Absenteeism |
| Chronic absenteeism is a factor that contributes to poor academic outcomes, but also can be a contributor to other health outcomes. There are also any number of reasons why students are chronically absent – getting to the bottom of trends in the underlying causes can help inform how you go about addressing the issue(s). |
| *Further Information on Correlations:*  A. <https://www.rwjf.org/en/library/research/2016/09/the-relationship-between-school-attendance-and-health.html>  B. <https://www2.ed.gov/datastory/chronicabsenteeism.html#three>  C. <http://drugabuse.imedpub.com/heroin-usage-impact-on-student-performance-and-truancy-amongst-high-school-students.pdf> |
|  |
| Risk Factor: Use of Marijuana Prior to Age 13 |
| Risk Factor: Current Alcohol Use |
| Research shows a relationship between early initiation of substance use and subsequent later misuse. |
| *Further Information on Correlations:*  A. <https://www.drugabuse.gov/publications/research-reports/marijuana/letter-director>  B. <https://www.hhs.gov/ash/oah/adolescent-development/substance-use/alcohol/risks/index.html>  C. <https://www.hhs.gov/ash/oah/adolescent-development/substance-use/index.html> |
|  |
| Protective Factor: Teacher or adult **at school** can talk to about a problem |
| Protective Factor: Parent or family member **at home** can talk to about something important |
| When students’ school environments are supportive, and their parents are engaged in their lives, they are less likely to use alcohol and drugs and engage in sexual behaviors that put them at risk for HIV, STDs, or pregnancy. |
| *Further Information on Correlations:*  A. <https://www.cdc.gov/healthyyouth/substance-use/pdf/dash-substance-use-fact-sheet.pdf>  B. <https://www.cdc.gov/healthyyouth/protective/school_connectedness.htm>  C. <https://www.cdc.gov/healthyyouth/protective/positiveparenting.htm>  D. <http://www.ascd.org/publications/educational-leadership/apr05/vol62/num07/A-Case-for-School-Connectedness.aspx> |

## Engage in Action Planning, Implementation, and Progress Monitoring

Prevention efforts are ideally a part of a coordinated approach to building and maintaining a safe and supportive school environment. A cycle of data inquiry supports and informs action planning and implementation of programs and strategies. At this stage in the cycle, teams will use their data to help:

* Determine what outcome(s) they intend to work towards.
* Determine a final list of indicators to monitor.

**Resources**

**Action Planning:** Districts may use tools or models like [Planning for Success](http://www.doe.mass.edu/research/success/) or the [Safe and Supportive Schools Framework](http://bhps321.org/) to further inform action/strategic planning in this realm.

**Implementation:** Districts can use resources like the [“Seal of Approval”] **[to be inserted]** to select programs and strategies to implement that address the needs identified through the data inquiry (steps A-c) and action planning process.

**Progress Monitoring:** Good use of data includes a plan for continuing to use data to monitor progress towards achieving goals and improving outcomes. Districts can use resources like the “[How do we know Initiative](http://www.doe.mass.edu/research/howdoweknow/)” to learn how to measure outcomes and show that implemented strategies are working.

## Evaluate and Adapt the Data Process and Begin Again at Step A

Teams should reflect on their data use process. At a minimum, reflection should occur on an annual basis, at the end of the school year or over the summer. The team discusses what has worked, what should be modified, and what should be replaced or eliminated. Where appropriate, any decisions about changes to the process should be supported by data and evidence and documented. Finally, the current team and other school and district leadership identifies which team members will continue to serve and who the new team members will be for the upcoming year. The district creates a plan for orienting new members and arranging for them to become trained in the process.

1. <https://www.mass.gov/files/documents/2017/11/14/TheCAREAct.pdf> [↑](#footnote-ref-1)
2. **Selected Research:**

   **Preventing Drug Abuse Among Children and Adolescents:** <https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents/chapter-1-risk-factors-protective-factors/what-are-early-signs->

   **SAMHSA Data Review - Risk and Protective Factors and Estimates of Substance Use Initiation:** <https://www.samhsa.gov/data/sites/default/files/NSDUH-DR-FFR3-2016/NSDUH-DR-FFR3-2016.pdf>

   **Protective Factors and Afterschool Programs:** <http://www.mcdowellgroup.net/wp-content/uploads/2018/02/act-protective-factors-and-afterschool-programs-1-30-2018-final.pdf> [↑](#footnote-ref-2)
3. **Notes on Data Sources**

   **SIMS:** The Student Information Management System (SIMS) is a student-level data collection system that allows Massachusetts Department of Elementary and Secondary Education (DESE) to collect and analyze more accurate and comprehensive information, to meet federal and state reporting requirements, and to inform policy and programmatic decisions.

   **YRSB:** DESE receives funding from Centers for Disease Control and Prevention (CDC) to conduct the Youth Risk Behavior Survey (YRBS) in randomly selected public high schools in every odd-numbered year. All data collected for the Massachusetts YRBS (MYRBS) are self-reported from Massachusetts public school students. Students in private schools, state custody, or other educational settings are not represented. MYRBS percent estimates presented in these tables are weighted (i.e., adjusted for nonresponse and distribution of students by grade, sex and race/ethnicity) in order to be representative of high school students across the Commonwealth. [↑](#footnote-ref-3)
4. **Additional Resources:**

   **Strategic Prevention Framework:** <https://www.samhsa.gov/capt/applying-strategic-prevention-framework>

   **Getting to Outcomes:** <https://www.rand.org/health/projects/getting-to-outcomes.html>

   **EWIS Implementation Guide:** <http://www.doe.mass.edu/edwin/analytics/implementation-guide.pdf>

   **District Data Team Toolkit:** <http://www.doe.mass.edu/accountability/toolkit/district-data-toolkit.pdf> [↑](#footnote-ref-4)
5. **A note about local YRBS:**

   Many schools and districts choose to conduct or participate in local surveys (school, district or regional efforts) to gather data about the risk behaviors of their own students. While often confused with the MYRBS; these surveys are not administered, monitored or tracked by DESE. We encourage you to inquire with your local school department to determine if there has been any current or past local effort and if so, how to access the data. [↑](#footnote-ref-5)