**ABSTRACT**

Recent upsurges in drug overdoses in the Massachusetts area, especially in adolescence is cause for further examination into this age group. We wished to investigate the risk factors that could influence this group (14-22 age range) to begin using drugs by distributing a survey to assess the social, familial, and personal factors.

**BACKGROUND**

Recently there has been a surge of drug use and overdoses in Massachusetts including Southeastern Massachusetts and the town of New Bedford. Narcotic and opioid overdose has increased by 600% in the last three decades in the United States, which has been contributed to the rise of heroin trafficking and over-prescription of opioid analgesic medications (Davis, C. et al. 2014). Deaths due to opioid overdose in New Bedford alone were as many as 25 reported cases, second only to Boston in 2013 (MA Department of Public Health, 2012). These overdoses have affected every age group but have perhaps been the most troubling in adolescents and young adults aged 15-24. The Massachusetts Department of Public Health (Mass DPH) reports that during fiscal year 2012, patients under the age of 18 accounted for 2,254 admissions at substance abuse treatment centers (MA Department of Public Health, 2012). The purpose of this qualitative study is to identify the rate of substance abuse and need for intervention in at-risk population, specifically in adolescents, in Southeastern Massachusetts.

Beyond treating the symptoms of overdose, there has been great concern and attention over how to actually prevent them. The town of New Bedford has long been affected by widespread poverty, creating dynamics that often favor substance abuse. Our goal was thus to assess the reasons for which adolescents may initiate substance abuse by establishing factors that may identify an adolescent as being ‘at risk’ for substance abuse. According to a study done by Nakawaki and Crano (2014), studying behavioral patterns in youths is may be a precursor for drug use, though they also found that environmental factors, parental influence, and delinquency correlated with drug use (Nakawaki, B. & Crano, W., 2014). In addition to characterizing general use and abuse of substances such as alcohol, tobacco products and illicit drugs, we sought to analyze the data using Relative Risk assessment.

**METHODS**

- Designed a survey to assess use of alcohol, tobacco and drugs as well as familial, socioeconomic and psychological parameters
  - Students answered survey by selecting yes or no, or selecting a variable on a scale where it applied.
- Reached out to 12 local schools requesting to implement our survey
- Distributed 1451 copies of our survey between two schools
  - A school specializing in students with diagnosed emotional and social disabilities enrolled in grades 6 through 12
  - A high school with 16 vocational technical programs with over 1,300 students in grades 9 through 12
- Analyzed the data using Relative Risk assessment

**RESULTS**

- Table showing Relative Risk Factors Associated with Substance Abuse

**RESOURCES**


**ACKNOWLEDGEMENTS**

- We would like to thank Lisa Morris and the MASS AHEC network for providing us with this opportunity, as well as the two schools that collaborated with us for allowing us to distribute surveys to their school populations. Also we would like to thank Dr. Shabana Naz and the entire medical team at GBMC for their professional guidance and support throughout this project.

**CONCLUSIONS**

Analysis of the data collected from an anonymous survey revealed a number of potential risk factors as well as possible protective factors regarding the likelihood of high school students to use drugs. The most negative factors were alcohol and tobacco use, as well as friends or family who use drugs. Important protective factors were a safe home life with regular family dinners and a trusted confidante.

**FUTURE DIRECTION**

In the limited time frame, we were not able to survey a number of different schools. The next step would be to administer the survey to a greater population of schools in order to obtain more varying socioeconomic and other environmental influences. Also, it could be beneficial to elaborate more on each of the data points and their risk factors, looking into the specific risks and drugs and how they relate as a whole.