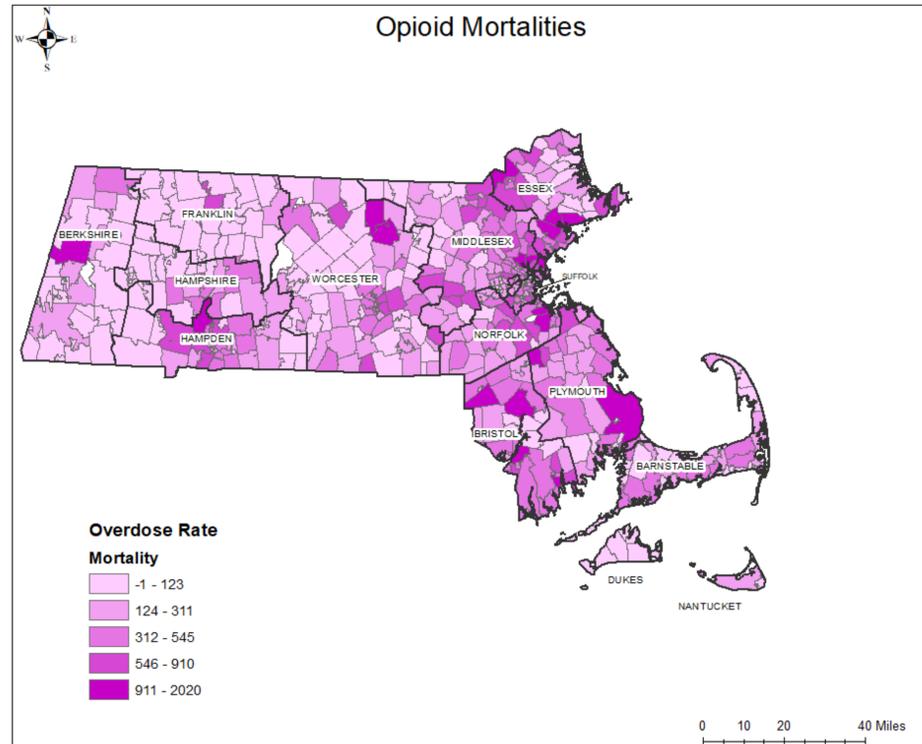


Opioid Use in Massachusetts

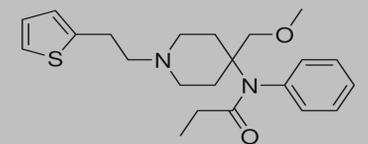
Introduction

In 2017 2,069 Massachusetts residents fatally overdosed, in the past 17 years Massachusetts has lost almost 16,000 residents to opioid use disorder. Opioid misuse in Massachusetts has surpassed the national average, and there has been an increase in use over the past few years. While there have already been federal and state reactions to the opioid epidemic across the country, policy makers should care because the opioid epidemic has economic, social, health, and more impacts on the Massachusetts community overall, and understanding the perspective of doctors who may be able to provide alternative pain coping methods to people which could lead to new policies about the epidemic. Additionally, Massachusetts has adopted a policy according to which the renewal of a prescriber's registration to prescribe controlled substances automates the prescriber's registration with the prescription drug monitoring program. Therefore, the state is already aware of the issue of needing to regulate prescribing practices, but are there certain areas that need to be monitored more?



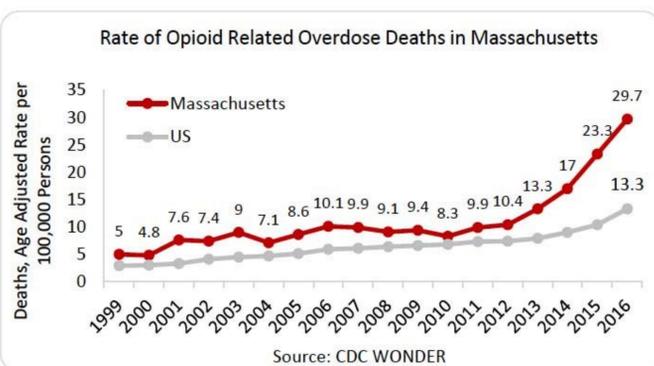
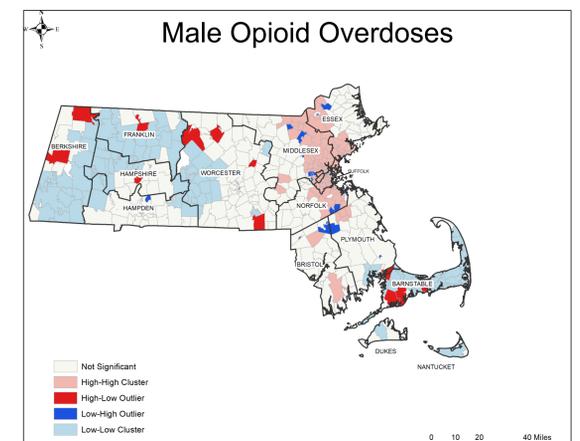
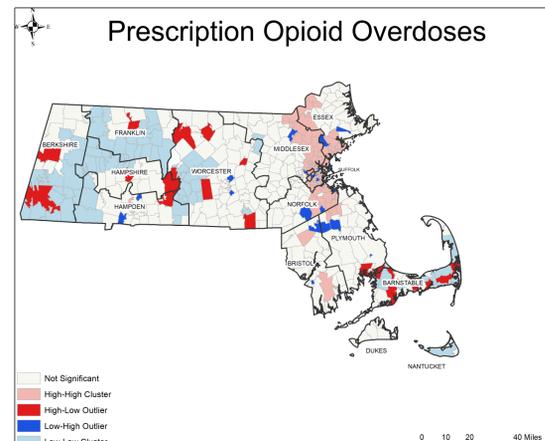
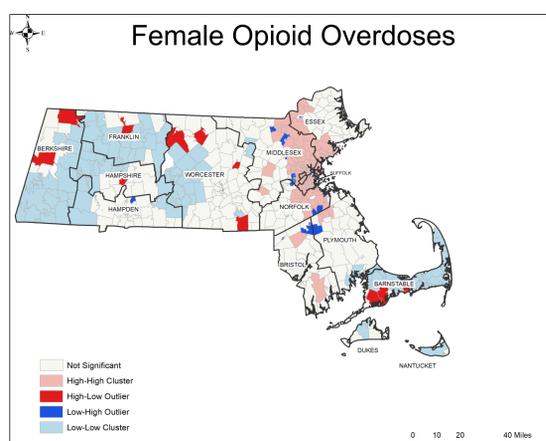
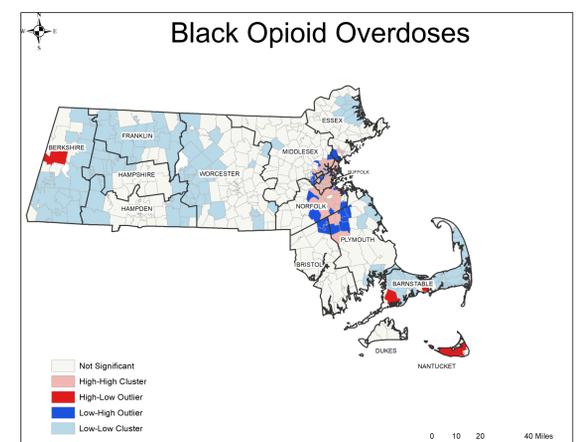
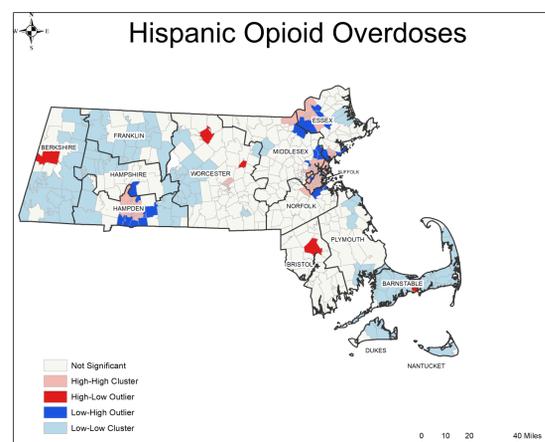
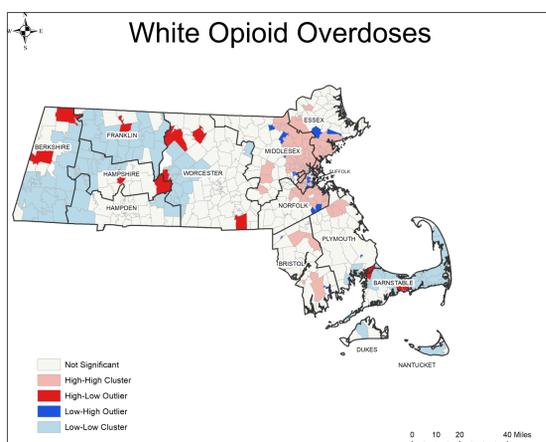
Objectives

Who is overdosing in Massachusetts on opioids? A spatial analysis of the demographic breakdown of opioid users in Massachusetts by Counties and zip code. This poster is a deep dive into three racial, white, black and Hispanic; two sex, male and female; and prescription opioid user demographics of opioid users across the state of Massachusetts.



Methods

For this project I used the data from the Massachusetts Department of Public Health to map where opioid mortalities were across the state overall. I then did a Local Moran's I on various demographic elements to see where certain clustering was across the state too later compare if there were commonalities. A Local Moran's I was performed for racial demographics of white, black and Hispanic, sex demographics of male and female, and prescription overdose demographics.



Results

Overall, the literature states that the typical opioid user is a white male with a history of chronic pain. From the Spatial Analysis however, there is an overall High-High clustering in Suffolk County, where Boston is located, of opioid overdoses no matter the racial or sex demographic. Additionally, there is an unequal distribution of opioid overdoses racially across the state as white people have the largest number of opioid hotspots across the state and black populations have the lowest. Furthermore, the prescription opioid overdose map shows the most varied clusters of overdoses across the state, and is most different in Worcester which is an interesting difference from the other demographic clustering.