

## Overview

[The Global Health Education and Learning Incubator at Harvard University](#) (GHELI) supports interdisciplinary education about world health through the production, curation, and dissemination of educational public goods. This exemplar work was a final project for “World Health: Challenges and Opportunities,” a General Education course at Harvard College taught by GHELI Faculty Director Sue J. Goldie. For this creative assessment designed with support from GHELI, students systematically analyze a societal health challenge they care about and create a “real world” product intended to influence policy or motivate change.

## Abstract

Infographics illuminating the troubling impact of opioid use on youth adults in Massachusetts.

## Artist


Emily Pardy (2020)

## Caption

The health problem that I have chosen for this project is the opioid epidemic in the United States. Specifically, I focused on highlighting one of the most vulnerable populations in the country, which are young adults living in Massachusetts. Despite the prevalence of this epidemic in Massachusetts compared to the rest of the country, opioid addictions are still highly stigmatized in the state. Shockingly, the opioid-related death rates for those living in the state of Massachusetts are twice as high as the national average—13.3 deaths per 100,000 versus 29.7 deaths per 100,000. The discrepancy has become even more prevalent in the last few years. Men and women in Massachusetts share similar risks for developing an opioid addiction, though men have a slightly higher incidence rate of opioid-related deaths. The age group affected the most by this epidemic are young adults, aged 18-34, and white non-Hispanics are another key population. The severity of the epidemic in Massachusetts can be explained by the increased use of synthetic Fentanyl in the region. Synthetic Fentanyl is 50x more potent than heroin and 100x stronger than other natural opioids, making any individual who uses it highly prone to addiction and overdose.

## Artist Lens

I wanted to focus on the opioid epidemic because it is a cause that I feel passionate about. Because I am from Boston, it is an epidemic that is prevalent in the lives of my friends and family. I also work in the Recovery Research Institute at Mass General Hospital, so I enjoy learning about ways to initiate and sustain recovery from substance use disorders. I think one of the biggest ways to help those in recovery is through social support from others, and social support begins with raising awareness about the issue. Therefore, I decided to make an infographic about this epidemic. I wanted to attach a face to the issue, so I chose to include a photo of a victim of this epidemic on the first page. My hope was that this will draw people’s attention and associate the issue with real people who feel real suffering. My intended target audience is Massachusetts residents who don’t know much about the epidemic or feel like it does not concern them. I want these readers to see how prevalent



this issue is, understand why that is the case, identify the effects it has on the people suffering from it, and remember how they can help, even in small ways.

## Media

Digital



Source: The Guardian

# THE OPIOID EPIDEMIC IN MASSACHUSETTS

## WHAT?

# OPIOIDS 101



## What are they?

A family of drugs including natural opiates like morphine and codeine, as well as synthetic and semi-synthetic opioids like heroin, oxycodone, and fentanyl



## Short-Term Effects

Commonly prescribed to relieve serious pain, opioids can cause feelings of drowsiness, depressed breathing and euphoria



## Long-Term Effects

When taken in amounts that exceed necessity, opioids create permanent changes to one's neural circuits and can cause them to develop a tolerance for and/or addiction to the drug, and in severe cases, can lead to an overdose or death

## WHERE?

# THE OPIOID EPIDEMIC EXISTS NATION-WIDE... BUT IS TWICE AS DEADLY IN MASSACHUSETTS

**13.3** per 100,000  
deaths  
are opioid-  
related in the US

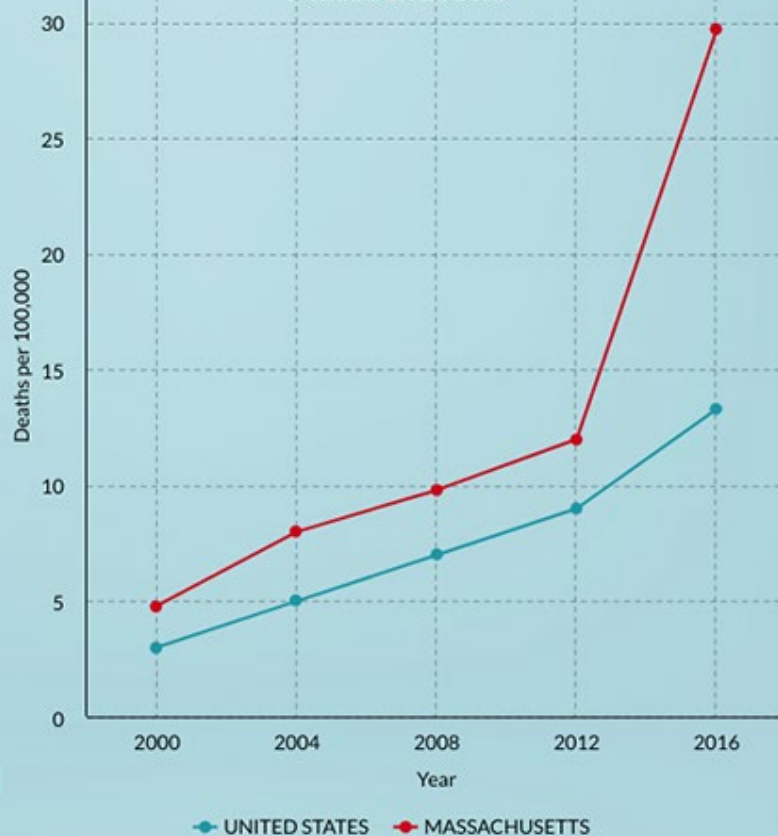
VS

**29.7** per 100,000  
deaths  
are opioid-  
related in MA

### Cities with the Most Opioid- Related Deaths (2011-2015):

1. Avon
2. Salisbury
3. Middlefield
4. Bernardston
5. Eastham
6. Fall River
7. Carver
8. Quincy
9. Everett
10. New Bedford

Opioid-Related Deaths in the US and  
Massachusetts

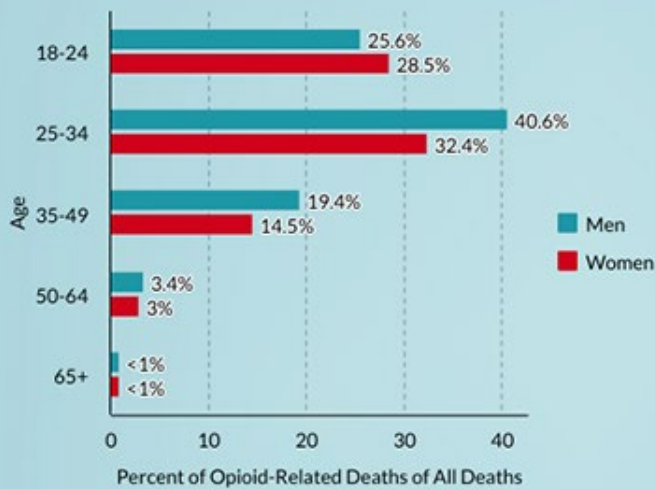


Source: Boston Indicators Report

# WHO?

## Gender and Age

Fatal Opioid Overdoses by Age and Gender in MA

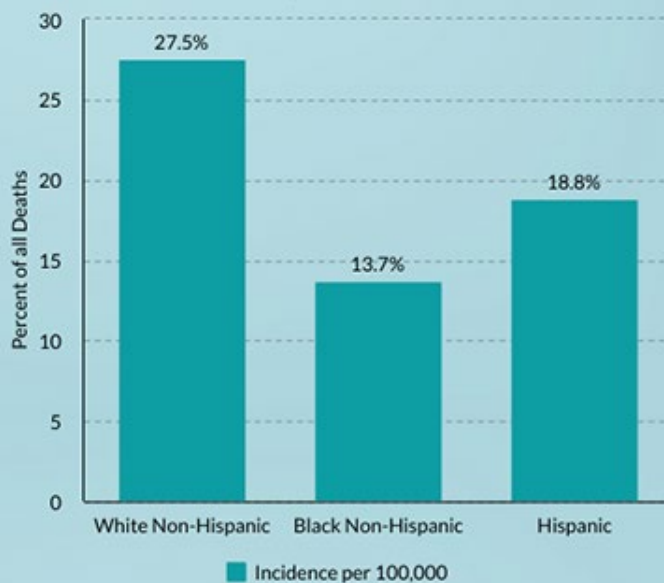


Men and women have similar risks for developing an opioid addiction, but **young adults** are the most at-risk age group

## Race and Ethnicity

**The White Non-Hispanic** population is affected at a rate around **2x greater** that of the **Black Non-Hispanic** population

Opioid-Related Deaths by Race and Ethnicity in MA (2015)



Source: Massachusetts Legislative Report

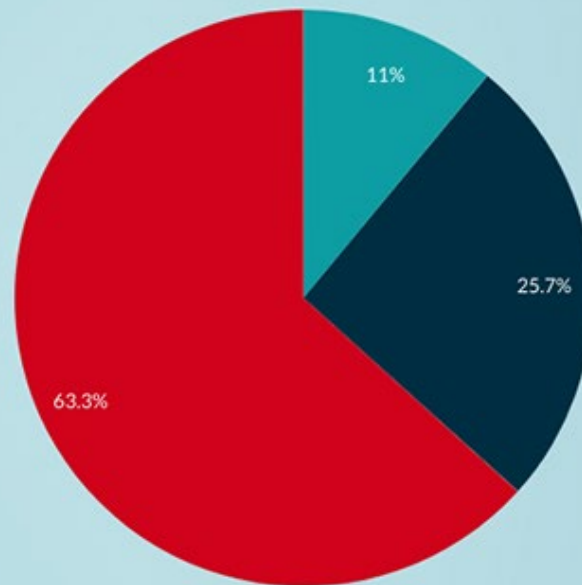
## WHY MASS?

**Synthetic Fentanyl** can be **50x more potent** than heroin and **100x stronger** than other, natural opioids

Massachusetts has the **third highest rate** of fentanyl-related deaths in the country

Opioid Deaths by Opioid Type (2016)

■ Painkillers (11%) ■ Heroin (25.7%) ■ Fentanyl (63.3%)



**Key Northeast drug-trafficking routes** run through MA, making it more vulnerable to the **illegal distribution of Fentanyl**



## DOES IT MATTER?

# YES.



**Costs related to substance abuse top more than \$700 billion annually in the United States**



**Addiction to an opioid puts an individual at greater risk for infectious diseases, such as HIV and hepatitis**



**Social disruptions like domestic violence, child abuse, job loss and criminal behavior are more common in those with an opioid addiction**



**Mental health disorders are disproportionately high for people battling opioid addictions, such as depression and anxiety**



**Opioid addictions can often lead to overdose and death - especially with the state's increase of synthetic opioids**

## WHAT CAN WE DO?

### **Raise awareness, end the stigma**



Opioid addiction is a serious neurological disease that many cannot fight alone. Try to avoid using words like "junkie", which only further stigmatize those battling addiction and often prevent them from seeking treatment.

### **Associate the issue to real people**

The opioid epidemic kills thousands of MA residents a year. The chances of knowing someone who is affected by it are high. **Remember their name** the next time you hear about this crisis and think about how you can support those in need.



### **Participate in and advocate for expanded prescription drug training**

More resources and programs have been offered to train students and professionals on how to prevent prescription drug misuse. Get involved and advocate for more trainings like this!

### **IF YOU NEED HELP**

You Can Call the Massachusetts Substance Abuse Helpline:

**(800) 327-5050**