

Massachusetts Department of Public Health

HEALTH Opioid Recovery and Remediation Fund Advisory Council

Opioid Overdose (Deaths and EMS), Opioid Treatment Provider and Utilization

Deirdre C. Calvert, Director, BSAS/MDPH
Sarah Ruiz
Hermik Babakhanlou-Chase

Presentation Overview

Maps of Opioid-overdose related deaths and incidents

- Death Counts and rates by city/town of residence
- Incidents by city/town of occurrence

Question: Are there any detectable trends in overdose deaths across/between communities?

Maps of BSAS treatment providers delivering opioid use disorder treatment

- Provider lists
- Utilization

Question: Where are there gaps in BSAS treatment capacity?

Map of DEA waivered prescribers who prescribed in 2021

- Number of providers
- Utilization

Question: Are there gaps in prescriber availability and/or waiver utilization?

Map of Overdose deaths over-laid with BSAS treatment utilization

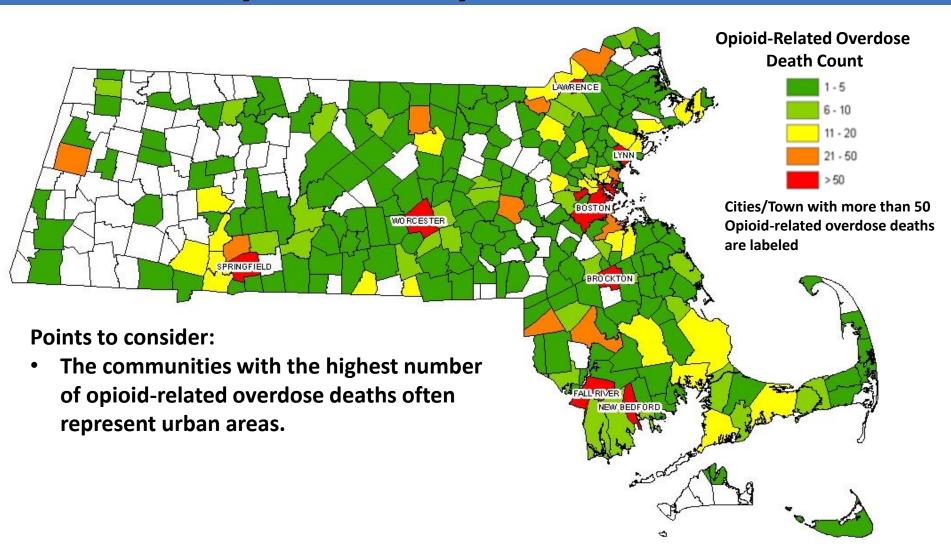
Question: is there any correlation between overdose deaths and utilization of BSAS services.



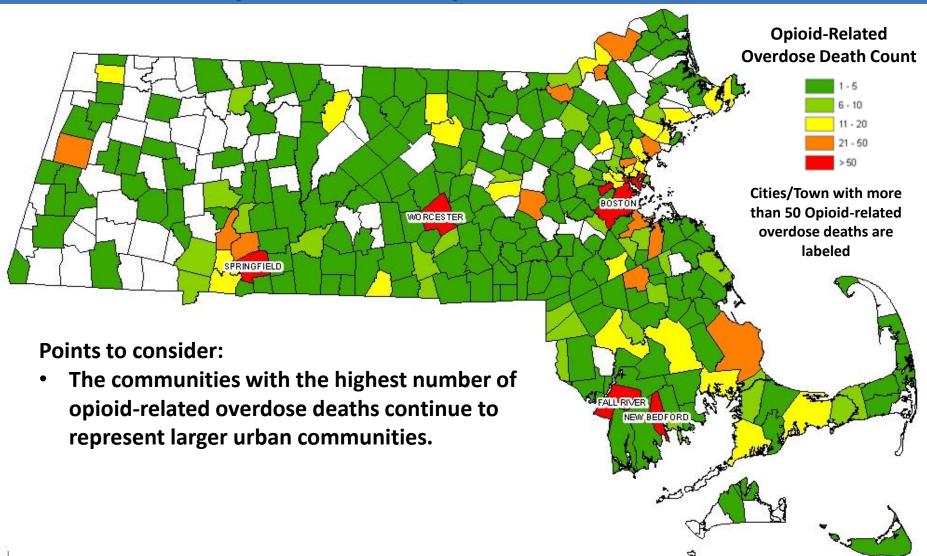
Opioid-Related Overdose Deaths

- The following three slides show Opioid-Related Overdose Deaths by Community of Residence for CY2019 and CY2020 by:
 - Actual counts of overdose deaths
 - Towns with over 50 deaths are labeled
 - Rates per 100,000 population
 - Towns with 10 or more deaths and a rate of 50/100,000 population are labeled
- Data for overdose deaths were sourced from the 2021 Q1 Opioid Overdose Quarterly Report

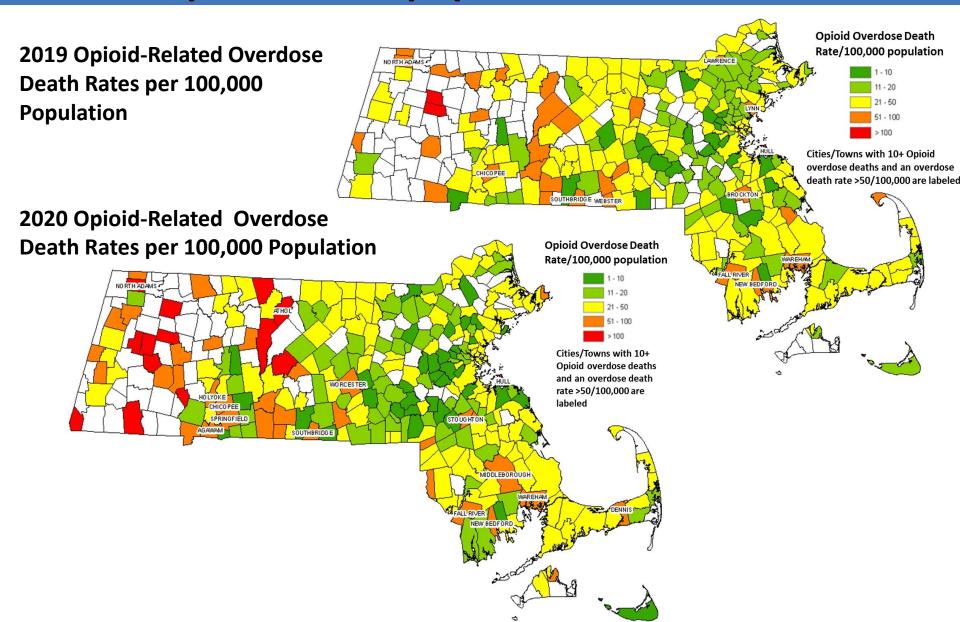
Opioid-Related Overdose Deaths CY2019 by Community of Residence



Opioid-Related Overdose Deaths CY2020 by Community of Residence



Comparison of Rates of Opioid-Related Overdose Deaths per 100,000 population: CY2019 - CY2020

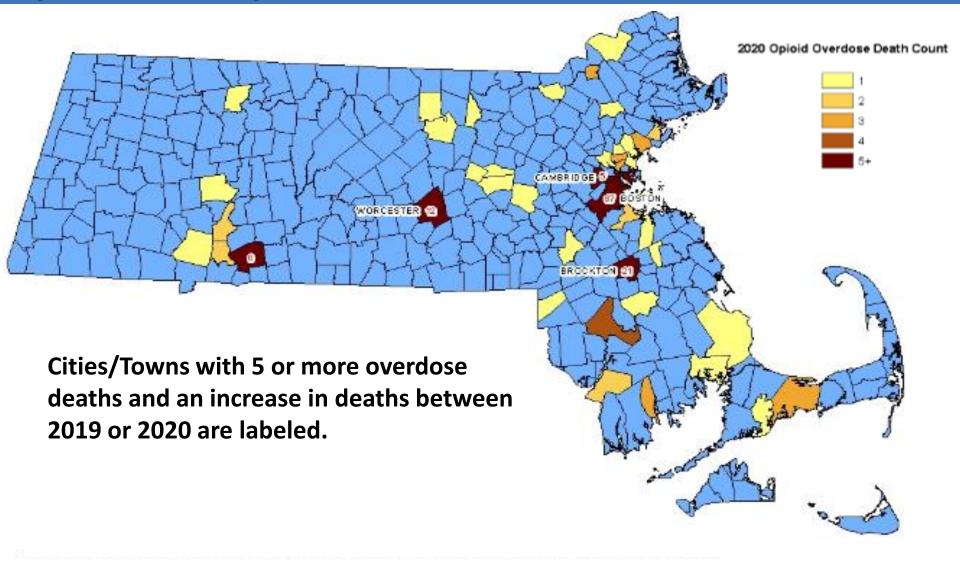


Opioid-Related Overdose Deaths: Change Between 2019-2020

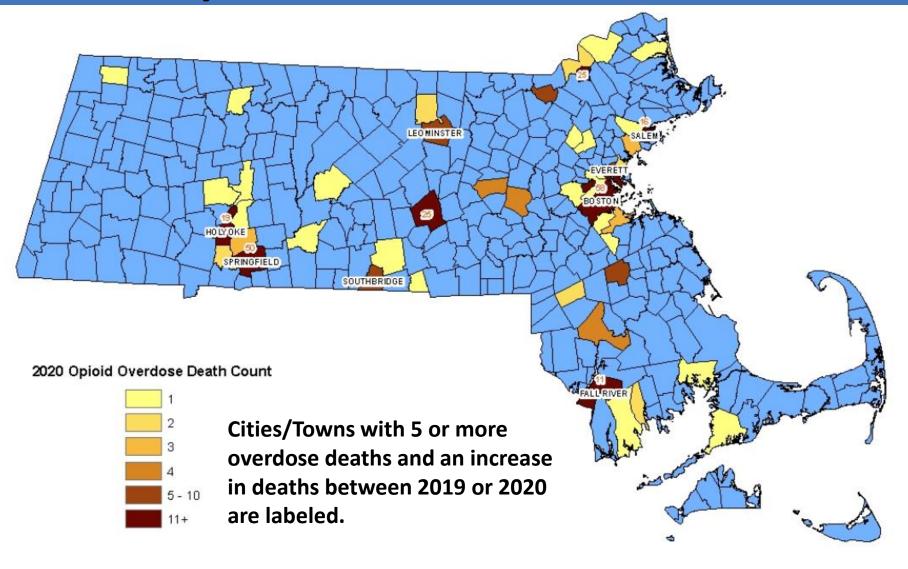
- The list of communities with high number of overdose deaths remain the same from CY2019 to CY2020 with some communities experiencing modest changes while others experienced more significant changes.
- Opioid-related overdose deaths in the city of Boston went up significantly from 173 to 245 deaths while others such as Lawrence went down from 55 to 37 deaths.
- More communities in Western MA show up with higher rates in CY2020 than in CY2019.
- Rolled up to the county level, Hampden and Berkshire have the highest opioid overdose death rates followed up by Bristol, Suffolk and Barnstable.



Black, Non-Hispanic Opioid-Related Overdose Deaths by Community where Incident Occurred, 2020



Hispanic Opioid-Related Overdose Deaths by Community where Incident Occurred, 2020



Change between 2019 and 2020 in Opioid-Related Overdose Deaths by Community of Incidence and Race

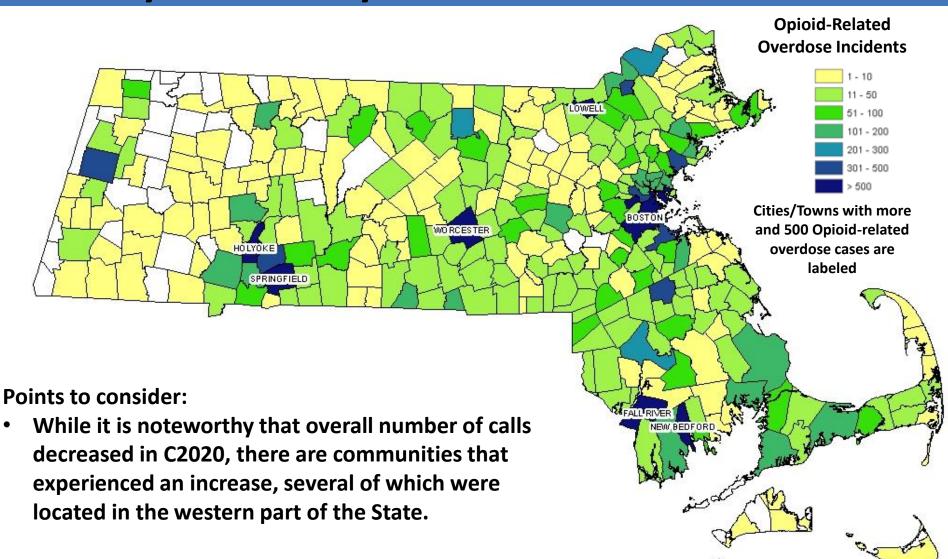
City/Town	Overall		% Change	Black, Non Hispanic		% Change	Hispanic		% Change	White/ Other		% Change
	2019	2020		2019	2020		2019	2020		2019	2020	
Boston	258	311	21%	51	87	71%	52	58	12%	155	166	7%
Brockton	63	80	27%	10	21	110%	6	6	0%	47	53	13%
Worcester	144	125	-13%	7	12	71%	26	25	-4%	111	88	-21%
Springfield	103	114	11%	10	8	-20%	31	50	61%	62	56	-10%
Overall for MA	2010	2037	1%	123	190	55%	269	297	10%	1618	1550	-4%

Opioid-Related Overdose Incidents Responded to by EMS by Community Where Incidents Occurred

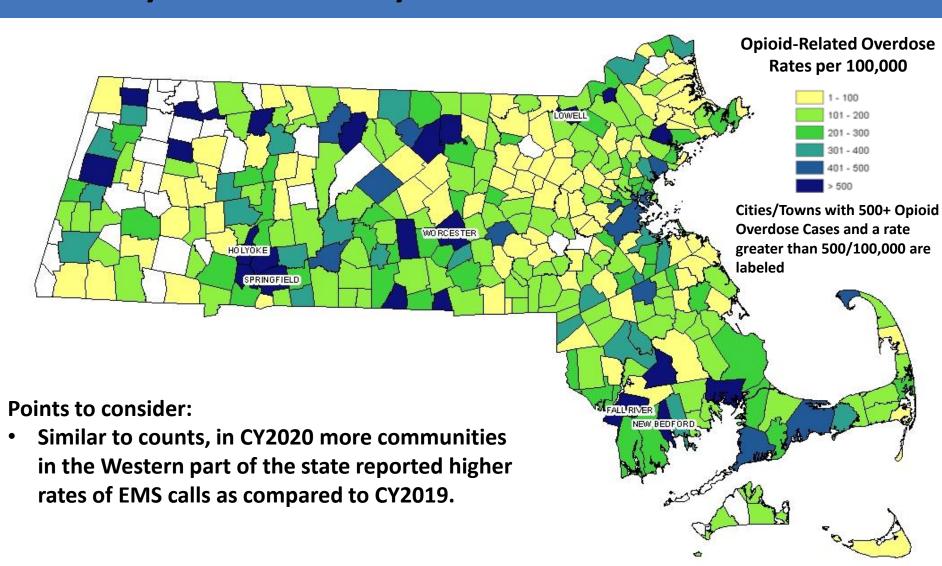
Opioid-Related Overdose Incidents by Community Where Incidents Occurred

- The following four maps show Opioid-related overdose incidents by community where the incident occurred for CY2019 and CY2020 by:
 - Actual counts of overdose incidents
 - Towns with over 500 incidents are labeled
 - Rates per 100,000 population
 - Cities/Towns with 500+ Opioid Overdose Cases **and** a rate greater than 500/100,000 are labeled
- Data for Opioid-related overdoses incidents were sourced from the 2021 Q1 Opioid Overdose Quarterly Report

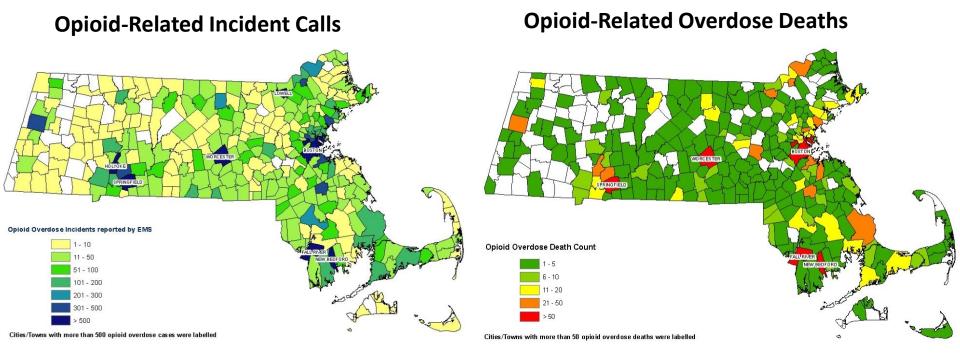
Opioid-Related Overdose EMS Incidents CY2020 by Community where Incident Occurred



Opioid-Related EMS Overdose Incident Rates CY2020 by the Community where Incident Occurred



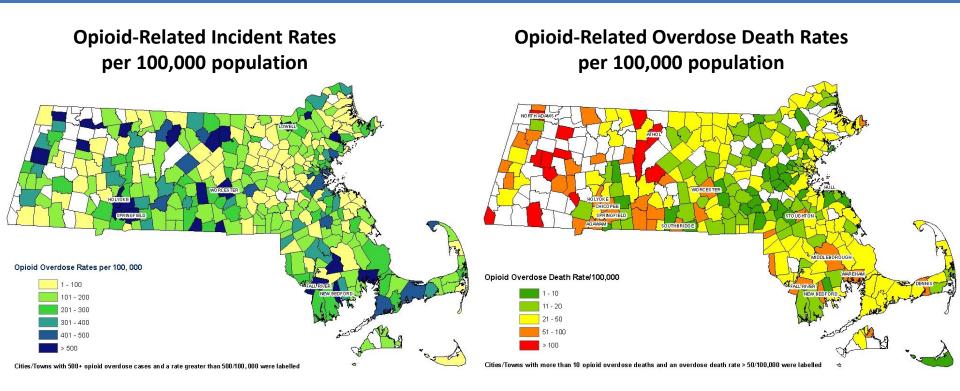
Opioid-Related EMS Overdose Incident Calls and Opioid-Related Overdose Deaths - CY2020



Points to consider:

 There is an observed relationship between the total number of EMS calls and overdose deaths within each community, in spite of the EMS calls being based on the community of incident and the overdose deaths being reported by community of residence.

Opioid-Related Overdose Incidents and Death Rates, CY2020

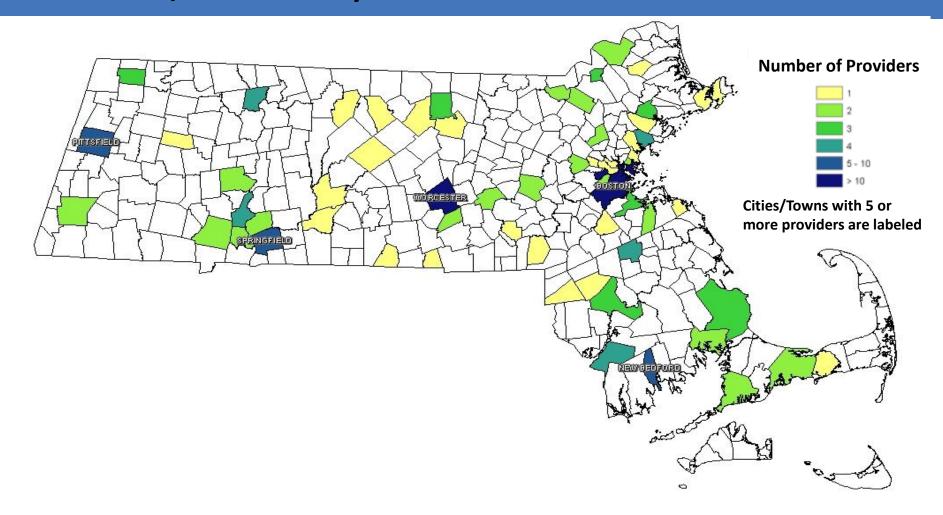


Points to consider:

 Here also we see a relationship between areas of the state that reported high overdose death rates and overdose-related EMS calls, but using this map it is difficult to determine which communities had comparable calls in comparison to their overdose deaths.

Distribution of Opioid Addiction Treatment Providers by City/Town									
Funded and/or Licensed by the Bureau of Substance Addiction Services									

Distribution of Opioid Addiction Treatment Providers Funded and/or Licensed by the Bureau of Substance Addiction Services



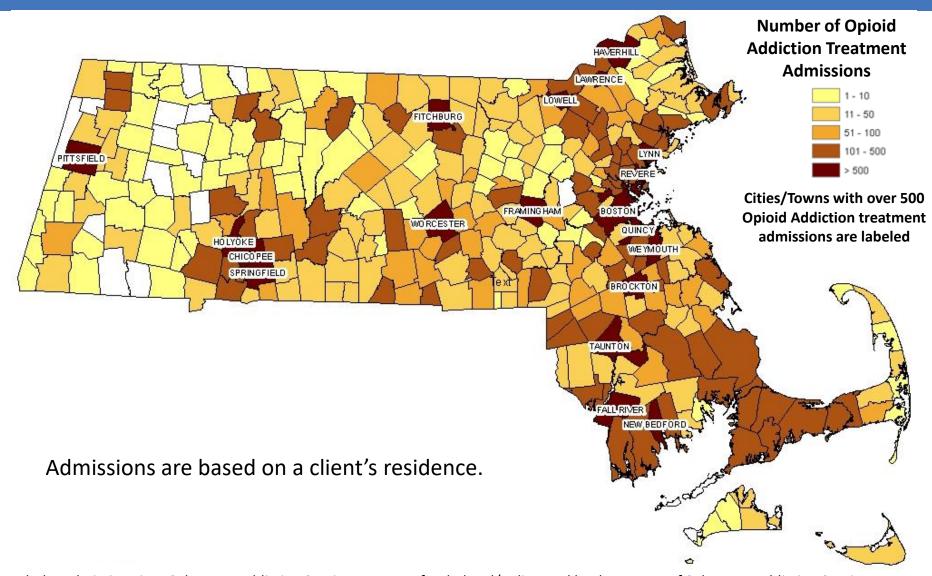
Utilizations of Substance Addiction Treatment Services by Community of Client Residence

Bureau of Substance Addiction Services Treatment Data

- Admissions records are from Bureau of Substance Addiction Services licensed and/or -funded substance addiction treatment programs only.
- "Admissions" refer to the number of new enrollments to substance addiction treatment services during the calendar year.
- CY2020 utilization rates decreased as compared to previous years due to COVID-19 restrictions. CY2019 data were used for generating the utilization maps.
- Rates were calculated using 2019 Census data.

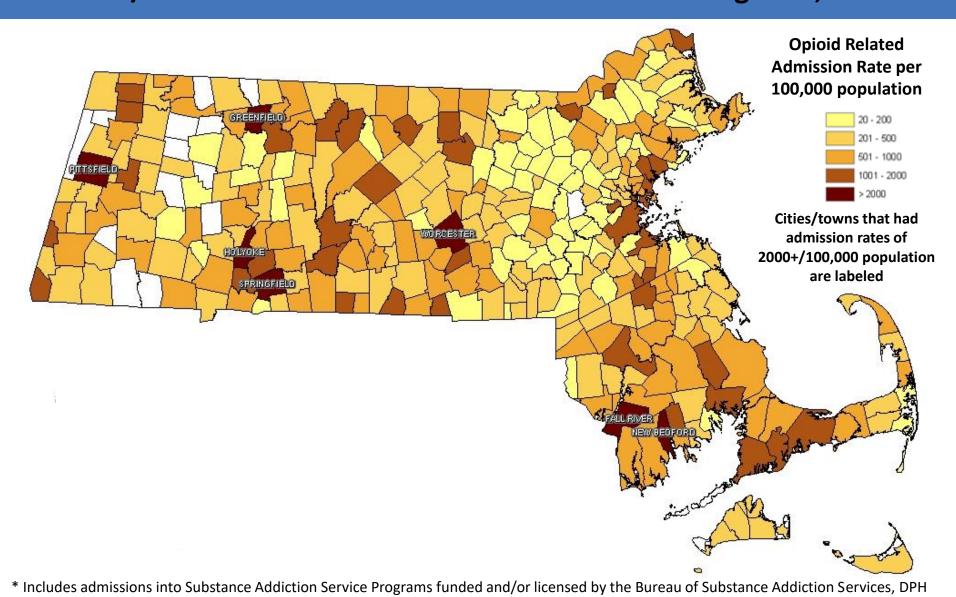
Source: Treatment statistics prepared by the Office of Statistics and Evaluation, Bureau of Substance Addiction Services, Massachusetts Department of Public Health on 6/1/2021 with data as of 4/30/2021.

Admissions for Patients with Opioid Use Disorder into BSAS Funded/Licensed Substance Addiction Treatment Programs, CY2019



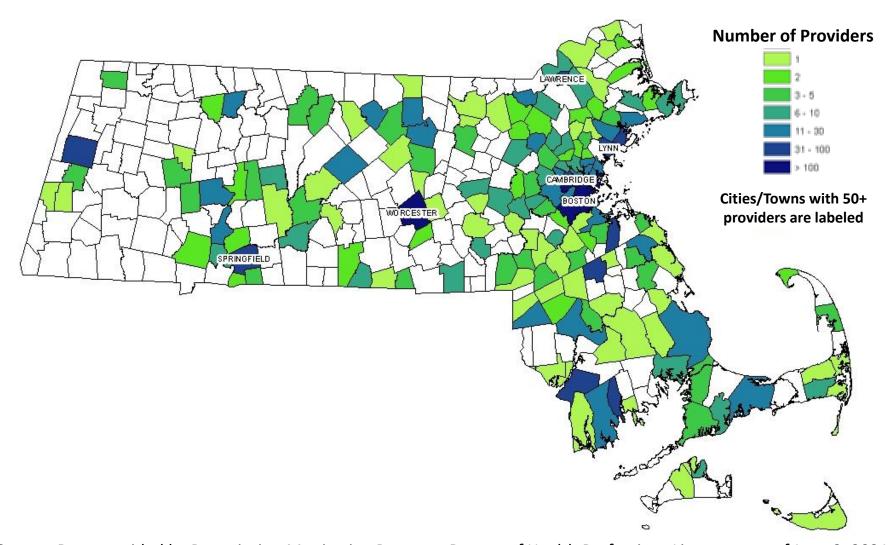
^{*} Includes admissions into Substance Addiction Service Programs funded and/or licensed by the Bureau of Substance Addiction Services, DPH

Rates of Admissions for Patients with Opioid Use Disorder into BSAS Funded/Licensed Substance Addiction Treatment Programs, CY2019



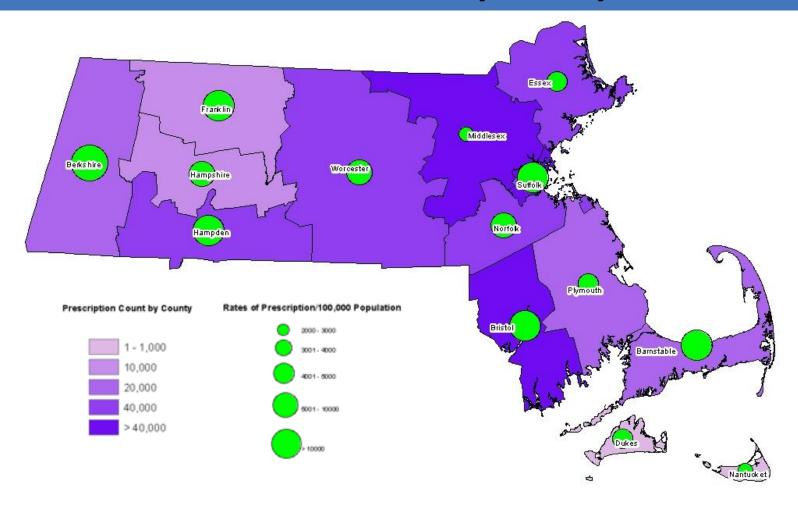
Distribution of DEA Waivered Providers and Number of Prescriptions by County

Distribution of DEA Waivered Providers Who Prescribe Buprenorphine for Substance Use Disorder



Source: Data provided by Prescription Monitoring Program, Bureau of Health Professions Licensure, as of June 3, 2021.

Prescriptions for Buprenorphine for Addiction Treatment, Counts and Rates by County



Source: Data provided by Prescription Monitoring Program, Bureau of Health Professions Licensure, as of June 3, 2021. Prescriptions are by the provider's county and include data from January 1- June 3, 2021.

Utilization of Opioid Addiction Treatment Services and Opioid Overdose-Related Deaths by Community of Residence

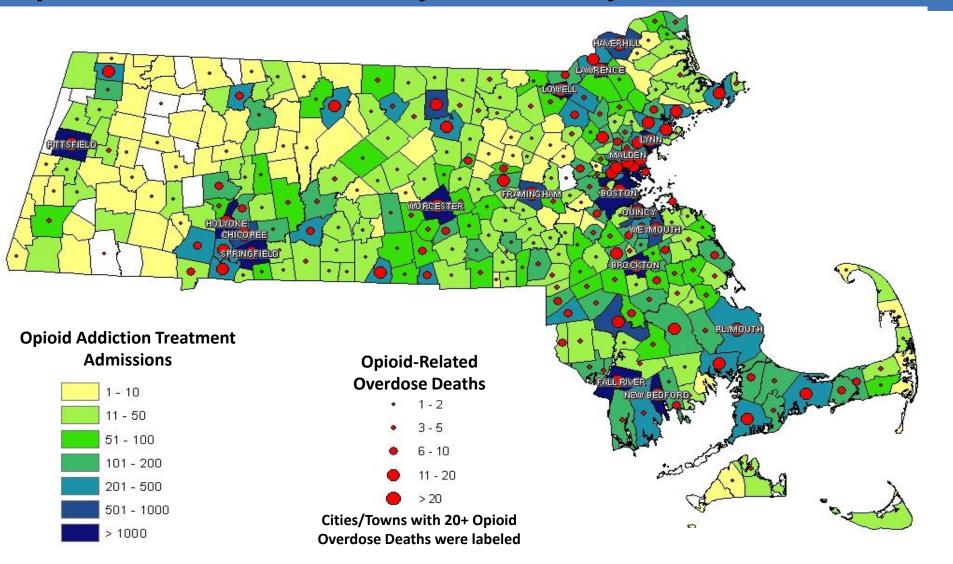
Utilization of Opioid Addiction Treatment Services and Opioid Overdose Deaths by Community of Residence

 The following slides show Opioid-Related Overdose Deaths by community of residence overlayed by Utilization of Opioid Addiction Treatment Services

Sources:

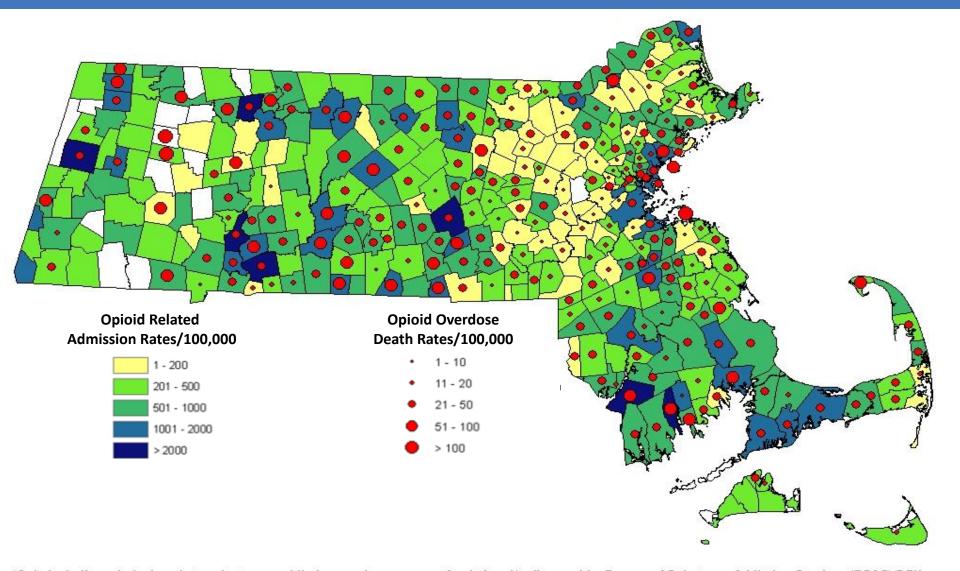
- Data for overdose deaths were sourced from the 2021 Q1
 Opioid Overdose Quarterly Report
- Treatment statistics prepared by the Office of Statistics and Evaluation, Bureau of Substance Addiction Services, Massachusetts Department of Public Health on 6/1/2021 with data as of 4/30/2021.

Opioid Addiction Treatment Admissions CY2019 and Opioid Overdose Deaths by Community of Residence CY2020



^{*} Includes admissions into Substance Addiction Service Programs funded and/or licensed by the Bureau of Substance Addiction Services, DPH

Opioid-Related Treatment Admission Rates and Opioid-Related Overdose Death Rates by Community of Residence, CY2019



^{*}Only including admissions into substancce addiction service programs funded and/or licensed by Bureau of Substance Addiction Services (BSAS)/DPH

Next Steps and Caveats

Caveats

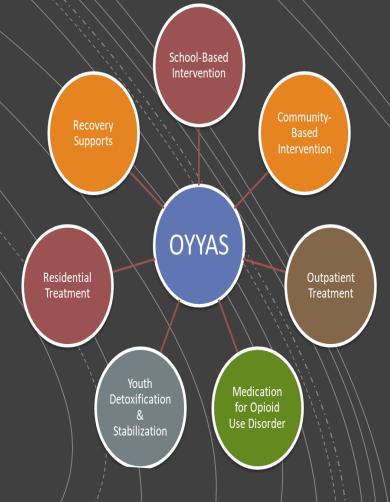
- Treatment data from providers without a BSAS contract not included in the utilization maps
- OTP data is incomplete due to capacity and/or structural issues
- Other Data Capabilities
 - Further analysis of treatment utilization and overdose deaths by race/ethnicity
 - Access to additional utilization data from other sources
 - County level analysis and maps
 - Develop an indicator based framework that incorporates additional and more complete addiction treatment data to systematically identify gaps in the utilization by county

Future Steps

 Collecting Distance to OTP treatment through Central Registry to identify gaps in OTP services

The BSAS Office of Youth & Young Adult Services

- Offers a full continuum of services including Community & School-based Intervention, Outpatient Treatment, Residential Services and Recovery Supports for Youth and Young Adults (8-26).
- Mission: To promote personal and family growth by ensuring youth and young adults experiencing substance use and co-occurring disorders have access to developmentally appropriate, culturally responsive, traumainformed services and supports.



In June 2019, BSAS released *Opioid Use Among Adolescents & Young Adults: Toolkit for Pediatric & Primary Care Providers.*

- This toolkit was developed specifically for pediatric, primary care, and other health professionals treating adolescents and young adults within their medical practice. This document is currently being updated to include new regulations and protocols.
- https://massclearinghouse.ehs.state.ma.us/P ROG-BSAS-YTH/SA5829.html

At the same time, BSAS and its supporting partners drafted and released the *MAT Practice Guidance Summary*.

- The aim of this document is to enable service providers at all levels to better engage, retain, and support adolescents (ages 16-17) in the treatment process.
- https://massclearinghouse.ehs.state.ma.us/P ROG-BSAS-YTH/SA5843.html

