



Governor Raimondo's Task Force on Overdose Prevention and Intervention

January 8, 2020

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WELCOME & ANNOUNCEMENTS



Rhode Island Emergency Medical Services (EMS) Data: Analyses and Heat Mapping of Opioid Overdose Activity

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Governor's Overdose Prevention and Intervention Task Force

January 8, 2020

Rhode Island EMS



- While on the scene, EMS providers respond to patients and collect detailed incident information.
- EMS providers submit information within two hours of completion of the incident to the ***Rhode Island Emergency Medical Services Information System (RI-EMSIS)***.*



* Rhode Island's regulations on Electronic Patient Care Reports (ePCR) can be found [here](#).

Identifying and Analyzing Opioid Overdoses



In 2017, RIDOH used EMS data to develop a case definition to identify opioid overdoses based on:

1. Primary/secondary impressions of the patient
2. Medication(s) administered to the patient
3. Patient's response to medication(s) administered
4. Mention of naloxone and an "unresponsive" term used in the EMS narrative report
5. Mention of "naloxone given" to the patient prior to EMS arrival

Note: The Enhanced States Opioid Overdose Surveillance (ESOOS) Case Definition for Emergency Medical Services (EMS) is available on health.ri.gov

Naloxone Administration by EMS



- Naloxone administration **does not** always indicate that an opioid overdose occurred.

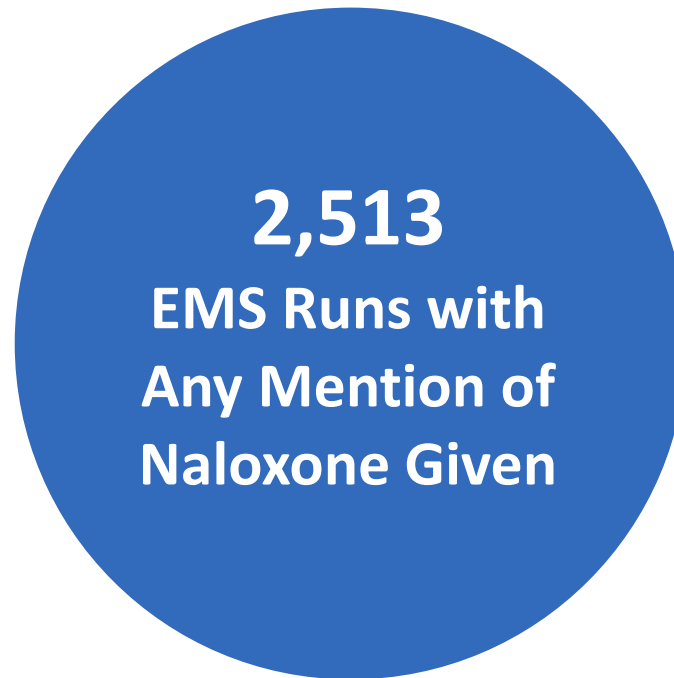
Naloxone ≠ Opioid Overdose

- Considered a “standard order” for altered mental status and if drug ingestion is suspected or unknown.
- An important component of an EMS resuscitation attempt for opioid overdose.

Counts of EMS Runs that Mention the Use of Naloxone, 2018



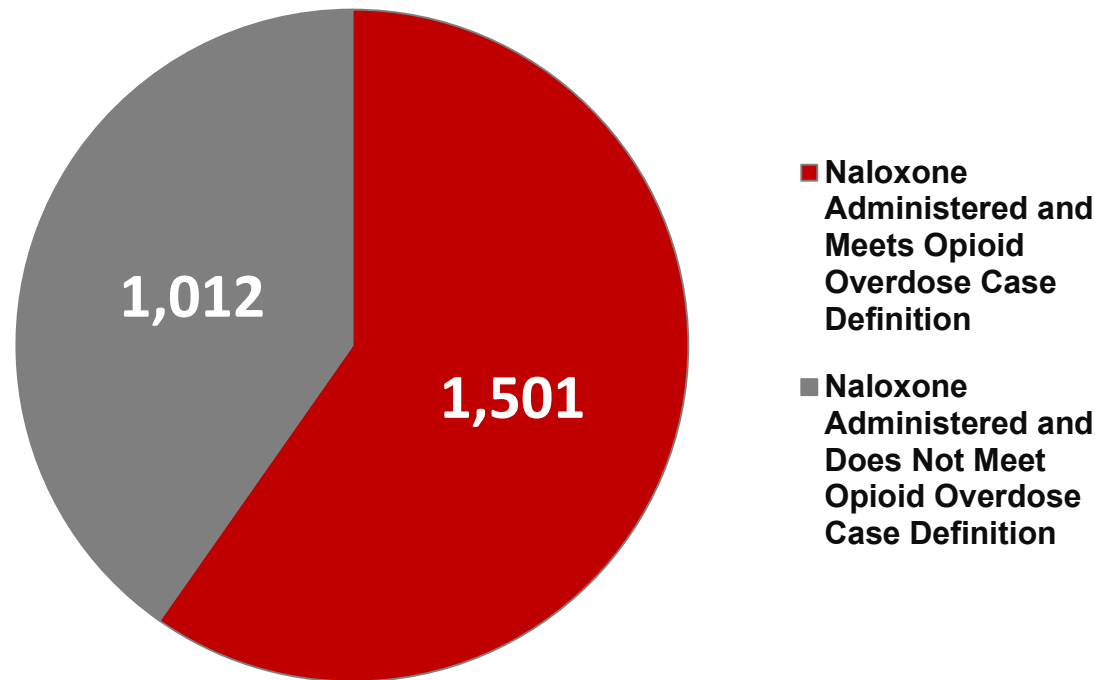
The number of opioid overdose-related EMS runs varies greatly based on the case definition.



Counts of EMS Runs that Mention the Use of Naloxone, 2018



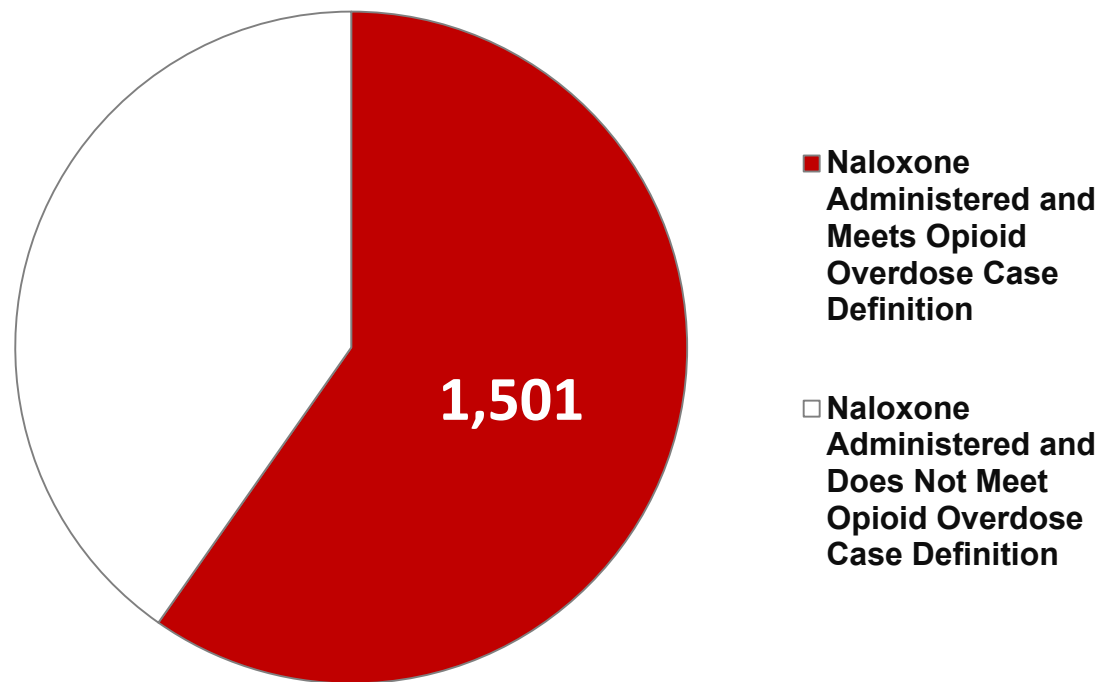
The number of opioid overdose-related EMS runs varies greatly based on the case definition.



Counts of EMS Runs that Mention the Use of Naloxone, 2018



The number of opioid overdose-related EMS runs varies greatly based on the case definition.



What Do EMS Data Tell Us?



1. Repeat opioid overdoses
2. Incident location type (e.g., public, private, or semi-private)
3. Rapid response heat mapping
4. Detailed geographic cluster analyses

Rhode Island EMS Data: Incidence of Repeat Opioid Overdoses



**In 2018, nearly 1 in 5
opioid overdose-related EMS runs
involved a person who experienced multiple
opioid overdoses within that same year.**



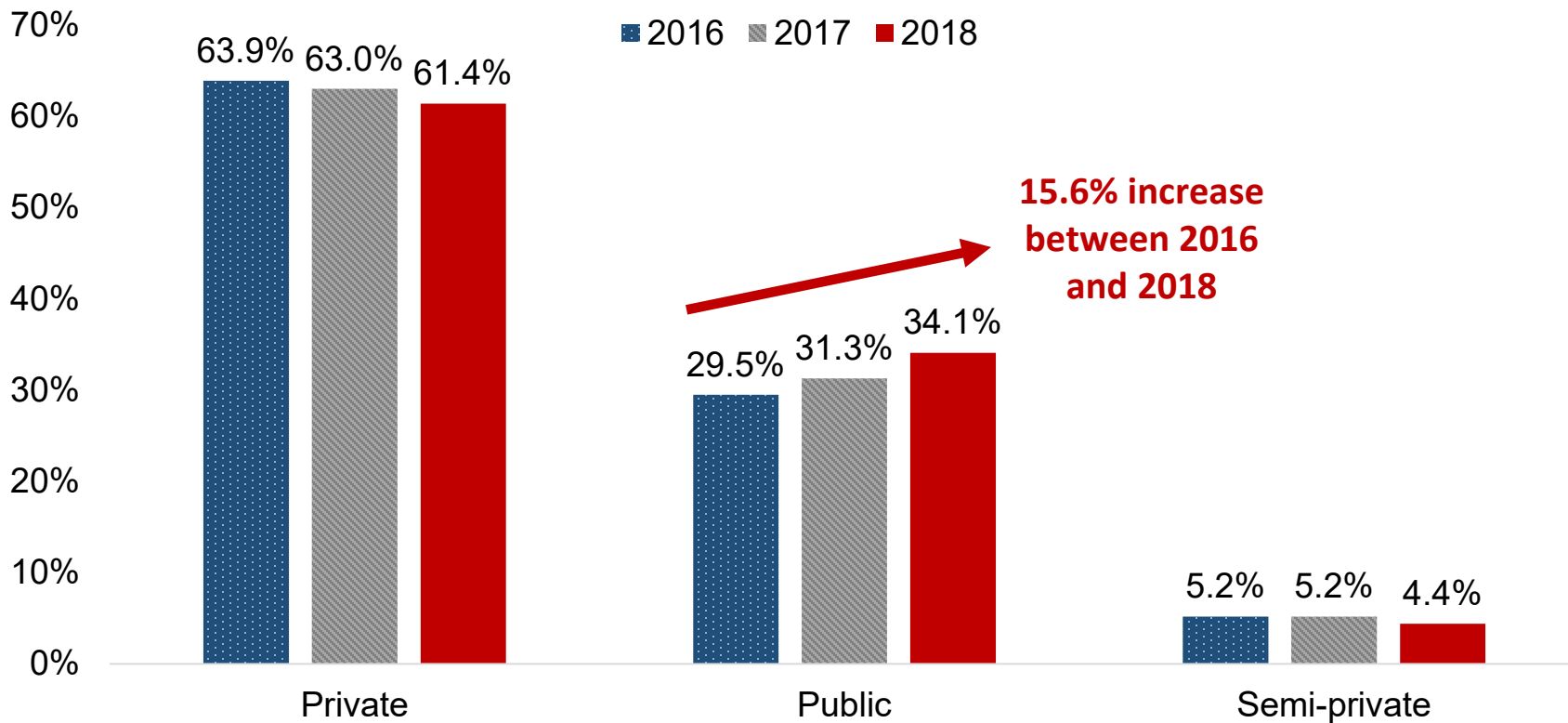
Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS)

Note: Analysis excludes records without valid name and date of birth

Rhode Island EMS Data: Incident Location Type



In Rhode Island, approximately 1 in 3 non-fatal opioid overdoses occurs in a public place. Between 2016 and 2018, the percent of opioid overdoses in public places increased by 15.6%.



Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS)

1917 2019

RHODE ISLAND MEDICAL JOURNAL



Rhode Island Department of Health

June 5

Did you know? In 2018, 1 in 3 opioid overdose calls in Rhode Island occurred in public places. If you were there, and had naloxone, you could help save a life. Always call 9-1-1 FIRST. Be prepared. Get naloxone and learn how to use it at any pharmacy. To learn more, visit PreventOverdoseRI.org.

Press Releases

New EMS Data Indicate Continued Need for Community Naloxone Use

New Rhode Island Department of Health (RIDOH) data indicate that more than a third of the opioid overdose calls to which Emergency Medical Services (EMS) responded in Rhode Island in 2018 occurred in public places. Public health leaders are again urging all Rhode Islanders who are comfortable doing so to carry naloxone, the overdose reversal medication.

The data, published on March 1, 2019 in the Rhode Island Medical Journal, indicate that 34.2% of the opioid overdoses that EMS responded to in 2018 occurred in public places. That figure was 29.6% in 2016. Examples of public places include streets, parking lots, restaurants, stores, and beaches.

"Naloxone can be purchased over the counter at pharmacies throughout Rhode Island, and it

State Health Officials Encourage People to Carry Naloxone

Health officials are encouraging Rhode Island residents to carry an overdose-reversal medication because of the number of opioid overdoses that occur in public places.

March 11, 2019

PROVIDENCE, R.I. (AP) – Health officials are encouraging [Rhode Island](#) residents to carry an overdose-reversal medication because of the number of opioid overdoses that occur in public places.

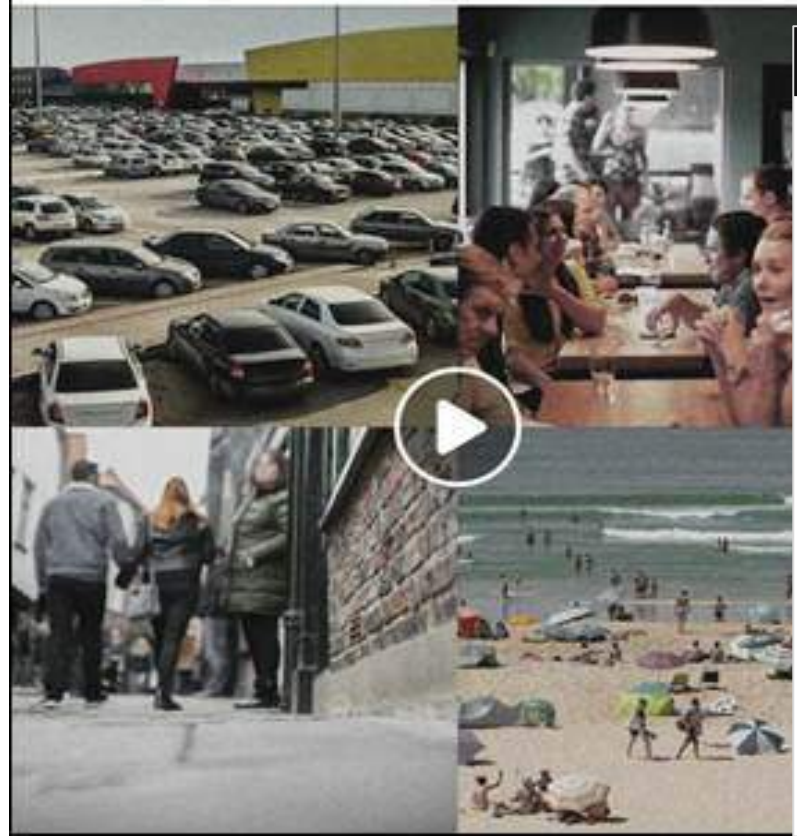
The state Department of Health said Monday that about 34 percent of the opioid overdoses emergency medical personnel responded to in 2018 occurred in public places, such as streets, parking lots, restaurants, stores and beaches. That's up from 31 percent in 2017 and about 30 percent in 2016.

The department urged residents to carry naloxone, if they're comfortable doing so.

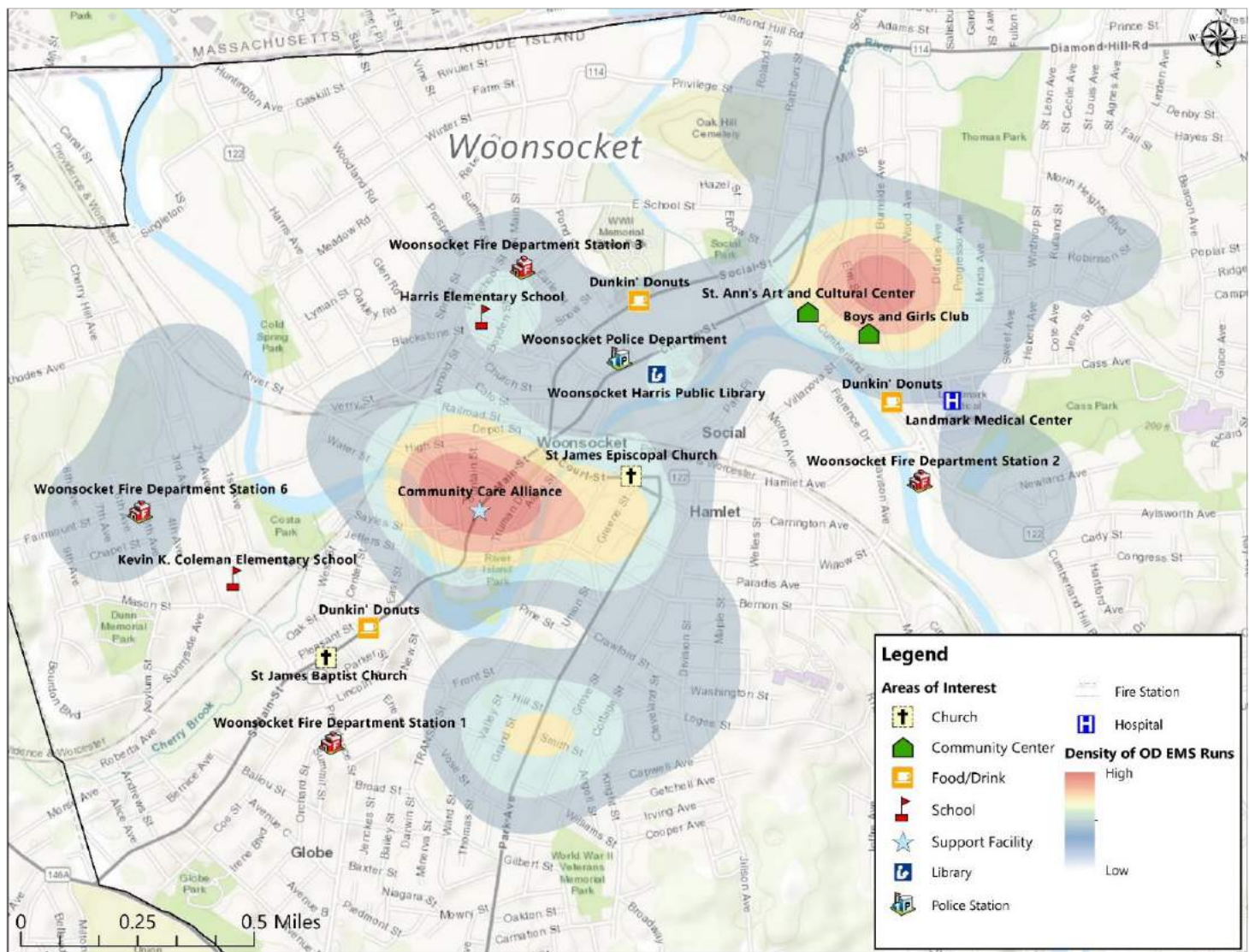
Health Director Nicole Alexander-Scott says naloxone is available over the counter at pharmacies throughout Rhode Island and it's easy to use.

Rhode Island saw a decrease in opioid-related overdose deaths for the first 10 months of 2018. The annual total will be available in a few weeks.

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Rhode Island EMS Data: Rapid Response Heat Mapping of Opioid Overdoses



Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS); April 1, 2019- June 16, 2019



Detailed Geographic Cluster Analyses of Opioid Overdoses: The 200-Meter Project

Purpose of the 200-Meter Project



- Geographic cluster analyses use RIDOH EMS data to identify locations where “clusters” of opioid overdose-related EMS runs occur.
- Identify and analyze overdose location types and surrounding areas.
- Inform community-level outreach, intervention, and communication efforts.

Cluster Analysis Process



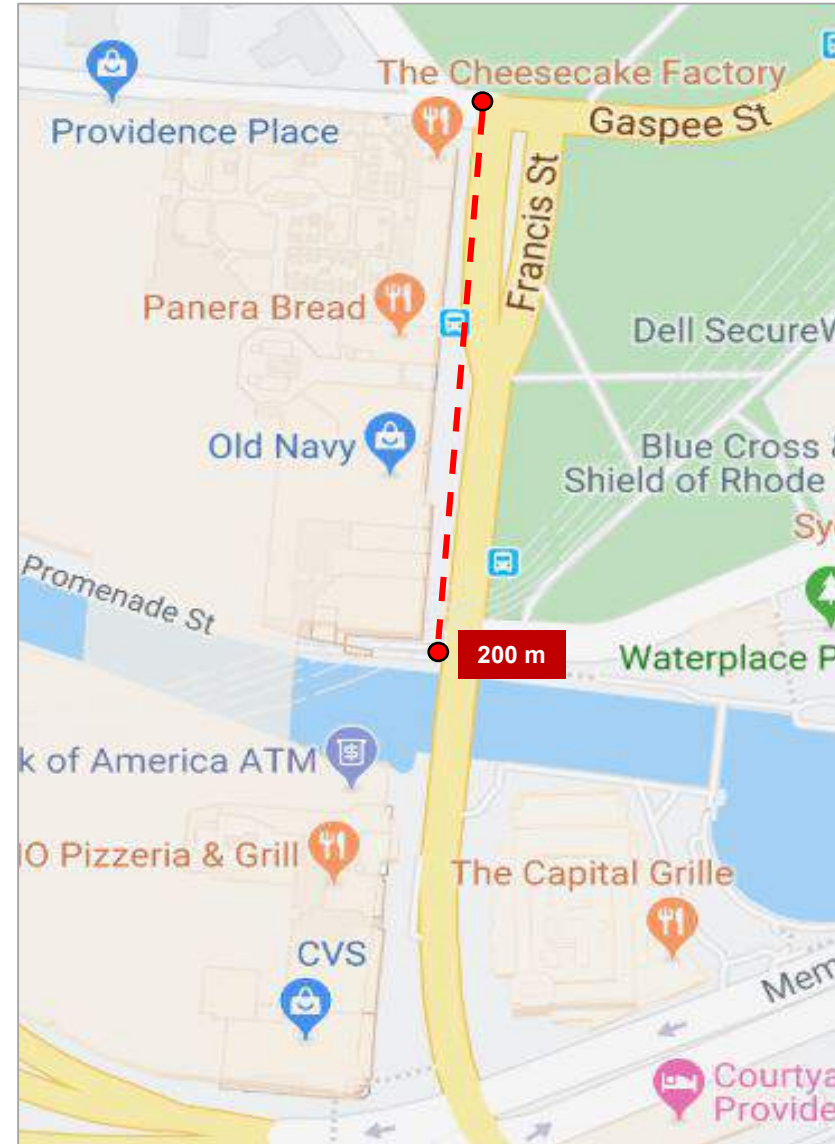
- Leverage RI-EMSIS data to map the incident locations of opioid overdose-related EMS runs from January 1, 2016 - June 30, 2019.
- Define clusters as having 22 or more opioid overdose-related EMS runs within a 200-meter radius.
- Analyze opioid overdose-related EMS incidents within each cluster and location type.

Note: There were 115 out of 5,493 EMS run locations during this timeframe that did not match and are not included in this analysis.

What Is the Significance of 200 Meters?



- Based on a similar study which assumes **200 meters** (approximately **656 feet**) is the distance a bystander would be willing to travel to rescue someone from overdosing.
- It takes about **2.5 minutes** to walk 200 meters.
- **Example:** Half the distance of the Providence Place Mall.

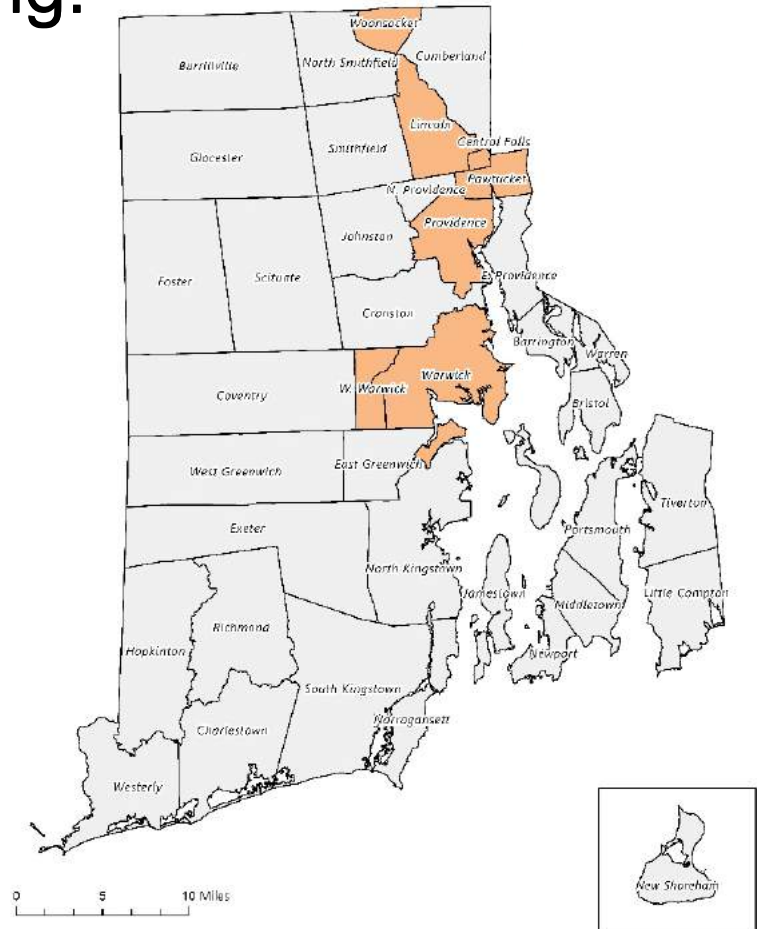


Analysis of Opioid Overdose-Related EMS Runs in Seven Municipalities



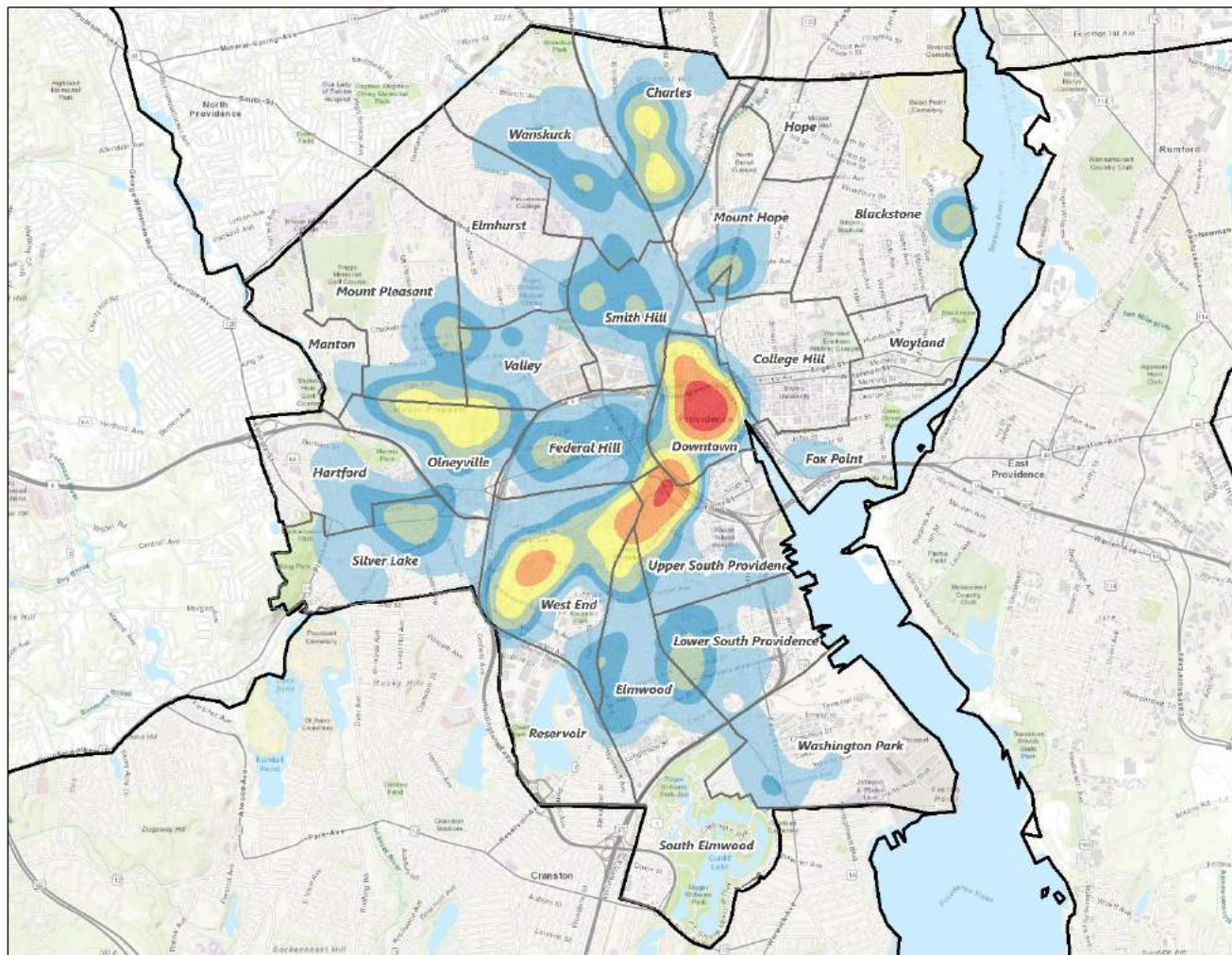
Municipalities with high clustering:

1. Central Falls
2. Lincoln
3. Pawtucket
4. **Providence**
5. Warwick
6. West Warwick
7. Woonsocket



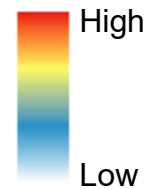
Note: High-burden cities, based on fatal and non-fatal overdose counts, include Cranston, Pawtucket, Providence, Warwick, and Woonsocket.

Density of Opioid Overdose-Related EMS Runs, Providence



Legend

Density of Opioid Overdose-Related EMS Runs

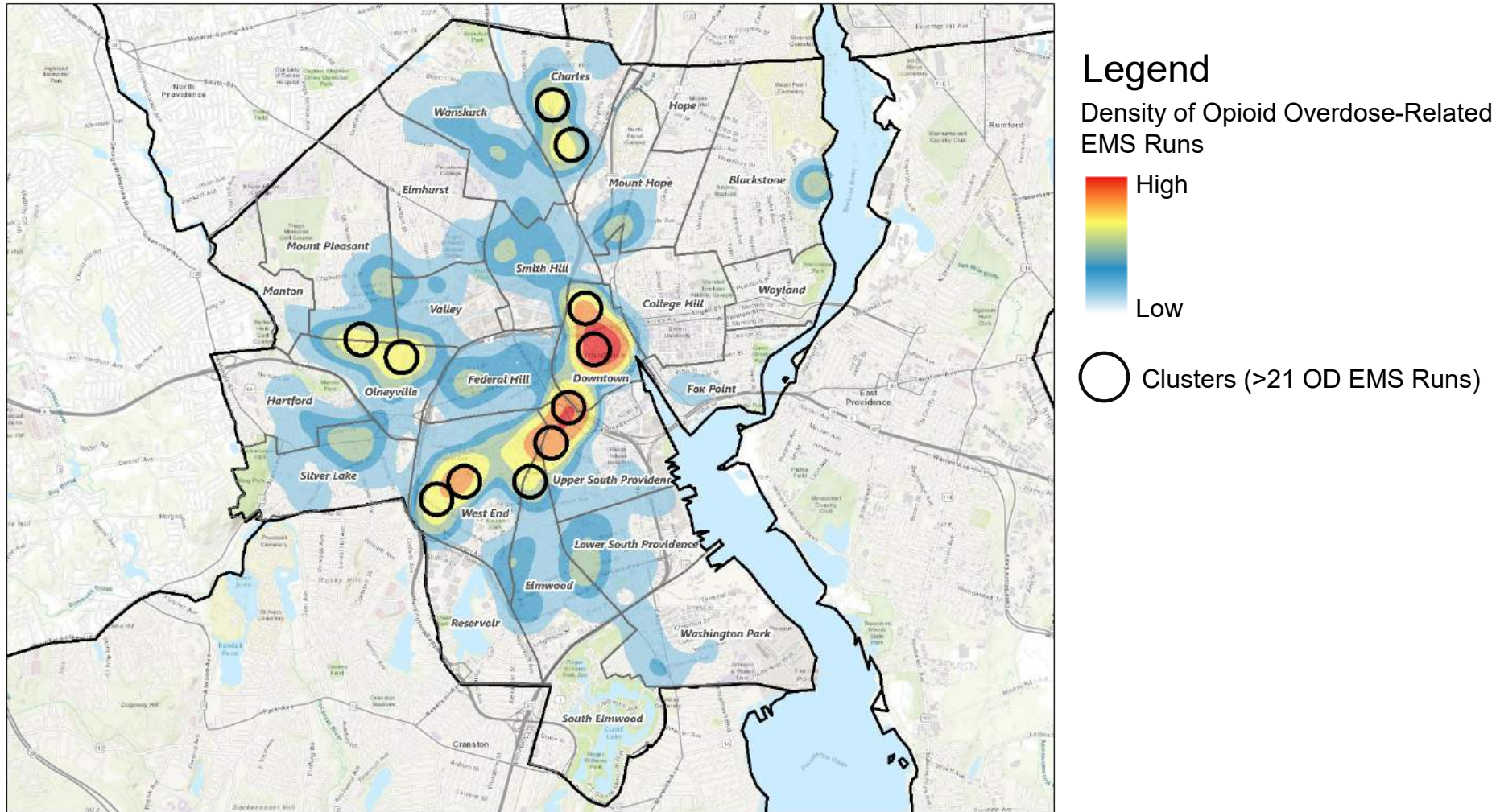


Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS); January 1, 2016- June 30, 2019

Density of Opioid Overdose-Related EMS Runs with Clusters, Providence



There are 11 clusters in Providence which refer to areas with 22 or more opioid overdose-related EMS runs within a 200-meter radius.



Legend

Density of Opioid Overdose-Related EMS Runs

High

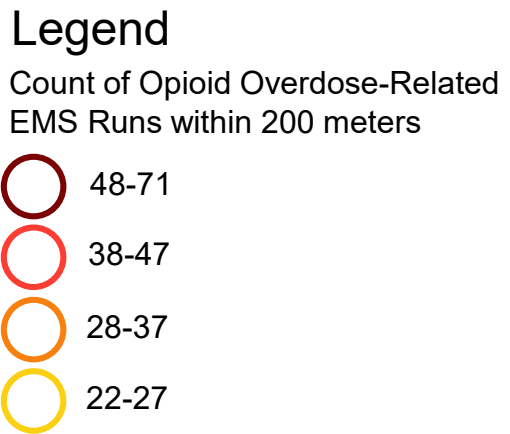
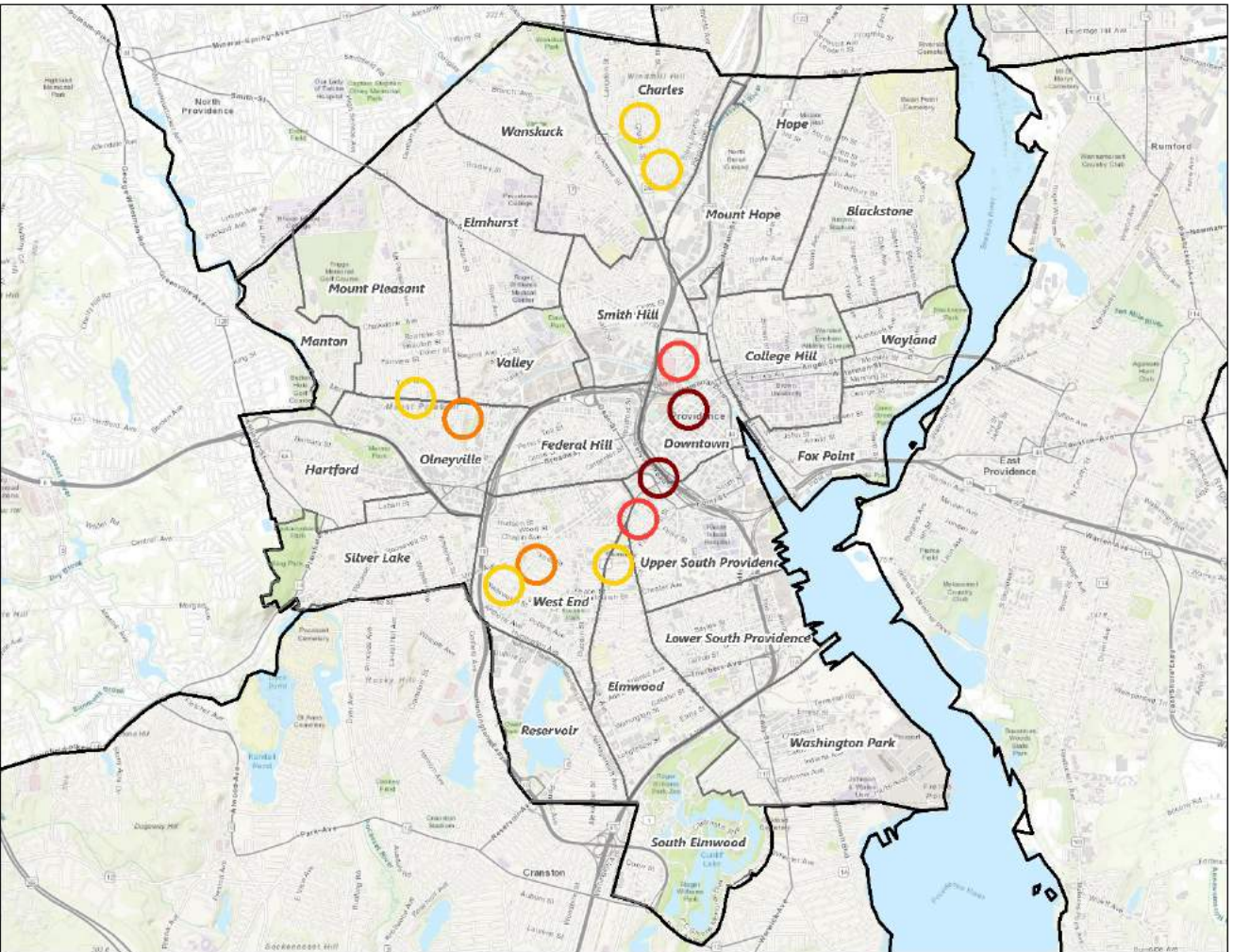
Low

Clusters (>21 OD EMS Runs)

Cluster Analysis of Opioid Overdose-Related EMS Runs, Providence



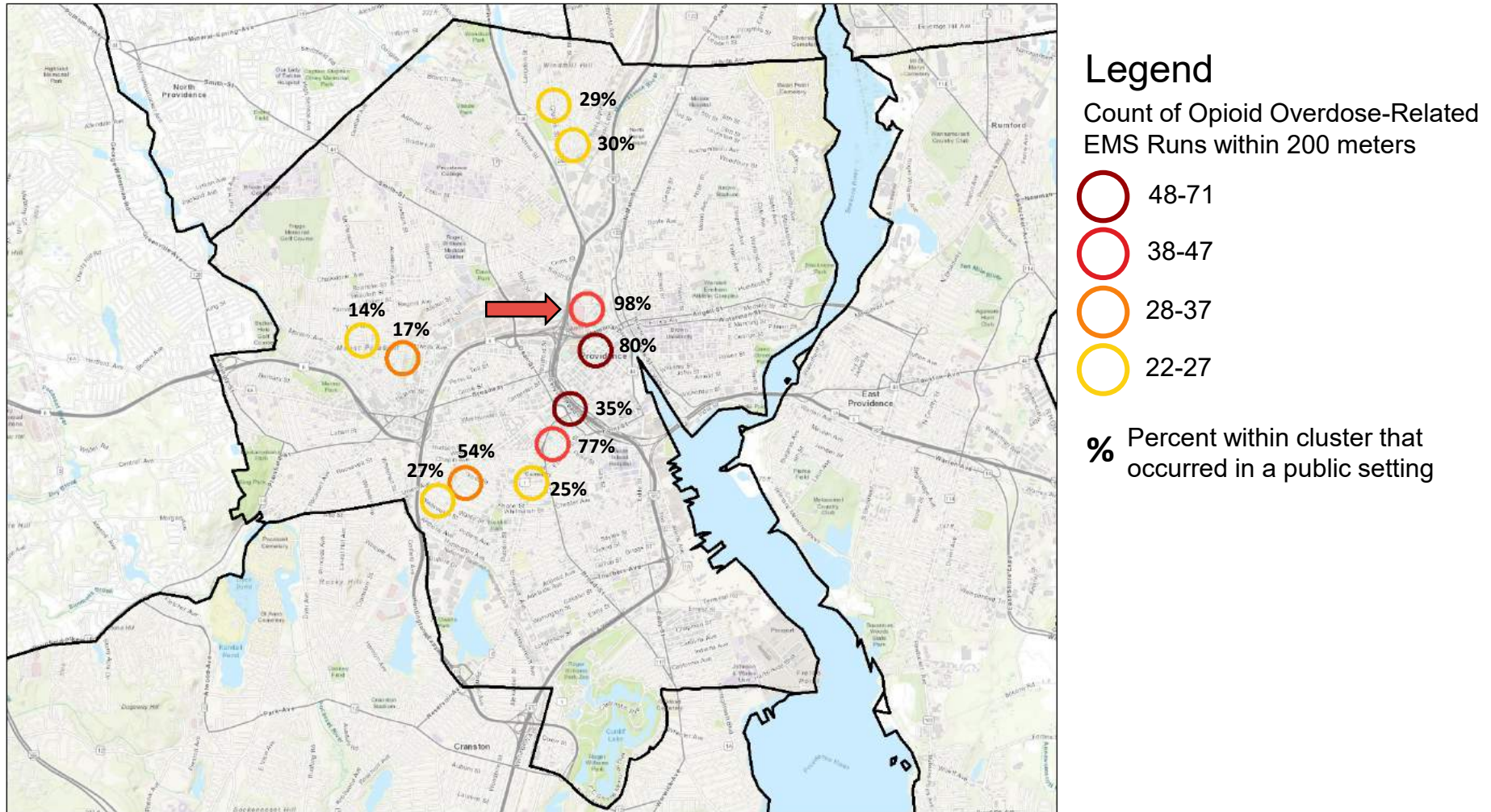
25% (390/1,532) of all incidents in this time frame occurred in one of the 11 clusters in Providence.



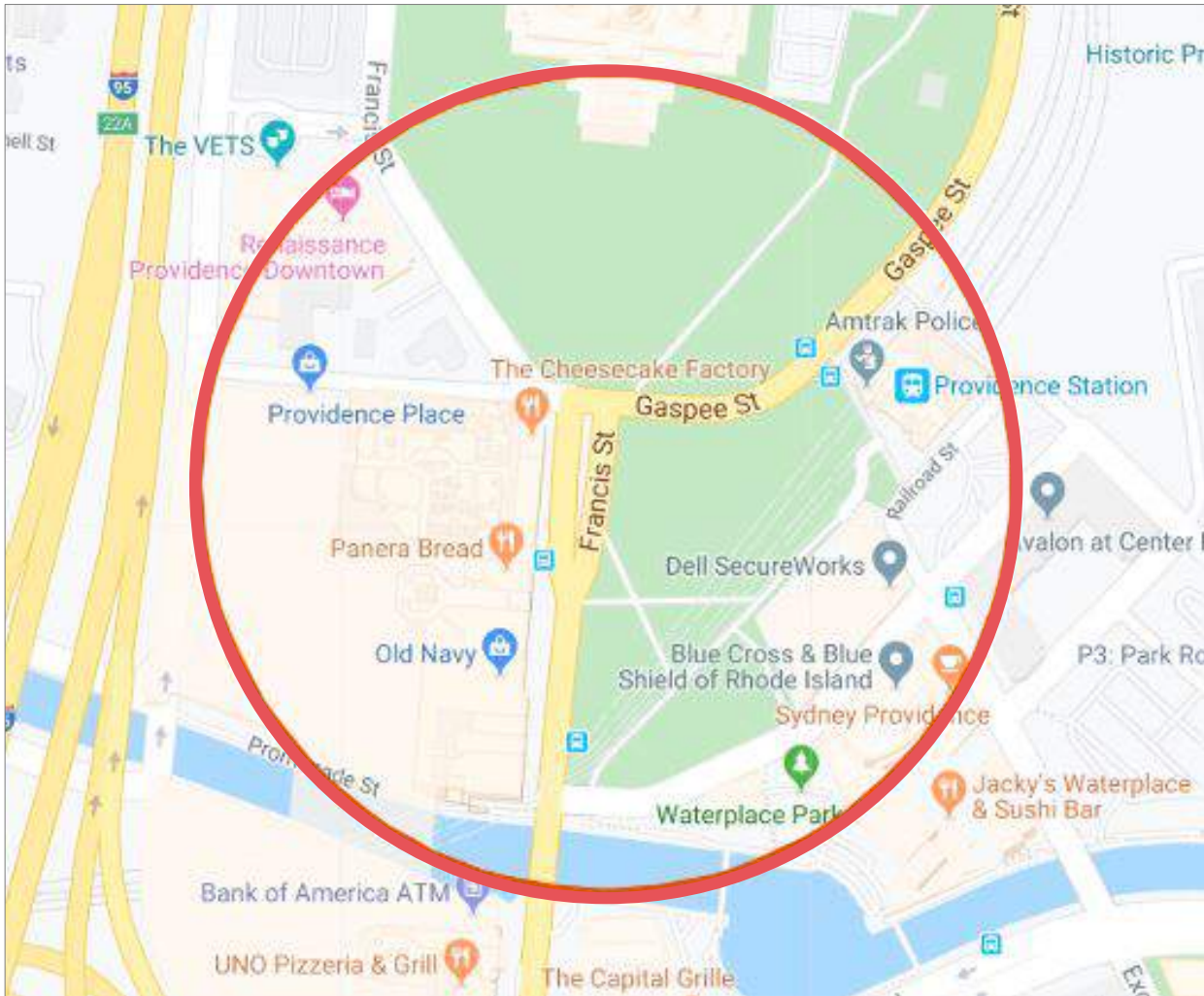
Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS); January 1, 2016- June 30, 2019

Percentages of Public Overdoses within Clusters, Providence

Of the 390 incidents occurring in Providence clusters, 52% of them occurred in a **public** setting.



Zoom Cluster with Highest Percentage of Public Overdoses, Providence



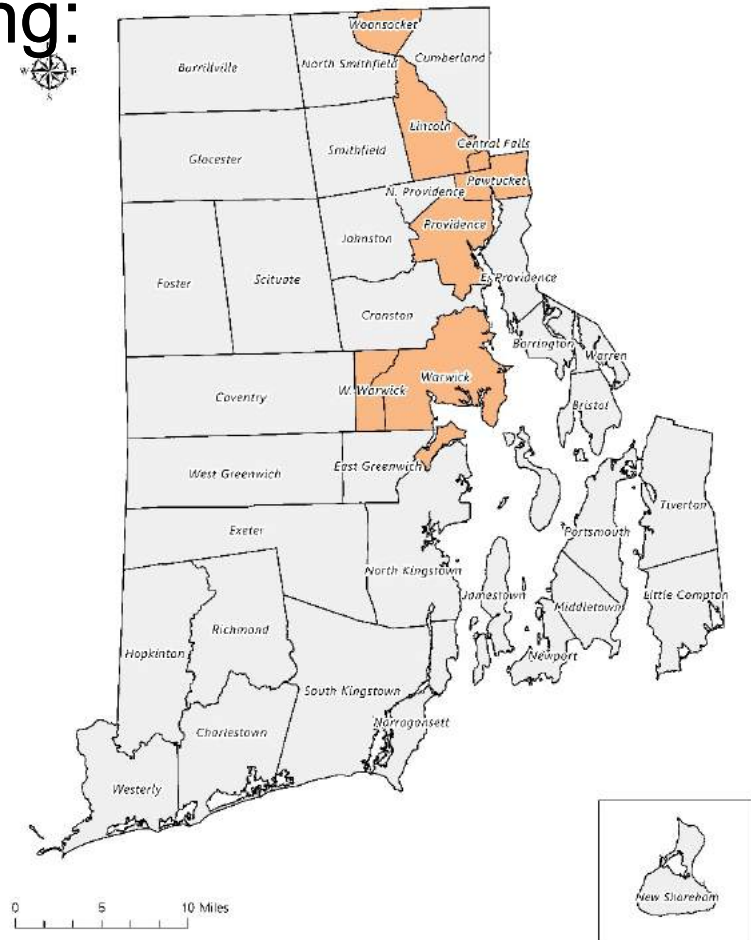
Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS); January 1, 2016- June 30, 2019
Note: Geographic locations indicated on this map identify general points of reference.

Analysis of Opioid Overdose-Related EMS Runs in Seven Municipalities



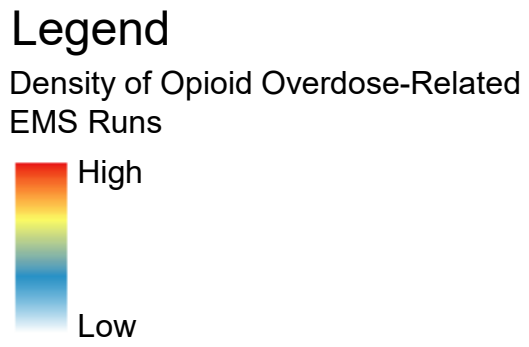
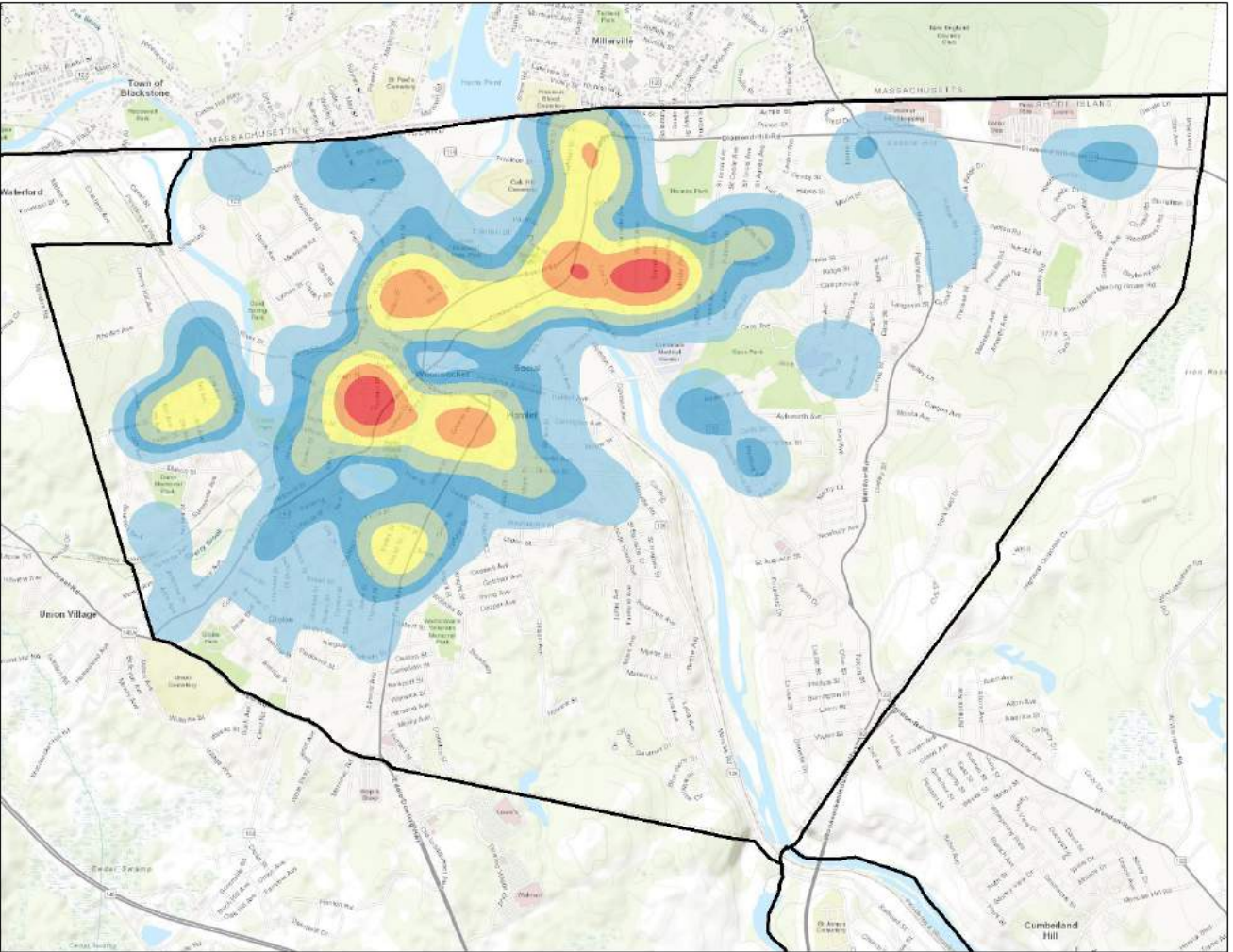
Municipalities with high clustering:

1. Central Falls
2. Lincoln
3. Pawtucket
4. Providence
5. Warwick
6. West Warwick
7. **Woonsocket**



Note: High-burden cities, based on fatal and non-fatal overdose counts, include Cranston, Pawtucket, Providence, Warwick, and Woonsocket.

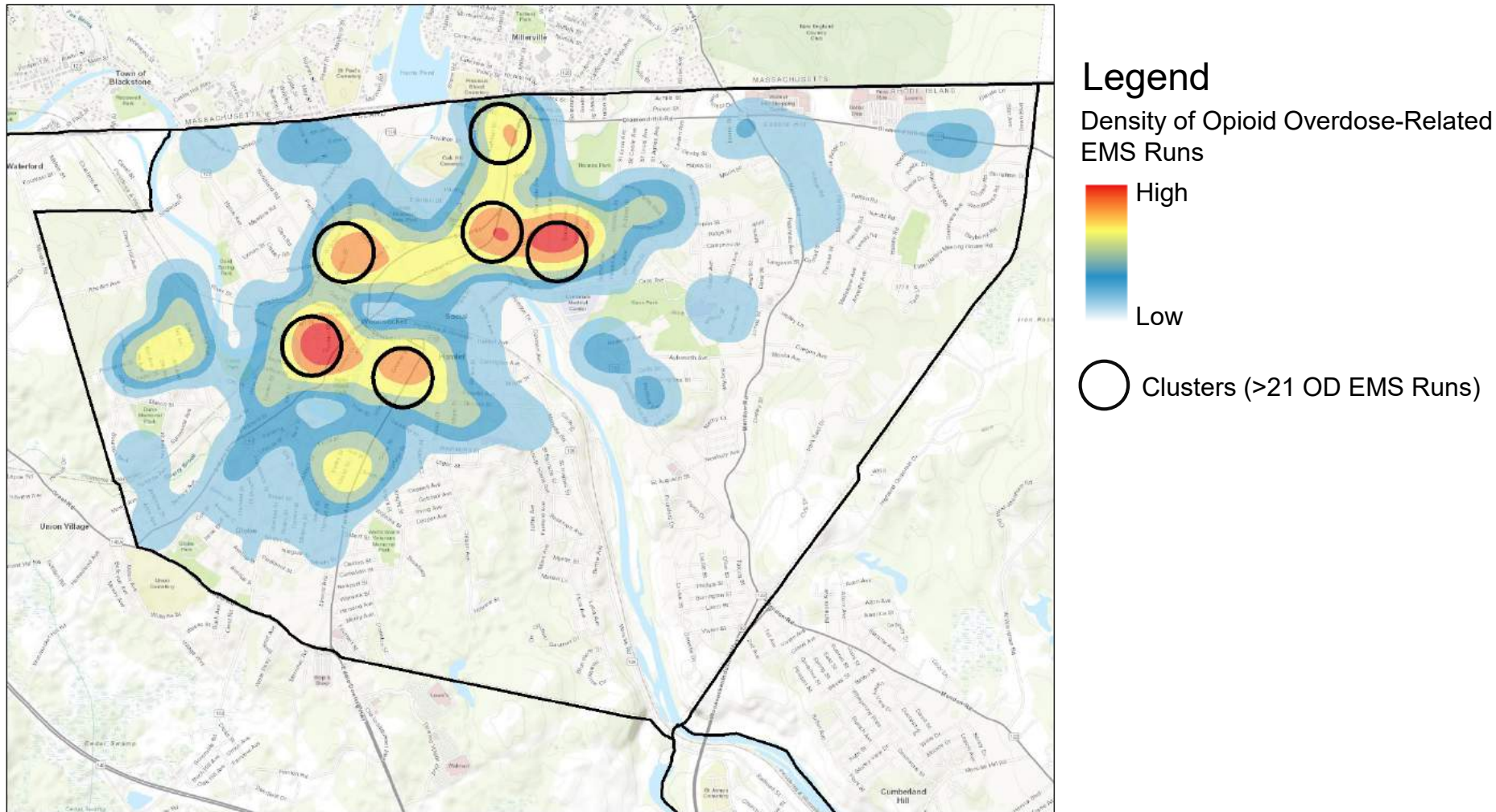
Density of Opioid Overdose Related EMS Runs, Woonsocket



Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS); January 1, 2016- June 30, 2019

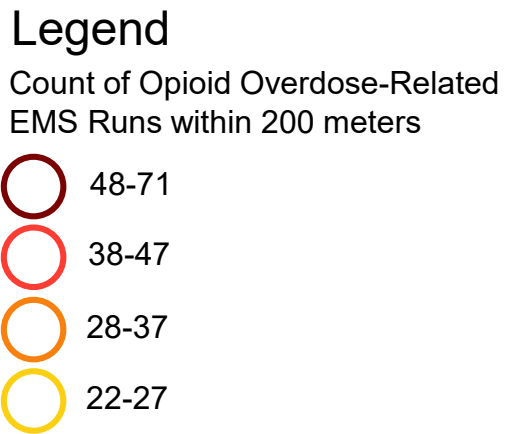
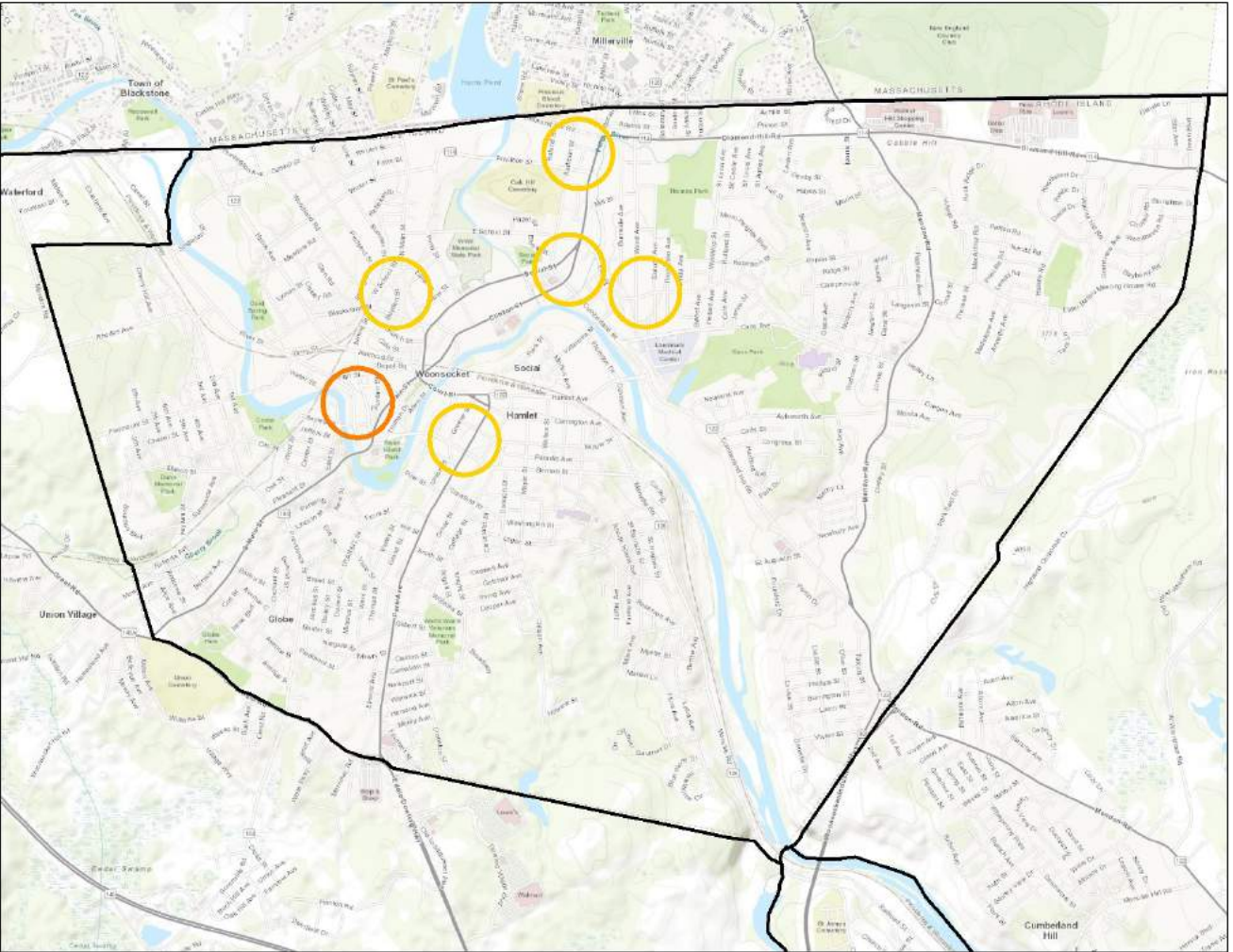
Density of Opioid Overdose Related EMS Runs with Clusters, Woonsocket

There are six clusters in Woonsocket which refer to areas with 22 or more opioid overdose-related EMS runs within a 200-meter radius.



Cluster Analysis of Opioid Overdose-related EMS Runs, Woonsocket

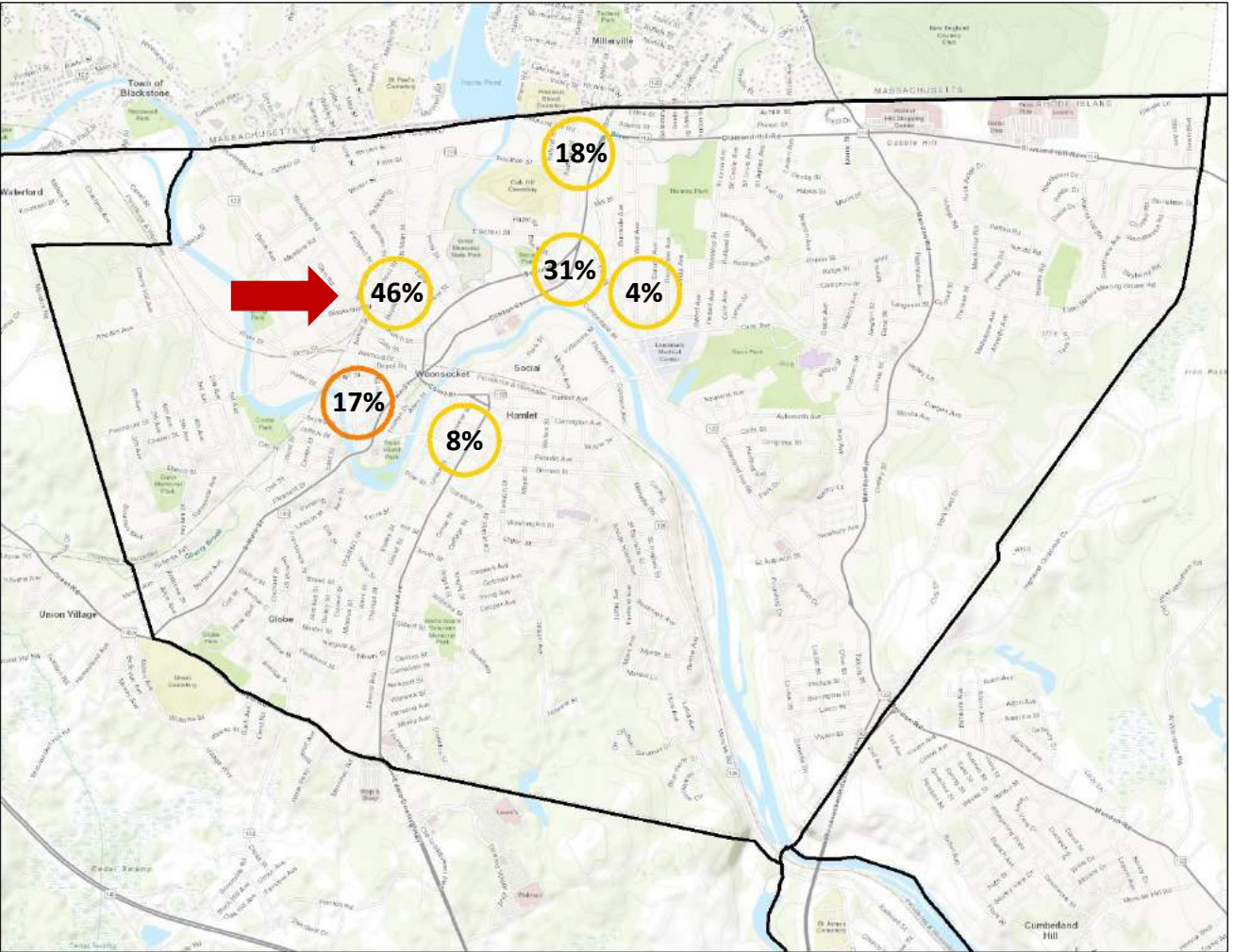
33% (160/481) of all incidents in this time frame occurred in one of the 6 clusters in Woonsocket.



Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS); January 1, 2016- June 30, 2019

Cluster Analysis of Opioid Overdose-related EMS Runs, Woonsocket

Of the 160 incidents occurring in Woonsocket clusters, 20% occurred in a **public** setting.



Legend

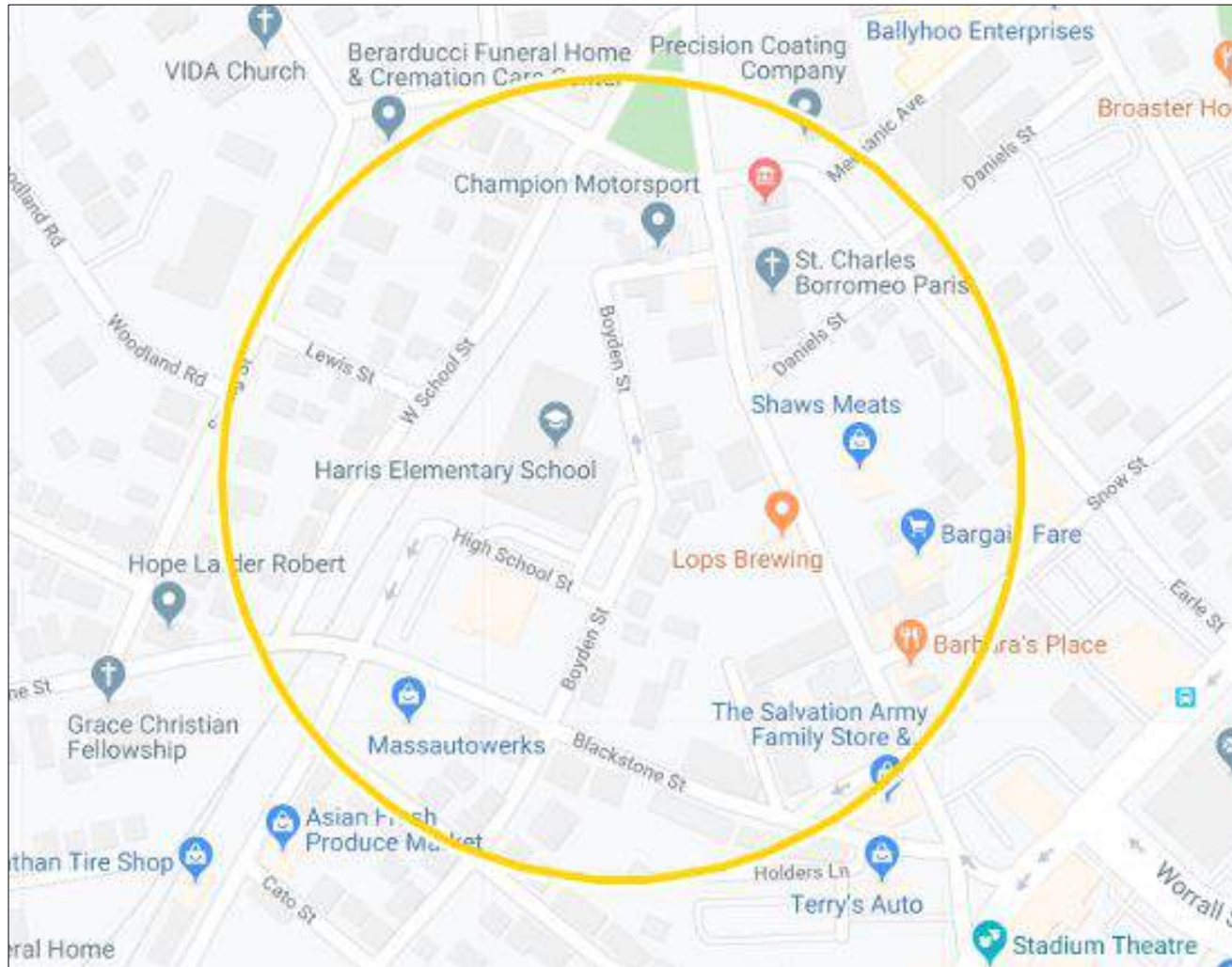
Count of Opioid Overdose-Related EMS Runs within 200 meters

- 48-71
- 38-47
- 28-37
- 22-27

% Percent within cluster that occurred in a public setting

Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS); January 1, 2016- June 30, 2019

Zoom Cluster with Highest Percentage of Public Overdoses, Woonsocket



Source: Rhode Island Emergency Medical Services Information System (RI-EMSIS); January 1, 2016- June 30, 2019
Note: Geographic locations indicated on this map identify general points of reference.

Geographic Cluster Analyses: Summary of Findings



- From January 1, 2016 to June 30, 2019, **seven Rhode Island municipalities displayed clustering** in opioid overdose-related EMS runs
- Within those seven municipalities, there were **25 clusters** that included a total of 763 opioid overdose-related EMS incidents.
- Within the 25 clusters, **44% (332/763) of incidents** occurred in a public setting. In two of the 25 clusters, more than 90% of incidents occurred in a public setting.

Note: There were 115 out of 5,493 EMS run locations during this timeframe that did not match and are not included in this analysis.

How Can We Use these Data to Inform Community-Level Response?



Leverage existing partnerships to plan and implement response efforts within identified clusters:

- Community Overdose Engagement (CODE) Planning Committees
- Health Equity Zones (HEZs)
- Rhode Island Regional Prevention Coalitions

Optimize resources within identified clusters:

- NaloxBox strategic placement and installation
- Community naloxone distribution
- Mobile and street outreach (i.e., treatment, peer recovery support specialists, harm reduction education, and needle exchange)

New Outreach Tool: Mobile-Compliant EMS Geographic Cluster Maps



- Interactive, digital maps can be viewed on Google Maps.
- Get a sense of where the clusters are located within neighborhoods.
- Excellent for conducting outreach or planning community-level interventions.
- Contact **Sarah.Karim@health.ri.gov** to access cluster map technical assistance.



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PUBLIC COMMENT

Task Force Work Groups

Are you interested in joining a Task Force work group? To learn more, contact a representative below:

- **Prevention:** Carol Stone, Carol.Stone@health.ri.gov; RIDOH
- **Rescue:** Jennifer Koziol, Jennifer.Koziol@health.ri.gov; RIDOH
- **Treatment:** Linda Mahoney, Linda.Mahoney@bhddh.ri.gov, and Jaime Bernard, Jaime.Bernard@bhddh.ri.gov; BHDDH
- **Recovery:** Linda Mahoney, Linda.Mahoney@bhddh.ri.gov; BHDDH
- **Harm Reduction:** Ryan Erickson, Ryan.Erickson@governor.ri.gov; Governor's Office
- **Family Task Force:** Trisha Suggs, Trisha.Suggs@bhddh.ri.gov; BHDDH
- **Substance Exposed Newborn (SEN) Task Force:** Margo Katz, Margo.Katz@health.ri.gov and Kristine Campagna, Kristine.Campagna@health.ri.gov; RIDOH
- **First Responder Task Force:** Matthew Moynihan, Matthew.Moynihan@risp.gov; Rhode Island State Police and Bryan Volpe, BVolpe@nehidta.org; Rhode Island Fusion Center
- **Cross-Cutting Workgroup:** Dennis Bailer, dbailer@weberrenew.org and Lily Rivera, lrivera@weberrenew.org; Project Weber/RENEW