

RHODE ISLAND GOVERNOR'S OVERDOSE PREVENTION AND INTERVENTION TASK FORCE



Rhode Island's Strategic Plan on Addiction and Overdose

Four Strategies to Alter the Course of an Epidemic

Final Report: November 10, 2015

Preface

Addiction and overdose are claiming lives, destroying families, and undermining the quality of life across Rhode Island. In 2014, 239 people in our state lost their lives to overdose, more than the number of homicides, motor vehicle accidents, and suicides combined. This is a strategic plan whose goal is to complement existing overdose prevention efforts to achieve the most immediate impact on addiction and overdose. The plan is focused on four critical, strategic initiatives. It is not meant to be comprehensive, and by design, must be flexible to adapt to changes in this dynamic epidemic. As such, it proposes a publicly visible online "dashboard" that will provide the public and policy makers with real-time data to gauge progress on this epidemic.

Opioid use disorder (referred to sometimes as opioid dependence and addiction) is a chronic relapsing disease that can develop with repeated exposure to opioids. There are strong genetic, situational, and societal factors that increase the risk of developing opioid use disorder. Untreated, it can be deadly. Opioid addiction is characterized by the development of tolerance (the need for an increasingly higher dose to achieve the same effect), and withdrawal (an extremely painful condition that occurs when people try to stop abruptly). During withdrawal, people feel as if they will die if they do not get an opioid. Fortunately, treatment for opioid addiction is effective and long-term recovery is possible.

For over a decade, opioid dependence and accidental drug overdose have been growing problems across the United States, and Rhode Island has been one of the hardest hit.ⁱ In 2013, Rhode Island had the highest rates of illicit drug use in the nation, as well as the highest rate of drug overdose in New England.^{i,ii}

This recent increase is directly related to a dramatic increase in the amount of opioids prescribed. The two main driving forces behind this increase were regulatory pressures encouraging more opioid prescribing, and unscrupulous practices by some in the pharmaceutical industry.ⁱⁱⁱ Doctors have generally failed to understand the potential for opioid use disorder in their patients. The result has been the creation of a generation of people addicted to opioids. Many individuals typically begin with opioid pain medications—such as Vicodin, Percocet, or OxyContin—and, often for economic reasons, transition to heroin use, and injection drug use.^{iv,v} Since 2002, rates of heroin addiction have doubled and heroin-related overdose deaths have nearly quadrupled in the United States.^{iv,v} Adding to these challenges, benzodiazepines have become increasingly available which, when taken with opioids, dramatically increase the risk of overdose. Finally, overdoses related to fentanyl-laced illicit drugs have increased dramatically across the US.^{vi,vii} This is a dynamic epidemic, exposing the need for collaborations between public health, public safety and behavioral health, reaching into the medical, pharmacy, harm-reduction and recovery communities, and in partnership with civil society, representing a communal call for action.

In the United States, the primary response to battling the opioid epidemic, and drug use in general, has been through the criminal justice system. This has resulted in the highest incarceration rate in the world, and is widely known to be ineffective at reducing drug use, with high rates of relapse to drug use, crime and re-incarceration.^{viii} Additionally, the criminal justice approach has fostered a fear of arrest that often impedes bystanders from calling to seek life-saving medical help in the case of an opioid overdose emergency. Taking a purely punitive approach in the face of the current crisis is misguided and risks further harm to individuals and communities already struggling with addiction. Outreach for earlier

engagement in treatment with evidence-based medical therapies and long-term recovery supports for people with opioid use disorder—in addition to broader public health, public policy, and societal changes—has the potential to have a much more beneficial effect.

It would seem appropriate to reduce the availability of prescription opioids as a way to stop this problem; however, unfortunately, if that is done too abruptly, in the absence of available treatment, it will drive more people to switch to using illicit drugs, which will increase the risk of overdose. In the long term, it will be important to reduce the widespread availability of opioids in order to reduce new initiates to opioid dependence.

Rhode Island boasts one of the strongest sets of clinical guidelines for the treatment of chronic pain in the country, with a forthcoming plan to enforce them. The state has an online accessible Prescription Monitoring Program (PMP) with an increasing number of health professionals registered and poised to use it, and is home to several institutions that have embraced aggressive three-day prescribing limits for opioids obtained from the emergency department. These and other local efforts to improve safer prescribing are noteworthy and necessary; they are well underway. This strategic plan is not meant to duplicate or circumvent these efforts.

This plan assumes a collaborative approach: it considers interventions aimed at both supply and demand, as well as those aimed at harm reduction. It further asserts that the “big picture” goals are to generate positive relationships with the most vulnerable of populations affected by addiction and overdose, to reduce drug-related stigma, to provide evidence-based treatment at every opportunity, and to support the pursuit of lifelong recovery. Support across Rhode Island – from hospital emergency departments, to police patrols, to political leaders, and from our friends, neighbors, and family members – is needed for our efforts to be successful. Thousands of lives hang in the balance.

On August 4, 2015, Governor Gina Raimondo issued Executive Order 15-14 to establish a broadly representative Task Force and to obtain expert input to develop these strategies. We are deeply grateful for her leadership.

The expert advisors for the Strategic Plan reviewed the existing literature on addiction and overdose; conducted over 50 interviews with local, national, and international stakeholders and experts; collected input from the Rhode Island community via a website, which hosted several surveys; hosted two public forums with expert and community panels; and presented progress to the Task Force as well as a draft plan for feedback and public discussion. Appendices to the Strategic Plan summarize responses to received feedback and a data appendix containing tables and figures that informed the Plan’s approach.

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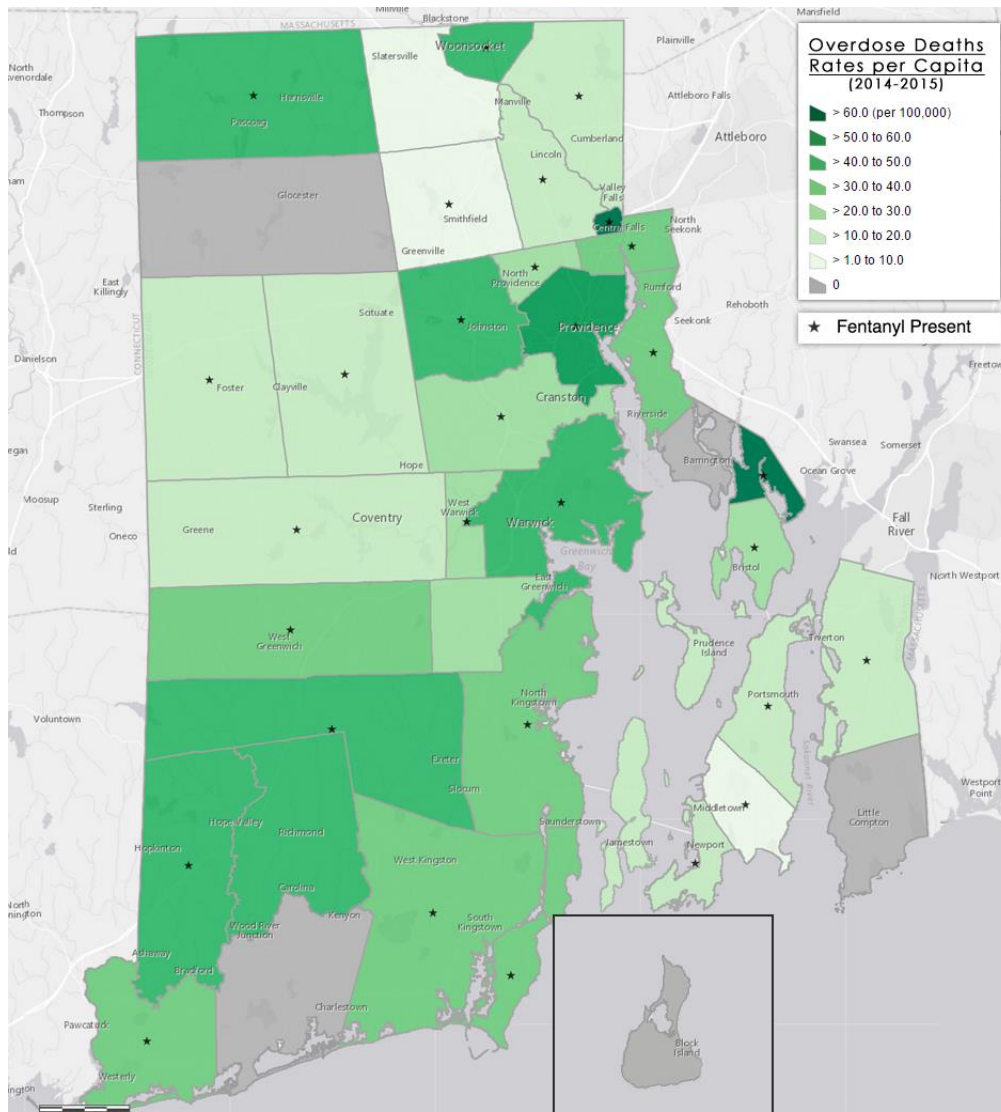
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Background: Key Facts on Emerging Trends in Overdose

Several recent shifts in overdose trends are important to note.

- 80% of overdose deaths in 2015 were illicit drug involved, up from 67-70% in prior years. Death rates for 2014-2015 are high in Providence and in many surrounding towns and cities; for instance, in Warren, Central Falls, and southwestern Rhode Island. All but four towns reporting overdoses in 2014 and 2015 did not report a fentanyl-involved overdose.
- 50% of overdose deaths in 2015 involved fentanyl, up from 37% in 2014, and far higher than prior years, where less than 5% of deaths involved fentanyl. Locations of fentanyl-involved deaths are not concentrated geographically. Fatal fentanyl-involved overdoses are more common among men, young people, and persons using by injection. 37% of fentanyl-involved overdose decedents in 2015 had recently been in prison or jail, up from 19% in 2014.



Map represents deaths attributable to unintentional drug overdose occurring between January 1, 2014 and August 8, 2015. Caution should be used in interpreting rates for towns with populations <20,000 persons because of their lack of statistical reliability. Fentanyl present indicates at least one overdose death was fentanyl involved. Source: Rhode Island Office of State Medical Examiners

Values Overarching This Strategy

There are five values informing this effort.

- Reducing Stigma.** For people who use or have a history of using drugs, the impact of stigma can be severe, and prevent access to lifesaving health and treatment services. Strategies should seek to reduce drug-related stigma experienced by people who use drugs, including from family members, employers, and health care providers.

- **Locally derived, data-driven, evidence-based.** Strategic components informed by data—especially clear data indicating benefit or harm, and local data—are strong and communicate higher confidence that they will accomplish measurable change.
- **Sustainable.** Plan components need be sustainable, economically and politically.
- **Responsive.** The epidemic of drug addiction and overdose is ever changing. Interventions should be able to be implemented quickly, and flexible enough to respond to changes in the epidemic’s nature.
- **Extraordinary.** This value conveys that the approach should be different from what has been implemented to date in Rhode Island, either in scale or in content.
- **Measurable.** Efforts should be able to be measured, to track progress and impact.

Long-Term Goal

The goal of this plan is to **reduce opioid overdose deaths by one-third within three years**. This Strategic Plan has four key strategies aimed at treatment, overdose rescue, prevention, and recovery.

Treatment Strategy: *Every Door is the Right One*

Impact Metric (Monthly): Number of patients with opioid use disorder, number receiving medication-assisted treatment (MAT) per year, retention in medication-assisted treatment, medication utilized

Evidence indicates that medication-assisted treatment (methadone, buprenorphine or depot-naltrexone* injection) has profound effects on people with an opioid use disorder. It reduces their risk of death, relapse, chance of going to prison, and greatly improves their quality of life. It is most effective as a long-term treatment. Making medication-assisted treatment as available as possible, whenever possible, can save lives.

- 21% of all overdose victims in 2014 and 2015 were incarcerated in the two years prior to death (up from 9% in 2009). Ever year, over 250 individuals enter the Rhode Island Department of Corrections on medication-assisted treatment and are either detoxed (if on methadone) or provided no taper schedule (if on buprenorphine).
- Emergency Department visits for drug poisonings and help-seeking for drug treatment admission have increased, specifically for opioids, and where the primary drug of abuse was heroin or other

*Dr. Rich declares a financial conflict of interest: his father helped found the company and he is a shareholder of the company that makes the depot-naltrexone injection product.

opioids. In 2014, overdose accounted for over 2,000 Emergency Department visits (data source: RI Department of Health).

- There are 4,500 individuals on methadone in Rhode Island and 4,662 individuals were treated with buprenorphine under the care of a physician, although many just for detoxification, in 2014. Methadone availability is widespread in Rhode Island, with many programs and capacity to expand, with generally no or very short waiting lists.
- Buprenorphine availability is far more scarce. Currently, the opioid treatment programs do not dispense buprenorphine. Fewer than 75 physicians are Drug Abuse Treatment Act (DATA) waived (i.e., can provide buprenorphine for office-based opioid therapy) to treat up to 100 patients, with only 43 physicians treating more than 50 patients in one year's time. Clearly, many prescribers do not operate at capacity.
- We estimate there are over 20,000 individuals in RI with opioid use disorder not on medication assisted treatment who could benefit from it. There is an opportunity to dramatically increase buprenorphine prescribing, in addition to continuing to expand methadone and depot-naltrexone availability. The principles of treatment should include a comprehensive evaluation and initiation of the most appropriate treatment for that individual.

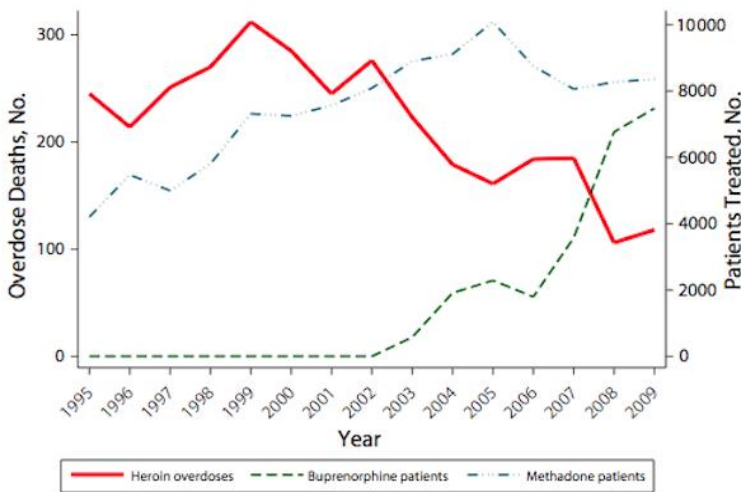
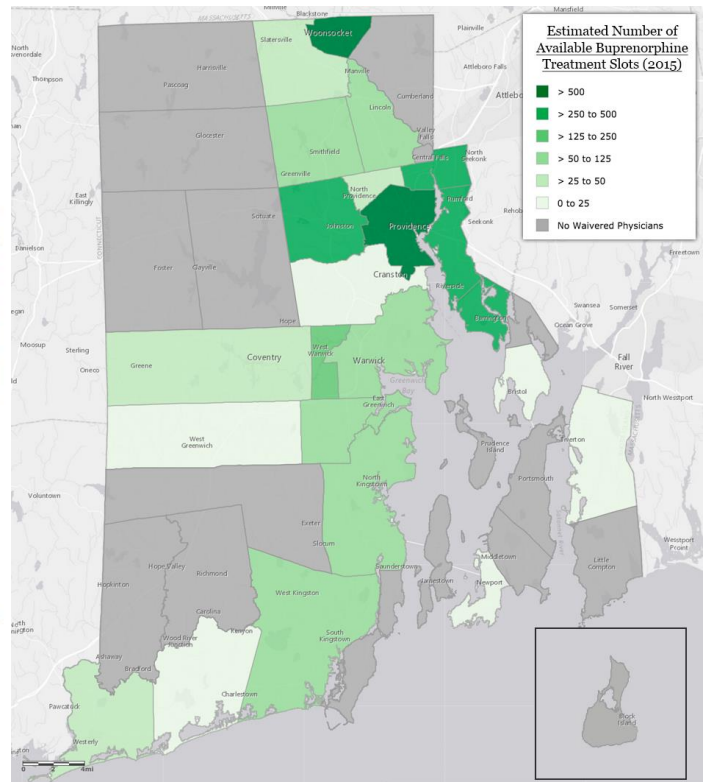


FIGURE 1—Heroin overdose deaths and opioid agonist treatment: Baltimore, MD, 1995–2009.

Overdose deaths dropped 70% in Baltimore in response to increased medication-assisted therapy availability. Source: Schwartz et al., American Journal of Public Health: May 2013, Vol. 103, No. 5, pp. 917-922.



Statewide availability of buprenorphine is scarce. Source: RI Prescription Monitoring Program, 2015

Key Strategy Components

Treatment Strategy The core of this initiative recommends the development of a system of medication-assisted treatment at every location where opioid users are found, primarily:

- the medical system (Emergency Departments, hospitals, clinics, etc.)
- the criminal justice system
- drug treatment programs, and
- in the community

To help our systems of care to better identify patients in need and provide medication-assisted treatment, this initiative recommends:

- A) Building capacity for medication-assisted treatment delivery, by:
1. Developing “Centers of Excellence for the Treatment of Opioid Problems” that can provide comprehensive evaluation, including mental health evaluation and treatment or referral, induction and stabilization services, as well as support to providers in the community. It is envisioned that such Centers would refer stabilized patients to other providers and receive back patients if they destabilize and require more intensive services.
 2. Expanding provider education in medication-assisted treatment by incentivizing and facilitating prescribers to obtain a DATA waiver and prescribe buprenorphine, and encouraging advance practice clinicians and nurses to obtain education on medication-assisted treatment to increase acceptability of this approach. Supports will include program implementation supports (e.g., Project Extension for Community Healthcare Outcomes (Project ECHO), Providers Clinical Support System for Opioid Therapies (PCSS-O), Providers Clinical Support System for Medication Assisted Therapies (PCSS-MAT)) and a system of community supports and contracts with counseling-only sites. Estimates suggest the need to increase capacity to 700 DATA- waived prescribers.
 3. All physicians in training should complete a DATA waiver training and all health professional degree-granting and law enforcement training institutions in Rhode Island should include curriculum on overdose prevention, opioid addiction, and medication-assisted treatment for opioid use disorder. For institutions granting doctorates of medicine, graduates should complete a DATA waiver training by time of graduation.
 4. Removing administrative barriers, especially the prior authorization (PA) associated with buprenorphine, and implementing interventions to encourage physician and practice groups and health centers to provide medication-assisted treatment including increasing the reimbursement rate for medication-assisted treatment, and assuring that all insurance plans in the state cover buprenorphine, methadone and depot-naltrexone.
 5. Encouraging the Directors of Medicaid, Rhode Island Department of Health (RIDOH), Rhode Island Department of Behavioral Healthcare, Developmental Disabilities, and Hospitals (BHDDH), the Health Insurance Commissioner, and others to facilitate, incentivize and measure the development of the “Centers of Excellence” and expanded capacity for medication-assisted treatment.

- B) Expanding medication-assisted treatment to new care settings, by:
1. Educating and encouraging Emergency Departments to start buprenorphine, with an appointment for continued treatment with waived physicians in the community.
 2. Supporting the Department of Corrections to screen for opioid use disorders, conduct an evidence-based assessment to initiate a treatment plan. For those in whom it is appropriate, and especially those already on treatment upon admission, offer medication-assisted treatment in prison and jail, and for others in whom it is indicated, start medication-assisted treatment prior to release with community referral for ongoing medication-assisted treatment.
 3. Educating and encouraging hospitals to offer medication-assisted treatment within the inpatient setting, and to start medication-assisted treatment prior to discharge with community referral for ongoing medication-assisted treatment.
 4. Offering medication-assisted treatment for those in drug treatment, especially those undergoing detoxification services, with documentation of a medication-assisted treatment plan, or why it is not medically indicated for the client being discharged from detoxification.
 5. Encouraging a cross-institution collaborative network between referring (e.g., Department of Corrections, Emergency Departments, hospitals) and accepting (Centers of Excellence) institutions with memoranda of understanding (MOUs) focused on seamless transition of care for opioid use disorder with medication-assisted treatment.
- C) Optimizing delivery of medication-assisted treatments in existing care settings through:
1. Instituting assessments for opioid use disorder and expanding capacity to offer medication-assisted treatment in high-volume provider sites, such as opioid treatment programs, federally qualified health centers, community treatment programs, Care New England and Lifespan hospital networks, and group practices.
 2. Reducing payment barriers to opioid treatment programs to expand services and offer buprenorphine and naltrexone in addition to methadone, with the decision for medication-assisted treatment based on shared decision-making with the patient. Specifically, we recommend establishing and implementing an alternative payment methodology for opioid treatment programs regarding buprenorphine.

Metric

The key metric, measurable monthly through the Prescription Monitoring Program, Medicaid, and other means, is the number of patients receiving medication-assisted treatment. Specifically, we can track:

- Federally qualified health centers (FQHCs) and community mental health centers (CMHCs), opioid treatment programs, prisons/jails, and Emergency Departments to report:
- Number of patients with an opioid use disorder, number receiving medication-assisted treatment per year, retention in medication-assisted treatment, medication utilized (number receiving methadone, buprenorphine products, naltrexone)

For training and support effort implementation, we can measure quarterly through training logs and medical licensure applications:

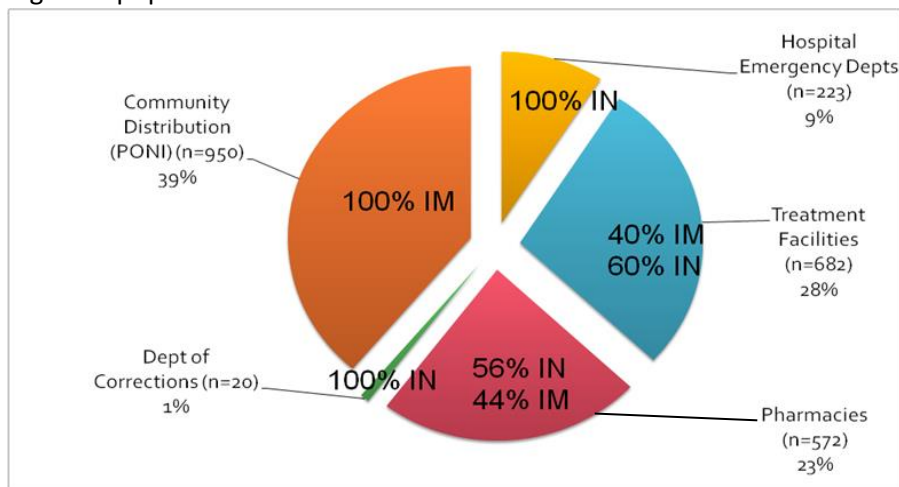
- Number of clinical programs newly offering medication-assisted treatment per year
- Number of new physicians trained/waivered yearly
- Number of new residents/medical students waived/trained yearly
- Number of nurses and other health professionals trained yearly
- Number of law enforcement officers trained yearly
- Number of clinicians participating in buprenorphine prescribing support activities (e.g., Project ECHO)

Rescue Strategy: *Naloxone as Standard of Care*

Impact Metric (Monthly): Number of prescribers prescribing naloxone; Number of naloxone prescriptions dispensed (overall), and to patients filling Schedule II opioid prescriptions or to patients filling opioid and benzodiazepine prescriptions

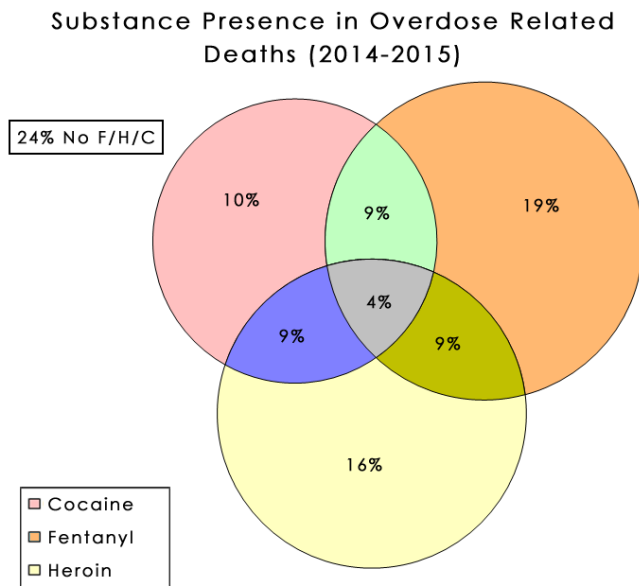
Naloxone saves lives by reversing the severe respiratory depression caused by opioids. Its use by laypeople trained to identify and respond to overdose has been linked to reductions in overdose death rates. People who use opioids are at greatest risk of overdose, and are motivated to protect themselves and others around them to save a life with naloxone.

- Naloxone provision has ramped up considerably, but the majority has been through community-based organizations. In addition, more than half of Rhode Island police departments have been trained in how to administer and equipped with naloxone.
- Cost of naloxone has increased to unsustainable levels and threatens the existence of the community programs as well as fledgling police department programs.
- None of the 2015 fatal overdose deaths noted naloxone (community or individually acquired) being administered prior to ambulance arrival.
- Compared to 2014, an increasing number of fentanyl-related overdose deaths also involve cocaine (see Venn diagram). This shift in fentanyl involvement indicates the need for a highly flexible response, and the importance of working with organizations and institutions in touch with high-risk populations.



Naloxone distribution in Rhode Island January 2014 to June 2015 by distribution source and route (IN=intranasal, IM=intramuscular). Source: RIDOH

- Even with wide spread distribution of naloxone, not everyone who experiences an overdose will have the benefit of a ready bystander to administer naloxone, and calling 911 will remain the standard. The Good Samaritan Law, which sunset on July 1, 2015, communicated to the public and to public safety the importance of intervening in an overdose, treating the situation first and foremost as a treatable medical emergency. Laws, policies, and communication strategies to encourage seeking help in an overdose emergency are a fundamental part of the rescue strategy. A Good Samaritan Law should be passed in Rhode Island.



Venn diagram indicating the presence of fentanyl, heroin, and cocaine in overdoses during 2014 to Aug 8th, 2015. Other substances involved in overdoses included alcohol, prescription drugs, and other illicit substances. There were 144 fentanyl-involved overdoses during this time period, 24% (n=35 of 144) of which had *only fentanyl* (with or without co-ingestion of alcohol) present. Another striking finding is the high percentage of deaths involving cocaine and fentanyl. Source: RI Office of State Medical Examiners.

Key Strategy Components

Overdose Rescue Strategy This initiative seeks to ensure a sustainable source of naloxone for community and first responder distribution, and a high coverage of naloxone among populations at risk of overdose.

There are three components to the overdose rescue strategy:

- A) **Naloxone distribution to patients receiving opioids.** Physicians should prescribe naloxone to their patients and opioid treatment programs should inform their clients about naloxone, if prescribing or dispensing an opioid to them. Pharmacists should offer naloxone to all Schedule II opioids being filled, for syringe purchases (without concurrent injectable medication), and for all co-prescriptions (within 30 days) of a benzodiazepine and any opioid medication. It should be the standard of practice to provide naloxone. Offering naloxone to those prescribed a Schedule II opioid or when co-prescribed a benzodiazepine and any opioid would have reached **86%** of overdose victims who received a prescription from a pharmacy prior to their death, and could have prevented **58%** of all overdose deaths from 2014 to 2015.
- B) **Designated fund for naloxone purchase.** Similar to the idea put forth by the Attorney General’s

office,^{ix} we recommend the creation of a designated fund for state-purchased and distributed naloxone, coordinated by RIDOH, with a medical director overseeing the program, and leveraging existing disaster medication purchasing procedures. Purchased naloxone would provide a source of medicine for first responders, school nurses, and other entities working with hard-to-reach, at-risk populations.

- C) **Outreach.** We recommend conducting aggressive outreach to high-risk populations and in neighborhoods severely affected by opioid overdose, using the secure dashboard (see section on Dashboard, below) data findings to guide efforts. Specifically, naloxone should be provided following a non-fatal overdose (e.g., in an Emergency Department setting); geographically targeted outreach should be conducted, including the expansion of mobile services and naloxone provision to people who inject drugs; peer recovery coaching should be extended during street outreach and other settings, such as in partnership with police departments; and outreach efforts should include educational, harm reduction, and facilitated treatment entry programs to survivors, their families, and their social networks.

Metric

To track naloxone prescribed and dispensed as the key metric, naloxone should be reported to the PMP, with access to reported prescriptions for the RIDOH for surveillance purposes. This will permit real-time tracking of naloxone distributed in the pharmacy. For community-dispensed naloxone, a separate system of reporting initial and refill naloxone kits should be maintained that standardizes current community data collection efforts. Data points can include:

- Number of prescribers prescribing naloxone and the number of naloxone prescriptions dispensed. In the pharmacy data, this includes: number of unique prescribers prescribing naloxone; number of naloxone prescriptions dispensed to patients purchasing syringes, to patients filling Schedule II opioid prescriptions and to patients filling opioid and benzodiazepine prescriptions within 30 days. In the community data, naloxone prescriptions dispensed should note training receipt, site, for whom the naloxone is intended, and should also track naloxone kit refills, including doses administered and experience of any adverse events.

Prevention Strategy: *Safer Prescribing and Dispensing*

Impact Metric (Monthly): Number of benzodiazepines and opioid prescriptions dispensed within 30 days for same patient; number of opioid treatment program patients also receiving prescribed benzodiazepine

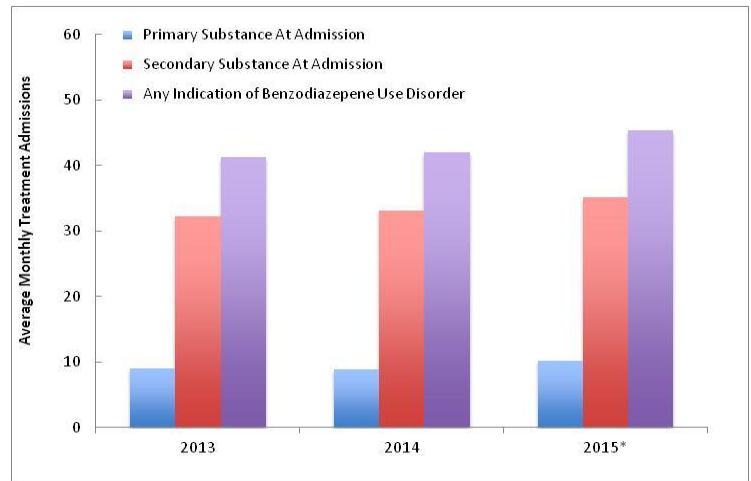
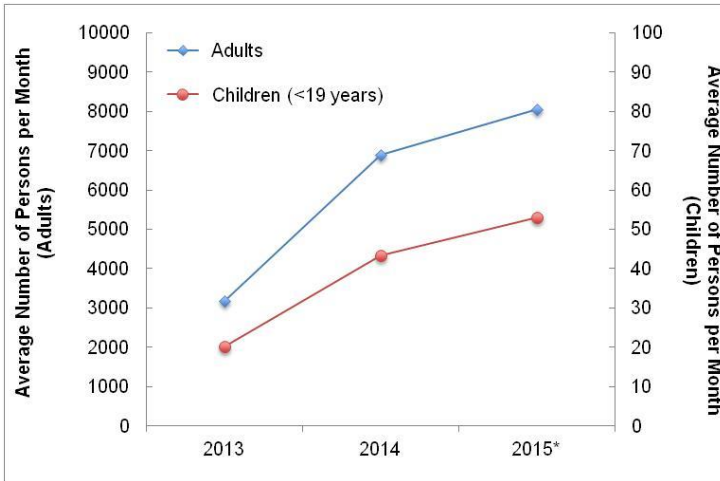
To achieve safer opioid prescribing, it is important to weigh the benefits of medication access for patients living with acute and chronic pain with those of the risks of diversion, addiction, overdose, and premature death. Unsafe combinations of prescribed medications are linked to addiction and many overdoses, and are preventable.

- Two-thirds of people who died in 2014-2015 of overdose received a controlled substance from a pharmacy the year prior to their death. Benzodiazepines were the most commonly dispensed prescription drug, and also the most deadly, involved in 33% of all 2014-2015 overdose deaths.

- The co-dispensing of benzodiazepines with an opioid within a 30-day period is common and increasing, including among youth under the age of 19 (see figure).
- Treatment admissions for benzodiazepines as the primary or secondary substance of abuse have increased in recent years (see figure).
- Rhode Island ranks 4th in the US for benzodiazepine use per capita.

Average number of people dispensed both a benzodiazepine and an opioid medication within 30 days* Source: RI PMP

Substance abuse treatment admissions for benzodiazepine use disorders, 2011-2014. Source: B-HOLD Database, BHDDH.



Key Strategy Components

This strategy seeks to reduce dangerous prescribing of benzodiazepines, which combine with opioids to impair breathing and cause death.

Prevention Strategy The main focus of this strategy is to use prescriber, Prescription Monitoring Program (PMP) and system-level efforts to reduce co-prescription of benzodiazepines with opioids (for pain or opioid use disorder).

The strategy permits a reorientation of the Prescription Monitoring Program to structure “alert” messages to prescribers and pharmacists when a patient’s prescription currently includes this combination. It encourages the standardized use of urine drug testing to test for benzodiazepine/opioid co-ingestion for opioid treatment programs and for other health care settings, in order to provide aggressive safety messaging to patients, possible taper (for opioid or benzodiazepine or both, as determined to be safe and clinically appropriate), or to reconsider prescribing the benzodiazepine/opioid, as well as to provide a prescription for naloxone as risk mitigation during initiation, taper, or continuation of prescribing the benzodiazepine/opioid combination.

Other measures include letters to prescribers from RIDOH/BHDDH on safer prescribing and specifically on benzodiazepine/opioid co-prescription, “academic detailing” (special, one-on-one visits to providers to discuss safety information) of physicians, hospitals, and clinics, and the creation of guidelines for the use of benzodiazepines in medication-assisted treatment and pain. In addition, BHDDH will review

current policies of opioid treatment programs on the use of benzodiazepines for clients maintained on methadone and collaborate with providers to establish consistency in adopting best practices.

Metric

The key metric, measurable monthly through the Prescription Monitoring Program and from BHDDH, is the rate of benzodiazepine co-prescribing with opioids.

- Number of benzodiazepines and opioid prescriptions dispensed within 30 days for same patient
- Number of opioid treatment program patients also receiving prescribed benzodiazepines

Recovery Strategy: *Expand Recovery Supports*

Impact Metric (monthly): Number of peer recovery coach encounters to Emergency Department, to hospital, to prison, in street outreach sessions; Rate of referral and retention (one-month) to treatment, to medication-assisted treatment, to recovery supports

The growing need and capacity for peer recovery services mirrors the pace of the epidemic. Successful recovery nurtures the individual’s health, home, community, and purpose. New opportunities are envisioned that support peer recovery services and medication-assisted recovery.

- Peer recovery coaches, as part of the Anchor Emergency Department program, saw more than a third of all overdose victims at the busiest Emergency Department in the state, providing care and recovery supports to over 110 individuals in one year.
- Securing treatment and recovery supports was achieved 83% of the time for Anchor ED recovery coaches (June 2014-July 2015).
- Peer recovery coach supports are geographically concentrated (Pawtucket, limited hours in Warwick), and communities hardest hit by overdose recently lack recovery resources of sufficient scale.

	Pre-Implementation January-February 2014	Post-Implementation September 2014-February 2015	p
	Discharged Overdose Patients N= 68	Discharged Overdose Patients N=147	
Naloxone Distribution	0	72 (49%)	<0.001
Educational Video	0	64 (43.5%)	<0.001
Recovery Coach Consultation	0	53 (36.1%)*	<0.001
Referral to Treatment	2 (2.9%)	65 (44.2%)	<0.001

*83% of Recovery Coach Consultation had confirmed linkage to treatment within 48 hours.

Recovery coach consultation and treatment referrals pre and post implementation of Project Lifespan Opioid Overdose Project (LOOP), to provide naloxone at discharge from the Emergency Department (Rhode Island Hospital; Source: Liz Samuels, PI)

Key Strategy Components

Recovery Strategy This initiative recommends the large-scale expansion of recovery coach reach and capacity.

Specifically, the recovery strategy urges peer recovery coach services with naloxone provision be implemented at every Emergency Department in the state, in hospitals to support addiction consultation services, in the criminal justice system to support medication-assisted treatment upon return to the community, and via a street outreach recovery coach effort. It will be important to cultivate a recovery coach pipeline, by at least doubling the number of recovery coaches for statewide and extended coverage, supporting in-prison recovery coaching and certification, and ensuring proper support and supervision of recovery coaches at this scale. Every effort should be made to expand and create consistency in reimbursement for delivery of certified peer recovery coach services.

A related aspect of this strategy is to standardize help-seeking and recovery supports through standardization of employee assistance programs (EAP) for the workforce and by mandating that all drug treatment programs develop recovery planning (including training programs and referrals, establish certification for recovery housing, and support case management to help people access resources) or coordinate such supports with an outside entity.

Metric

The key metrics will be reportable monthly and obtained from Anchor Recovery (and other peer recovery service providers), BHDDH and other sources, to include the number and percentage of high-risk individuals accessing recovery supports, including the number and types of services provided. Specifically:

- Number of peer recovery coach encounters to Emergency Department, to hospital, to prison, in street outreach session
- Rate of referral and retention (one-month) to treatment, to medication-assisted treatment, to recovery supports

Dashboard

A “dashboard” (i.e., an online indicator panel of relevant data that provides a snapshot of problems and progress) will be created of available data and from multiple sources, *including the key metrics across all four critical initiatives*. Many of the named impact metrics have already been compiled by the expert strategic team, and can inform an initial dashboard. Other impact metrics require standardization and improvement. A public-facing dashboard and a password-protected dashboard should be created. In this way, it will be possible to keep the public informed about progress and key stakeholders up-to-date with real-time data, while preserving the privacy of patients and decedents.

A key consideration to ensure timely detection and changes in overdose trends and policy effects is to have a robust and responsive toxicological testing protocol. Funds are recommended to update and modernize this capacity at the State Health Laboratories.

There are concerns that too dramatically reducing the prescription opioid supply risks driving people to more risky use of prescription opioids and to switch to heroin, and we know that the heroin supply is more deadly now than ever before. It will be important, therefore, for the dashboard to track the following indicators alongside the initiative's impact metrics:

- Number of prescriptions for opioids dispensed
- Number of prescription opioid doses dispensed
- Initiation of nonmedical use of prescription opioids and age at first use of prescription opioid
- Prevalence of nonmedical use of prescription opioids
- Age at entry into treatment for substance use disorder

The Prescription Monitoring Program and annual statewide and national survey tools will provide these data. The dashboard will be complemented by ongoing data collection (brief surveys and targeted interviews) with people who use drugs and who are not in treatment or in prison. In this way, there is an “on the ground” feedback loop for the initiatives and a source for confirming or refuting detected trends observed on the dashboard.

Communication Plan

A communications strategy aimed at supporting each of the initiatives, with specific target audiences, messages, and measurable outcomes, should be developed. Public service announcements and communication strategies should consider targeting the public, health professionals, and public safety professionals, emphasizing facts and the personal impact of evidence-based interventions and treatment, including calling 911, saving a life with naloxone, receipt of medication-assisted treatment, and recovery supports and successes. A special public awareness campaign for people who use drugs around safety concerns regarding fentanyl is indicated and urgently needed. These campaigns should be created with the meaningful involvement of people who use drugs or those in recovery, in order to ensure that all announcements are clear, effective, and help to reduce stigma.

Finally, the Substance Abuse Prevention Task Forces in every community should be engaged to provide greatly needed stigma-reducing programming, supports (especially for families dealing with addiction and loss), and awareness among parents and communities, related to help-seeking, overdose awareness, and safer prescribing initiatives.

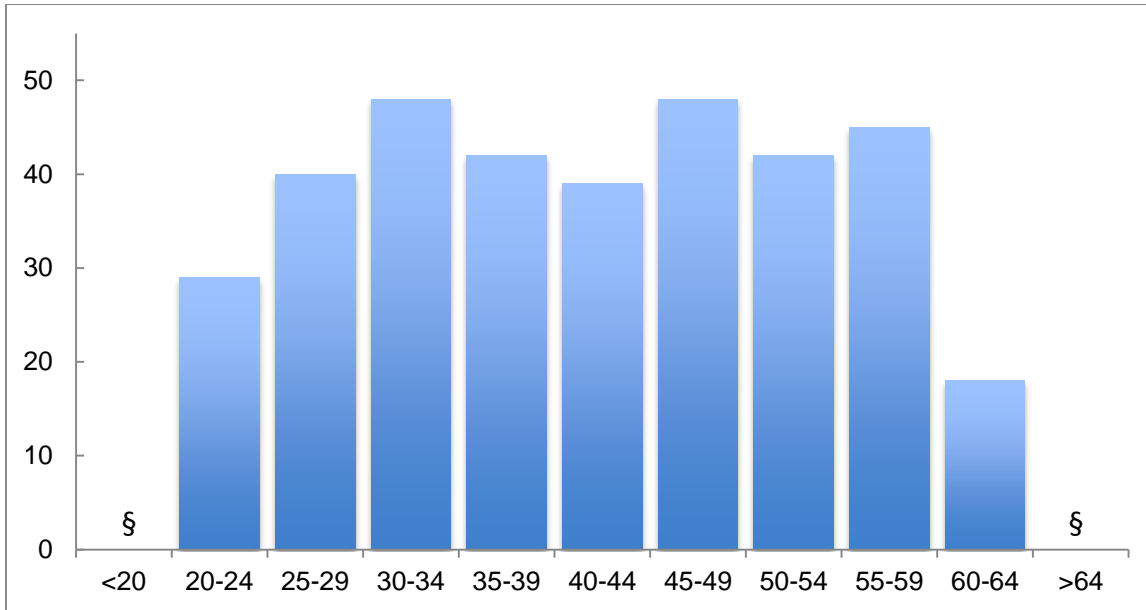
ⁱ Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2013 on CDC WONDER Online Database, released 2015. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on Oct 14, 2015

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- ⁱⁱ SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2012 and 2013. Accessed at <http://www.samhsa.gov/data/sites/default/files/NSDUHStateEst2012-2013-p1/Tables/NSDUHsaePercents2013.pdf> on Oct 14, 2015
- ⁱⁱⁱ Kolodny, A., Courtwright, D. T., Hwang, C. S., Kreiner, P., Eadie, J. L., Clark, T. W., & Alexander, G. C. (2015). The prescription opioid and heroin crisis: a public health approach to an epidemic of addiction. *Annual review of public health, 36*, 559-574.
- ^{iv} National Survey on Drug Use and Health (NSDUH), 2002-2013.
- ^v Multiple Cause of Death Files from the National Vital Statistics System, 2002-2013.
- ^{vi} Park, T. W., Saitz, R., Ganoczy, D., Ilgen, M. A., & Bohnert, A. S. (2015). Benzodiazepine prescribing patterns and deaths from drug overdose among US veterans receiving opioid analgesics: case-cohort study. *bmj, 350*, h2698.
- ^{vii} Mercado-Crespo, M. C., Sumner, S. A., Spelke, M. B., Sugerman, D. E., & Stanley, C. (2014). Notes from the field: increase in fentanyl-related overdose deaths-Rhode Island, November 2013-March 2014. *Morbidity and Mortality Weekly Report, 62*(24), 531-531.
- ^{viii} Global Commission on Drug Policy report: <http://www.globalcommissionondrugs.org/>
- ^{ix} Arditi, L. RI rebate program aims to stem cost of overdose antidote. Sept 29, 2015. <http://www.providencejournal.com/article/20150929/NEWS/150929248>

Data Appendix

This appendix contains overdose data and other statistics that informed the conceptualization and development of *Rhode Island's Strategic Plan on Addiction and Overdose: Four Strategies to Alter the Course of an Epidemic*.

Figure 1. Distribution of the age at death, accidental overdose fatalities, Rhode Island (Jan 1st, 2014 – Aug 8th, 2015)



Source: Office of State Medical Examiners

Note: § denotes data that are suppressed due to small numbers

Table 1. Characteristics of overdose fatalities, Rhode Island, Jan 1st – Aug 8th 2015 (n=119)

Characteristic	N or Median*	% or IQR
Age (median, IQR)	41	30 – 54
Male (n,%)	90	75.6
White (n,%)	112	94.1
Location of incident (n,%)		
Own residence	89	74.8
Someone else's residence	11	9.2
Public location	§	§
Other	§	§
Evidence of injection drug use (n,%)	44	37.0
Recent incarceration (n, %)	32	26.9
Fentanyl present (n,%)	60	50.4
Alcohol present (n,%)	37	31.1
Benzodiazepines present (n,%)	39	32.8
Cocaine as a contributing cause of death (n,%)	44	37.0
Buprenorphine present (n, %)	§	§
Methadone present (n, %)	11	9.2
Oxycodone present (n, %)	17	14.3
Hydrocodone present (n, %)	§	§

Source: Office of State Medical Examiners

*Not all cells add to 119 due to missing data

§ denotes data that are suppressed due to small numbers.

IQR: interquartile range, 25th and 75th percentile

Table 2: Characteristics of overdose fatalities, Rhode Island, Jan 1st – Dec 31st, 2014 (n=238)

Characteristic	N or Median	% or IQR
Age (median, IQR)	43	33 – 51
Male (n,%)	166	69.8
White (n,%)	210	88.2
Recent incarceration (n, %)	42	17.6
Fentanyl as a contributing cause of death (n,%)	84	35.3
Benzodiazepines as a contributing cause of death (n,%)	59	24.8
Cocaine as a contributing cause of death (n,%)	72	30.3
Buprenorphine present (n, %)	§	§
Methadone present (n, %)	26	10.9
Oxycodone present (n, %)	22	9.2
Hydrocodone present (n, %)	§	§

Source: Office of State Medical Examiners

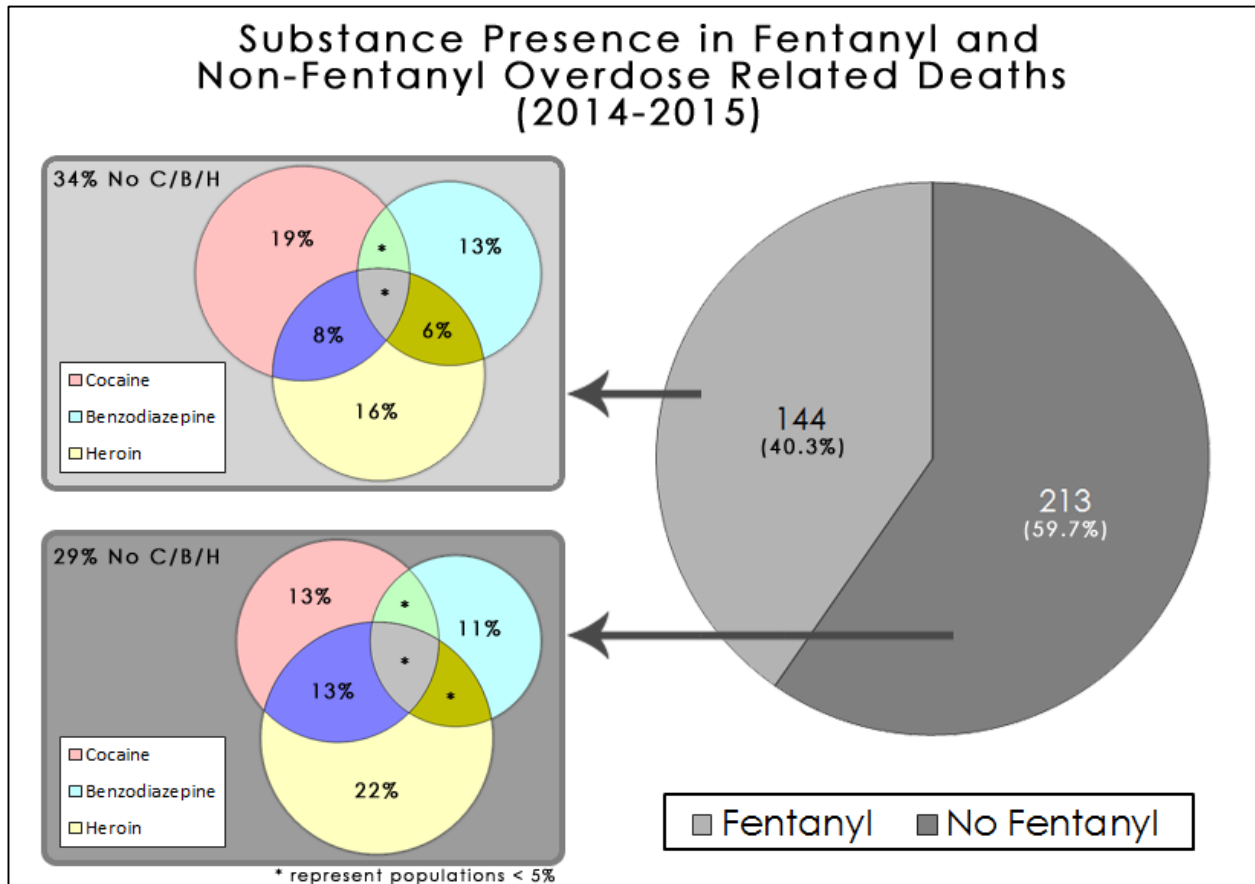
*Not all cells add to 238 due to missing data

Table 3: Factors associated with fentanyl-positive toxicology among overdose fatalities in Rhode Island, January 1st – August 8th, 2015 (n=119)

Characteristic	Risk Ratio (95% CI)	p-value
Age (per year older)	0.98 (0.97 – 0.99)	0.006
Female (vs. male)	0.48 (0.26 – 0.88)	0.019
Non-white (vs. white)	0.64 (0.20 – 2.02)	0.451
Location of residence (ref: other)		
Own residence	1.11 (0.56 – 2.19)	0.759
Residence of another	1.20 (0.52 – 2.79)	0.672
Death in hospital (yes vs. no)	1.21 (0.83 – 1.75)	0.324
Evidence of injection (yes vs. no)	1.85 (1.29 – 2.65)	<0.001
Others present at time of overdose (yes vs. no)	1.06 (0.73 – 1.53)	0.775
Alcohol present (yes vs. no)	0.74 (0.48 – 1.14)	0.174
Benzodiazepines present (yes vs. no)	0.95 (0.65 – 1.40)	0.797
Cocaine as a contributing cause of death (yes vs. no)	1.06 (0.74 – 1.52)	0.755

In 2015, overdose fatalities with fentanyl-positive toxicology were more likely to be younger, male, and have evidence of injection, compared to overdoses without fentanyl present.

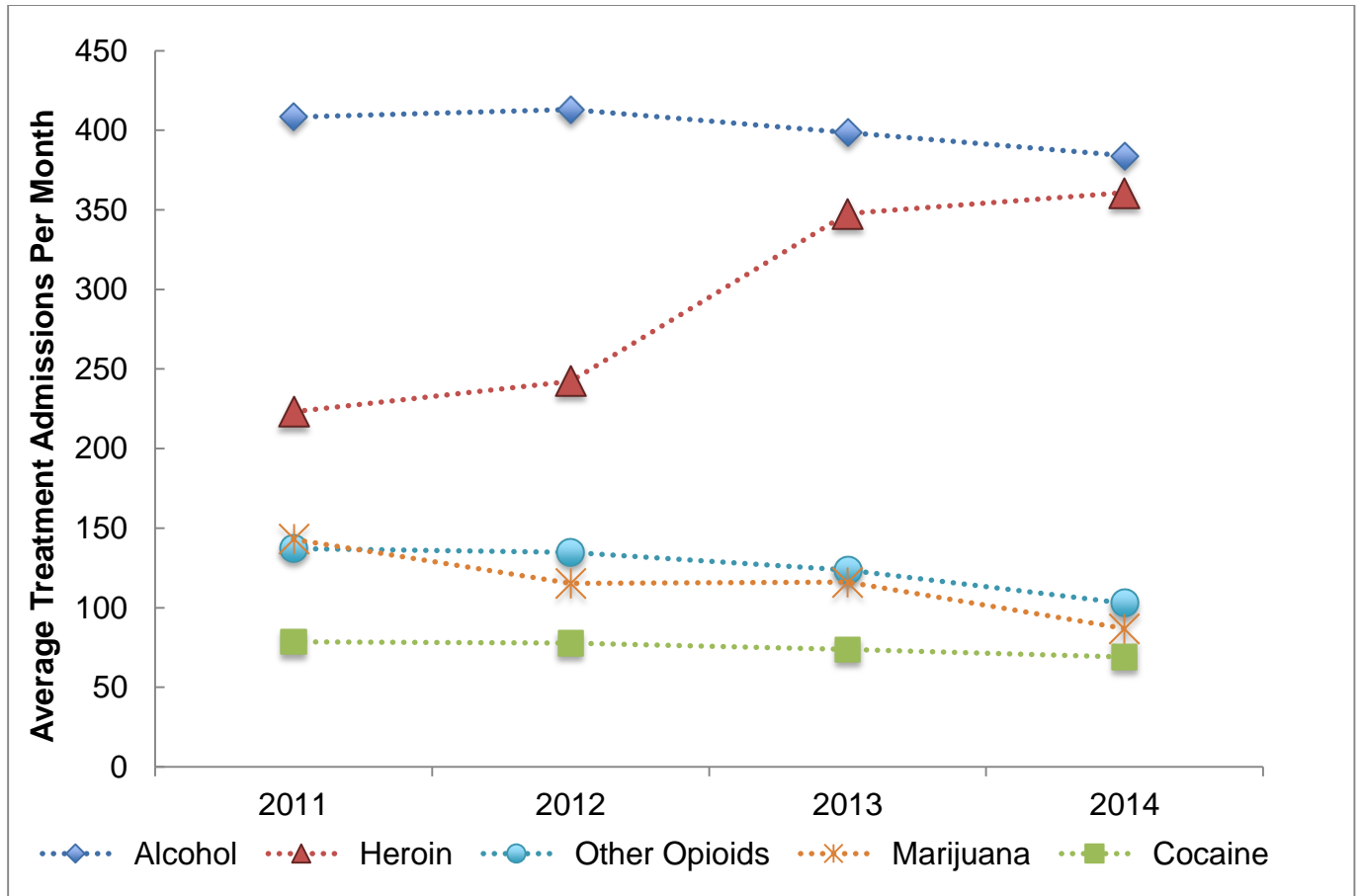
Figure 2. Prescription and illicit drug combinations among overdose decedents, Rhode Island, Jan 1st 2014 – August 8th, 2015.



Source: Office of State Medical Examiners

*Just over 4 in 10 overdose fatalities were positive for fentanyl toxicology during this time period. The majority of deaths had some combination of cocaine, benzodiazepines, or heroin present, indicating substantial polysubstance use among decedents. However, 24% (n=35 of 144) of the fentanyl-attributable deaths had **only** fentanyl (with or without co-ingestion of alcohol) present. Similar trends were observed among the overdoses with no fentanyl present, although there was a greater proportion of heroin-only deaths in this group (22% vs. 16%, respectively).*

Figure 3. Primary substance of abuse reported at treatment admission, Rhode Island, 2010-2014

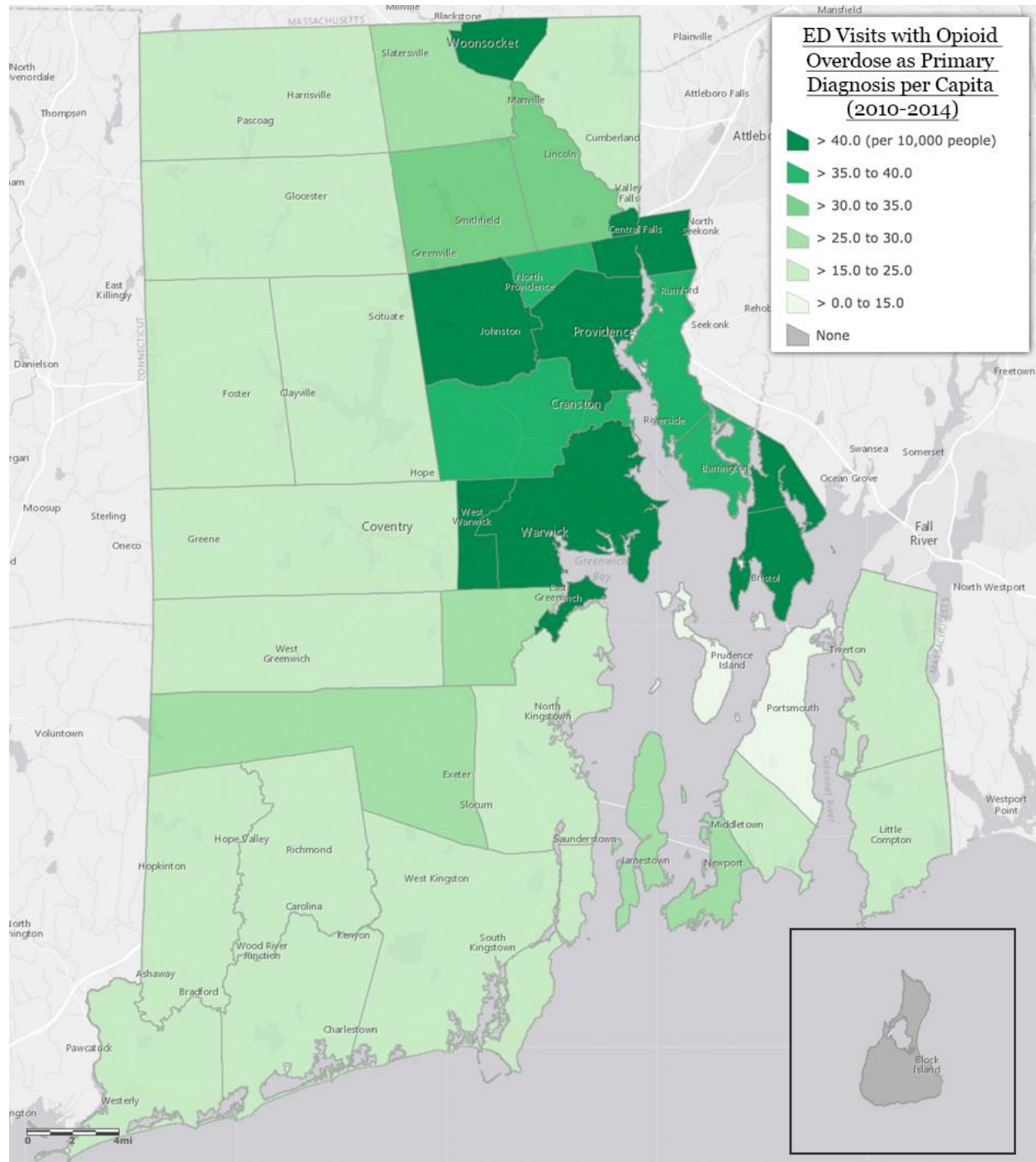


Source: Rhode Island Department of Behavioral Healthcare, Developmental Disabilities & Hospitals

Treatment admissions for persons reporting heroin as their primary substance of abuse have increased dramatically since 2011, while admissions for other opioids have decreased.

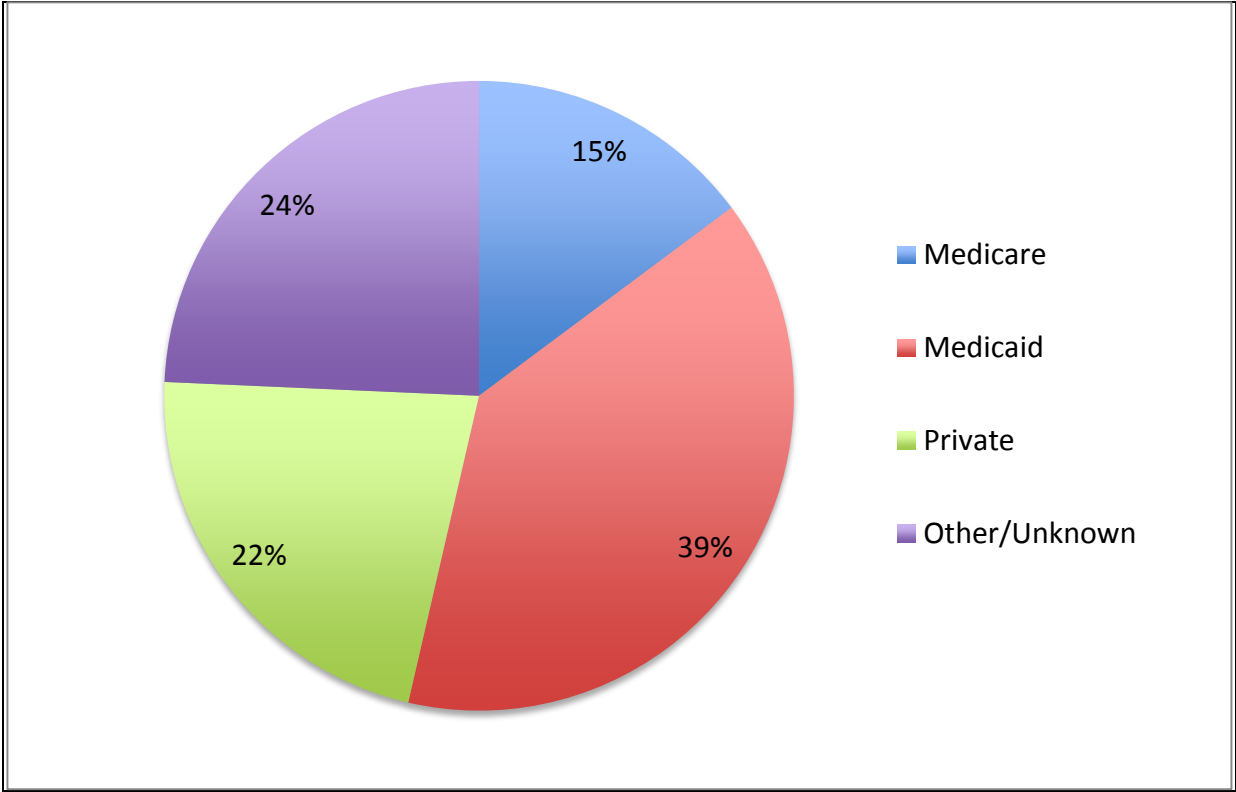
Notably, the number of persons reporting injection as a route of administration at treatment admission has increased from 2,550 in 2011 to 3,927 in 2014 (a 54% increase).

Figure 4. Geographic distribution of Emergency Department visits (per capita) with a primary diagnosis of opiate overdose or opioid abuse/dependence, Rhode Island, 2010-2014



Note: data represent city/town of patient residence
 Note: Data are for Rhode Island residents and represent patients alive at discharge
 Note: ICD-9 codes = 304.0, 304.7, 305.5, 965.0
 Excludes ED visits that resulted in an inpatient admission
 Note: New Shoreham not shown as numbers were too small for statistical reliability
 Source: Hospital Discharge Emergency Department Visit Database, Rhode Island Department of Health

Figure 5. Distribution of primary payer for patients admitted to Rhode Island Hospital Emergency Department for an accidental overdose (2014)



Source: Rhode Island Department of Health
Note: ICD-9 codes: E850-E858, E980, 960-969.

Figure 6. Geographic distribution of naloxone administrations by Emergency Medical Services (EMS) per capita, Rhode Island (2013 – 2015)

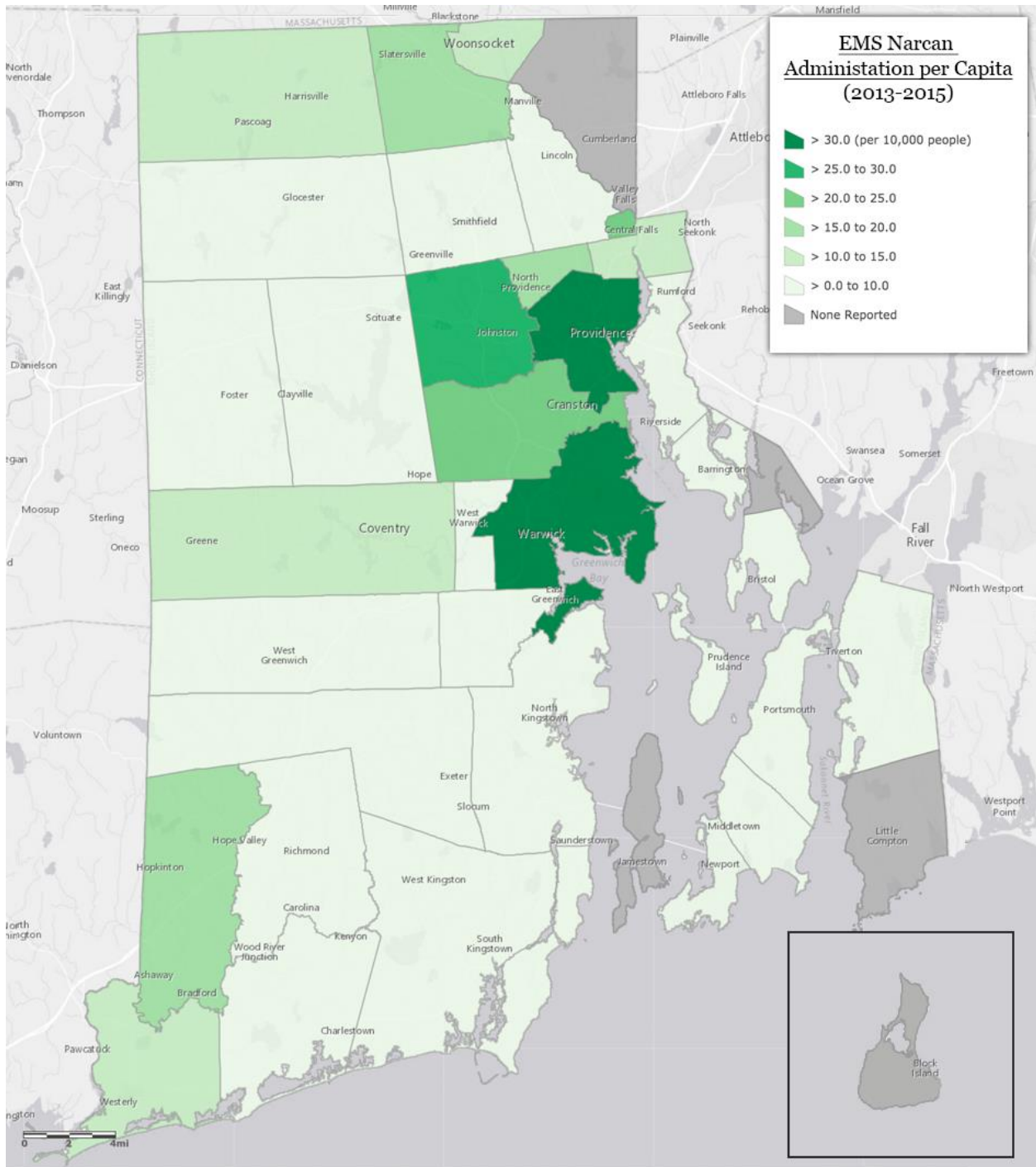


Figure 7: Geographic distribution of naloxone distribution by two major pharmacy chains (Jan 2014 – May 2015)

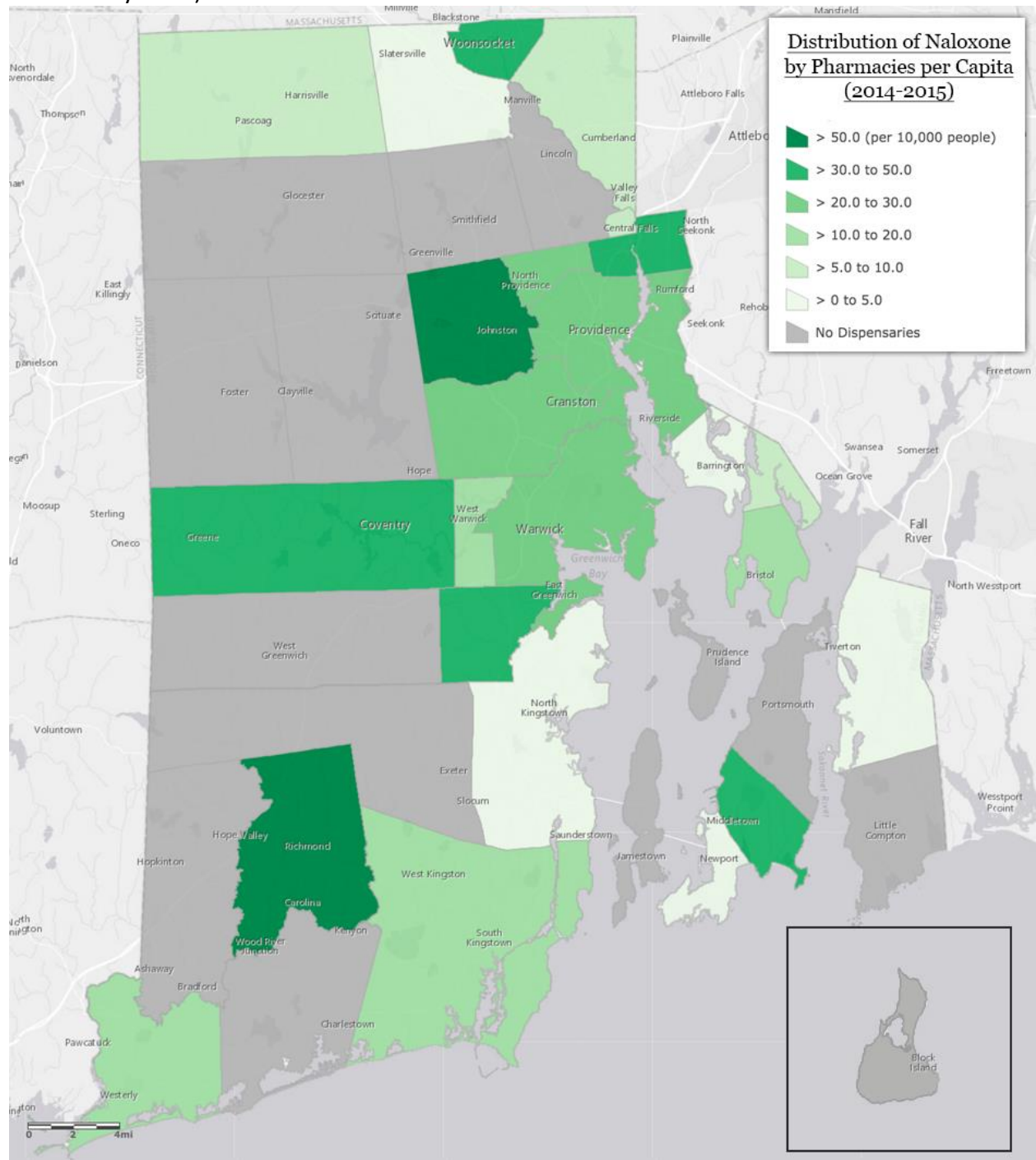
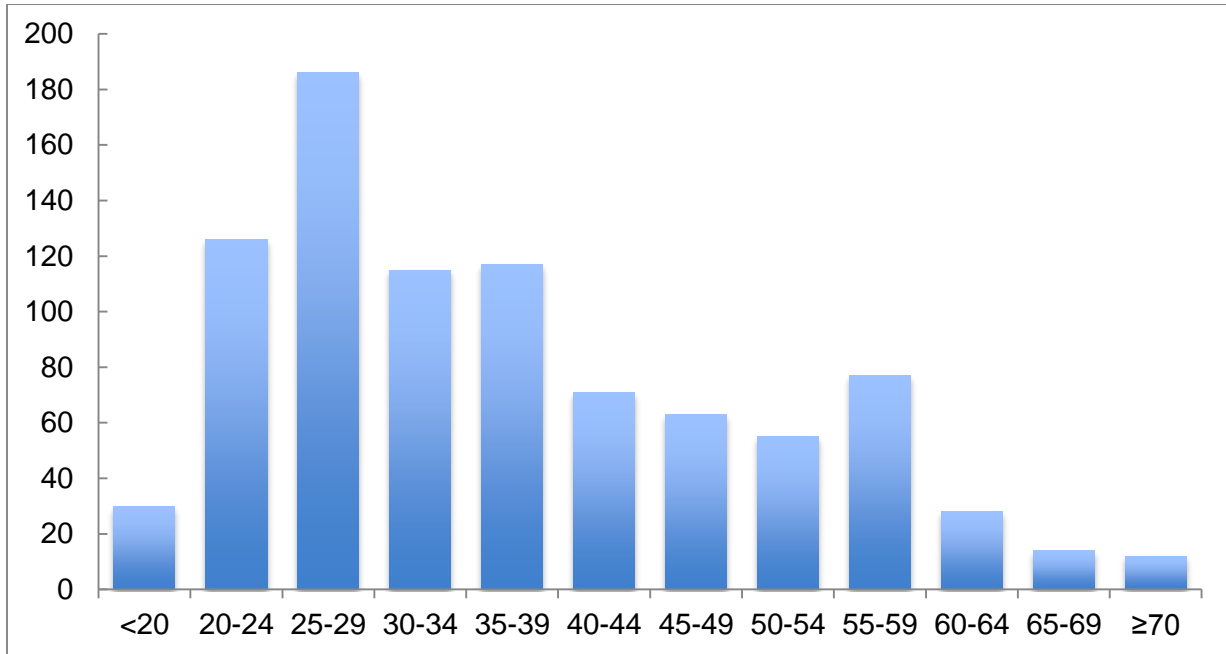


Figure 8: Age distribution of patients reported by Rhode Island hospitals through the 48-hour overdose reporting system, April 1st, 2014 – July 31st, 2015 (n=907)



Source: Rhode Island Department of Health

The age distribution reflects the “bi-modal” distribution seen among the fatal overdose cases during the same time period. However, these patients tend to be younger than decedents. The median age of overdose fatalities was 43, whereas the median age in this sample is 34.

Table 4: Characteristics of overdose events reported to the RI Department of Health through the state’s 48-hour overdose surveillance system, April 1st, 2014 – July 31st, 2015

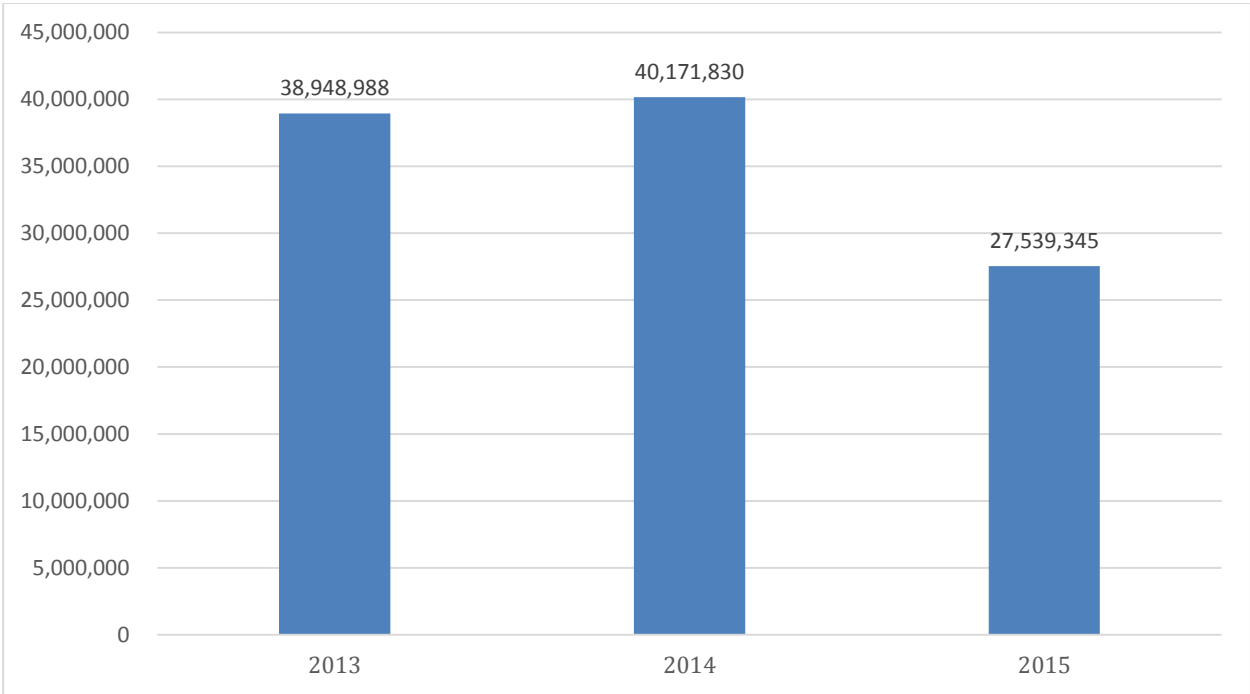
Characteristic	N or Median	% or IQR
Age (median, IQR)	34	27 – 46
Male (n,%)	597	65.8
Race (n,%)	112	94.1
White	739	81.5
Black or African American	72	7.9
Other	11	1.2
Unknown	83	9.2
ICD-9 Code		
965.00 (poisoning by opioids)	36	4.0
965.01 (poisoning by heroin)	536	59.1
965.02 (poisoning by methadone)	33	3.6
965.09 (poisoning by other opiates)	92	10.1
E850.1 (accidental poisoning by methadone)	20	2.2
E850.2 (accidental poisoning by other opiates)	107	11.8
Missing or unknown	83	9.2
Substance abuse treatment referral [§]	396	43.7
Naloxone given by*		
Emergency Department staff	281	31.0
Emergency Medical Services	570	62.8
Family/Friend/Layperson	22	2.4
Police	14	1.5
Missing or unknown	138	15.2
Naloxone dosage given (median, IQR)	2.0	0.8 – 2.5

Source: Rhode Island Department of Health

* values add to greater than total due to multiple responses per patient

§ 385 responses were missing or unknown

Figure 9: Doses of opioid medications dispensed to Rhode Island residents (2013 to 2015)



Source: Rhode Island Prescription Monitoring Program

Note: 2015 data represents prescriptions filled between January 1st and September 28th

Comments and Responses on the Draft Strategic Plan on Opioid Overdose and Addiction

More than several dozen commenters submitted thoughtful responses to the draft Strategic Plan, and we made a number of important changes based on this input. We thank all who contributed. Below are responses and explanations to the major points that were raised.

Treatment Strategy

- *Several comments expressed concerns about mandating medical school education content on buprenorphine training.*

We appreciate this perspective and have clarified the text to emphasize the need for such training rather than a specific mechanism of assuring that it is provided. If diabetes therapy required a special training course, there would be no question that graduates of Rhode Island medical schools would be expected to be trained and ready to help patients. The fact that an effective treatment for addiction requires a training course should not lessen our expectation for training. We consider the future investment in health professional education put forth by our initiative to be a necessary response to the current opioid crisis. The plan's language strongly encourages that all health professional degree-granting institutions in Rhode Island include curriculum on overdose prevention, opioid addiction, and MAT for opioid use disorder. For institutions granting doctorates of medicine, graduates should complete a DATA waiver training by time of graduation, as both a documentation of appropriate training, as well as one less obstacle to initiating prescription of buprenorphine. We have added that such training should be provided by the end of calendar year 2016, leaving time for implementation.

- *Several comments noted that there is an insufficient primary care workforce in Rhode Island, and that the additional burden to address opioid dependence will be too much.*

There is clearly a tremendous need for primary care physicians to do much of the 'heavy lifting' in the care and treatment of patients with opioid use disorder. Many of these individuals are already in care, and primary care physicians will find that treating the addiction will make treating other types of chronic illness easier and more satisfying. The revised plan more explicitly supports efforts to expand primary care in Rhode Island as well as welcome input and involvement of primary care in working together to implement this plan.

- *Several comments discussed the limits of buprenorphine therapy alone for opioid use disorder.*

We appreciate this comment because (1) there are other evidence-based therapies for opioid use disorder, including methadone and depot-naltrexone; and (2) for maximum effectiveness buprenorphine needs to be part of an overall treatment approach.

With respect to methadone, Rhode Island has done great work expanding access to effective treatment using this medication and is investing in medical homes on site and other innovative approaches. Depot-naltrexone is the newest medication-assisted treatment, is not promoted heavily in the Plan because the

long-term evidence of acceptability, sustainability and efficacy at reducing overdose deaths is not yet available, although it is hoped that such evidence may become available soon.

The Plan emphasizes the importance of expanding access to effective treatment using buprenorphine for Rhode Island because it is a proven strategy that can rapidly reduce overdose deaths. Rhode Island's capacity to make evidence-based treatment with buprenorphine available is quite limited, and expanding this capacity can make a significant difference in the short term. The revised Plan is even more clear on the key point that buprenorphine access alone is not the goal; buprenorphine should be combined with counseling and other important social supports.

We recognize that there are no magic wands. Opioid dependence is a complicated disease that has protean manifestations with profound implications for the individual's whole being including their health, mental health, behavior, social functioning, as well as their family and community and society at large. These manifestations can develop over years and it is unrealistic to think that a medication alone will fix all of these problems in the short term. For many, a given episode of treatment may have no apparent beneficial effect, and it may take a long time to improve. However for many others, treatment that includes effective medications can be and often is a life-changing intervention that can lead to dramatic improvements in many dimensions of an individual's life.

- *Several commenters expressed concern about the cost of medication-assisted treatment and who will bear that cost.*

We are all paying the price for not having adequate access to effective therapy in Rhode Island. The costs of medication-assisted treatment are more than offset by the additional medical costs of not being in treatment, and that does not consider many other societal costs, including to the justice system. (Clark et al JSAT, 2015.57;75-80)

- *A few comments conveyed concerns about the focus on medication-assisted therapy, instead of drug-free approaches.*

The best evidence for immediate decrease in mortality is with the use of medication-assisted therapy. That said, opioid use disorder is a complex disease, which impacts nearly every part of an individual's life. It is unrealistic to expect a complex series of behaviors, that often has developed over years, to change immediately with a medication. Medication-assisted therapy can preserve life and allow an individual to work on their recovery. Sustained long term recovery ideally includes health, home, community and a purpose. A medication addresses none of these, but allows an individual to work on all of these. The optimal use of medication-assisted treatment includes comprehensive recovery services, and that is the high quality medication treatment that we need to strive for in Rhode Island.

Overdose Rescue Strategy

- *Several comments addressed the technology needed and time it would take to implement a recommendation to co-dispense naloxone as an "opt-out" for all Schedule II opioid medications.*

There were also some requests to reflect on how prescribers could be more involved in prescribing naloxone, rather than just relying upon the pharmacists to provide the prescription for it.

We acknowledge that there are practical concerns around implementing an “opt-out” policy for naloxone, as described. To attend to this concern, we have removed the “opt-out” policy. We have also made important changes to more clearly indicate that naloxone provision should be the standard of care for reducing risk of opioid overdose both by the prescriber and the pharmacist. The fact is that offering naloxone under the Plan’s specifications would have reached **86%** of overdose victims who filled a prescription for a controlled substance from a pharmacy prior to their death, and **58%** of all deaths from 2014 to 2015.

- *A number of comments were received regarding the absence of the Good Samaritan Law and suggestions to address it legislatively.*

The Rhode Island Good Samaritan Law sunset on July 1, 2015. While there is little evidence to date indicating that Good Samaritan laws are necessary or sufficient to prevent overdose deaths in a community, we agree that help-seeking in a medical emergency should take precedence over drug-related arrest. The revised version of the Strategic Plan acknowledges the important role that a Good Samaritan Law can play in reducing stigma, clarifying law enforcement’s role in a medical emergency, and promoting help-seeking (calling 9-1-1) in a drug-related emergency.

Prevention Strategy

- *Many expressed concern about insufficient alternative treatments for pain and requested that as part of the plan, including supporting comprehensive pain management centers and support for acupuncture, massage, and multiple other modalities.*

We especially appreciate this comment, as it is true that patients with pain need options besides long-term opioid therapy. There is no question that there is a tremendous need for additional options for the management of chronic pain and comprehensive, multimodal approaches seem to have the best outcomes. We encourage the medical and allied health community in Rhode Island to make such measures available.

- *Several comments requested that we focus the plan to reduce prescription opioid prescribing and overall opioid use.*

We appreciate the point that reducing opioid use in the community is an important goal to strive for. However, the data are not clear on the effects of swiftly reducing prescribing of opioid medications. Changes in opioid supply can have the intended effect of reducing availability of abuseable medications but have also been linked to an increase in transition to illicit drug use and in more risky drug use behaviors (e.g., snorting and injecting pain medications). Reducing prescription opioid prescribing volume is the long-term goal, with measurable declines over a more gradual period of change. The

state's CDC-funded prescription opioid overdose prevention grant is a four-year, multimillion dollar investment in the infrastructure and activities of prescription opioid overdose and addiction prevention, and has as its centerpiece expansion of the PMP, enforcement of prescriber guidelines, academic detailing of prescribers, and raising awareness of medication safety, disposal, and storage. We support these efforts. The Strategic Plan focuses on the problem of benzodiazepine and opioid co-prescribing and dispensing as an area where large impact and measureable change in patient safety can be realized quickly.

- *Several comments noted that prevention of opioid abuse in the first place needs to start in the schools and with the family. We had several comments requesting that school-based prevention programs and targeted, early intervention programs for school-aged children be a focus of the prevention initiative.*

These comments brought to light a larger need in Rhode Island. While reducing benzodiazepine co-prescription is an emergency prevention strategy, it is critical for the state to move further upstream to broader prevention initiatives. That's why we are recommending that such efforts should be the subject of a Workgroup for the Governor's Task Force in 2016, that includes significant representation from parents, adolescent treatment providers, youth, school nurses, and the schools. The Workgroup should cover a range of potential school-based interventions, including screening (perhaps by School Nurses), which are beyond our expertise and focus at this time. These efforts can seek new funding for the Department of Health or BHDDH, from CDC, Department of Education, Department of Justice, or private foundations. We have revised the Strategic Plan to emphasize the significant role of the Substance Abuse Prevention Task Forces in every community, which are poised to provide greatly needed stigma reducing programming, supports (especially for families dealing with addiction in the family), and awareness among parents and communities, related to help-seeking, overdose awareness, and safer prescribing and disposal initiatives.

Recovery Strategy

- *Several comments reflected concerns about the lack of a coordinated, community-wide recovery support system for persons with substance use disorders, which encompasses other service delivery systems, including housing, education, criminal justice, child welfare, physical and behavioral health. Furthermore, there was a strong suggestion both in the surveys and at the community forum to provide recovery housing, safe housing for women and families with opioid use disorder, and regulation of sober houses.*

We appreciate these concerns and agree that recovery supports are essential to support successful implementation of the Plan and for the future of Rhode Island. This Strategic Plan focused on emergency measures and support services with evidence and promise to reduce overdose and the risk of overdose in the short term. For this reason, expansion of peer support recovery coaches is the centerpiece of the Recovery initiative. The revised draft recommends that the Task Force include Revisiting Recovery Resources as part of a 2016 Workgroup undertaking. Such an effort would allow the

recovery community, BHDDH, sober house management, housing, child and family welfare, transportation, and other social service delivery partners to provide input and suggested best practices, to organize, expand, regulate, and clarify coordination of recovery supports in the state.

