The Rhode Island Community Responds to Opioid Overdose Deaths

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ABSTRACT

The challenge of addressing the epidemic of opioid overdose in Rhode Island, and nationwide, is only possible through collaborative efforts among a wide breadth of stakeholders. This article describes the range of efforts by numerous partners that have come together to facilitate community, and treatment-related approaches to address opioid-involved overdose and substance use disorder. Strategies to address this crisis have largely focused on increasing access both to the opioid overdose antidote naloxone and to high quality and timely treatment and recovery services.

KEYWORDS: Opiate addiction, overdose, opioid, naloxone

INTRODUCTION

Rhode Island experienced a dramatic increase in opioidinvolved overdose deaths in the first half of 2014. Prior to the first broad acknowledgment of opioid overdose as a public health crisis, statewide collaborations were underway to reduce opioid overdose deaths and address the crisis of opioid addiction.

The Drug Overdose Prevention and Rescue Coalition, convened in 2012 by The Rhode Island Department of Health

(HEALTH), has grown from a handful of advocates to more than 100 members. Active members represent the state public health and behavioral health agencies, Department of Corrections, law enforcement, treatment providers, recovery organizations, healthcare providers, researchers, prevention councils, and other affected community members. The charge for the Coalition was to establish, and now implement, a state-wide strategic plan (see Table 1).1 Strategic priorities were informed by national and local research and published best practices.²⁻⁶

This article outlines the context, and efforts to date, to implement six community and treatmentrelated aspects of the strategic plan (other elements of the plan are addressed elsewhere in this issue).

1) Establish statewide overdose surveillance mechanisms

Data is essential in guiding intervention efforts. Understanding the scope and breadth of the epidemic includes examining non-fatal, as well as fatal, overdoses. Until recently, EMS data could not be accessed from a centralized source and ED, hospital, and death data had a two-year lag time.

- Beginning in January 2014, the RI emergency medical system started collecting real-time, electronic data on drug overdose incidents and naloxone administration in the pre-hospital setting. The report form includes pre-hospital naloxone administration data (if administered and by whom).
- In April 2014, HEALTH passed emergency health regulations requiring all hospitals and emergency departments to report any opioid overdose-related events to the health department within 48 hours. The reporting form includes naloxone administration data (if administered and by whom) and whether the patient was referred to treatment or recovery services.⁷
- The Medical Examiner reports all confirmed accidental drug overdose deaths on the 15th of the month for the prior month. The data is posted on the HEALTH website: http://www.health.ri.gov/data/drugoverdoses/. The Medical Examiner also provides more detailed updates on accidental drug overdose death data at quarterly Coalition meetings.

Table 1. 2011–2016 Injury Prevention Strategic Plan Drug Overdose Prevention and Rescue Recommendations

- 1. Establish statewide overdose surveillance mechanisms
- 2. Increase usage and effectiveness of the Prescription Monitoring Program (PMP).
- 3. Increase access to naloxone training and distribution programs.
- 4. Increase licensed healthcare worker and institutional responsibility
- 5. Implement and expand disposal units throughout the state.
- 6. Support prevention policies that work.
- 7. Increase general public awareness of drug overdose as a preventable public health problem.
- 8. Support and affirm people at risk for drug overdose.
- 9. Increase access to substance abuse treatment.
- 10. Build state capacity to implement drug overdose prevention and rescue programs.

2) Increase access to naloxone training and distribution programs

Naloxone, an opioid antagonist, reverses opioid overdose by blocking the opioid receptors. Bystander use of naloxone began over a decade ago, through the pioneering efforts of physicians in the harm-reduction field. Expanded prescription and distribution of naloxone for bystander use is recognized as a best practice in response to the epidemic of opioid overdose fatalities.8-10

As a prescription medication, each state's prescribing and dispensing guidelines govern naloxone access. HEALTH issued emergency regulations, in March 2014, expanding naloxone access, by authorizing the following: Any licensed prescriber can issue a non-patient-specific order to certain organizations, such as police departments and treatment facilities; naloxone can be prescribed to a family member or friend of an individual at risk of experiencing an opioid-related overdose; and any licensed prescriber may dispense naloxone to family members or others on site, during an office or emergency department visit.11 These regulations expand providers ability to reach individuals at highest risk of opioid overdose.

- The Miriam Hospital PONI Program (Preventing Overdose and Naloxone Intervention) began in 2006 as a pilot program in collaboration with HEALTH.¹² Since 2012, PONI has trained almost 700 individuals in overdose prevention, recognition and intervention and distributed a corresponding number of naloxone kits at no cost to the client. The program relies on clients to contact the program to report naloxone use and request a refill. To date, 60 clients have reported using naloxone to reverse an opioid overdose.
- Since 2007 PONI has collaborated with the Rhode Island Department of Corrections (RIDOC) to provide overdose prevention training (without naloxone distribution) to inmates prior to release from incarceration. Distribution of naloxone at release has been piloted (see below), but lack of resources to purchase naloxone has been a barrier to implementation.
- In 2011, researchers at Rhode Island and Miriam hospitals launched a pilot program to train inmates approaching release from RIDOC and to dispense naloxone kits upon release. This research effort included creation of "Staying Alive on the Outside," a video geared toward overdose prevention and response immediately following release from incarceration. Results of the study concluded implementation of a naloxone training and distribution program is a feasible component of pre-release training and skills building. 13-14 Participants were able to effectively able to recognize an overdose and administer naloxone, based on prepost intervention evaluation, including simulating response to an overdose one month post-release from incarceration.
- In 2012, with the leadership of the Rhode Island Medical Society, the Good Samaritan Overdose Prevention law was passed to promote naloxone use by lay responders and



calling 911 in case of an overdose. The law protects anyone who administers naloxone in good faith from civil or criminal liability. It also protects the victim of overdose, and bystanders who call 911, from prosecution for minor drug charges. Similar legislation has passed in 20 states. Efforts are underway to reauthorize the law (due to sunset in 2015).

- In 2012, Walgreens Pharmacy entered into a Collaborative Practice Agreement with Dr. Josiah Rich to distribute naloxone, on a walk-in basis. A Collaborative Practice Agreement allows pharmacists to furnish naloxone without an individual prescription. Along with the medication, pharmacists provide overdose prevention, recognition, and response training. (Also, see elsewhere in this issue).
- Butler Hospital initiated a naloxone program in 2013 for patients treated for opioid dependence. At-risk patients watch an instructional video and receive individual education from physicians, nursing staff, and pharmacists on the safe administration of naloxone. From October 2013 through June 2014, naloxone was distributed in the Partial Hospital Alcohol and Drug Treatment Program to 119 (69% of eligible patients) patients with opioid dependence. The program was expanded to inpatients in April of 2014. Naloxone was

- distributed to 45 inpatients (12% of eligible inpatients).
- The RI Disaster Medical Assistance Team and Medical Reserve Corps developed the Naloxone and Overdose Prevention Education Program of Rhode Island (NOPE-RI) in 2013 to address the opioid overdose epidemic. This program recruits, trains, and deploys volunteer medical professionals to educate community members about addiction, overdose prevention, and the use of naloxone. NOPE-RI trainings target the medical community and public safety professionals. NOPE-RI also serves as a clearinghouse for naloxone and overdose prevention educational resources in the state, and supports efforts to expand access to naloxone. www.nopeRI.org.
- Early 2014 the Department of Behavioral Health, Developmental Disabilities and Hospitals (BHDDH) issued emergency regulations requiring all staff in state-licensed behavioral health organizations to be trained in overdose prevention, recognition and intervention. At least one staff person from each organization is certified as a Trainer, who is responsible for training other staff, who train at-risk patients. Residential and detox facilities are responsible for distributing naloxone to at-risk patients before discharge. BHDDH purchased 500 naloxone kits for provision to uninsured, indigent patients. 15
- Law enforcement and other non-medical public safety professionals are often first on the scene when 911 is called.
 NOPE-RI, with Coalition support, created and delivered a training curriculum and toolkit to facilitate engagement with law enforcement agencies. Over 500 law enforcement officers in RI have been trained and many more trainings are planned. The State Police and some municipality police have begun carrying naloxone. www.nopeRI.org/law.html.¹⁶
- Emergency Department distribution of naloxone began in August 2014 (see elsewhere in this issue).

3) Implement and expand disposal units throughout the state

In the last 15 years, availability of prescription opioids for pain relief has exponentially expanded. One outcome has been the proliferation of prescription opioids in medicine cabinets, which has contributed to increased non-prescription use. In an effort to curb this access, law enforcement agencies, prevention councils, and municipalities have collaborated to provide safe disposal sites for unused opioids. Many police stations in the state have 24/7 disposal sites. For a complete list, see http://nopeRI.org/drugdisposal.html. Another strategy for safe disposal is "Prescription Drug Take Back Days." On April 26, 2014, 45 sites in Rhode Island collected prescription drugs in 36 cities and towns.

4-5) Increase general public awareness of drug overdose as a preventable public health problem and support and affirm people who are risk of overdose

The purpose of public awareness campaigns is to: inform the

community regarding the extent and impact of opioid overdose and addiction; educate the public regarding its role in preventing addiction and overdose; and informing affected individuals, family members and loved ones of resources available to them. Reducing stigma associated with the disease of addiction is interwoven in all these efforts. Anchor Recovery Community Centers (http://www.anchorrecovery.org/) and Rhode Island Addiction Recovery Efforts (http://ricares.org/) are leaders in this effort and have been key in ensuring that addiction treatment and recovery support are integral messaging in all public awareness efforts. Additionally, local media have been present and conscientious in informing the public regarding opioid addiction and overdose.

- Rhode Island Hospital researchers, in collaboration with BHDDH and HEALTH, created and distributed "If you let her sleep it off she might not ever wake up" poster. Walgreens utilized this poster in its efforts to promote naloxone distribution through the Collaborative Practice Agreement.¹⁷
- Community forums have occurred across the state in 2014 to educate the public about the extent of the opioid overdose and addiction, steps taken by authorities to address the problem and steps that the public can take to protect themselves and their loved ones. These forums have also been an opportunity for the public to give feedback and guidance.¹⁸
- In collaboration with HEALTH, CVS pharmacy donated three prominent, highway billboards in early 2014. The billboards featured the tagline: "Addiction is a Disease, Treatment is Available, Recovery is Possible."
- HEALTH is developing a communications campaign targeting healthcare providers, first responders and drug users, and their families and friends. HEALTH will host grand rounds (CMEs) for prescribers in fall 2014 on the disease of addiction and safe prescribing practices. Focus groups were held with drug users and their families/friends to develop messaging and placement of a public education campaign on drug overdose awareness and prevention.¹⁹
- BHDDH, HEALTH and other state leaders recently participated in SAMSHA's 2014 Prescription Abuse Policy Academy. BHDDH and HEALTH have partnered to devise and implement innovative responses to the prescription abuse epidemic, including building on existing public awareness campaigns and ways to improve utilization of the Prescription Drug Monitoring program.

6) Increase access to substance abuse treatment

Coalition members recognize that opioid overdose deaths are happening in the context of dramatic increases in prescription opioid addiction. Current efforts to increase access to substance use treatment include:

• BHDDH and The Providence Center are administering a pilot program providing hospital emergency rooms with peer recovery coaches to meet with drug overdose survivors. Recovery coaches train patients on overdose and naloxone

and engage patients in discussions about treatment and recovery services. Recovery coaches are on call all weekend. The program is underway at Kent Hospital, and will expand it to emergency departments statewide.

- BHDDH, HEALTH, and Bridgemark partnered to offer The Physician Consult Program, a program to provide physicians immediate assistance with patients who may be at high risk for misuse of opioid medication. Interested physicians may call 401-781-2700. Also see http://www.health.state.ri.us/ healthrisks/addiction/for/providers/.
- United Way's 211 is well known throughout the state by people looking for assistance with social service needs. BHDDH, HEALTH and United Way partnered to have 211 as a resource for substance use treatment referrals.
- With the passage of the Affordable Care Act, access to affordable health coverage and Medicaid expansion to low-income adults, access to addiction treatment services has increased considerably. Addiction treatment services can serve as primary prevention in reducing future incidence of overdose events and fatalities.

CONCLUSION

This crisis has prompted collaboration among state agencies and integration of a broad range of community members. These efforts are ongoing and building. Nonetheless, opioid-overdose fatalities remain a public health crisis. While we are poised to make a considerable impact on the epidemic, adequate resources are a barrier to realizing that potential. A next important step is to work with our state leaders and law makers to recognize the pandemic of addiction as a funding priority.

References

- Preventing Violence and Injuries in Rhode Island: 2011-2016 Rhode Island Strategic Plan http://www.health.ri.gov/publications/plans/2013InjuryPrevention.pdf
- Rhode Island Public Health Association. Rhode Island public health brief: prescription drug deaths, Brief No. 5, December 19,
- Rhode Island Department of Health, Center for Health Data and Analysis. Rhode Island Hospital Discharge Data, 2008-2010.
- Centers for Disease Control and Prevention (CDC). Web-based Injury Statistics Query and Reporting System (WISQARS), 2008-2010. www.cdc.gov/ncipc/wisqars.
- 5. Centers for Disease Control and Prevention (CDC). Policy impact: prescription painkiller overdoses, 2011.
- 6. Green TC, Graub LE, Carver HW, Kinzly M, Heimer R. Epidemiologic trends and geographic patterns of fatal opioid intoxications in Connecticut, USA: 1997–2007. *Drug and Alcohol Dependence*. 2011;115:221-8.
- Rhode Island Department of Health Rules and Regulations Pertaining to Opioid Overdose Reporting. [R23-1-OPOIDR] http://sos.ri.gov/documents/archives/regdocs/released/pdf/DOH/7862.pdf
- Centers for Disease Control and Prevention. Community-Based Opioid Overdose Prevention Programs Providing Naloxone-United States, 2010. Morbidity and Mortality Weekly Report. 2012;61(6):101-105
- Cost-Effectiveness of Distributing Naloxone to Heroin Users for Lay Overdose Reversal. Phillip Coffin, Sean Sullivan. Annals of Internal Medicine. 2013.
- 10. Walley AY, Xuan Z, Hackman HH, Quinn E, Doe-Simkins M,

- Sorensen-Alawad A, Ruiz S, Ozonoff A. Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. British Medical Journal. 2013 Jan 30;346:f174.
- 11. Rhode Island Department of Health Rules and Regulations Pertaining to Opioid Overdose Reporting. [R23-1-OPOID] http://sos.ri.gov/documents/archives/regdocs/released/pdf/ DOH/7846.pdf
- 12. Yokell M, Green TC, Bowman S, McKenzie M, Rich J. Opioid overdose prevention and naloxone distribution in Rhode Island. Med Health Rhode Island. 2011;94:240–242.
- 13. "Staying Alive on the Outside," video can be accessed at www. prisonerhealth.org
- 14. Ray M, Green TC, Bowman S, Lord S, McKenzie M, Rich JD. Development of an incarceration-specific overdose prevention video: Ŝtaying Alive on the Outside. Health Education Journal. In Press 2014.
- 15. Behavioral Health Developmental Disabilities and Hospitals Issues Emergency Regulations to Address the High Rate of Narcotic Overdose Deaths. Press Release February 20, 2014. http:// www.ri.gov/press/view/21341
- 16. State Police Announces Full Deployment of Narcan® to Troopers - Narcan® Counters the Effects of Opioid Overdoses. Press Release May 2, 2014. http://www.risp.ri.gov/outreach/2014/ Narcan_May2014.php
- 17. "If you let her sleep it off She might not ever wake up" poster. http://prescribetoprevent.org/wp-content/uploads/OD_Poster_ ENG_Female_RI.pdf
- 18. Media coverage from community forums: http://www.rimed. org/rimedicaljournal/2014/03/2014-03-62-news-complete.pdf, http://wpri.com/2014/05/10/newport-hospital-to-hold-forumon-overdoses/;http://www.providencejournal.com/breaking-news/ content/20140408-forums-to-address-overdose-deaths-in-r.i.. ece; http://www.turnto10.com/story/25223010/forum-on-overdose-epidemic-set-for-friday
- 19. Rhode Island Department of Heath Overdose webpage: http:// www.health.ri.gov/healthrisks/drugoverdose/

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Disclaimer

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