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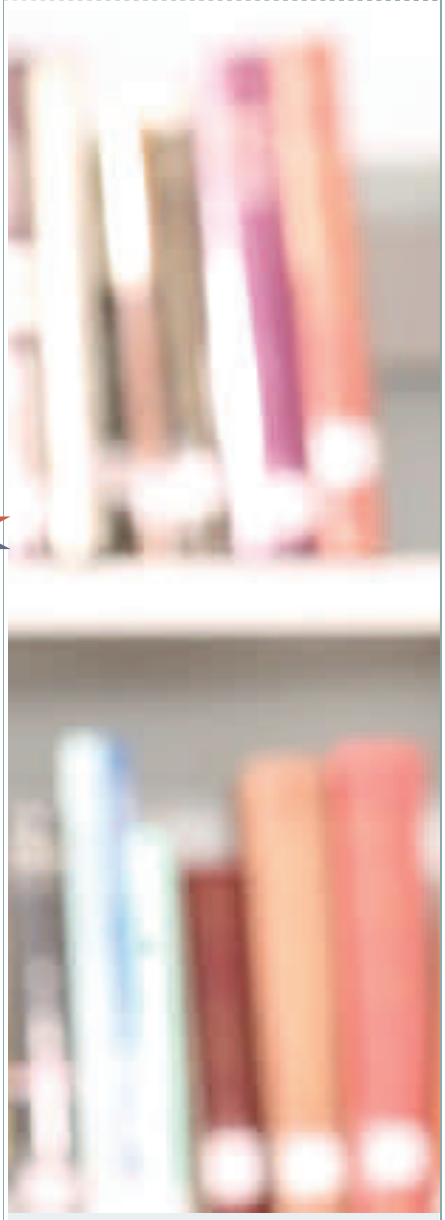
Insights

INTO RISK MANAGEMENT



RISK: Challenges and Solutions in the Opioid Crisis

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The information contained in this newsletter was co-authored by Drs. Rich and Sadacharan, and in large part, taken from Dr. Rich's testimony made to the Congress of the United States at the House Committee's hearing entitled, "Challenges and Solutions in the Opioid Crisis," on May 8th of this year. The remarks are based upon both doctors' experience caring for patients impacted by opioids, both in the community and behind bars at the Rhode Island Department of Corrections.

This article and the contents within is an enduring activity approved for 1.0 *AMA PRA Category 1 Credit(s)*™ and 1.0 category 1 credit in Risk Management Study. *(See link on p. 3.*
Please note: the link will expire two (2) years from the date this newsletter is issued.)

Opioid addiction, or what we now call Opioid Use Disorder, is generally a poorly understood disease. Both the disease and its treatments have long been highly stigmatized in our society. This combination of a lack of understanding and stigma has resulted in misdirected resources and contributed to a worsening of the problem. (1)

Opioids can alleviate pain and suffering and also induce a state of euphoria. Opioids have two physiologic properties which distinguish them from most other addictive substances and lead to many of the adverse outcomes: tolerance and withdrawal. When opioids are taken regularly, on a daily basis, tolerance and withdrawal can develop rapidly, within as little as days to weeks. Tolerance refers to the need to continually increase the dose in order to achieve the same effect. Said another way, the more one uses, the more one needs to use. Tolerance also can be lost quickly when opioid use is interrupted for as little as days to weeks.

(1) https://newsatjama.jama.com/2018/01/03/jama-forum-a-new-years-wish-on-opioids/

INSIDE THIS ISSUE

SPECIAL POINT OF INTEREST

- **CME link on page 3**

WHAT HAPPENS IN WITHDRAWAL...

Withdrawal is an incredibly uncomfortable experience that occurs when someone who has developed tolerance attempts to or is forced to cease opioid use abruptly. Withdrawal has been described as about the worst feeling that a human can feel. From a patient's experience, "imagine the worst flu you have ever had, combine that with the worst stomach bug you ever had and multiply them both by a thousand." Withdrawal symptoms typically worsen in intensity for 2-3 days, and then begin to diminish. People do desperate things to avoid or get out of withdrawal.

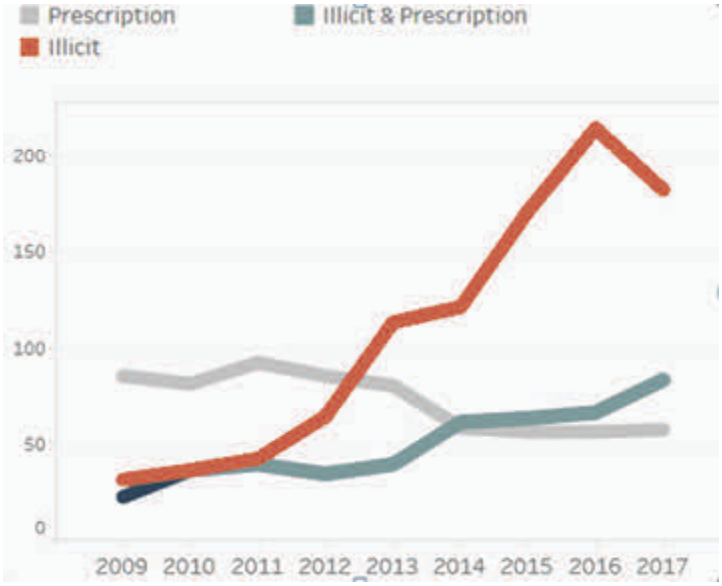
...AND OVERDOSE?

When too much opioid is consumed, the person loses consciousness and eventually stops breathing, resulting in an overdose death. With increasing and decreasing tolerance and fluctuating potency, quantity and purity of opioids, it can be very difficult to predict when an overdose can occur.

An overdose occurs when there is a discrepancy between the individual's tolerance and the amount and potency of the opioids that are consumed. Of course, additional sedatives such as alcohol or benzodiazepines also contribute to overdoses. Overdoses can be effectively reversed with the prompt use of naloxone by intranasal spray or injection.

The illicit opioid supply...has...become contaminated with fentanyl and related compounds which are fifty to thousands of times more powerful than heroin.

DRUG OVERDOSES IN RHODE ISLAND:

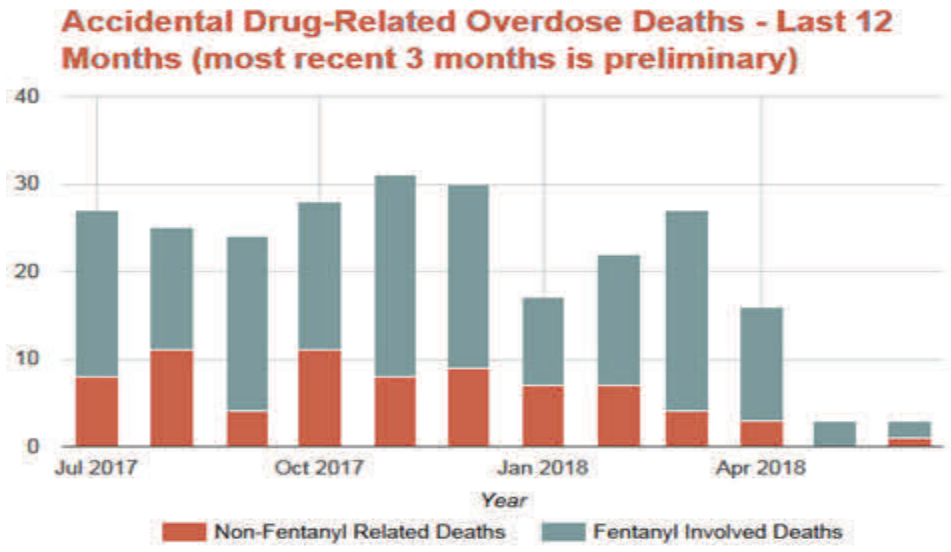


The illicit opioid supply (including heroin and counterfeit pills and even cocaine) has in the past few years become contaminated with illicitly manufactured fentanyl and related compounds which are 50 to thousands of times more powerful than heroin. Fentanyl overdoses can also be reversed with naloxone, but it must be given much more rapidly and often in higher doses to be effective. (2)

A crucial problem with the current epidemic, which includes illicit fentanyl, is that both sellers and consumers often have no idea what is in the substances they are buying, selling and consuming, or how powerful or concentrated it is. Drug checking services are a promising strategy for fentanyl detection. (3)

Drug overdose is a national public health crisis and the number of deaths are increasing. Fentanyl poses a great threat, exacerbating our overdose crisis. Since 2009, we have seen the number of overdose deaths related to fentanyl increase *fifteen fold* in Rhode Island.

OVERDOSE DEATHS IN RHODE ISLAND:

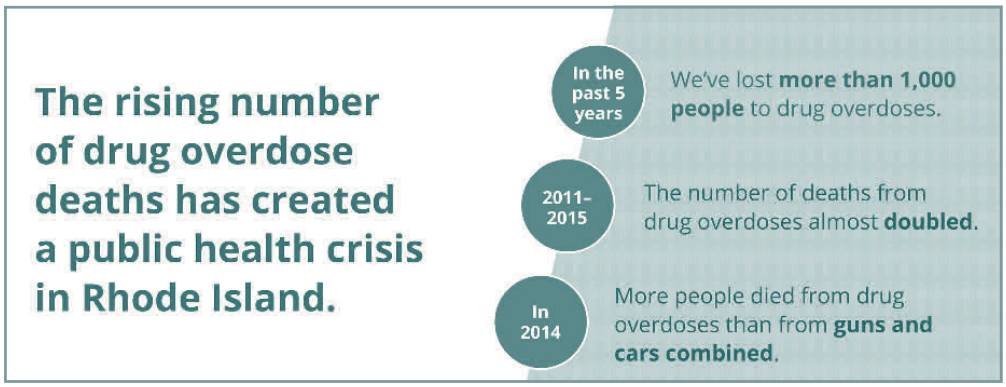


(2) https://www.cdc.gov/mmwr/volumes/66/wr/mm6614a2.htm?s_cid=mm6614a2_w

(3) https://americanhealth.jhu.edu/fentanyl

OPIOID USE DISORDER

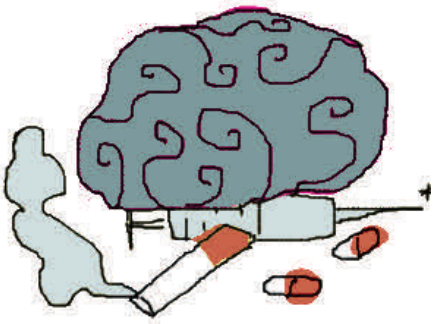
Some people with exposure to opioids will go on to develop Opioid Use Disorder, which we used to call 'opioid addiction.' It is characterized by ongoing use despite adverse consequences.



There is a strong situational component that contributes to the development of opioid use disorder. The situational component could be peer pressure, physical and social isolation, or often prior trauma. For example, several of Dr. Rich's patients were molested and abused as children and were told "it didn't happen" and "if it did, it's your entire fault" and "we don't talk about that." They carried this psychological burden into adulthood, and for some, once exposed to an opioid, that whole psychological burden gets lifted briefly. It is no wonder they would want to go back to that place where their psychological pain is relieved.

There is also a strong genetic component. People with addiction in their family are at increased risk for developing opioid use disorder.

Nationally, overdose deaths have risen *fivefold* since 1999, and the crisis has evolved over the years, with prescription opioids giving way to heroin and illicit fentanyl as the primary drivers of the epidemic. 64,000 Americans died of drug overdose in 2016 – about 2/3 of them linked to opioids.



WHAT HAPPENS TO THE BRAIN IN OPIOID USE DISORDER?

Dr. Rich describes the brain in two parts: the thinking brain, the cerebral cortex, and the primitive or reptilian brain, which is "hard wired" for survival. Most of our behavior and actions can be controlled by our thinking brains. For example, we can hold our breath for a long time, but there comes a time when the primitive brain kicks in and takes over; it forces us to breathe, even if we are in a smoke-filled burning building.

This is the part of the brain that is damaged in opioid use disorder. The brain interprets symptoms of withdrawal as "we are going to die" and commands the body to do whatever it has to do to obtain and consume an opioid in order to survive and to avoid the feelings of dying.

When someone gets hooked on opioids, as their tolerance increases, they need to consume ever increasing amounts to stay out of withdrawal. They are being squeezed like a boa constrictor. Every time they breathe out, they get squeezed tighter and cannot breathe back in. This puts a strain on their resources, which, for many can lead to stealing, and/or involvement in the sex and/or drug trades.

To earn 1.0 CME credit for reading information on Challenges and Solutions in the Opioid Crisis in this issue, click on the link below or scan the QR code on the right:

https://www.surveymonkey.com/r/75N5G2B

Please note:

The link and code will expire two (2) years from the time this newsletter was issued.

STOP THE EPIDEMIC

We know what needs to be done to stop this epidemic: A public health approach based on sound science and evidence based practices. (1)

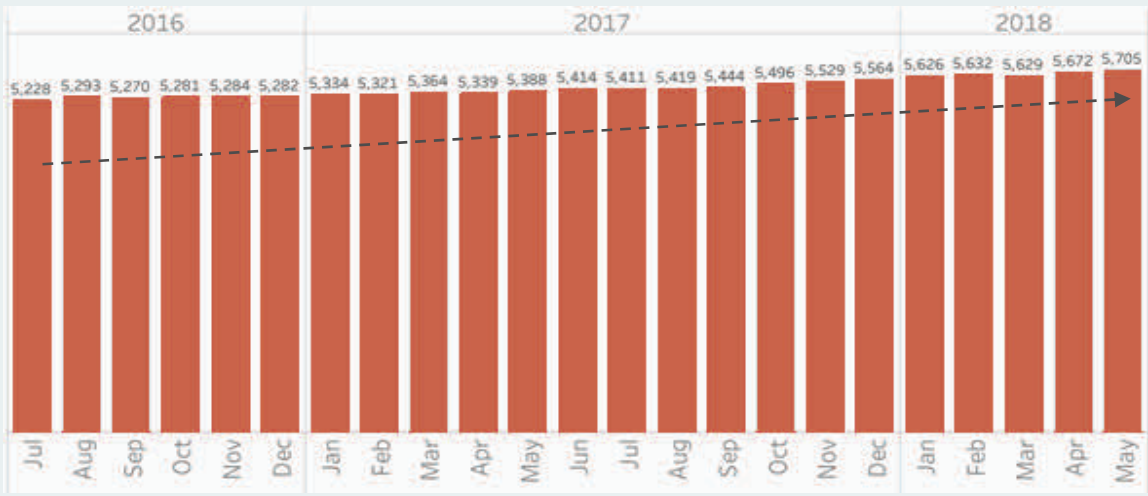
First, we need to provide effective treatment. Medications for Addiction Treatment, or medication assisted therapy (MAT), which include(s) methadone, buprenorphine (Suboxone) and depot-naltrexone (Vivitrol) are proven effective therapies to reduce overdose deaths. They work by different mechanisms, but when taken correctly, block the euphoric effects of opioids and keep the patient from developing withdrawal. This allows people to stabilize their lives and return to work, school, or family activities. An increase in MAT in Baltimore dropped the overdose rate by 80%. (4) In France, where buprenorphine is widely available, fatal overdose is nearly non-existent. (5)

The number of Rhode Islanders on MAT is on the rise. A key initiative under the Governor's action plan (6) is to increase the number of people accessing medications for addiction treatment starting with those passing through the prison and jail. Within a year of implementation, Rhode Island saw a 12% drop in overdose deaths, and for those recently released from incarceration, a 61% drop in overdose deaths. (7) This highlights the fact that increasing MAT availability will drive down opioid overdose deaths.

Because of the tremendous stigma around Opioid Use Disorder and its treatment, patients are treated poorly even in the medical setting. Blame, shame and judgment tend to drive people away from treatment. We as a medical profession need to examine the ways that we stigmatize patients with this disease, and encourage them towards recovery using the most effective treatments: medications for addiction treatment. We should be initiating patients on methadone and buprenorphine throughout the healthcare system, and achieving similar reductions in mortality to what is found among people leaving the Department of Corrections. Our Physicians, Nurse Practitioners and Physicians Assistants should all be certified to prescribe buprenorphine. This involves completing the Data Waiver Training and obtaining a special DEA license. We should facilitate seamless transition for our patients onto Methadone and have close collaboration with Methadone Treatment Programs.

The number of **Rhode Islanders on medication assisted treatment (MAT)** is on the rise:

(Sources: RI DOH, BHDDH)



(4) https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2012.301049

(5) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3949694/

(6) http://preventoverdoseri.org/our-action-plan/

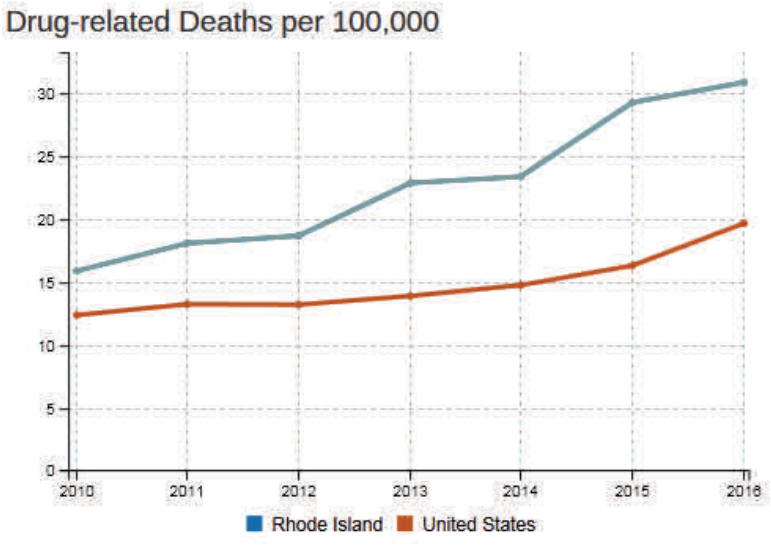
(7) https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2671411?resultClick=1

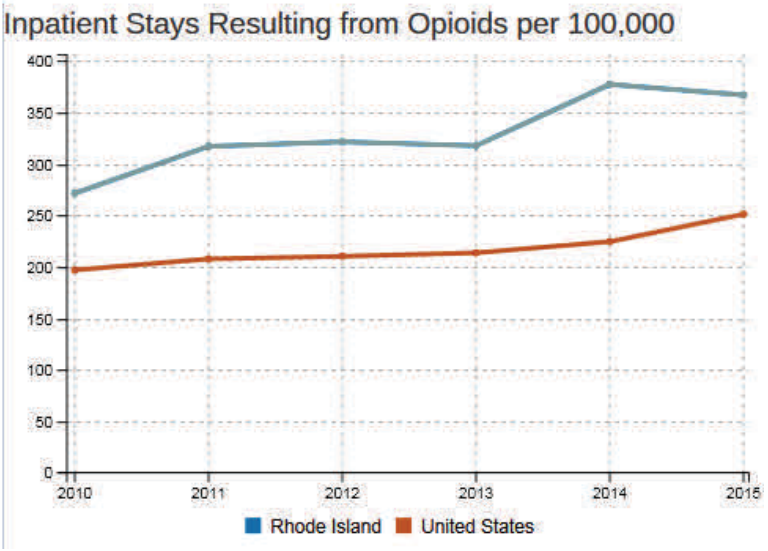
BEYOND A BED...MAT

The availability of access to the MAT medications is extremely limited throughout many parts of our nation (http://opioid.amfar.org/indicator/SMAT_fac). A sustained effort to develop widespread availability of comprehensive, high quality medication treatments for people with opioid use disorder, similar to what the Ryan White Care Act did to address the AIDS epidemic, is desperately needed; however, in the US much of the discussion of "treatment" is based upon the outdated notion that complete abstinence is best. For many this involves going to a detox, facility, a place to stay until you are detoxified...*a bed*.

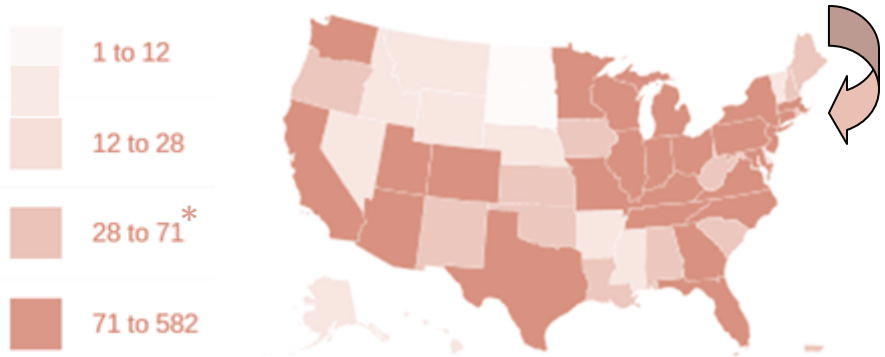
There is a problem with “detox" as drug treatment: Up to 90% of the time, patients relapse to opioid use. Combining a lost tolerance during the detox and fentanyl contamination of much of the illicit opioid supply, there is an even greater risk of fatal overdose. It has never been so dangerous to relapse to illicit opioid use.

Thus, MAT approaches have a far superior track record at promptly reducing overdose deaths than does the antiquated detox and abstinence approach. For patients not interested in or aware of MAT, there are many things that can be done to engage them in care, including outreach programs for needle exchange services, naloxone distribution and other services that reduce overdose risk, mitigate drug-related harm, build trust and reduce stigma.





Number of substance abuse treatment facilities offering any MAT



As of this year, 2018, RI has 37* substance abuse treatment facilities offering MAT.

TREATING ADDICTION: PENALTY VS. PUBLIC HEALTH INITIATIVES

~Three Problems With Increasing Penalties~

In the US, what has prevailed over a public health approach is a punitive approach, such as increasing penalties for distribution of dangerous substances. While it seems like that approach should work; the fact is that it does not. (6) What it will do is increase incarceration rates and incarcerate a lot of low level dealers who are primarily involved in the drug trade as a way to address their own addiction.

The punitive approach can have the opposite effect and drive people away from needed services. It is based upon the notion that the "abstinence only" model is effective, which, for the vast majority of people, it is not, especially in the short run. Most people with opioid use disorder do not simply stop using opioids and get on with their lives, no matter how much they are coerced, threatened or punished.

There are, however, many examples of public health and public safety collaborations that have yielded promising results. For example, the Good Samaritan laws in many states have provided protection for people who call 911 for help in the event of an overdose. The heroic work being done by police and firefighters in administering naloxone to overdose victims are excellent examples of changing attitudes to further engage people struggling with opioid use disorder. Additionally, pretrial and pre-arrest diversion efforts to direct people into treatment have demonstrated significant success in decreasing recidivism. Nationwide examples of this include Law Enforcement Assisted Diversion (LEAD) and the Police Treatment and Community Collaborative (PTAC).

Further increasing penalties will only squander...successes and drive people underground, further away from desperately needed treatment. The war on drugs has not worked.

In Rhode Island, the firemen's Safe Stations are examples of public health/public safety collaborations designed to divert people struggling with addiction who volunteer for help into treatment. Most of these pre-arrest diversion programs also offer wrap-around services and case management designed to help engage and retain individuals in treatment.

Further increasing penalties will only squander those successes and drive people underground, further away from desperately needed treatment. The war on drugs has not worked. The National Research Council panel, on which Dr. Rich was the only physician member, examined the Causes and Consequences of High Rates of Incarceration and found that "the best empirical evidence suggests that the successive iterations of the war on drugs-through a substantive public policy effort-are unlikely to have markedly or clearly reduced drug crime over the past three decades." (8) The Pew Charitable Trusts also recently documented, in a nationwide study, that increased imprisonment does not reduce drug problems. (9) Opioid Use Disorder is not something that can be treated effectively with punishment or threat of punishment. If it did, we would have already solved the problem. Increasing penalties for smaller amounts of drugs, including fentanyl, will dramatically worsen the situation. It would incentivize high-level traffickers who import most of the fentanyl and opioid analogues to increase the purity of the fentanyl they are manufacturing, importing and introducing into the US illicit market. In turn, this would substantially increase the danger associated with fentanyl use. Increasing the penalties for selling opioids will most likely capture predominantly low level sellers who are unlikely to know what they are selling and do not have the ability to sell any other drugs, and will be easily replaced by other desperate individuals.

(8) *https://www.nap.edu/catalog/18613/the-growth-of-incarceration-in-the-united-states-exploring-causes*

(9) *http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2018/03/more-imprisonment-does-not-reduce-state-drug-problems*

SUCCESSES ABROAD

~Opportunities for Rhode Island~

A very strong punitive approach to the crack cocaine epidemic was exercised beginning in the 1980s, based in part on some misinformation about the dangers of crack cocaine.

Congress enacted mandatory minimum sentences for small amounts of crack cocaine. The result was a dramatic escalation of incarceration that devastatingly and disproportionately impacted minority, impoverished and inner-city residents. In 2010 Congress took an important step toward rectifying the crack sentencing disparity and passed the Fair Sentencing Act, but more work remains to eliminate this disparity. We should not repeat the mistakes of the past with our response to opioids. Although fentanyl and other opioids undoubtedly pose more mortality risk than crack cocaine, increasing penalties and incarceration would surely worsen the opioid overdose crisis.

...increasing penalties and incarceration would surely worsen the opioid overdose crisis...

The "punishment" based approach to addiction is an expensive failure. As our world becomes more global, we should begin to look to other countries for ideas in managing addiction. In Portugal, in 2001, possession and use of illicit drugs was decriminalized. Drug trafficking remains illegal. The result has been a dramatic drop in incarcerations, harm associated with drug use, including HIV, and among the lowest rates of drug use in Europe. In North America, the first legal supervised consumption site (also known as a supervised injection facility), Insite, opened in Vancouver, BC in 2003. While the idea of supervising the use of injection drugs may seem counterintuitive to the road to recovery, it provides an invaluable method for harm reduction and offering true partnership between patients and the medical community, allowing the first conversations of recovery to happen without judgment or blame. The success of Insite has inspired American cities like Philadelphia and Seattle to begin advocating for their own safe consumption sites.

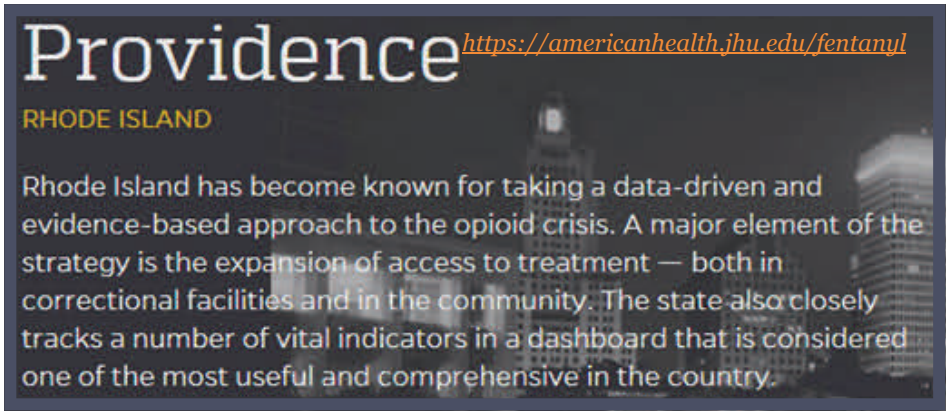
Rhode Island has begun trailblazing work in treating opioid use disorder for justice-involved individuals, and in developing partnerships with public safety and public health. Given the current opioid epidemic however, we must double our efforts in the medical community to support evidence-based ways to keep our patients healthy and alive.

Source: Pew's analysis of 2014 data from the states of New Jersey and Tennessee, the federal Bureau of Justice Statistics National Corrections Reporting Program, the Federal Bureau of Prisons, the Centers for Disease Control and Prevention, the Federal Bureau of Investigation's Uniform Crime Reporting (UCR) Program, and the Substance Abuse and Mental Health Services Administration's National Survey on Drug Use and Health

What's Happening in Rhode Island…

> **[Rhode Island's plan] … could serve as a model for the nation.** Rhode Island is focused on stronger prescription tracking, expanded use of withdrawal and overdose-reversal drugs, and increased efforts to ensure that hospitals connect overdose patients with treatment services.
>
> "**It's a very clear and comprehensive plan**," said Joshua Sharfstein, M.D., associate dean of Johns Hopkins University's School of Public Health.

The Washington Post
April 3, 2016



Governor Raimondo's Overdose Prevention and Intervention Action Plan

…focuses on four specific and complementary strategies designed to cut the number of lives lost to overdose by a third within three years:

Prevention: Take aggressive measures to improve patient safety and better monitor opioid use through the Prescription Drug Monitoring Program.

Rescue: Ensure access to naloxone.

Treatment: Expand the quality and availability of medication-assisted treatment (MAT). Buprenorphine/naloxone, naltrexone, and methadone are evidence-based treatments for opioid addiction/opioid use disorder.

Recovery: Expand access to peer-recovery services and MAT.

We should not repeat the mistakes of the past with our response to opioids.

Opioid use is poorly understood by most people. The black market is unregulated, leading to the manufacture of opioids with highly variable potency, which challenges efforts to control the damage done by them. Punitive measures may make people feel like tough action is being taken, but out in the world where people are dying, such an approach will only make matters worse, distracting attention and resources away from what needs to be done.

Strong public health and medical approaches, with a dramatic up-scaling of high quality MAT programs and strategies to engage people with opioid use, as well as tools to reduce harmful use as much as possible is what is needed.

Insights is published by Lifespan's Department of Risk Management Loss Prevention division.
Submissions and ideas are welcome and may be submitted to the department or faxed to **401-444-8963.**