

CONNECTICUT MEDICAL ASSISTANCE PROGRAM DEPARTMENT OF SOCIAL SERVICES & HEALTH INFORMATION DESIGNS



Connecticut Medical Assistance Program Quarterly Newsletter

The dramatic increase in opioid overdose deaths in the United States has pushed the opioid epidemic out as a major public health issue. Drug overdose is now the leading cause of preventable death, surpassing motor vehicle accidents. In 2014, there were 47,055 U.S. drug overdose deaths; 61% involved an opioid.¹ During 2015, drug overdoses accounted for 52,404 U.S. deaths, including 33,091 (63.1%) that involved an opioid.¹

In 2015, there were 697 opioid-involved fatalities in the state of Connecticut. Injection was the route of opioid administration in 25% of fatal cases. Opioids identified among decedents were heroin/morphine alone (38%), prescription opioid analgesics alone (24%), fentanyl alone (9%) and combination of opioids (30%). In addition, benzodiazepines were identified in 42% of individuals with an opioid-related fatal overdose, and alcohol in 28%.²

Based on a report published late last year in MMWR, from 2014 to 2015, Connecticut was in the top 3 states to experience the largest percentage increases in death rates from synthetic opioids [NY (135.7%), CT (125.9%), and IL (120%)] and was also in the top 4 states that experienced the largest absolute rate changes in heroin deaths from 2014-2015 (table1).¹

Information from that same report showed that from 2014 to 2015, the death rate in the U.S. from synthetic opioids other than methadone, which includes fentanyl, increased by 72.2% and heroin death rates increased by 20.6%.¹ This increase is likely driven by illicitly manufactured/distributed fentanyl.^{3,4}

An illustration of these statistics occurred close to home during 2016, at Yale New Haven Hospital. The emergency department experienced an outbreak of overdoses associated with fentanyl. The next section is an excerpt taken directly from the report published in MMWR where 12 patients presented with fentanyl overdose and 3 of the 12 died. "On the evening of June 23, 2016, a white pow-

der advertised as cocaine was purchased off the street from multiple sources and used by an unknown number of persons in New Haven, Connecticut. During a period of less than 8 hours, 12 patients were brought to the emergency department (ED) at Yale New Haven Hospital, experiencing signs and symptoms consistent with opioid overdose." Three of those patients died and the substance which caused the overdose was determined to be fentanyl.⁵

Based on the alarming epidemiology of the current opioid crisis seen throughout the U.S. and here in Connecticut, the Federal government as well as individual states have made strides to combat the epidemic. In March of 2015, the U.S. Department of Health and Human Services identified three priority areas to address the opioid crisis and to decrease opioid use disorders and overdose which included; opioid prescriber education, community naloxone access, and improved access to medications for opioid use disorder. A multi targeted approach is needed to address access to opioid medications, while at the same time, providing solutions to the rising number of overdoses and need for treatment. Other targeted approaches or ideas to address the crisis include:

- ◆ Implement the CDC Guideline for Prescribing Opiates for Chronic Pain⁶
- ◆ Improve access to and use of Prescription Monitoring Programs (PMPs)
- ◆ Reduce prescription opioid supply
- ◆ Increase Naloxone distribution
- ◆ Increase and improve access to opioid disorder treatment programs/Medication Assisted Treatment (MAT)
- ◆ Reduce Illicit opioid supply

- ◆ Educate healthcare providers and the public
- ◆ Prescription drug take back programs
- ◆ Overdose prevention Education and Naloxone Distribution (OEND) programs

In Connecticut, Governor Dannel Malloy created the Connecticut Opioid REsponse (CORE) team via the Alcohol and Drug Policy Council (ADPC) to address the state's opioid crisis. He charged the group with creating a focused set of tactics and methods in order to have a rapid impact on the number of overdose deaths within Connecticut. A document published by the CORE team in October 2016² outlined strategies and tactics the group would take over the next three years to combat the opioid epidemic within our state:

- ◆ Strategy 1: Increase access to treatment, consistent with national guidelines, with methadone and buprenorphine
- ◆ Strategy 2: Reduce overdose risk, especially among those individuals at highest risk
- ◆ Strategy 3: Increase adherence to opioid prescribing guidelines among providers, especially those providing prescriptions associated with an increased risk of overdose and death
- ◆ Strategy 4: Increase access to and track use of naloxone
- ◆ Strategy 5: Increase data sharing across relevant agencies and organizations to monitor and facilitate responses, including rapid responses to "outbreaks" of overdoses and other opioid-related (e.g., HIV or HCV) events.
- ◆ Strategy 6: Increase community understanding of the scale of opioid use disorder, the nature of the disorder, and the most effective and evidence-based responses to promote

Table 1					
Synthetic opioids other than methadone			Heroin		
2014	2015	% change in rate, 2014 to 2015	2014	2015	% change in rate, 2014 to 2015
No. (Rate)	No. (Rate)		No. (Rate)	No. (Rate)	
94 (2.7)	211 (6.1)	125.9	299 (8.9)	390 (11.3)	27.0

Connecticut Medical Assistance Program Quarterly Newsletter

treatment uptake and decrease stigma.

Additionally, specific legislation has been passed in Connecticut to encourage some of the targeted approaches⁷. Laws have been passed to:

- ◆ Increase access to opioid antagonists to individuals or family members to prevent overdoses (CGS § 17a-714a)
- ◆ "Good Samaritan" laws provide immunity for people seeking emergency help for a drug overdose (CGS § 21a-279)
- ◆ Legal and civil protection of people who prescribe, dispense, or administer opioid antagonists to a person experiencing a drug overdose (CGS § 17a-714a)
- ◆ Connecticut has established a statewide prescription drug monitoring program (PDMP)
- ◆ Seven-day limit on opioid prescriptions
- ◆ Pharmacists can prescribe opioid antagonists
- ◆ Continuing Education (CE) is required for physicians, APRNs, PAs, and dentists in pain management and prescribing of controlled substances
- ◆ Prior to prescribing more than a 72-hour supply of a controlled substance, the prescriber must check the PDMP for the patient they're prescribing for

In addition to some of the initiatives listed above, Ohio's governor, John R. Kasich, created the Governor's Cabinet Opiate Action Team (GCOAT) which developed some unique methods to combat the epidemic⁸:

- ◆ The development of statewide guidelines for prescribing short and long acting opiates which use 80 mg MED as a stop point
- ◆ The Pill-Mill law which revokes licenses of prescribers and pharmacists who violate proper prescribing or dispensing of prescription drugs.
- ◆ Education Initiatives to Increase Public

Awareness: "Stop overdose. Carry Naloxone" public announcement campaign; Project DAWN (Deaths Avoided with Naloxone), an opioid overdose prevention program (OOPP); Pharmacist campaign "Sometimes We Just Have to Say No."

- ◆ Plan to integrate the state's PDMP directly into electronic medical records and pharmacy dispensing systems

Naloxone

At the Federal and State level, naloxone access has become a priority strategy for tackling the opioid epidemic. Naloxone is an opioid antagonist that is FDA approved for the emergency treatment of known or suspected opioid overdose, as manifested by respiratory and/or central nervous system depression. Naloxone can be administered intranasally (IN), intramuscularly (IM), intravenously (IV), or subcutaneously (SC).

An important part of knowing when to distribute naloxone to patients who are at high risk of an overdose is awareness of the risk factors for an opiate overdose⁹:

- ◆ Polypharmacy and mixing opioids with other sedatives
- ◆ Changes in drug potency or purity
- ◆ Using high doses of prescription opioids
- ◆ Using opioids alone
- ◆ Using opioids after a period of abstinence (post-incarceration, post-addiction treatment, relapse)
- ◆ Previous non-fatal overdose
- ◆ Chronic illnesses involving organs responsible for drug metabolism

On July 15, 2015, Connecticut passed legislation that allows pharmacists to dispense naloxone. Since the passage of this law, pharmacists have been a conduit for naloxone access in the outpatient setting. Based on review of the Connecticut Medical Assistance Center claims, the population has seen an increase in

naloxone distribution via the pharmacy (Table 2). Furthermore, distribution of naloxone has been associated with a reduction in opioid overdose deaths¹⁰. The CDC recommends naloxone distribution to patients who are receiving greater than 50 mg morphine equivalents, concurrent benzodiazepine use, substance abuse disorder, or previous opioid overdose.^{1,10-13}

When assessing a patient's overdose risk to determine if naloxone should be dispensed, a pharmacist should⁹

- ◆ Assess patients for overdose risk factors
- ◆ Review all medications and optimize medication safety
- ◆ Check the PDMP
- ◆ Obtain a substance use history
- ◆ Obtain an overdose history
- ◆ Provide education

In November 2016, the DEA referred to prescription drugs, heroin, and fentanyl as the most significant drug-related threats to the United States.¹⁴ Efforts to reduce opioid prescription rates and similar policy implementations do not lead to an increase in overdoses, but rather a reduction in the number of people exposed to opiates.¹⁵ "The misuse of prescription opioids is intertwined with that of illicit opioids; data have demonstrated that nonmedical use of prescription opioids is a significant risk factor for heroin use underscoring the need for continued prevention efforts around prescription opioids.¹⁶" It is important that policies continue to be developed that assist with combatting the epidemic.

Table 2: Number of Naloxone Prescriptions Dispensed for the

Product	2015	2016	2017 (1st QTR)
EVZIO 0.4 MG AUTO-INJECTOR	98	381	11
EVZIO 2 MG AUTO-INJECTOR	0	0	1
NALOXONE 0.4 MG/ML SYRINGE	8	11	2
NALOXONE 0.4 MG/ML VIAL	249	530	108
NALOXONE 2 MG/2 ML SYRINGE	392	226	22
NARCAN 4 MG NASAL SPRAY	0	3,451	1,228
Totals	747	4,599	1,372

1. Rudd RA, Seth P, David F, et al. Increases in drug and opioid-involved overdose deaths - United States, 2010-2015. *MMWR Morb Mortal Wkly Rep* 2016;65(50):1445-1452.
2. <http://www.ct.gov/dhs/servlet/StatewidePublicInformationCenter.do?tid=301&cid=301&cid=301&cid=301>
3. Clackson RM, Martinez P, Seth P. Fentanyl law enforcement submissions and increases in synthetic opioid-involved overdose deaths—27 states, 2013-2014. *MMWR Morb Mortal Wkly Rep* 2016;65:837-43.
4. Mitchell RB, Gaudin RW, Cecher C, et al. Increases in fentanyl-related overdose deaths—Florida and Ohio, 2013-2015. *MMWR Morb Mortal Wkly Rep* 2016;65:844-9.
5. Tomasiou AJ, Hawk KF, Jabarkhan K, et al. Multiple fentanyl overdoses—New Haven, Connecticut, June 23, 2016. *MMWR Morb Mortal Wkly Rep* 2017;66(6):107-111.
6. Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain—United States, 2016. *MMWR Recomm Rep* 2016;65 (No. RR-1).
7. <http://www.ct.gov/casr/servlet/StatewidePublicInformationCenter.do?tid=301&cid=301&cid=301&cid=301>
8. Patten J, Mackinnon NJ, Boone JM, et al. Strategies and policies to address the opioid epidemic: a case study of Ohio. *J Am Pharm Assoc* 57 (2017) 548-553.
9. Kim JK, Stralberg JP, Davis CS, et al. Prescribe to prevent: Overdose prevention and naloxone rescue kits for prescribers and pharmacists. *J Addict Med* 2016;50(3):300-02.
10. Walley AV, Xuan Z, Hackman HH, et al. Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. *BMJ* 2013;346:f174.
11. Baber E, Rowe C, Santos CM, et al. Primary care patient experience with naloxone prescription. *Ann Fam Med* 2016;14(5).
12. American Medical Association. Task force to reduce prescription opioid abuse. <http://www.ama-assn.org/speical/pubs/advocacy/controlling-prescription-opioid-abuse/division.asp>
13. The Centers for Disease Control and Prevention. Guidelines for prescribing controlled substances for pain.
14. <http://www.dea.gov/newsroom-center/2016/11/07/16-205summary.pdf>
15. Dowell D, Zhang K, Hoopes RE, Hoxworth JM. Mandatory provider review and pain clinic laws reduce the amounts of opioids prescribed and overdose death rates. *Health Aff (Millwood)* 2016;35:1876-83.
16. <http://www.cdc.gov/drugopiodata/pubs/1608.html>
17. Condon WM, Jones CM, Baldwin GT. Relationship between nonmedical prescription-opioid use and heroin use. *N Engl J Med* 2016;374:154-63.
18. Condon WM, Jones CM, Baldwin GT. Relationship between nonmedical prescription-opioid use and heroin use. *N Engl J Med* 2016;374 (2):154-63.
19. Karsanik T, Walley AV. Opioid overdose prevention and naloxone rescue kits: what we need to know and what we don't know. *Addict Sci Clin Pract* 2017;12:4.
20. Seal KH, Thawley R, Gee L, et al. Naloxone distribution and cardiopulmonary resuscitation training for injection drug users to prevent heroin overdose death: a pilot intervention study. *J Urban Health Bull NY Acad Med* 2005;82(2):300-11.
21. Doo-Graem M, Quinn E, Xuan Z, et al. Overdose resources by trained and untrained participants and change in opioid use among substance-using participants in overdose education and naloxone distribution programs: a retrospective cohort study. *BMS Public Health* 2016;14:297.
22. Grigg RE, Gurtman J, D'Amico CJ. Effectiveness of bystander naloxone administration and overdose education programs: a meta-analysis. *AJPAJ Epidemiology* 2015; 210.
23. Dargatzis N, Creppage K, Austin A, et al. Observed transition from opioid analgesic deaths toward heroin. *Drug Alcohol Depend* 2016;162:298-311.
24. Jones CM. Heroin use and heroin use risk behaviors among nonmedical users of prescription opioid pain relievers: United States, 2002-2004 and 2008-2010. *Drug Alcohol Depend* 2013;132:95-100.
25. LaRoche MD, Zhang F, Ross-Degnan D, et al. Rates of opioid dispensing and overdose after introduction of abuse-deterrent extended-release oxycodone and withdrawal of propoxyphene. *JAMA Intern Med* 2015;175:978-987.
26. Mann SC, Bourgeois P, Karandinos S, et al. Every "never" I ever said same "no": transitions from opioid pills to heroin injection. *Int J Drug Policy* 2014;25:257-266.
27. Lof C, Rhoads J. Opioid overabundance naloxone education in a substance use disorder treatment program. *Am J Addict* 2016;25:221-226.
28. Sonawale NU, O'Donnell J, Gaudin RW, et al. Characteristics of fentanyl overdose—Massachusetts, 2014-2016. *MMWR Morb Mortal Wkly Rep* 2017;66(14):382-86.
29. Evans TJ, Hubbard SE, Clark MA, et al. Factors associated with knowledge of a good samaritan law among young adults who use prescription opioids non-medically. *Health Residuation* 2016;13:24.
30. Baber E, Rowe C, Santos CM. Academic detailing pilot for naloxone prescribing among primary care providers in San Francisco. *J Fam Med* 2017;49(2):122-4.
31. Garcia MC, Doshik AB, Kwakasi T, et al. Declines in opioid prescribing after a private insurer policy change—Massachusetts, 2011-2015. *MMWR Morb Mortal Wkly Rep* 2016;65(41):1125-31.
32. Rudd RA, Aleshin N, Ziboff JE, et al. Increases in drug and opioid overdose deaths—United States, 2000-2014. *MMWR Morb Mortal Wkly Rep* 2016;64:1378-82.
33. Gupta R, Shah ND, Ross JS. The rising price of naloxone—risks to efforts to stem overdose deaths. *N Engl J Med* 2016;375(23):2213-15.