Addressing Opiate Overdose Problems

This update of a 2008 VLRS report offers a comprehensive analysis of the current issues affecting Vermont in terms of opiate use, treatment in regard to the drug naloxone, as well as details the way in which state governments are attempting to alleviate and remedy their respective issues concerning opiate usage.

Definitions

Opioids/Opiates

Opioids are a collection of substances distinguished by having morphine-like, analgesic (pain relieving) effect; whereas opiates specifically, are the natural alkaloids taken from the opium poppy. Although all opiates are opioids, not all opioids are opiates. Thus while subtle distinctions between the classification of opioid and opiate are present, the terms are used interchangeably in scholarly writing as well as legislation. This report will also use the terms interchangeably.

Opioid Antagonists

There is more than one type of opioid antagonist, but Naloxone is the preferred drug to combat opioid overdose. Therefore, we provide information on the use of naloxone in this report.

---


3 Center for Disease Control and Prevention, “Community-Based Opioid Overdose Prevention Programs Providing Naloxone,” 2010, accessed February 25, 2013, [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6106a1.htm?s_cid=mm6106a1_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6106a1.htm?s_cid=mm6106a1_w).
Opiate Mortality in Vermont

Opiate use and opiate overdoses are a continuing problem in Vermont. Between 1999 and 2002, eighty-five Vermonters died from opiate overdoses, whereas between 2009 and 2010, 200 Vermonters died from opiate overdoses. Figure 1 shows the mortality rate for Vermont from drugs as provided by the Vermont Department of Health.

Drug overdoses generally stem from a combination of substances, though the Vermont Department of Health report attributes any drug death with an opiate present as an opiate death, regardless of the other drug. Furthermore, the category of prescription opiate is included to represent legal opiates, and differentiate from heroin, not to imply whether or not the victim(s) obtained the opiate legally via prescription. Anticoagulants, commonly known as “blood thinners,” are a substance used to prevent blood clots, among other medical conditions. The deaths in the data attributed to anticoagulants were from elders (mean age of 82).

![Figure 1: The Vermont drug mortality rate from 2004 to 2012.](source)


---

As Figure 1 shows, the number of deaths from opiate overdoses peaked in 2007 with 56 overdoses attributed to prescription opiates, with the number of deaths stemming from prescription opiates steadily decreasing since. In 2011, however, there was a slight jump in deaths from prescription opiates, with 52 deaths. It must be noted however, that 2011 had a high overall drug mortality rate and the percentage of deaths caused by opiates in 2011 was 48.6%, the lowest percentage of deaths caused by prescription opiates since 2004. Thus the mortality rate due to opiates has been decreasing since 2008.

**Opiate Effects on Vermont’s Population**

In 2010, U.S. Attorney General Eric Holder gave a speech in Montpelier, Vermont in which he remarked “[t]oday, prescription drug abuse is considered the fastest-growing drug problem in the country. And opiate-based painkillers are among the most commonly abused drugs.”8 This national trend is parallel to the opiate abuse trend in Vermont.9

One way to measure the opiate abuse trend is by observing the admittances into rehabilitation centers within Vermont; the U.S. Department of Health and Human Services compiles these statistics. The Treatment Episode Data Set (TEDS) is contains data collected by states in monitoring their substance abuse treatment systems. TEDS statistics shows that admittances to substance abuse facilities for opiate problems has increased tremendously since the early 2000’s (see Figure 2), and now has overtaken alcohol for substance abuse admittances. Alcohol previously was the substance most treated for abuse.10 According to the National Survey of Substance Abuse Treatment Services (N-SSATS), a data set gauging the number of rehabilitation facilities, there are only two more substance abuse treatment facilities in Vermont than there were in 2002.11 Thus, while the amount of people being treated for opiate abuse has risen steadily, the number of substance abuse facilities has not greatly increased; indicating a rise in opiate abuse.12,13

TEDS has a few drawbacks however, namely that many private for-profit rehabilitation centers not registered through the state substance abuse agency may be excluded from TEDS. Also, “TEDS does not include data on facilities operated by federal agencies [such as] the Bureau of

---

Prisons, Department of Defense, and the Veterans Administration; are also not included, meaning the data is obtained mainly through state agencies. In addition, “TEDS is an admissions-based system, and TEDS admissions do not represent individuals. An individual admitted to treatment twice within a calendar year would be counted as two admissions. Most states cannot, for reasons of confidentiality disclose client information. Even given these limitations, the TEDS substance abuse data set still comprises a “significant portion of all admissions to substance abuse treatment” [facilities], thus still indicating a rising trend in opiate abuse in the state of Vermont. 

Figure 2: Admissions to Vermont substance abuse treatment facilities. 
Source: Vermont Treatment Episode Data Sets: 1992-2011

Figure 2 documents Vermont’s opiate abuse trend using the Treatment Episode Data Set (TEDS). This system records data relating to rehabilitation center admitances per year and by substance, an indicator as to substance abuse trends in Vermont. 

---
Data Discrepancy

In Vermont, deaths from opiates have fallen, while abuse of opiates has risen. Although, we are unable to give a specific or definite reason for these seemingly contradictory numbers, we can speculate as to some of the many factors influencing this trend. We believe it is possible that there has been a shift in the demographics of opiate abusers. In the past, heroin users may have used prescription opiates when heroin is not available to achieve the same effects intravenously; now it is possible that prescription drug abuse is on the rise stemming from persons strictly abusing prescription opiates due to a higher prevalence of prescription painkillers in households in Vermont, as well as nationally. Abusers who inject opiates are at a higher risk for overdose rather than abusers who only orally ingest prescription tablets. Furthermore, another facet of this theory is that those who ingest tablets are more aware of the dosage they are receiving, as prescription pills are clearly labeled, and the user knows the amount that they are taking. In contrast, a person who injects heroin and/or melts down prescription opiates to inject may be less aware of the purity or potency of the opiate, leaving them at a higher risk for overdose.

Another theory for this discrepancy is that on one hand it may be argued that prescription drugs as well as rehabilitation have become more accepted culturally in contemporary times, resulting in an increase in use of drugs and admittance to rehabilitation centers. While on the other hand, an increase in substance abuse facilities strictly devoted to opioid treatment may have encouraged more people to seek help, while also decreasing the overall mortality rate. At this point it is not entirely clear what explains the declining opiate-fatality rate and increasing substance abuse admittance rate.

Naloxone

Opioid overdose occurs due to a stifling of the respiratory system. An opiate overdose is an extremely slow process, leaving ample time for medical intervention. Naloxone hydrochloride (naloxone) is an opioid antagonist, meaning it blocks the opiate receptors to reverse the effects of an opioid overdose. “Naloxone strips clean the brain’s opioid receptors and reverses the respiratory depression causing almost immediate withdrawal.”

---

Naloxone is a relatively inexpensive generic drug. Unlike opioids, naloxone “lacks any psychoactive or addictive qualities.”22 In other words, naloxone has no abuse potential. The opioid antagonist can be administered intravenously, intramuscularly, or intranasally.23 It is typical that, “upon administration [of naloxone], habitual opioid users typically experience symptoms of acute withdrawal including physiological and mental cravings for [the opiate], confusion and dysphoria.”24 These symptoms last approximately forty-five minutes.25 Naloxone should not be given or prescribed to patients with cardiovascular problems (which occur often in excessive alcohol drinkers) as it may result in serious injury or death.26 There have not been sufficient studies done on children and pregnant or breastfeeding women, therefore these patients may be at risk. Naloxone may interact with other drugs (primarily those that have an effect of the central nervous system), so it is pertinent that the physician be informed of all medications the patient may be taking.27 Specific side effects of naloxone may include, “coughing or hoarseness, feeling faint, dizzy, or lightheaded, feeling warmth or heat, fever or chills, flushing or redness of the skin, especially on the face and neck, headache, lower back or side pain, painful or difficult urination [and] sweating.”28

**Naloxone Regulations under Vermont and Federal Law**

The Food and Drug Administration classifies naloxone as a prescription drug.29 “Naloxone is not a controlled substance as defined by federal or state law, but is a prescription drug subject to the general laws and regulations that govern all prescriptions in regular medical practice.”30

The governing body in the state of Vermont responsible for “setting standards for issuing licenses, licensing only qualified applicants, investigating complaints of unprofessional conduct, disciplining and regulating the practices of license holders,” is the state of Vermont Board of

---

22 Scott Burris, Leo Beletsky, Carolyn Castagna, Casey Crowe, and Jennie Maura McLaughlin, “Stopping an Invisible Epidemic: Legal Issues in the Provision of Naloxone to Prevent Opioid Overdose.”


24 Scott Burris, Leo Beletsky, Carolyn Castagna, Casey Crowe and Jennie Maura McLaughlin, “Stopping an Invisible Epidemic: Legal Issues in the Provision of Naloxone to Prevent Opioid Overdose.”

25 Scott Burris, Leo Beletsky, Carolyn Castagna, Casey Crowe and Jennie Maura McLaughlin, “Stopping an Invisible Epidemic: Legal Issues in the Provision of Naloxone to Prevent Opioid Overdose.”


29 Scott Burris, Leo Beletsky, Carolyn Castagna, Casey Crowe and Jennie Maura McLaughlin, “Stopping an Invisible Epidemic: Legal Issues in the Provision of Naloxone to Prevent Opioid Overdose.”

Each patient receiving naloxone must be issued a prescription by a physician or a licensed medical provider working in collaboration with a physician, such as an advanced practice nurse (APN) or physician’s assistant (PA). Under the rules and standards of the Vermont Office of Professional Regulation, a prescription is not valid unless, “it is issued for a legitimate medical purpose arising from a prescriber-patient relationship which includes a documented patient evaluation adequate to establish diagnoses and identify underlying conditions and/or contraindications to the treatment.” Thus, although a person experiencing an overdose would be unlikely to be able to administer naloxone to themselves, naloxone could not be prescribed to a person who themselves was not a current opiate abuser. A licensed professional who prescribed naloxone for third party use, could potentially face disciplinary actions. Furthermore, the party who worked in collusion with the licensed professional to distribute or administer naloxone to non-prescribed recipients could also face charges for being “unlawfully engaging in the practice of pharmacy” or practicing medicine without a license.

**Government Activity**

In order to combat the consequences of drug abuse, many states have taken specific measures to reduce the harm done by opioids. As of 2010, 15 states and the District of Columbia had community-based overdose prevention programs that distributed naloxone; some of these state governments have even expanded naloxone access to include civilian administration of naloxone. Additionally, many states are passing legislation known as, “Good Samaritan Laws.” These laws are intended to encourage people to seek medical assistance if they witness or experience a drug or alcohol overdose. These laws also provide limited immunity (the scope of which varies from state to state), from civil and/or criminal charges of possession of a controlled substance, if the substance was only obtained due to an effort to assist a person having a medical emergency such as an overdose.

---

37. Center for Disease Control and Prevention, “Community-Based Opioid Overdose Prevention Programs Providing Naloxone.”
Massachusetts

On August 2, 2012 Massachusetts passed a “911 Good Samaritan Law” and laws relating to opioid antagonists. Naloxone or another opioid antagonist may be prescribed to anyone at risk of an opiate overdose or to anyone who may be in “a position to assist a person at risk” of an opiate overdose. Any person acting in “good faith” may obtain a prescription for, have possession of and/or administer naloxone to a person “appearing to experience an opiate-related overdose.” A person seeking medical assistance for themself or another for a drug-related overdose may be granted limited immunity from prosecution and charges related to possession of a controlled substance if “the evidence for the charge of possession of a controlled substance was gained as a result of the overdose and the need for medical assistance.” This law does not protect an individual from being “charged with trafficking, distribution, or possession of a controlled substance with intent to distribute.”

Rhode Island

In June of 2012, Rhode Island passed “The Good Samaritan Overdose Prevention Act” which also included provisions for opioid antagonists (naloxone). A person acting in “good faith” who takes “reasonable care” in administering an opioid antagonist to someone they believe is experiencing a drug overdose, will not be held criminally or civilly liable for administering the drug. Also, a person who seeks medical attention for a drug overdose or drug-related emergency will be granted limited immunity for possession of a controlled substance, if the evidence of possession “was gained as a result of seeking medical assistance.”

Connecticut

As of October 1, 2012, Connecticut allows licensed health care professionals to “prescribe, dispense, or administer an opioid antagonist to treat or prevent a drug overdose” without liability for “damages in a civil action or subject to criminal prosecution.” Connecticut legislation does not specify if laypersons are permitted to administer opioid antagonists. Also, as of October 1, 2011, a person seeking medical assistance for someone who they “reasonably believe” is experiencing an overdose from liquor or any drug or substance, may be granted limited immunity from charges relating to possession of a controlled substance and/or charges for possession of drug paraphernalia.

---

Washington

In 2010, Washington State passed a joint, Naloxone/Good Samaritan Bill. “A person acting in good faith may receive a naloxone prescription, possess naloxone, and administer naloxone to an individual suffering from an apparent opiate-related overdose.” Someone seeking medical assistance for an individual that is experiencing a drug-related overdose may result in limited immunity from prosecution and charges of possession of a controlled substance. The individual for whom medical assistance was sought, will also receive limited immunity, provided the “evidence for the charge of possession of a controlled substance was obtained as result of the overdose and the need for medical attention.”

Conclusion

Opiate substance abuse and a subsequent increase in opiate-related deaths nationally have recently prompted individual state governments to pass Good Samaritan and naloxone legislation in an attempt to reduce fatalities. Currently, in Vermont, while the opiate-overdose-fatality rate has decreased since the mid-2000’s the number of admittances for opiate substance abuse has risen. The increase in abuse of opiates in Vermont has led to the discussion of possible similar legislation to curb opiate abuse.

This report was completed on April 22, 2013 by Meagan Borofsky, T.J. Bowse and Stephen-George Davis under the supervision of Assistant Director Kate Fournier and Professor Anthony Gierzynski in response to a request for an updated report on opiate abuse in Vermont.

Contact: Professor Anthony Gierzynski, 513 Old Mill, The University of Vermont, Burlington, VT 05405, phone 802-656-7973, email agierzyn@uvm.edu.

Disclaimer: This report has been compiled by undergraduate students at the University of Vermont under the supervision of Professor Anthony Gierzynski. The material contained in the report does not reflect the official policy of the University of Vermont.