



The Vermont Opioid Overview

Information & Safety Precautions

July 11, 2017

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Opioid Addiction

According to the VT Department of Health, there were 112 opioid-related fatalities in Vermont for the year 2016.



An **opiate** is cultivated from the naturally occurring opium plant. A **synthetic opiate**, like Hydrocodone, is designed and generated in a laboratory to recreate the effects of an opiate. The term **opiate** is frequently used to describe the entire opiate family including natural and synthetic substances.

Opioid pain medication was initially created for pain relief. Opioids act by attaching to proteins known as opioid receptors. The receptors are found in the brain, spinal cord, and other areas of the body. Once the drug attaches to the receptors, it results in desired pain relief. Users can also experience a euphoric feeling.

Opioids are highly addictive and due to the cost and increased regulations of prescription medication, addicted users often turn to a cheaper easier alternative, heroin.

In 2014, **168,000 children** aged 12-17 are addicted to prescription pain relievers nationwide.

1 in 4 patients in long term opioid therapy in a primary care setting struggles with opioid addiction.

Drug Monitoring Initiative (DMI)

The DMI works with the public to educate about the current opioid problem, and works with community organizations to create new partnerships and solutions.

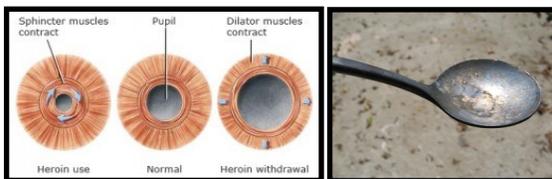
The public is encouraged to contact the VIC whenever they see or hear anything suspicious.

The VIC acts as a central point of contact for the federal, state, county, and local enforcement—collecting, analyzing, and disseminating time-sensitive information and intelligence to assist with major crime investigations. Do not hesitate to contact us.

Look for...

Paraphernalia:

- Heroin packaging such as small glassine bags. These bags often have stamps.
- Tissue or clothing with blood spots
- Cotton Balls
- Small rubber bands or hair ties
- Narcan™
- Needles
- Spoons
- Lighters



Signs of Abuse:

- "Track Marks" which are marks caused by injecting needles.
- Pinpoint pupils. Opioids are the only drug that causes pupils to become small
- Drowsiness or nodding off
- Mental Confusion
- RESEARCH MORE
- 1 in 20 report using prescription opioids for non medical purposes (missing meds, etc.)



Background

Heroin is an illegal substance that is processed from morphine (a natural substance extracted from the seed pod of the Asian opium poppy plant). Pure heroin is a white powder with a bitter taste, often snorted or smoked and appeals to many first time users. Heroin is typically combined with other substances when sold. Once the end product arrives on the street it is often dissolved, diluted then injected into veins or muscles. Many users that turn to heroin are already victims of addiction. The user will build a tolerance to the drug, which requires a higher dose to feel similar effects to the previous dose.

Synthetic opioids are manmade narcotic analgesic drugs that have many of the same qualities that opiates do. The synthetic opioids are often created in underground laboratories, sold through the internet and mailed through the postal service to the desired destination. It is often re-packaged and sold on the street disguised as heroin. Heroin is typically seen as a brown or white powder packaged in small glassine bags. The glassine bags come in a variety of colors, with many different names, numbers or images stamped on them.



An image of what possible lethal doses of heroin, fentanyl and carfentanil look like.

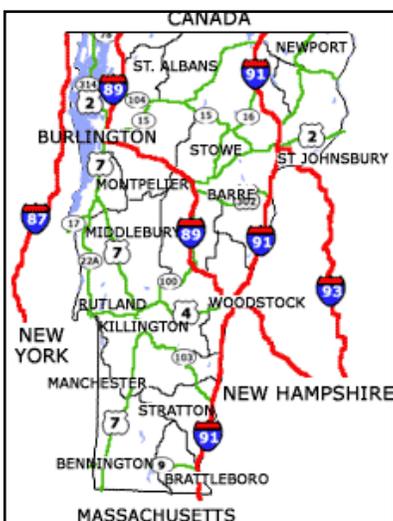
One common alternative to heroin is fentanyl. Fentanyl is a powerful synthetic opioid analgesic that is similar to morphine, but is 50 to 100 times more potent. It is a schedule II prescription drug that is typically used to treat severe pain or manage pain after surgery.(4) Some other common synthetic opioids that are abused by drug users include, but are not limited to: *acrylfentanyl*, *butyrfentanyl*, *furanylfentanyl*, *carfentanil* and *U-47700*. There are over 40 known fentanyl analogues. Fentanyl analogues are a chemical compound created in a clandestine laboratory. When the Drug Enforcement Administration (DEA) adds the newest analogue to the Schedule of Controlled Substance list, the laboratories change the chemical formula slightly, rename it then sell it to the United States among other countries. **Fentanyl and some fentanyl analogues have been found in Vermont.**

Currently, one of the most potent fentanyl analogues is carfentanil. Carfentanil's only known use is for an elephant tranquilizer. It is 100 times more potent than fentanyl, which is lethal at the 2-milligram range (comparable to several grains of salt). See image to the left for a visual comparison of a possible lethal dosage if accidentally contacted. Carfentanil has not been found in Vermont, but has been seen in other New England states and other parts of the country.

According to the U.S. Centers for Disease Control and Prevention, the United States consumes **85%** of all the world's natural and synthetic opiates, which in **2015** factored in **33,091** U.S. deaths.

Vermont Trends

Over the last year in Vermont, heroin has been found combined with several different substances to include: cocaine, methamphetamine, fentanyl, *U-47700*, furanyl fentanyl, alprazolam, morphine, oxycodone, ketamine, tramadol, fluoroisobutyrylfentanyl, acrylfentanyl, acetylfentanyl and butyrylfentanyl. In many of the instances where heroin was combined with another substance, the end user was not aware. This is a great risk for those addicted to opioids. When a user is accustomed to a particular strength of heroin and tries to use something stronger in the same quantity, it can lead to an overdose.



Vermont's proximity to large urban areas and Canada makes it a unique territory for transporting substances. The major interstates that traffickers often use are Interstate 87 in New York, Interstate 89 and 91 in Vermont and Interstate 93 in New Hampshire. There are several routes that traffickers use such as Route 22A, which allows someone to travel from New York to Vermont with minimal exposure to law enforcement.

Transportation does not always refer to a personally owned vehicle. Traffickers may use public transportation with limited security to transport illegal substances. There are many different options that offer low fares that are easy and convenient to travel between cities. From buses, railways, taxis and rental cars, there are several ways traffickers try avoiding law enforcement.

The internet is also utilized to facilitate transactions between vendors in China and distributors in the United States, commonly through the dark web. A distributor may purchase the legal or illegal substances from the vendor with digital currency, then the product is shipped through the mail service to a designated address. The distributor will repackage the product (often mixed with other substances unknown to the end user), and sell on the street for an increased price. Current-

ly in urban areas, heroin can sell for as low as \$2/ bag. Vermont has a varied cost of heroin depending on who the user purchases it from. In 2016, The Berkshire Eagle wrote an article referencing a bag of heroin in Vermont can range from \$8/ bag to \$20/ bag, which is a decrease from 2013 when \$30-\$35/ bag was average. It is becoming more common for fentanyl and/or its analogues to be repackaged and sold as heroin unknowing to the user because it is more profitable for the dealer. **Vermont has had a few unconfirmed connections to drugs sold and purchased through the dark web.**



IV. <http://www.sciencemag.org/news/2017/03/underground-labs-china-are-devising-potent-new-opiates-faster-authorities-can-respond>

V. <https://www.drugabuse.gov/publications/drugfacts/fentanyl>

VI. <http://www.berkshireeagle.com/stories/special-report-vermonts-heroin-cheaper-deadlier,190339>

VII. <https://middleburycampus.com/25762/local/vermont-battles-heroin-epidemic/>



Safety Precautions

Opioids can come in a variety of colors and consistencies, but it is almost impossible to know at sight what a particular substance is made of. Even users don't always know what product they are using. Some users have reported using one substance, but a lab test shows that substance is something completely different.

Many of the opioids created in a laboratory have a white powdery consistency, which could be any one of the fentanyl analogues, or could just be baking powder. It is always important to be aware of your environment and to avoid any unfamiliar substance.

There are several risks when coming into contact with opioids, synthetic or natural. Heroin is often mixed with more potent drugs such as fentanyl.

Fentanyl and its analogues can be readily absorbed through:

- Inhalation
- Oral exposure
- Ingestion
- Skin contact

Scene Safety:

Overdose victims may be found in many different environments including bedrooms, vehicles or the outdoors. The victims may also be found in various positions that may conceal a ring, or other contaminated drug paraphernalia. It is advised to notify and wait for emergency services and to not touch any substance or individual at the scene.

Overdose victims in enclosed spaces may create exposure risks. By opening a door to a vehicle or room, a substance could potentially go airborne. Please wait for first responders with the appropriate personal protective equipment to handle the scene. If you do accidentally move something or someone, be careful to avoid any needles or substances that may be present.

Any person who may come into contact with any type of suspected illicit substance should use caution as it is unknown exactly what it is and minimize exposure risks by taking appropriate safety measures.



Narcan™

In 2016, 53% of the overdoses in Vermont required more than one dose of the reversal medication called nasal naloxone hydrochloride, commonly known as Narcan™. According to the Vermont Health Department, Narcan™ can reverse an overdose. When a person has overdosed, Narcan™ is sprayed into the nostrils and the medication blocks the opioid receptors in the brain, essentially creating immediate withdrawal and restores normal breathing. The quicker Narcan™ is administered, the more effective it is in reversing the overdose. Some EMS and police services are trained to carry Narcan™.

The wide availability of Narcan™ means many overdose victims may have doses of Narcan™ on hand prior to arrival of first responders. **It has been reported that people are using Narcan™ as a tool to achieve the ultimate high by pushing their boundaries and utilizing Narcan™ when they go too far.** Administering higher doses of Narcan™ can create a sharper withdrawal, which could create **first responder safety concerns as a patient may become aggressive or even violent.**

Sometimes multiple doses of Narcan™ are needed to revive a heroin overdose victim. When users mix heroin with stronger synthetic opioids like fentanyl, acrylfentanyl or even carfentanil, several if not many doses of Narcan™ are needed if successful. According to the DEA's carfentanil warning issued in 2016, it is recommended to continue the administration of Narcan™ every 2-3 minutes until the individual is breathing on his/her own for at least 15 minutes or until EMS arrives. Not all first responders have the required doses to counteract strong opioids like fentanyl and its analogues, which makes it that much more dangerous.



VIII. <http://www.healthvermont.gov/response/alcohol-drugs/narcan-naloxone-overdose-rescue>

IX. <https://www.dea.gov/divisions/hq/2016/hq092216.shtml>

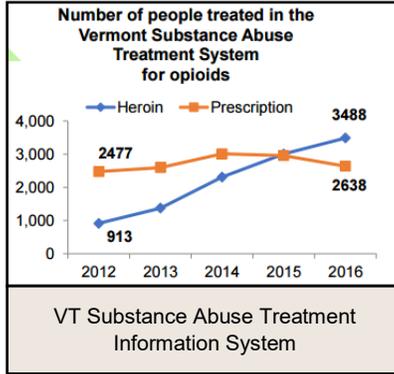
X. <http://www.wcax.com/story/32678230/why-vt-officials-need-more-narcan-to-combat-vt-heroin-overdoses>



Implications

How to help

If you want to anonymously report suspicious activity:
the Vermont TipSoft website is
www.VTips.info.



Understanding and recognizing the risks associated with opioid abuse is important for not only family and friends of an addict, but for the community in general. The overall numbers of individuals being treated and reporting prescription medication abuse is nationwide on a decline. At first glance, it seems like less people are addicted to opioid prescriptions. Unfortunately, abusers of prescription medication are opting for cheaper alternatives like heroin. **The number of individuals treated for heroin addiction has significantly increased.** According to the chart presented by the Vermont Department of Health, the number of people treated for heroin addiction in Vermont increased from 913 individuals in 2012 to 3,488 individuals in 2016.

A KILLER IN THE CABINET

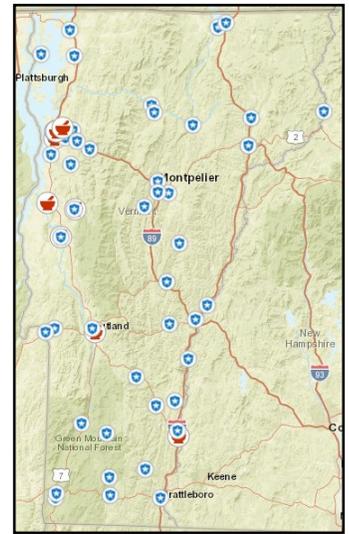
— MEDICATION SAFETY TIPS —

- KEEP A WRITTEN INVENTORY TO KEEP TRACK OF MEDICATIONS
- LOCK UP THE MEDICATIONS
- KNOW YOUR KIDS' FRIENDS AND TALK TO THEIR PARENTS ABOUT MEDICATIONS
- DISPOSE OF OLDER/UNUSED MEDICATIONS

2,500 TEENS BEGIN ABUSING PRESCRIPTION DRUGS EACH DAY

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One way to help prevent opioid addiction is to educate children and all individuals on the risks associated with prescription medication. Removing the early exposure to prescription medication can help reduce the dependence. Another way is to remove medication that is no longer needed. The Drug Enforcement Administration created the National Take-Back Initiative that involves the National Prescription Drug Take Back Day. Drug Take Back Day is a semi-annual event nationwide where people can turn in their expired or no longer used prescription medication. According to the DEA, the day "aims to provide a safe, convenient, and responsible means of disposing of prescription drugs, while also educating the general public about the potential for abuse and medications". There are several locations that are open year round that have drop boxes dedicated to prescription medications. See the map to the right for locations of permanent prescription drug disposal sites. The map is located on the Vermont Department of Health website.



In the United States today, **580** people will try heroin for the first time.

If you do have a relative, friend or neighbor that is or suspected to be addicted to opioids, the Vermont Department of Health has numerous resources on their website. Their website also has resources for those individuals that do find themselves addicted to opioids and want to find treatment. It is a great first stop for finding drug addiction treatment in Vermont.

7 out of 10 people who used heroin in the past year also misused opioids in the past year

Another resource provided on the Vermont Department of Health website is the Vermont Recovery Network. The centers are local, non-residential facilities that provide peer support, sober recreational activities and volunteer opportunities. They assist recovering addicts with a drug free lifestyle. There are several locations throughout the state located on the adjacent map that highlights where those recovery resources are located.

The 13th National Take Back Day that took place on April 29, 2017 collected **900,386** pounds for the entire United States. In Vermont, **5,553** pounds were collected from 71 designated sites.

VRN VERMONT RECOVERY NETWORK
200 Clarendon Street
White River, VT 05001
(802) 748-3888
VTRECOVERYNETWORK@gmail.com
Funded through:
VERMONT DEPARTMENT OF HEALTH
Agency of Human Services

<https://vtrecoverynetwork.org/>

Education and recognition are keys to stopping future addiction. Opioid addiction is in Vermont and does not discriminate. Daughters, sons, moms, dads, neighbors, employees, supervisors, tenants, and everyone else you can think of are at risk for opioid addiction. Given the variety of opioids readily available it is crucial to be aware of the risks and dangers. Opioids do not only present a risk for those that use them, but for those that unknowingly encounter them.



If you are concerned and want to anonymously report suspicious drug activity the Vermont website is www.VTips.info.

XI. <http://www.healthvermont.gov/alcohol-drugs/services/prescription-drug-disposal>
 XII. <http://www.healthvermont.gov/alcohol-drugs/help>
 XIII. <http://www.healthvermont.gov/alcohol-drug-abuse/how-get-help/find-treatment>
 XIV. http://www.healthvermont.gov/sites/default/files/documents/pdf/ADAP_data_brief_opioidmisuse.pdf