





### Heroin

Heroin is an opioid drug made from morphine, a natural substance taken from the seed pod of the various opium poppy plants grown in Southeast and Southwest Asia, Mexico, and Columbia. Heroin can be white or brown powder, or a black sticky substance known as black tar heroin.







## Asian







## Black Tar







## Brown Heroin from Mexico







### Street Names

Common street names for heroin include:

Big H

Black Tar

Chiva

Hell Dust

Horse

Negra

Smack

Thunder





## How is it abused?

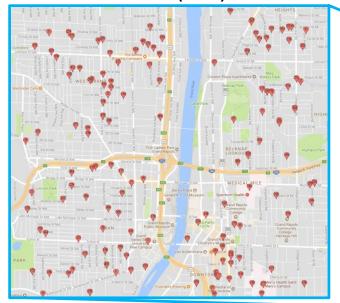
Heroin can be injected, smoked, or sniffed/snorted. High purity heroin is usually snorted or smoked.

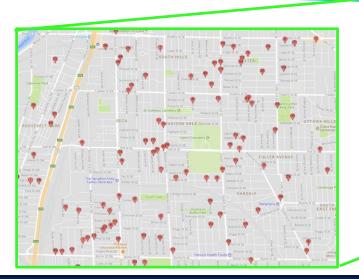


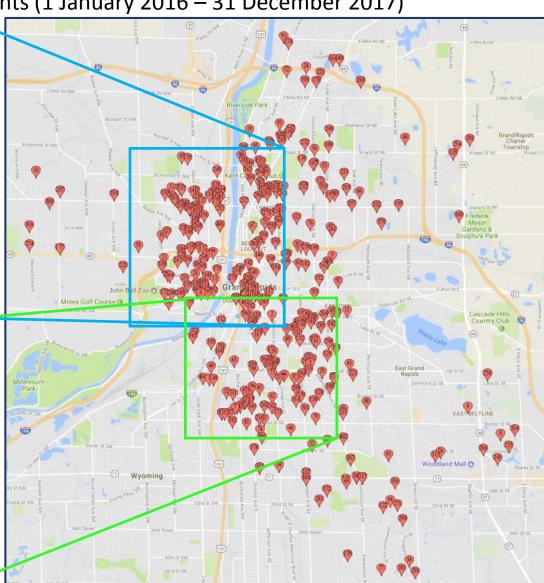
### **GRPD Opiod Overdose - Geolocation**



### All (412) Overdose Events (1 January 2016 – 31 December 2017)











## What are its overdose effects?

Because heroin users do not know the actual strength of the drug or its true contents, they are at a high risk of overdose or death.

The effects of a heroin overdose are:

- Slow and shallow breathing,
- blue lips and fingernails,
- clammy skin,
- convulsions,
- coma, and
- possible death

#### **GRPD Opioid Deaths**



In Mid- 2016, GRPD Patrol Units were trained and began carrying and administering Naloxone (Narcan).

While overdose related medical emergencies have increased by 115%, since the deployment of Narcan by GRPD the number of deaths from overdose have dropped by 23.6%.

In 2017, GRPD alone administered more than 31 doses of Narcan in emergency responses.





# What is its effect on the body?

One of the most significant effects of heroin use is addiction. With regular heroin use, tolerance to the drug develops. Once this happens, the person must use more heroin to achieve the same intensity. As higher doses of the drug are used over time, physical dependence and addiction to the drug develop.

#### Effects of heroin use include:

- Drowsiness,
- respiratory depression,
- constricted pupils,
- nausea, a warm flushing of the skin, dry mouth, and
- heavy extremities





## What is its effect on the mind?

Because it enters the brain so rapidly, heroin is particularly addictive, both psychologically and physically. Heroin users report feeling a surge of euphoria or "rush," followed by a twilight state of sleep and wakefulness



## Which Drugs Cause Similar Effects?

Other opioids such as OxyContin, Vicodin, codeine, morphine, methadone, and fentanyl can cause similar effects as heroin.



# 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, and it is typically used to treat patients with severe pain or to manage pain after surgery. It is also sometimes used to treat patients with chronic pain who are physically tolerant to other opioids. In its prescription form, fentanyl is known by such names as Actiq<sup>®</sup>, Duragesic<sup>®</sup>, and Sublimaze<sup>®</sup>. Street names for fentanyl or for fentanyllaced heroin include Apache, China Girl, China White, Dance Fever, Friend, Goodfella, Jackpot, Murder 8, TNT, and Tango and Cash.





# Powdered Fentanyl







# How is Fentanyl abused?

Fentanyl can be injected, snorted/sniffed, smoked, taken orally by pill or tablet, and spiked onto blotter paper. Fentanyl patches are abused by removing its gel contents and then injecting or ingesting these contents. Patches have also been frozen, cut into pieces, and placed under the tongue or in the cheek cavity. Illicitly produced fentanyl is sold alone or in combination with heroin and other substances and has been identified in counterfeit pills, mimicking pharmaceutical drugs such as oxycodone.





#### **Source of Overdoses**

Value	Percent
Heroin	46.2%
Prescription opioid medication	17.9%
Not an opioid/opiate overdose	3.8%
Unknown	35.9%

Note: Heroin includes the assumption of Heroin which may be Fentanyl/Synthetic Opiate.

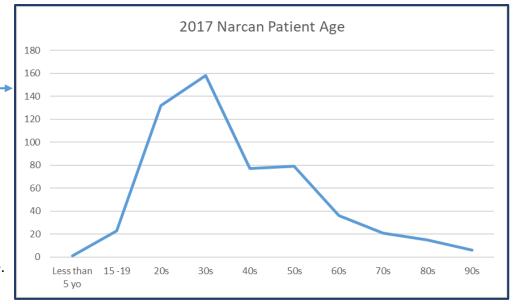
#### **Grand Rapids Police Department**



#### Administration of Naloxone by Law Enforcement

#### **Kent County Naloxone Summary**

- 15.4% of Naloxone in Kent County is administered by Law Enforcement.
  (28.1% by Medical First Response, 56.5% by Advanced Life Support)
- 66.6% Male, 33.4% Female
- Average Patient Age: 41
- Excluding child/toddler overdose via adult, overdoses begin at 15 yoa and rate of overdose increases by 474% by 29 yoa. The largest increase occurs from 18-23 yoa.
- Most Common Barrier to Treatment: Too Many Patients.
  Law Enforcement and Fire do not carry 3-5 doses for a single call.
- Response time in Kent County is typically less than
  5 Minutes, within the City of Grand Rapids, less than 1 Minute.
- In 97% of responses by Public Safety, Police or Fire/EMS are the first administration of Naloxone.
- Lack of Breathing is the most commonly reported symptom of overdose to dispatchers. Cardiac Arrest is second.



- 43% of patients received breathing assistance before administration, 37% after.



# City of Grand Rapids Overdoses

Non-Fatal Overdose 2016: 49

Fatal Overdose 2016: 82

Non-Fatal Overdose 2017: 172

Fatal Overdose 2017: 110