

HENNEPIN COUNTY

SHERIFF'S OFFICE

Report date: April 2018

One-Day Snapshot Study: The prevalence of opioid abuse and overdose among jail inmates in Hennepin County

On Wednesday, December 6, 2017, the Hennepin County Sheriff's Office and Hennepin Healthcare undertook an effort to study the prior opioid use and abuse histories of all inmates in the Adult Detention Center or "Jail." From 2015 to 2017, the number of opioid-related deaths in Hennepin County increased by 65%, with a record high 175 deaths during 2017. The One-Day Snapshot Study seeks to inform the Sheriff's Office, its criminal justice partners, and the public about the occurrence of opioid and heroin use and overdoses, the current public safety response, and areas that should see improvement. **One fifth of the inmates present in the Jail on December 6 self-reported prior use or abuse of opioids (prescriptions and heroin). Roughly 95% of inmates who self-reported a prior opioid-related overdose had been revived with naloxone.**

All findings are based on self-reported opioid use and abuse histories among inmates prior to being booked into the Jail

Initial Findings

1. **20% (173) of the Jail inmates self-reported use or abuse of opioids.** (Figure 1)
 - 52% self-identified as heroin-only users
 - 31% self-identified as prescription-only users
 - 16.7% self-identified as using a combination of heroin and prescription opioids

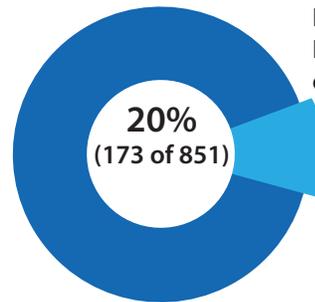


Figure 1
Inmates with a history of opioid use or abuse

2. **64% (111) of the 173 inmates with a history of opioid abuse had overdosed.** (Figure 2)
3. **95% (105) of the 111 inmates who overdosed had been administered naloxone.** (Figure 3)

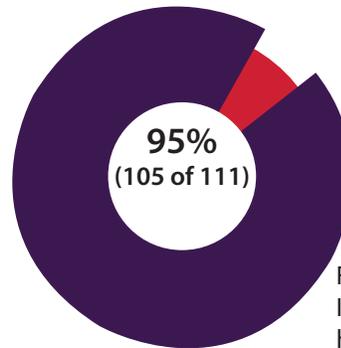


Figure 3
Inmates who had overdosed and had been administered naloxone

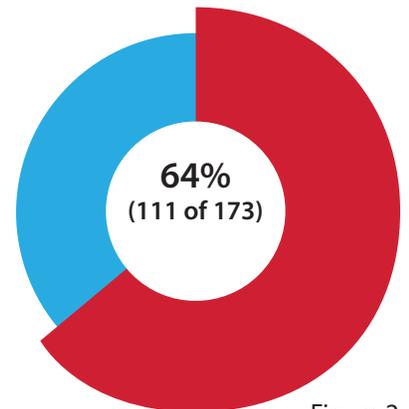


Figure 2
Inmates with a history of opioid use or abuse who had overdosed

4. While 20% of the inmates self-reported use or abuse of opioids, only 2.1% (18) of the 851 inmates in the study reported that they had received addiction treatment in the past.¹
5. Approximately 74% of the inmates with a history of opioid abuse had confirmed indicators or met other criteria associated with mental illness.

¹ Includes non-opioid related inpatient addiction treatment.



Study Findings

All findings are based on self-reported opioid use and abuse histories among inmates prior to being booked into the Jail

Connection to Mental Health Acuity

In the Fall of 2016, the Hennepin County Sheriff's Office conducted a similar One-Day Snapshot Study to evaluate and quantify the need for expanded mental health services in the jail and support the HSCO's identification, management, and diversion of the mentally ill who are detained in the jail or otherwise become involved in the criminal justice system. The results indicated that approximately 52% of the Jail population had confirmed indicators or met other criteria associated with mental illness.

Co-occurring mental illness and substance abuse are a particular concern for public safety stakeholders. Among the 173 inmates with a confirmed history of opioid use and abuse, 128 (74%) had a mental health acuity score of 2 or higher (representing a varying degree of mental illness). Among the inmates without a confirmed history of opioid use or abuse, the mental health acuity score of 2 or higher was just 61.7%. The Jail uses a mental health acuity score scale of 1-4, with 1 representing no evidence or history of mental illness, and 4 representing the highest risk, requires immediate evaluation.

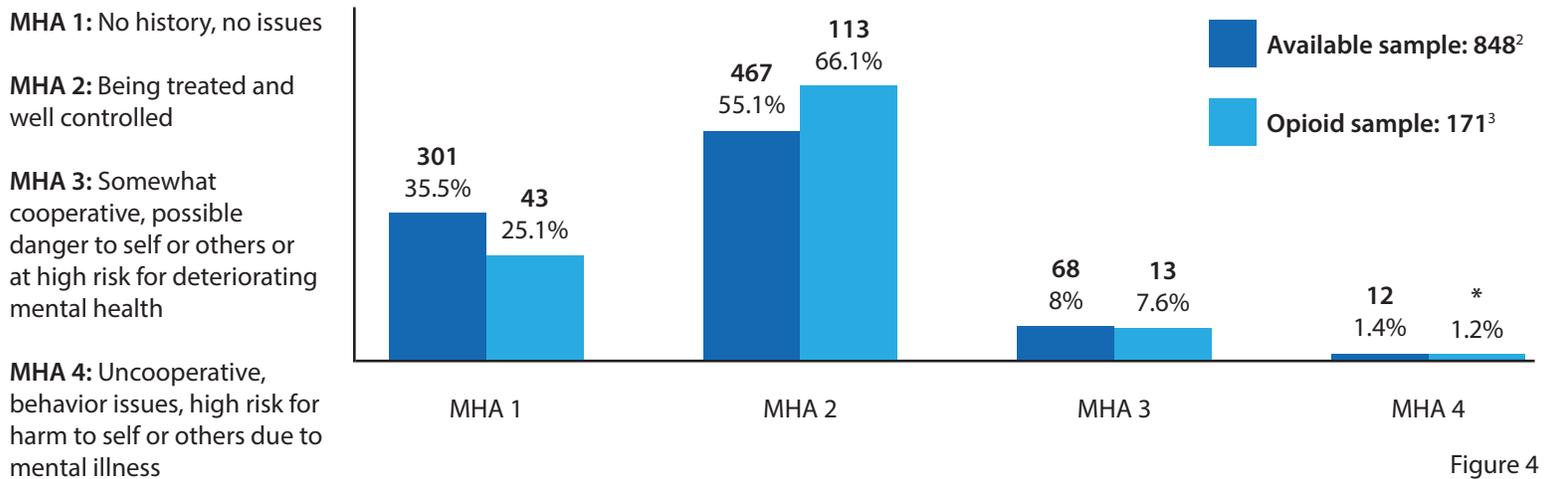


Figure 4
Mental health acuity comparison

Addiction Treatment and Opioid Withdrawal Orders

In 2017, nearly 100 Opiate Withdrawal Orders were written for inmates in the Jail – an expensive treatment option utilized for inmates who require a sustained naloxone treatment, in some cases for several days. Inmates who receive this intense treatment should be referred to addiction counseling or follow-up medical care, rather than being released to the street as they typically are now. While 20% of the inmates self-reported use or abuse of opioids, only 2.1% (18) of the 851 inmates in the study reported that they had received some type of inpatient addiction treatment in the past.

² Data not available for 3 inmates.

³ Data not available for 2 inmates.

*Less than 10 instances, data not reported.

Opioid Overdoses and Naloxone Saves

111 (64%) of the 173 inmates with a history of opioid abuse had overdosed.

According to medical and Jail data, 105 (12.3%) of the 851 inmates in the study had been administered naloxone; some multiple times.⁴ The 105 naloxone saves represent 95% of the 111 inmates that had a confirmed overdose in their past.

In the photo:

A NARCAN kit that HCSO deputies carry while patrolling and working in the jail. The kit includes a 4 milligram dose of naloxone. During 2017, deputies administered the drug 7 times.



Opioid-Related Deaths

One of the primary motivations in performing this One Day Snapshot Study and producing this report was to further assist the Hennepin County Sheriff's Office's top priority – addressing the opioid public safety crisis and the record number of opioid-related deaths in Hennepin County.

In recent years, Hennepin County has experienced a significant increase in the number of opioid-related deaths, as seen in Figure 5.

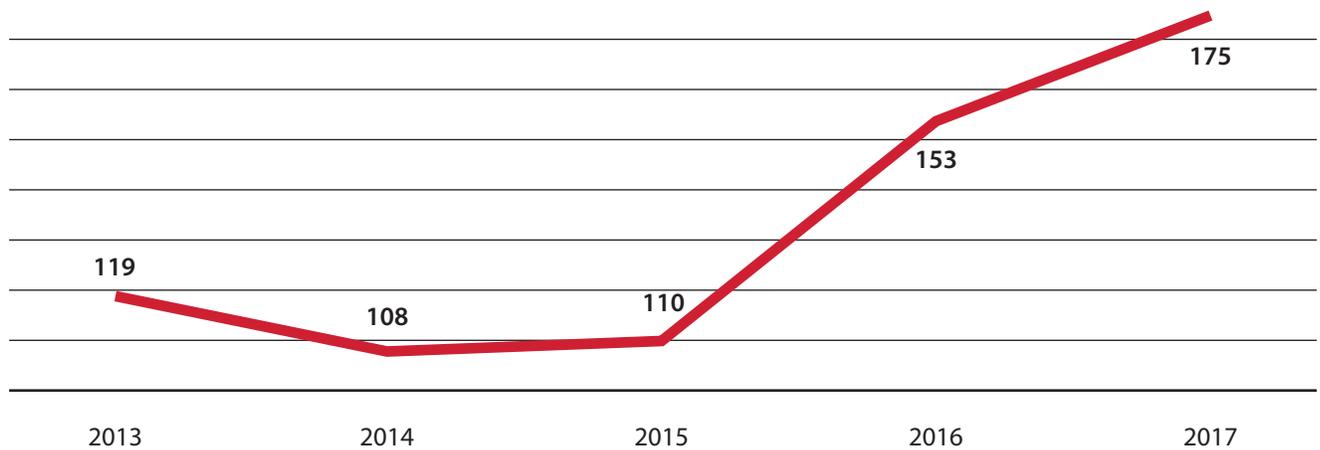


Figure 5
Opioid-related deaths in Hennepin County

⁴Includes naloxone saves, medical treatment, etc. according to Hennepin County data. Data collected outside of Hennepin County has not been included.

Relationship with Violent Crime

As indicated in Figure 7, both violent crime incidents and opioid-related deaths in Hennepin County have increased in recent years. Though we cannot make claims of causality, it is worth noting that the trends follow similar shapes with opioid deaths lagging by approximately one year. If a significant relationship does exist between violent crime trends and the use of opioids, it is even more imperative that we work to solve this public safety crisis.

Figure 6
Highest offense level inmates were booked into the Jail

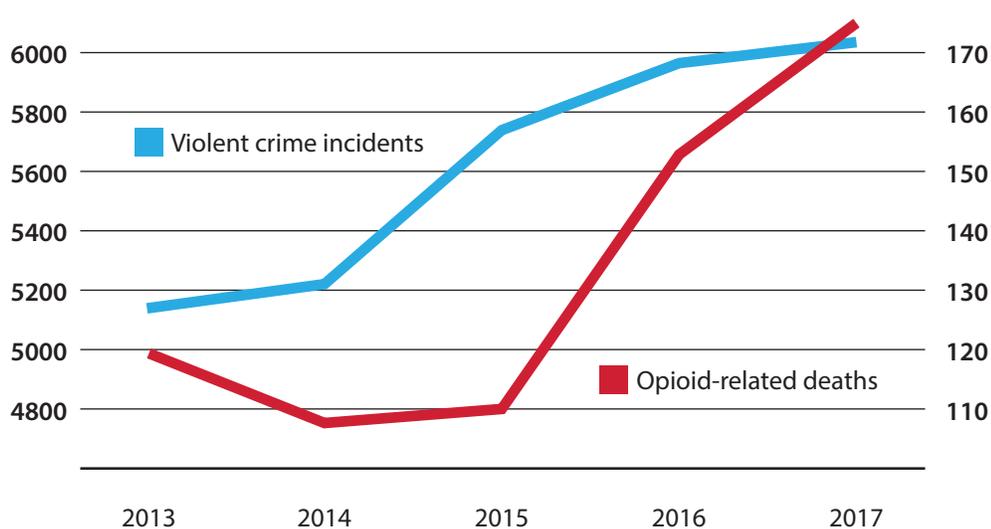
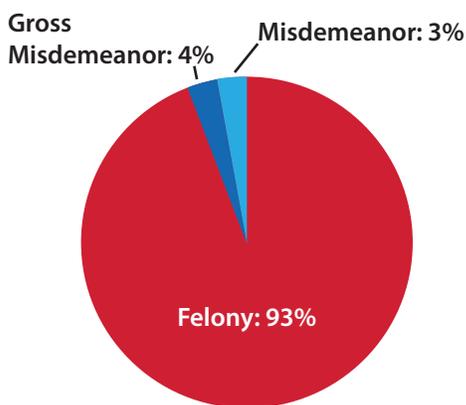


Figure 7
Violent crime vs. opioid-related deaths in Hennepin County

Methodology

Every inmate enters the Jail through a booking process which includes a health screening conducted by a registered nurse. During 2017, approximately 32,000 health screenings were conducted during the booking process, and in December of 2017, questions about past opioid use and abuse were added to the assessments. The Sheriff's Office surveyed each of the 851 inmates in the Jail on December 6, 2017 to study prior opioid use and abuse histories, and overdose rates of inmates.

Study results were collected from self-reported inmate questionnaires conducted by Jail medical staff, and confirmed against Hennepin County medical records and Jail data.⁵ The data collected and produced here represent a base as relevant information from medical facilities outside of the Hennepin Healthcare system were not included. Additionally, Jail records were not collected from correctional facilities outside of the Hennepin County Jail. Because of the limited access points to relevant information, we believe the actual prevalence of opioid abuse and overdose history among the Jail population is likely higher than what is reported here.

The subject group was 88% male and 12% female. The offense level at booking for the survey population were 44% felony, 3% gross misdemeanor, 7% misdemeanor, and 46% probable cause. The highest offense levels inmates were booked into the Jail were as follows: 93% felony, 4% gross misdemeanor, and 3% misdemeanor (Figure 6).

⁵ All medical records were accessed by Hennepin Healthcare staff, complying with all HIPAA Privacy Rules.

