Heroin in Snohomish County: Mortality and Treatment Trends

January 2015
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Introduction

Opioid use, especially heroin use, is an increasingly serious problem in Snohomish County. From 2011 to 2013, approximately one out of every five heroin deaths in the state occurred locally. In 2013 alone, heroin and prescription opioid overdoses represented two-thirds of the 130 accidental overdose deaths in the county. Recognizing the need to move toward evidence-based practices, the Snohomish Health District and Snohomish County Department of Human Services partnered to evaluate the statistics specifically for our community.

Heroin in Snohomish County: Mortality and Treatment Trends represents the hard work of Mark Serafin, Dr. Robin Fenn and many others who are committed to preventing drug use, treating heroin and other opioid addictions, and preventing overdose deaths. The thoughtful and detailed analysis in this report demonstrates the real epidemic in Snohomish County, as well as the need for multiple partners to intervene at targeted points.

In order to affect lasting change, the community must work together to find meaningful short- and long-term solutions. Increased awareness of Washington’s Good Samaritan Law, additional detoxification capacity, increased distribution of overdose reversal kits, and the evaluation of alternatives to incarceration are some of the ways county officials can begin to address this problem. We hope this report will serve as a catalyst for continued discussions and actions on a broader scale.

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The team would also like to acknowledge the technical expertise of Caleb Banta-Green with the University of Washington and Jennifer Sabel with Washington State Department of Health.
Executive Summary

Snohomish County is facing an epidemic of drug overdoses. Of approximately 300 deaths per year due to unintentional injury, 44 percent were due to unintentional poisoning. The primary agents for unintentional poisoning deaths were prescription opioid analgesics (particularly oxycodone and hydrocodone) and heroin. The increase in mortality caused by these drugs is mirrored in local substance abuse treatment programs, which have also seen large increases in the number of clients experiencing problems with these drugs. That heroin has recently replaced opioid painkillers as the main agent in overdose deaths and addiction treatment is of particular concern.

Combating this epidemic requires a coordinated effort of Snohomish County agencies. Law enforcement, social and health services, and community groups must collaborate in order to disrupt the sources of heroin, prevent drug use from happening, treat those who have become addicted, and prevent overdose deaths. These agencies must coordinate efforts in order to maximize their collective impact. Ineffective, older methods must be replaced with evidence-based practices that can effect change. Meeting this challenge is everyone’s responsibility.

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Heroin in Snohomish County

Mortality Due to Heroin

Unintentional poisoning deaths have increased in Snohomish County since the 1990s. Most of this increase was driven by the growing use of opioid painkillers carrying a high potential for abuse and overdose. The most commonly prescribed opioids recently have been oxycodone and hydrocodone. Overdoses of these drugs increased until 2008, followed by a sharp decrease due to tighter regulations and drug reformulation. However, heroin-related deaths began to increase at about the same time. Deaths from these drugs comprise about two-thirds of overdose deaths in the county.

From 2011 through 2013, Snohomish County experienced unusually high numbers of deaths involving heroin. Similar high rates were observed in Washington State and the U.S. as a whole. These increases seem to be driven by users’ desire to find a replacement for prescription opioid painkillers (used for recreational purposes) combined with the sudden availability of inexpensive, but potent, heroin.
When heroin is metabolized by the body, the resulting compounds are indistinguishable from those produced when the body metabolizes prescription morphine. In addition, few medical examiners in the state are properly trained to distinguish heroin from other opioids. Many deaths that are recorded as “morphine” or “other opioids” are actually heroin. Analyses conducted by the Alcohol and Drug Abuse Institute at the University of Washington found this to true in about 84 percent of such cases. The chart above shows the trend in heroin-related deaths including both “confirmed” cases and “probable” heroin deaths. Note the increasing proportion of deaths that were confirmed as heroin from 2007 through 2013, as well as the major increase in heroin-related deaths that occurred in 2011.
Until 2010, Snohomish County’s rate of heroin-related mortality was similar to the State’s. After 2010, the county began to experience much higher death rates than was normal for Washington. From 2011 forward these differences were statistically significant. During these years more than 40 county residents died with heroin in their system each year. Snohomish County experienced 18% of all heroin-related deaths in Washington during this period, although the county comprises only 10% of the state’s population.
About two-thirds of heroin-related deaths in Snohomish County and Washington were males. Although there was an increase in the proportion of women in 2011 and 2012, it was not significant. Heroin-related deaths were most common among people between the ages of 18 and 29, but none occurred to people younger than 18. Deaths related to heroin were rare among people 65 and older.
Native Americans are disproportionately represented among heroin deaths in the county, with a rate more than six times greater than that of whites. Native Americans were also more likely to die from heroin than other races in Washington as a whole. Nine percent of heroin overdoses in Snohomish County occurred to Native Americans, who only comprise 1.2 percent of the county’s population. However, most of the Native American deaths occurred in 2011 and 2012, with only one in 2013, so this difference may no longer be as profound. Similarly, during this period Native Americans made up 13 percent of publicly-funded detoxification admissions for heroin.
Heroin-related deaths were most common in the 98201 (North Everett) and 98271 (Tulalip Reservation) zip codes. These two zip codes experienced 39 such deaths from 2011 through 2013, or 27 percent of the total number of heroin-related deaths in the county. In contrast, each of these zip codes represents only 4 percent of the county population. The concentration of deaths in zip code 98271 is not surprising given the high number of heroin-related deaths to Native Americans in the county, as discussed previously.
Treatment

Data from drug treatment programs reflect those from death certificates. Admissions for problems with opioid painkillers as the primary drug of choice have decreased, but this decrease has been more than cancelled out by the increase in admissions for heroin.

Adult admissions to publicly-funded detoxification programs show a pattern similar to that of drug deaths. The proportion of admissions for oxycodone and hydrocodone as primary drug of choice fell sharply in 2011, while those for heroin as primary drug of choice increased just as sharply. Detoxification admissions for these two types of drugs increased from 16 percent of admissions in 2005 to 69 percent in 2013.

Note: Treatment data reflect those admissions to adult detoxification, adult outpatient and youth outpatient treatment for those clients with a residence zip code in Snohomish County. These admissions exclude clients whose treatment was paid for by the Department of Corrections and private insurance as the consistency of data for these two types of payers may be inadequately represented in the state SCOPE database.
Admission data for adults to publicly-funded outpatient drug treatment programs show a similar pattern to mortality and detoxification admissions. There was an increase in the proportion of admissions due to opioids as the primary drug of choice, with most of the recent growth being due to heroin. Admissions for oxycodone or hydrocodone peaked in 2010, when they accounted for 10 percent of all admissions. Since then, heroin has been the primary cause of adult outpatient treatment admissions, accounting for 25 percent in 2013.
The number of youth in outpatient treatment programs is much lower than that of adults. However, there was still a steady increase in the percent of admissions where heroin and oxycodone/hydrocodone were the primary drug of choice from 2005 through 2011. As seen with adults, treatment admissions for oxycodone and hydrocodone were highest from 2008 through 2010, after which they decreased. Similar to trends for adults, admissions for heroin as the primary drug of choice began to increase in 2009, reaching a high in 2011. After this, the proportion treated for heroin decreased slightly, with oxycodone and hydrocodone disappearing as a primary reason for treatment. It should be noted that even though heroin admissions are down slightly since 2011, there were still 23 youths treated for heroin as the primary drug of choice in 2013, compared to only 1 in 2005.
Policy Implications/Strategies

Evidence-based strategies to address opioid overdose, treatment and prevention already exist. These are summarized below, with more detailed information provided under the Data Sources section.

Given the increase in the number of detoxification admissions for heroin and other opioids use, and given that only 16 publicly-funded detoxification beds available in Snohomish County, the county’s detoxification capacity should be expanded. Areas and municipalities outside of the Everett core (e.g., South County, North County) need to be considered as potential sites for expanded detoxification programs.

The County should continue to expand medication-assisted treatment for those with heroin or opioid addictions (including but not limited to methadone, naloxone and naltrexone). Research shows that when treating substance use disorders, a combination of medication and behavioral therapies (medication-assisted treatment, or MAT) is most successful.

We should enhance support and community education and outreach about HB 1796, the “Good Samaritan Law”. One way to do this is to expand the availability of naloxone (commonly known as Narcan) to include school personnel, law enforcement, treatment agencies, corrections, families, individuals, and more. In a recent evaluation of the Washington State 9-1-1 Good Samaritan Drug Overdose law, 42 percent (n=355) of those opioid users at syringe exchanges in King County had witnessed an opioid overdose in the prior year; 9-1-1 was only called in 50 percent of those incidents. Following public outreach about the law, 88 percent of opioid users indicated that now they were aware of the law, they would be more likely to call 9-1-1 during future overdoses (Banta-Green et al., 2011). Since 2010, at least 188 community-based overdose prevention programs now distribute naloxone. A recent study of the programs’ impact indicated that over 10,000 overdoses were reversed nationally since 2010 (Wheeler et al, 2012).

We must continue to support and expand primary prevention efforts, especially in areas with a higher prevalence and incidence of heroin/opioid use. The Institute of Medicine and National Research Council’s Preventing Mental, Emotional, and Behavioral Disorders Among Young People Report – 2009 notes that every dollar spent on early treatment and prevention programs for addictions and mental illness programs yields $2 to $10 savings in health costs, criminal and juvenile justice costs, educational costs, and lost productivity (O’Connell et al., Eds, 2009).

Finally, the courts should review and implement evidence-based practices for alternative sentencing and treatment in lieu of incarceration. Nearly half of people incarcerated have been identified as having both substance abuse and mental disorders, often requiring medications along with counseling, such as medically-assisted treatment (Miller et al, 2014).
Data Sources


REFERENCES


