



Issue Brief

Overdoses of pain medications and heroin rise dramatically in the Finger Lakes

As the Centers for Disease Control and Prevention (CDC) and the U.S. Department of Health and Human Services have documented, the United States is in the midst of an epidemic of drug abuse. According to the CDC, more people died from drug overdoses in 2014 than in any year on record.¹ The CDC also reports that sales of prescription opioids in the United States have nearly quadrupled since 1999, “yet there has not been an overall change in the amount of pain that Americans report.”²⁻⁴

Equally disturbing is the rise in heroin abuse. Research suggests that the diminished availability of prescription drugs may be correlated with the growing use of heroin, a drug known to be cheaper and easier to obtain than prescription pharmaceuticals.⁵⁻⁷ A study published in 2014 in the Journal of the American Medical Association found that 86 percent of study participants reported abusing opioid pain relievers before using heroin and 75 percent reported their first opioid was a prescription drug.⁸

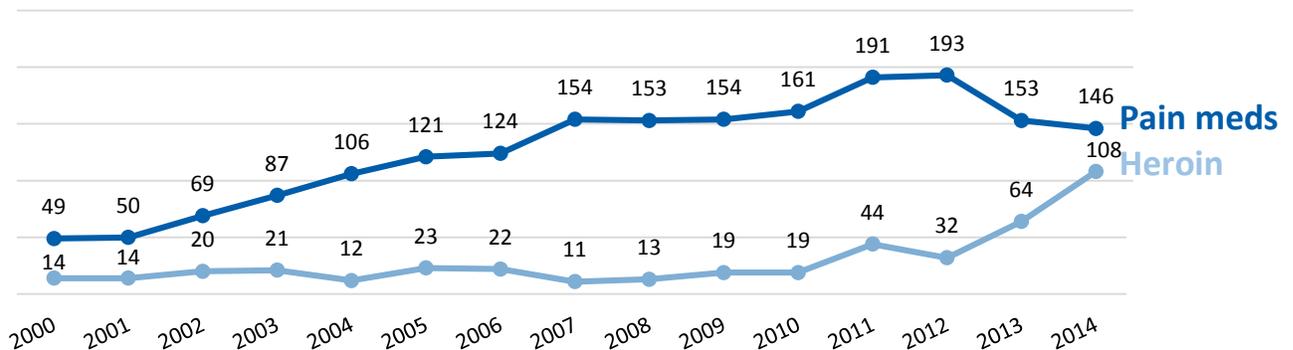
In recent publications, the NY State Comptroller has highlighted the staggering increase in deaths related to heroin overdose across the state. “Overdose deaths in New York related to heroin use reached a record high of 825 in 2014, a jump of more than 23 percent from the previous year and nearly 25 times the number of a decade earlier.”⁹

To determine if the nine-county Finger Lakes region¹⁰ has followed national trends, the Finger Lakes Health Systems Agency analyzed hospitalizations and emergency department visits in which a patient received a diagnosis of overdosing on either pain medication or heroin. Data were collected from the Statewide Planning and Research Cooperative System (SPARCS) for Finger Lakes residents aged 15 and older.

In recent years, drug overdoses climb for heroin, drop for pain killers

The figure below shows hospitalizations in the Finger Lakes region from 2000 to 2014 by type of overdose. Since 2000, pain medication overdoses have increased 198 percent. Of significant concern, heroin overdoses have increased 671 percent since 2000. Although the number of pain medication overdoses appear to be decreasing in recent years, there has been a corresponding increase in the

Number of Hospitalizations for Overdoses



Data Source: SPARCS, 2000-2014

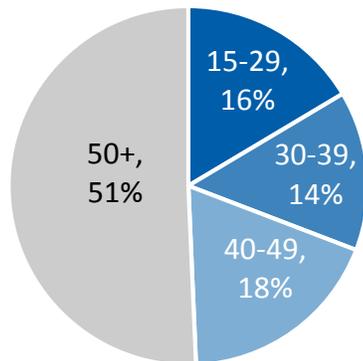
number of heroin overdoses. While a direct relationship between the two will require additional research, there is some evidence to suggest that the availability of pain medications has an impact on the utilization of other opiates.

One of the factors influencing the availability of pain medications is the New York State Department of Health's I-STOP Prescription Monitoring Program. Implemented in August 2013, I-STOP requires providers to check prescription histories of their patients prior to writing scripts to prevent abuse of prescription drugs. Anecdotal evidence from throughout the region suggests that the trend of decreasing pain medication use and corresponding increases in heroin use has continued beyond the data currently available.

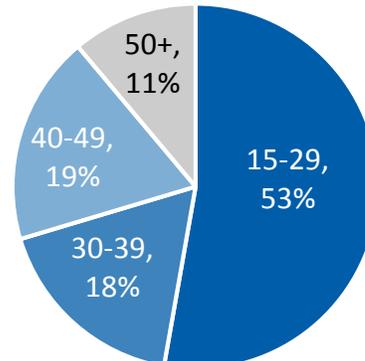
Addiction is spread across all age groups

Drug abuse in the Finger Lakes region cannot be linked to any one demographic group or geographic area. It is an epidemic that spans age, locality, race and ethnicity. Hospitalizations for pain medication and heroin overdoses have increased from 2000 to 2014 across all age groups in the Finger Lakes. However, 2014 data revealed that hospitalizations for pain medication abuse were highest in the 50+ age group, with 75 overdoses, while hospitalizations for heroin abuse were highest in the 15-29 age group, with 57 overdoses.

Pain Medication Overdoses
Hospitalizations by Age Group



Heroin Overdoses
Hospitalizations by Age Group

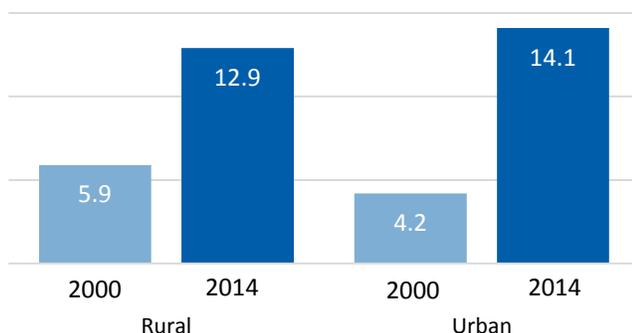


Data Source: SPARCS, 2014

Addiction is growing in both rural and urban communities

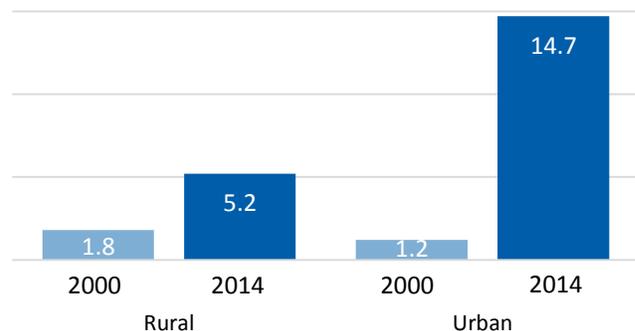
In the Finger Lakes, both urban and rural counties experienced increased overdoses. For rural counties, admissions for pain medication overdoses rose 142 percent, while admissions for heroin overdoses increased 186 percent. Monroe County, the region's only urban county, saw an even more alarming spike, with pain medication overdoses increasing 256 percent and heroin overdoses 1,157 percent.

Pain Medication Overdoses



Age/Sex adjusted hospitalization rates. Data Source: SPARCS, 2000-2014. Rural counties include Chemung, Livingston, Ontario, Schuyler, Seneca, Steuben, Wayne and Yates. Monroe County was considered as the only urban county in the region.

Heroin Overdoses

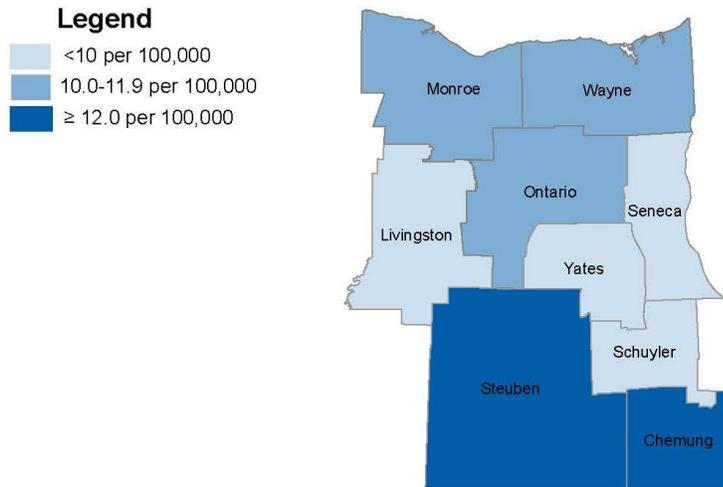


Age/Sex adjusted hospitalization rates. Data Source: SPARCS, 2000-2014. Rural counties include Chemung, Livingston, Ontario, Schuyler, Seneca, Steuben, Wayne and Yates. Monroe County was considered as the only urban county in the region.

Overdose rate for pain medications is highest in rural counties

The rate per 100,000 residents for emergency department treat-and-release visits relating to pain medication overdoses in 2014 were highest in the Southern Tier counties (Steuben—15.7 per 100,000; Chemung—12.2 per 100,000), followed by the Northern and Central counties.

Pain Medication Overdose Rate

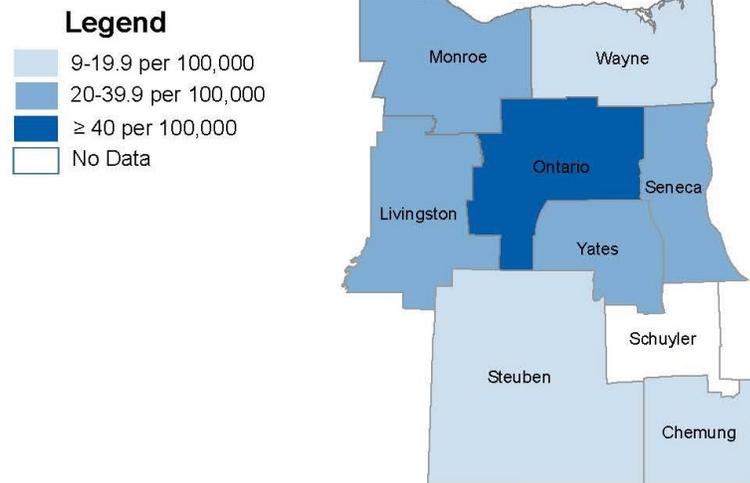


Age/Sex Adjusted Rate of Treat and Release ED Visits for Pain Medication Overdoses
Data Source: SPARCS, 2014. Calculations Performed by FLHSA.

Overdose rate for heroin is highest in Ontario, Monroe and Yates counties

Emergency department data also revealed that heroin overdose rates in 2014 were highest in the Central and Northern counties—including Livingston (32.4 per 100,000), Monroe (36.5 per 100,000), Seneca (22.9 per 100,000), and Yates County (36.4 per 100,000). The highest rate of emergency department treat-and-release visits for heroin overdoses in 2014 was in Ontario County (54.3 per 100,000).

Heroin Overdose Rate



Age/Sex Adjusted Rate of Treat and Release ED Visits for Heroin Overdoses
Data Source: SPARCS, 2014. Calculations Performed by FLHSA.

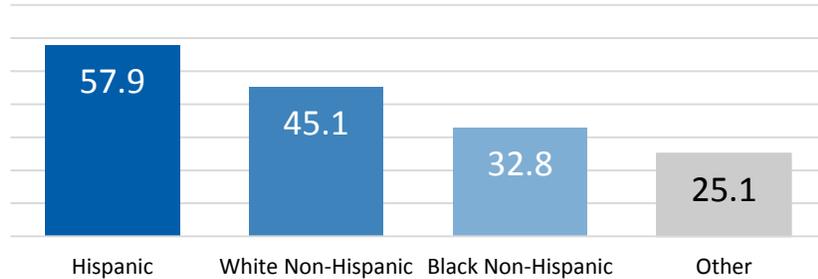
NOTE: There were no data for Schuyler County residents.

These findings indicate that the region’s heroin epidemic is not exclusively an urban concern. In fact, the highest rates of ED treat-and-release overdoses for either pain medication or heroin were found in rural counties.

Hispanics have higher overdose ED treat-and-release visit rates

The rate of ED treat-and-release overdoses for either pain medication or heroin in the Finger Lakes Region in 2014 were highest for Hispanics, followed by White Non-Hispanics, Black Non-Hispanics and those reported as “other,” demonstrating a concern across all races and ethnicities in the region.

Combined Overdose Rate for Heroin and Pain Medication



Age/Sex adjusted rate per 100,000 population. Data Source: SPARCS, 2014.

Deaths from overdose decline in 2014

In 2014, 62 individuals in the Finger Lakes region died from accidental or intentional poisoning by narcotics including cocaine, heroin, methadone and opium—a 21 percent decline from 2013, when 78 people died from narcotic poisoning. During 2014, a new New York State law also went into effect which expanded health care professionals’ authority to administer and prescribe Narcan (naloxone), a synthetic opiate antidote.¹¹ The intent of the law was to provide widespread access to Narcan, thereby reducing deaths due to narcotic overdoses. Preliminary data from New York State Department of Health Vital Statistics indicate that this provision may have decreased the number of overdose mortalities in the region. However, as more data become available, further exploration will be needed to confirm this relationship.

Conclusion

Our region’s hospital data clearly demonstrate that the drug abuse epidemic widely discussed across the state and nationally is prevalent in the Finger Lakes region. Regardless of wealth, population density, racial and ethnic makeup, all Finger Lakes communities are faced with this challenge. Detailed analyses, information on driving forces and more current data are needed to address the issue. Current data sets do not capture the full scope of the problem or provide sufficient insight into potential solutions. Without successful intervention, trend data suggest a continued increase in overdose admissions and emergency department visits through the years 2015, 2016 and beyond.

Endnotes

¹ Centers for Disease Control and Prevention. Increases in Drug and Opioid Overdose Deaths — United States, 2000–2014. MMWR 2015; 64;1-5.

² Centers for Disease Control and Prevention. Morbidity and Mortality Weekly Report. Available from URL:http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6043a4.htm?s_cid=mm6043a4_w#fig2. Accessed August 17, 2015.

³ Chang H, Daubresse M, Kruszewski S, et al. Prevalence and treatment of pain in emergency departments in the United States, 2000 – 2010. Amer J of Emergency Med 2014; 32(5): 421-31.

⁴ Daubresse M, Chang H, Yu Y, Viswanathan S, et al. Ambulatory diagnosis and treatment of nonmalignant pain in the United States, 2000 – 2010. Medical Care 2013; 51(10): 870-878.

⁵ Cicero, T.J.; Ellis, M.S.; and Surratt, H.L. Effect of abuse-deterrent formulation of OxyContin. N Engl J Med 367(2):187–189, 2012.

⁶ National Institute on Drug Abuse. Epidemiologic Trends in Drug Abuse, in Proceedings of the Community Epidemiology Work Group, January 2012. Bethesda, MD: National Institute on Drug Abuse, 66.

⁷ Pollini, R.A.; Banta-Green, C.J.; Cuevas-Mota, J.; Metzner, M.; Teshale, E.; and Garfein, R.S. Problematic use of prescription-type opioids prior to heroin use among young heroin injectors. Subst Abuse Rehabil 2(1):173–180, 2011.

⁸ Cicero TJ, Ellis MS, Surratt HL, Kurtz SP. The changing face of heroin use in the United States: a retrospective analysis of the past 50 years. JAMA Psychiatry. 2014;71(7):821-826.

⁹ Thomas P. DiNapoli. Prescription Opioid Abuse and Heroin Addiction in New York State, New York State Comptroller. June 2016.

¹⁰ Finger Lakes Region defined as: Chemung, Livingston, Ontario, Monroe, Schuyler, Seneca, Steuben, Wayne and Yates counties of New York State.

¹¹ New York State Legislature, New York State’s Opioid Overdose Law, Public Health Law Section 3309, Bill Number S6477B-2013, Chapter 42 of the Laws of 2014.

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