

Owen County Substance Use Healthcare: Current Status, Gaps, and Barriers

Substance abuse, especially opioid addiction, has been increasing at an alarming rate in the eight-county region known as Northern Kentucky (Boone, Campbell, Grant, Kenton, Carroll, Gallatin, Owen, and Pendleton counties). There was a 36% increase in emergency room visits for opioid-related poisonings from 2014 to 2016 in the region, and then at least another 30% increase from 2016-2017. Accidental poisoning deaths have also significantly increased there. Although Northern Kentucky accounts for only 10.3% of Kentucky's population, it had 21.3% of the heroin overdose deaths and 22.5% of fentanyl overdose deaths in Kentucky in 2017 (Northern Kentucky Health Department, 2018). The Northern Kentucky accidental poisoning death rate was 55 deaths per 100,000 residents in 2017, which is significantly more than Kentucky's rate at 37.2 per 100,000 residents –Kentucky has the 5th highest accidental poisoning death rate in the county (CDC, 2018).

Importantly, in the Northern Kentucky region, younger males had the greatest number of accidental poisoning deaths in 2015, for the first time exceeding the number for the males aged 45-54. This trend has continued through today. The majority of EMS opioid related incidents in 2017 were in this age group as well.

In addition, Northern Kentucky has over a third of the acute Hepatitis C cases in the Commonwealth. These rates are among the highest in the nation. In 2015, rates were 3.5 times the rate of Kentucky, and 11.9 times the rate of the U.S. And in June of last year, Kentucky Commissioner of Public Health Jeff Howard reported that a recent outbreak of Hepatitis A was the “worst on record across the nation” (Warren, 2018). More than half of these cases have been tied to illicit drug use.

Perhaps more alarming, the number of HIV cases has also significantly increased, with 46 new cases identified in Northern Kentucky in 2017, double the rate from 2014. In January 2018, Northern Kentucky initiated a cluster investigation because 2/3rds of those newly diagnosed with HIV identified injection drug use as a risk factor. A CDC Epi-Aid team concluded that HIV is being transmitted rapidly among networks of people who inject drugs between Northern Kentucky and the Cincinnati metro region.

Owen County, a HRSA-designated rural county, is situated in one of the hardest hit regions of the opioid epidemic. The Kentucky Injury Prevention and Research Center (KIPRC) developed an Overdose Risk Index Score by combining data on drug arrests, accidental poisoning related deaths, accidental poisoning related emergency room visits, and accidental poisoning related hospitalizations by county. Owen County was one of the counties identified as a statistically significant Drug Overdose Risk Index Hot Spot, with a 95% confidence interval (Bush et al., 2018). This ranking did not miss the mark, as the number of accidental poisoning deaths in Owen County increased from 2017 through the first quarter of 2018 (KIPRC, 2019).

There were 44 cases of acute drug poisoning for Owen County in 2017, 47 cases of nondependent abuse of drugs (without an overdose), and 37 cases of drug dependences, as reported by emergency departments and inpatient records (KIPRC, 2018). This puts the annual rate of drug consumption that required hospital care at 1,189 per 100,000 residents. In addition, over half of all arrests in Owen County are drug-related (Kentucky police arrest reports, 2019). Owen County reported 83 EMS runs for accidental poisoning in 2016 but only 10 in 2017. However, there are concerns that these data are being underreported.

At the same time, there are no inpatient SUD treatment beds in Owen County. No one there is licensed to provide medication-assisted therapy. Other than some one-on-one counseling, and telehealth intensive outpatient counseling available through NorthKey, all SUD treatment is referred outside the county. However, Three Rivers Health Department did initiate a syringe access exchange program in February 2019 and does distribute naloxone to first responders and those at high risk.

The county is challenged by several social determinants of health (cf., County Health Rankings, 2019). More than 61% of children there qualify for free or reduced-price lunch, with 25% of them living below the federal poverty line. A quarter of youth are “disconnected,” neither working nor in school. While 83.5% of adults graduated from high school or equivalent, only 9.6% have a bachelor’s degree. Over a fifth of the non-institutionalized population receives some form of disability compensation. While the reported unemployment rate is relatively low at 4.6% (though higher than the Commonwealth’s or the national rates), 49% of the adult population is disengaged from the labor market.

The county is a designated HPSA for both Primary Care and Mental Health Care. The ratio of patients to Primary Care Physicians in Owen County is 2,660:1, as compared to 1,520:1 for Kentucky and 1,320:1 for the United States (County Health Rankings, 2019). The ratio of Mental Health Providers is 2,690:1 in Owen County, as compared to 490:1 for Kentucky and 470:1 for the U.S. (County Health Rankings, 2019).

Triad Health Systems offers a spectrum of medical care in Owen County, including mental health counseling and behavioral therapy, with three PCPs, two APRNs, a psychiatrist, a psychologist, a community support worker, a part-time LCSW and part-time behavioral health nurse practitioner. St. Elizabeth Healthcare provides intermittent specialty care. The county offers no emergency care, inpatient facilities, or in-home care. EMS transport times range up to 35 minutes to the nearest ED. Walk-in appointments are available at Triad to meet urgent care needs. Survey data from residents indicate that residents travel 20-60 minutes to their medical appointments. Residents can schedule transport for non-emergency medical appointments on a sliding fee schedule through county-administered public transportation. However, a lack of automated scheduling prevents full utilization of the 18 fully accessible vans. We note that, despite being medically underserved, there are no reported wait times for services, which indicates that residents are not fully utilizing the care available.

In addition, NorthKey Community Care offers outpatient therapy two days a week, as well as psychiatric and APRN medical services two days per month. NorthKey provides a school-based therapist two days per week with plans to expand to three days next academic year. NorthKey also provides on-site targeted case management, community support, and some employment services.

R.E.A.C.H. (Reaching Every Addict through Christ’s Help) offers 12-step programming and some family support programs, drug testing, and referrals for detox and rehabilitation (all volunteer led). Kentucky’s Choice offers outpatient treatment, substance use disorder education and assessments, some peer support and general mental health counseling – though days and hours are limited (3.5 days per week). Focus group data indicate that peer support services are especially lacking in the county.

Survey data from community residents indicate that while they recognize the county’s substance use problems, there is a lack of community commitment to address the issue. Seeking help or sharing with others is stigmatized and limits taking action to utilize available addiction services. Many believe that their neighbors view addiction as a criminal issue, and not a medical one. However, the county’s Drug Prevention Coalition and the Three Rivers Health Department have made some strides in educating the community on substance misuse, harm reduction, and SUD.

Demographics:

The population of Owen County has decreased slightly since 2010. Currently there are 10,765 residents (Kentucky State Data Center, 2018) living within the 374 square mile boundaries of the county, with an average household size of 2.7 -- which is larger than the 2.49 average household size in Kentucky and the 2.64 of the United States (U.S. Census Quickfacts, 2018). The median household income in 2017 dollars for 2013-2017 was \$41,031 in Owen County, which is less than the median household income for Kentucky (\$46,535) and in the United States as a whole (\$57,652) (U.S. Census Quickfacts, 2018). The per capita annual income is \$22,802, which again is less than Kentucky (\$25,888) and the United States (\$31,177). The unemployment rate is 4.1%, which is less than Kentucky's 5%, but comparable to the U.S.'s 4% (Kids Count Data Center, 2018). However, the federal poverty rate in Owen County (18.2%), while comparable to Kentucky's (18.5%), is substantially more than the United States (12.7%). And 25.4% of the children in Owen County live in poverty, which again is comparable to the 25.3% of children in Kentucky, but more than the 19% of children in the U.S. (Kids Count Data Center, 2018).

Due to the state's Medicaid expansion, only 6% of residents of Owen County are uninsured, which is the same as in Kentucky, but less than the United States (11.3%) (Gallup-Healthways Poll, 2017). As with Kentucky, 22% of Owen County residents are enrolled in Medicaid (Kentucky Health Facts, 2017). However, over 50% of Owen County youth (1,226 out of 2,409) are on public health insurance, compared to 40% for Kentucky and 36% for the United States (Kids Count Data, 2018). (Note: if the state's 1115 Waiver goes forward, then we anticipate that the percentage of uninsured in Owen County will increase significantly.)

References:

- Bush, A., et al. (2018). Kentucky's Drug Overdose Burden, 2016-2017. KIPRC.
<http://www.mc.uky.edu/kiprc/Files/drug/2018/KyDrugOverdoseBurden2016-17.pdf>.
- Center for Disease Control. (2019). Drug Overdose Death Data.
<https://www.cdc.gov/drugoverdose/data/statedeaths.html>.
- County Health Rankings and Roadmaps (2019). Robert Woods Johnson Foundation.
<http://www.countyhealthrankings.org/app/kentucky/2018/measure/factors/4/data>.
- Gallup-Healthways Poll (2017). <https://news.gallup.com/poll/208196/uninsured-rate-edges-slightly.aspx>
- Kentucky State Data Center (2018). <http://ksdc.louisville.edu>.
- Kentucky State Police (KSP) data. Heroin and other opioid related arrests by offense zip code, 2011-2017.
<https://nkhd.maps.arcgis.com/apps/MapJournal/index.html?appid=8d43ab38289f4decbda45af1b4eff875#>.
- Kids Count Data Center (2019) Annie E Casey Foundation. <https://datacenter.kidscount.org/>
- KIPRC. (2018) Kentucky resident opioid-involved drug overdose death by county, 2011-2017.
<http://www.mc.uky.edu/kiprc/Files/drug/2018/OpioidResidentsReport.pdf>.
- Northern Kentucky Health District. (2018). GEOStory of Opioid Addiction.
<https://nkhd.maps.arcgis.com/apps/MapJournal/index.html?appid=8d43ab38289f4decbda45af1b4eff875>.
- Warren, B. (2018). Kentucky's hepatitis A outbreak is the worse in the nation. *Louisville Courier Journal*.
<https://www.courier-journal.com/story/news/local/2018/06/27/deadly-hepatitis-outbreak-worst-kentucky-history/737574002/>.