

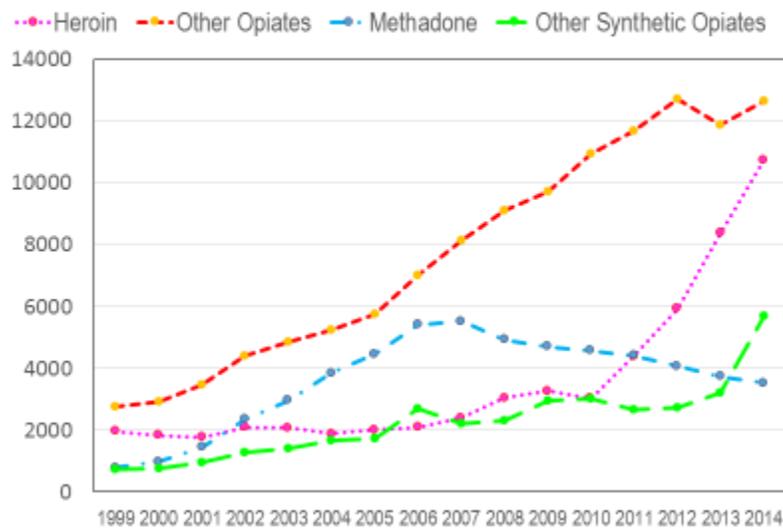


## Brief Report on the Current Epidemic of Drug Poisoning Deaths

Jane C Maxwell, Ph.D.  
Research Professor  
Addiction Research Institute  
UT School of Social Work

The Centers for Disease Control have reported that since 2000, the U.S. rate from drug overdose deaths involving opioids has increased from 2.1 per 100,000 persons in 1999 to 8.8 per 100,000 in 2014. In Texas, the rate is lower but has increased from 1.5 to 4.2 per 100,000 in the same time period. Opioid pain relievers include morphine, oxycodone, and hydrocodone, and synthetic opioids include fentanyl, pethidine, and tramadol. Statistics are also reported on deaths due to heroin and deaths due to methadone, a drug which is used both as a pain reliever and also to treat opioid addiction.

**Exhibit 1. Number of Drug Poisoning Deaths: United States: 1999—2014**

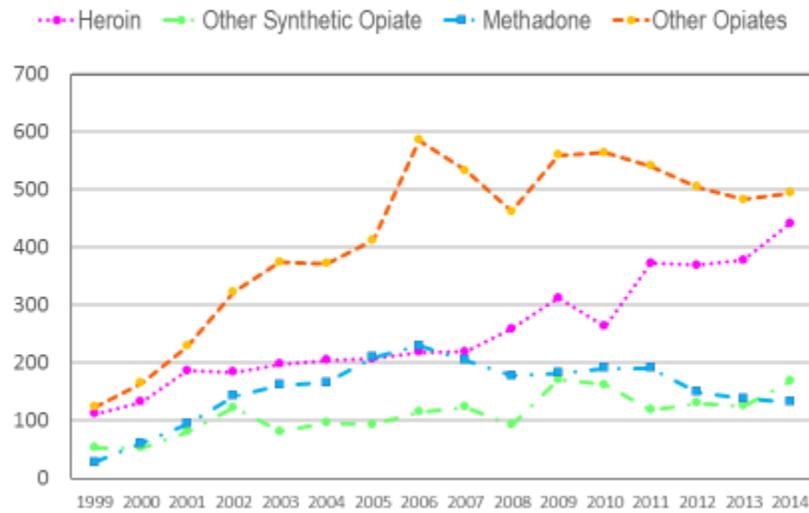


Data from CDC Wonder retrieved 3/4/2016

Nationally, as Exhibit #1 shows, the U.S. opioid overdose epidemic has two distinct but interrelated trends: a 15 year-long increase in overdose deaths involving prescription opioid pain relievers and other synthetic opiates and a recent surge in heroin overdose deaths. In the Northern U.S., there have been increases in overdoses due to the presence of illicit fentanyl manufactured in Mexico and China. Fentanyl is often combined with white South American heroin to increase the potency, which increases the death rate. In the West and Southwest, including Texas, heroin is Mexican “Black Tar,” a gummy substance which can be diluted with water and injected or dried and mixed with diphenhydramine or another powder and inhaled (“cheese heroin” was a powdered combination of dried Black Tar and Tylenol). Methadone deaths have decreased due to changes in distribution of the drug among retail pharmacies. The national rate for opioid pain relievers increased 9 percent, the rate of heroin deaths increased 26 percent, and the rate for synthetic opioids increased 80 percent between 1999 and 2014.

Exhibit 2 shows the same data for Texas. It should also be noted that illicit fentanyl is rarely combined with Black Tar heroin in Texas. While heroin deaths have increased, deaths due to other opiates and synthetic opiates have leveled off. The decline in other opiate deaths in Texas is due to several causes, including the rescheduling of hydrocodone, which is the most abused pain drug in Texas, from Schedule III to the more restrictive Schedule II, along with the reductions in opioid doses, volume, prescriptions and pills dispensed following implementation of the 2010 “pill mill” law in Texas.<sup>1</sup>

**Exhibit 2. Number of Drug Poisoning Deaths: Texas 1999-2014**



Data from CDC Wonder retrieved 3/4/2016

In addition to the increases in the number and rates of deaths, the characteristics of the users have changed, which has implications for targeting treatment to the users. Cicero et al. found that the demographic composition of heroin users entering treatment has shifted over the last 50 years from an inner-city, minority-centered problem to one that has a more widespread geographical distribution primarily involving white men and women in their late 20s living outside of large urban areas.<sup>2</sup>

In Texas, the proportion of whites entering heroin treatment has increased from 44 percent in 1985 to 59 percent in 2014. Among those entering treatment for dependence on other opiates and synthetics, 74 percent were white and average age was 35. Nationally, the proportion of whites entering treatment for a primary problem with heroin increased from 47 percent in 1992 to 70 percent in 2012 and the proportion entering treatment with a primary problem with other opioids increased from 84 percent to 90 percent in the same time period.

In addition to the race/ethnic shift, the heroin population has become younger. In Texas, the average age of persons dying with a mention of heroin has dropped from 40 in 2005 to 36 in 2013. Nationally, the proportion of persons under age 30 entering treatment has increased from 26 percent in 1992 to 43 percent in 2012 and the proportion of persons under age 30 entering treatment for other opioids has increased from 20 percent to 52 percent in the same time period.

The rates per 100,000 for Texas counties vary. Only 9 counties had reliable overdose death rates per 100,000 for opiates according to 2014 data from CDC, but they provide evidence of the extent of the opiate overdose problem in the largest Texas counties.

<b>Exhibit 3. 2014 Overdose Death Rates per 100,000 in Texas Counties Due to Heroin, Other Opiates, Other Synthetic Opiates, and Methadone</b>	
Bexar County	5.1
Collin County	3.7
Dallas County	6.8
Denton County	2.8
El Paso County	3.2
Harris County	5.1
Nueces County	10.4
Tarrant County	4.9
Travis County	2.3
Counties not listed had unreliable rates	
Source: CDC Wonder, Data downloaded on March 1, 2016	

In 2012, there were an estimated 1.5 million opioid users who received medication treatment such as methadone or buprenorphine, but there were also more than 2.5 million Americans who met the criteria for dependence or abuse of prescription pain pills or heroin who were not in treatment and another 2 million who began using these drugs in 2012. This means there may be 4.6 million opioid-addicted people, but medication assisted treatment is available to less than 1.5 million.

Although the media has focused on heroin overdoses, the number of deaths involving other opioids is far greater, and naloxone should be seen as an adjunct to be prescribed along with any opioid that could cause overdose. Naloxone would be particularly appropriate for new inductees to methadone treatment, those with cognitive impairments, those on heavy doses of pain pills who may not remember their medication schedules, or who may have previously suffered overdoses. Positioning naloxone as an adjunct to pain medication would also lessen the stigma it now suffers from some that it is a form of being “soft on drugs.”<sup>3</sup>

<sup>1</sup> Tatyana Lyapustina, Lainie Rutkow, Hsien-Yen Chang, Matthew Daubresse, Alim F. Ram, Mark Faul, Elizabeth A. Stuart, G. Caleb Alexander, Effect of a “pill mill” law on opioid prescribing and utilization: The case of Texas, *Drug and Alcohol Dependence*, 159, 190-197, 2015.

<sup>2</sup> Theodore Cicero, Matthew Ellis, Hilary Surratt, Steven Kurtz, The changing face of heroin use in the United States: A retrospective analysis of the past 50 years. *JAMA Psychiatry*, 71 (7), 821-826, 2014.

<sup>3</sup> Jane C. Maxwell, The pain reliever and heroin epidemic in the United States: Shifting winds in the perfect storm. *Journal of Addictive Diseases*, 34 (2-3), 127-140, 2015.