

The American Opioid Epidemic

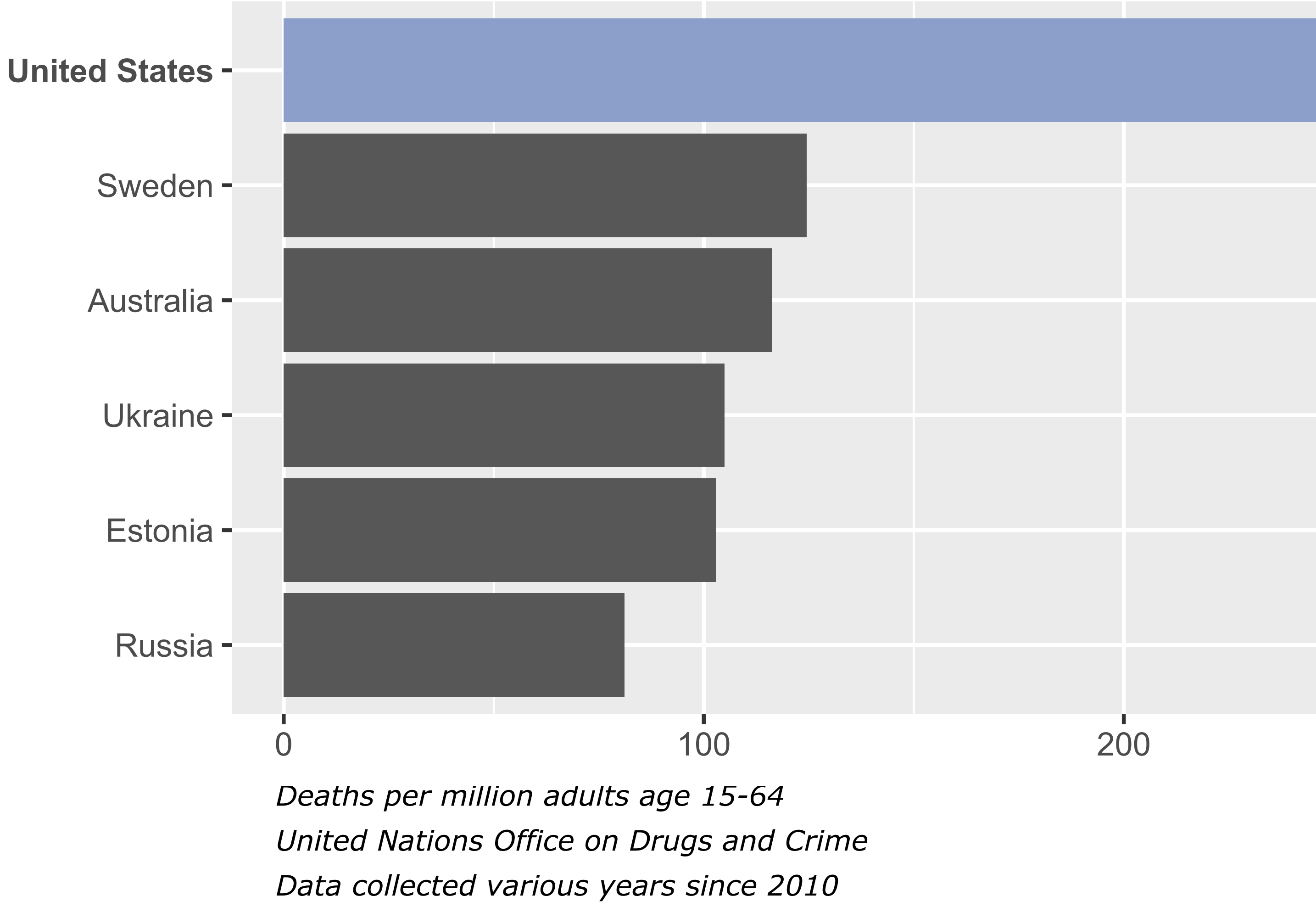
Ali Al-Ghaithi, Derek J. Pavelka,
Matthew Pelz, Xuân-Hà Vandenberg



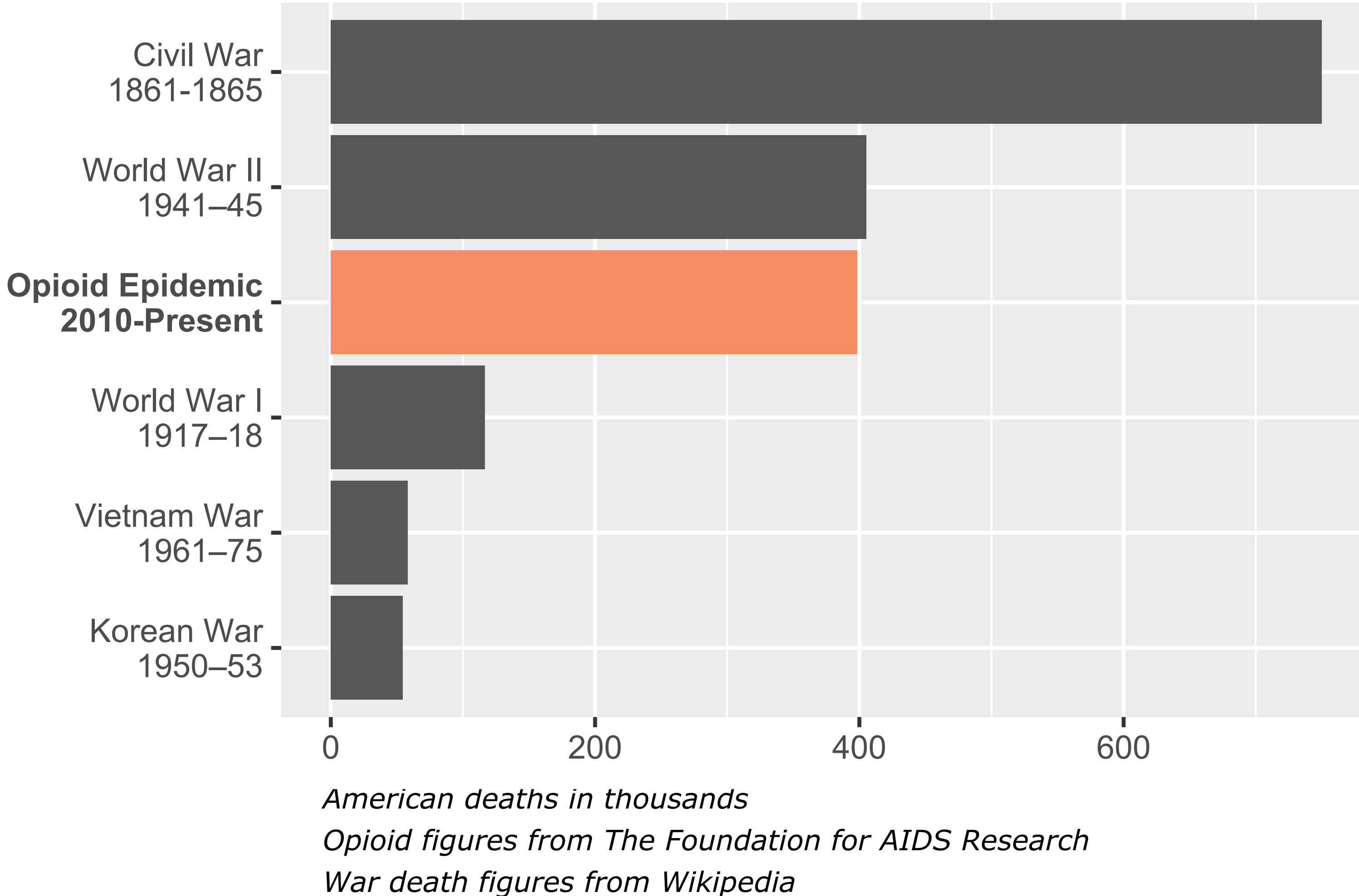
UNIVERSITY OF NEBRASKA AT OMAHA

The opioid epidemic has been an issue in the United States for many years. Medical providers have become hesitant in prescribing opioids, but drugs remain widely available. This study explores aspects of the issue, including increases in overdose rates, geographic distributions of overdoses and prescription rates, and comparisons of different types of opioids. Data from each state was analyzed to see which has the most opioid-related overdose deaths. One opioid in particular, fentanyl, has recently garnered more attention due to its lethality. This data could be useful to law enforcement, health care providers, and legislators.

The US has the highest opioid-related death rate in the world by a wide margin.

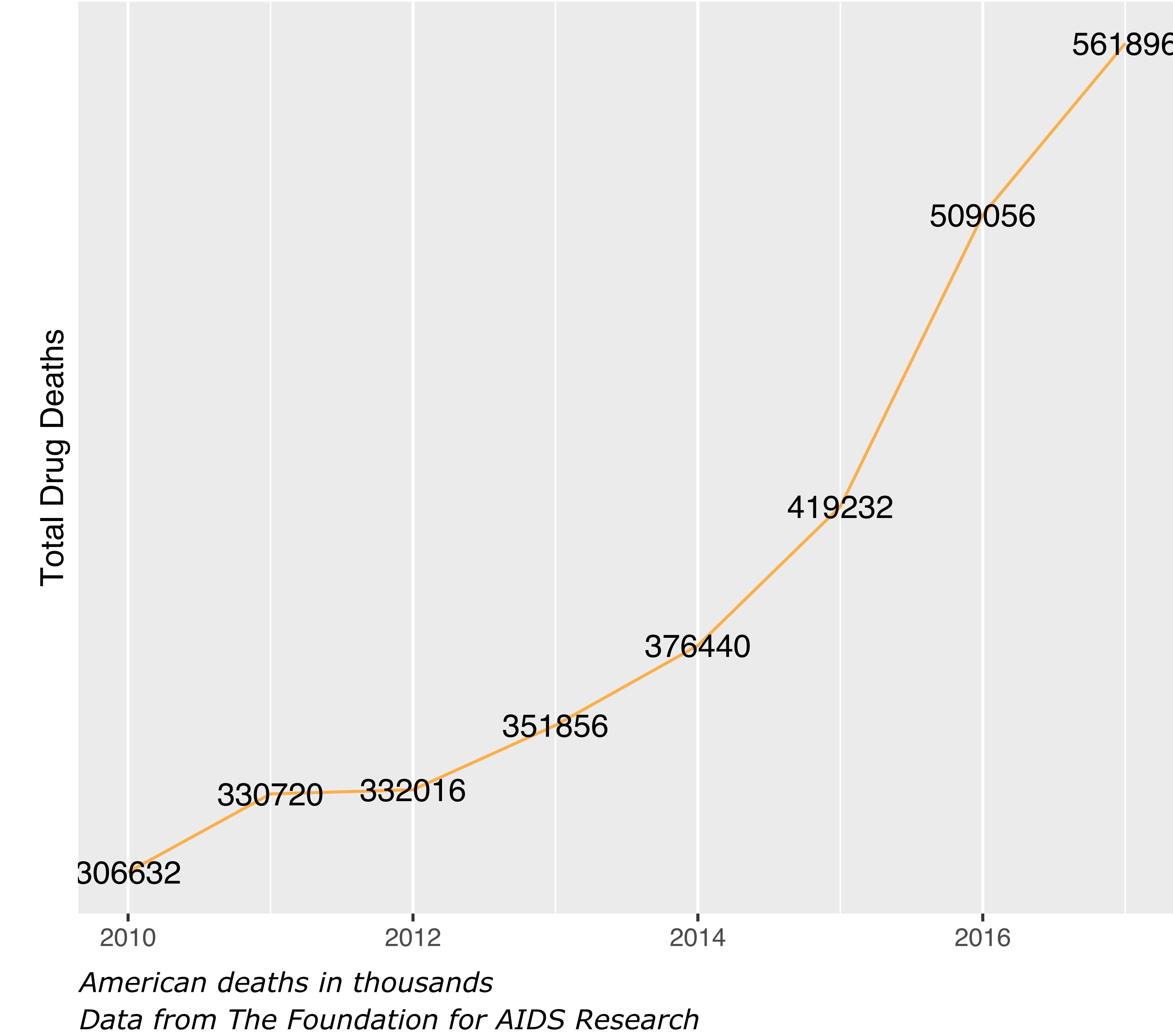


The opioid epidemic has taken nearly as many American lives as World War II.



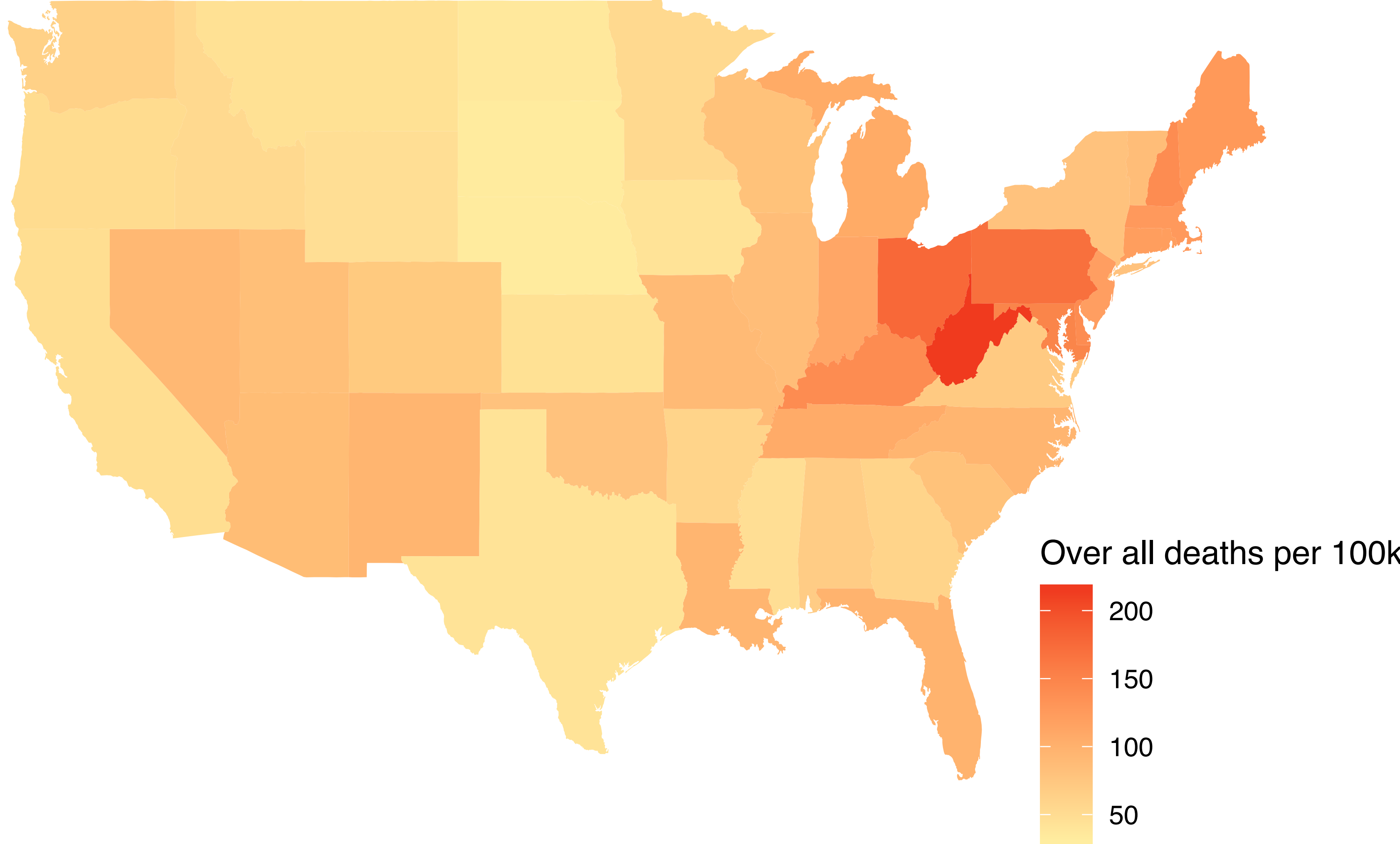
What is an opioid? Opioids are compounds that resemble opium in a variety of effects like addictive properties or psychological effects. Opium comes from the juice of the Papaver Somniferum, commonly known as the opium or breadseed poppy. The milky white fluid harvested from an unripe poppy is air dried to form what is known as opium. The drug itself is used as a pain reliever that is reddish-brown, heavily scented and very addictive. Due to its ability to affect mood or behavior, it is also used and sold for non-medical purposes. A few known opioids that will be focused on in this poster are heroin, methadone, and fentanyl.

Opioid-related drug deaths in the United States are increasing

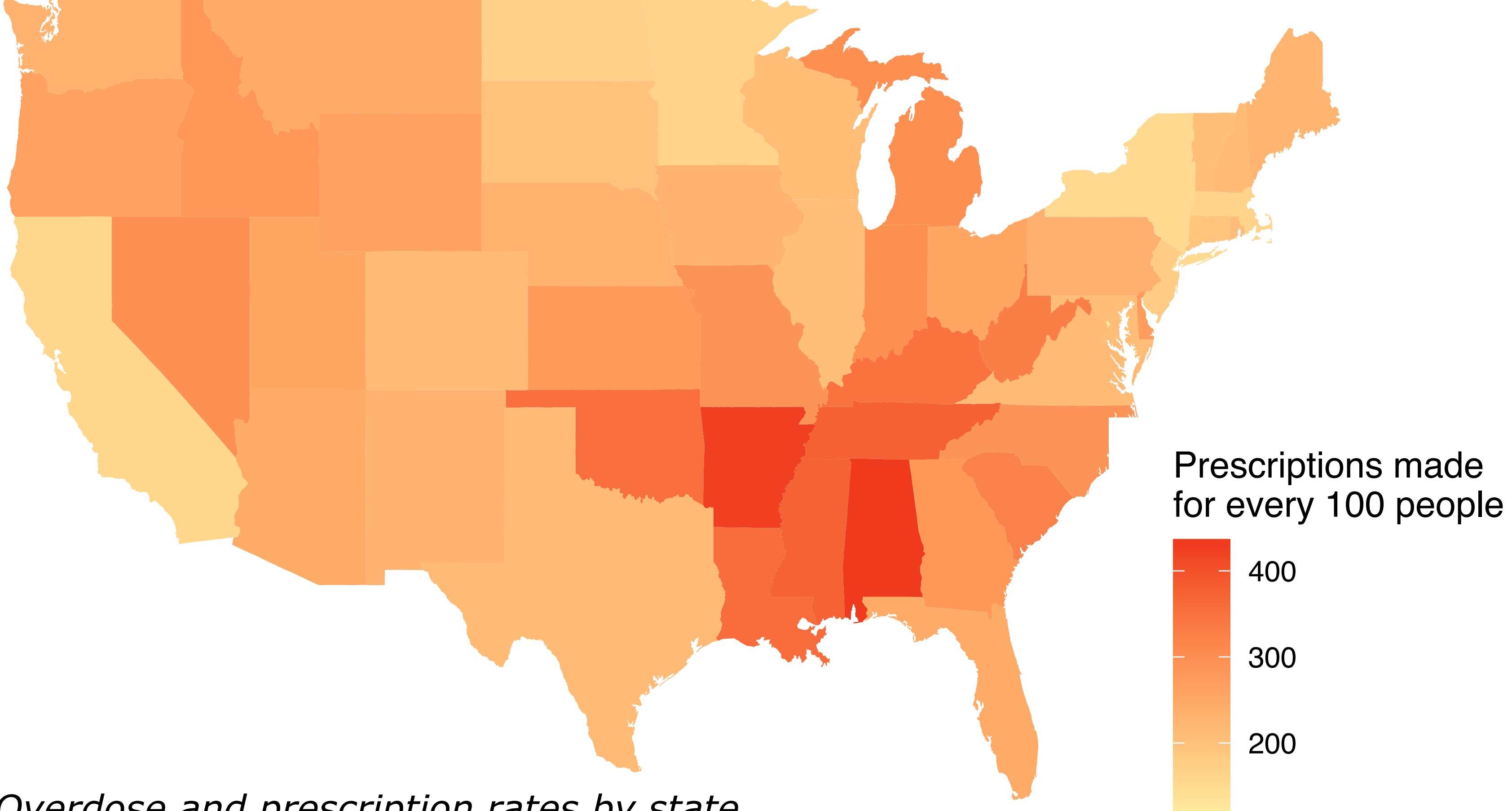


There has been a boom in opioid-related deaths since 2010. The total number of deaths resulting from overdoses nearly doubled between 2010 and 2017.

Opioid-related drug deaths in the United States in 2017

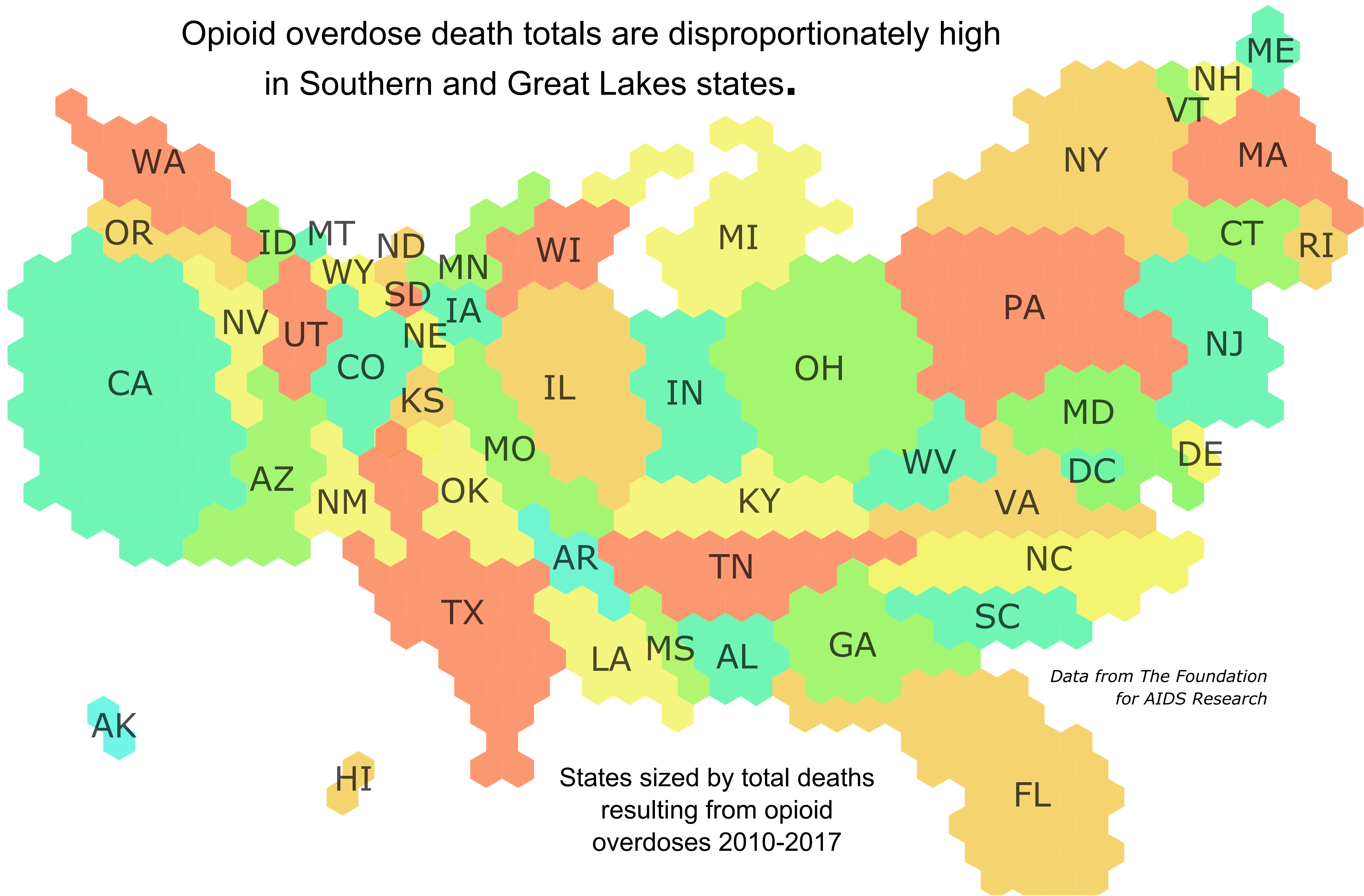


Opioid-related drug prescriptions in the United States in 2017

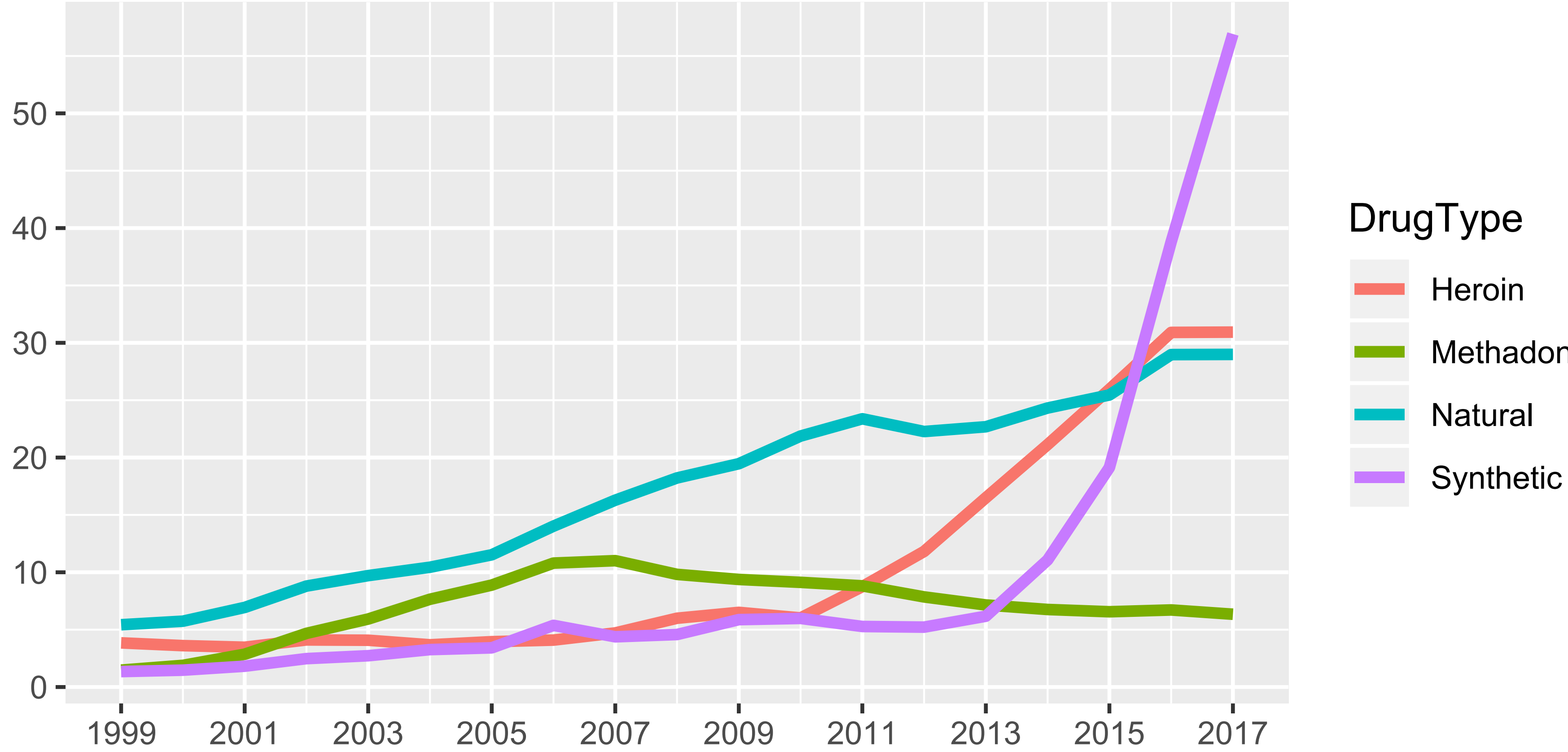


Overdose and prescription rates by state
Data from The Foundation for AIDS Research

Opioid overdose death totals are disproportionately high in Southern and Great Lakes states.



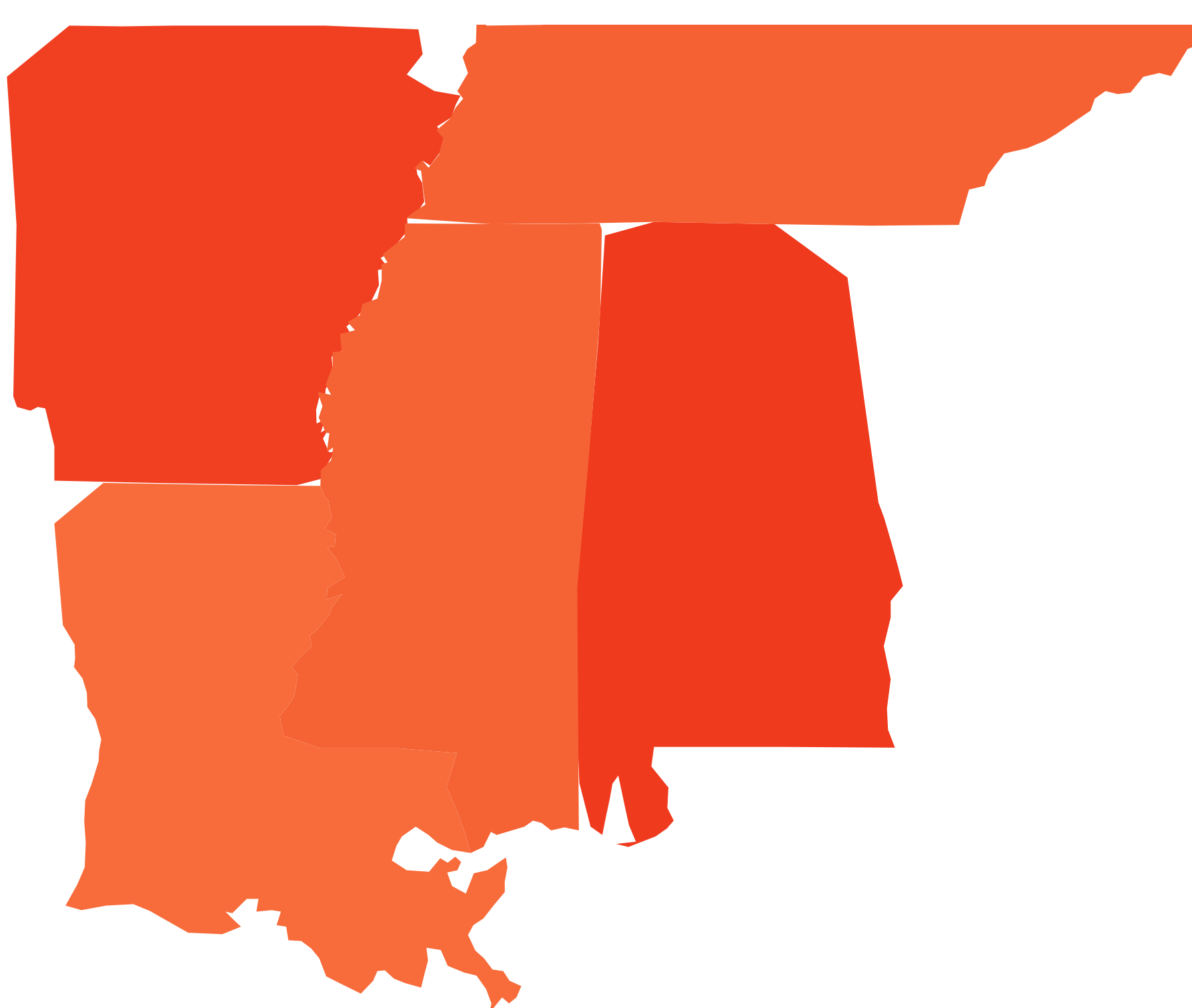
Synthetic drugs including Fentanyl are linked with the spike in overdoses



Thousands of overdoses by opioid type
Data from the Henry J. Kaiser Family Foundation

With the exception of methadone, there has been a large increase in opioid-related overdoses. The greatest spike is in non-methadone synthetic, the category in which fentanyl lies.

Alabama and Arkansas have the highest rates of opioid prescriptions in the United States in 2017



How are opioids taken? There are a multitude of different ways that the opioids can be taken into the body. There are the more commonly known ways like orally or injected into various attributes of the anatomy such as the veins and muscles or the lesser known nasal spray, patch, suppository, or implanted pump.