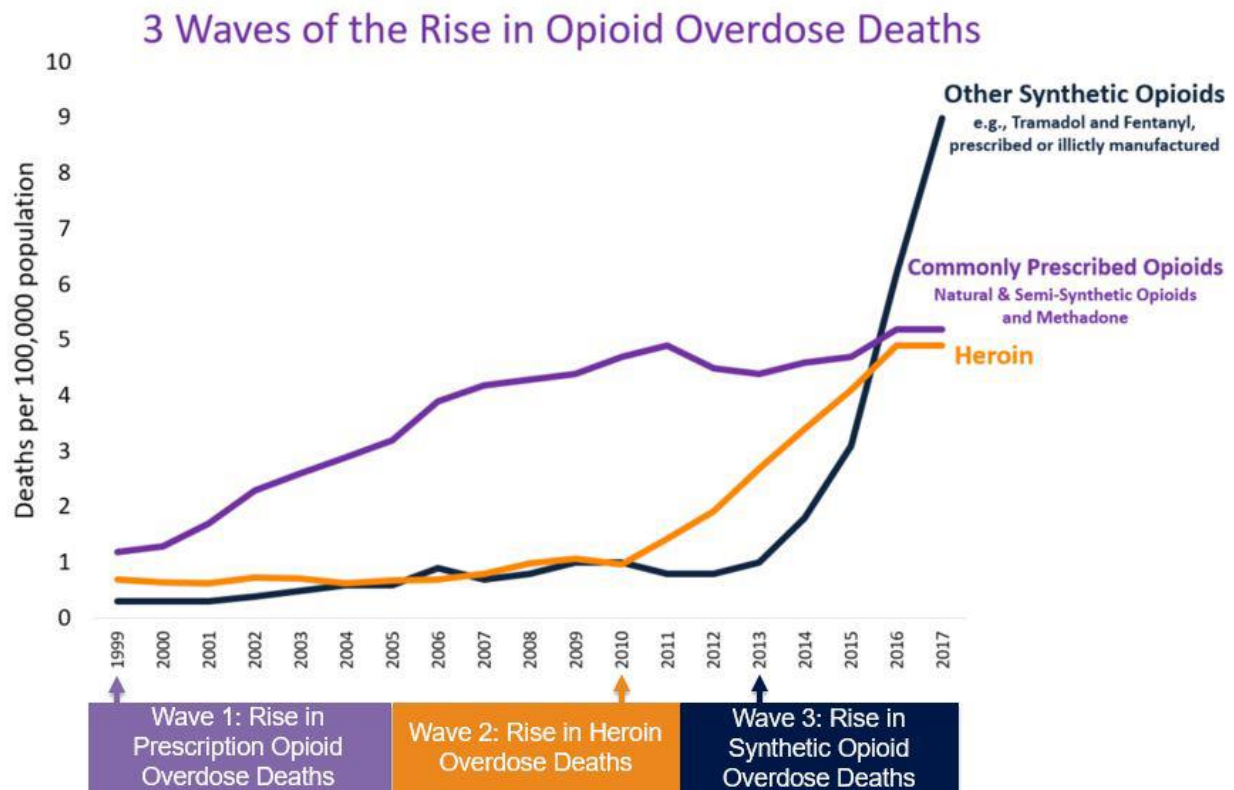


THREE WAVES HANDOUT: CDC GUIDE TO UNDERSTANDING THE EPIDEMIC*

From 1999-2017, almost 400,000 people died from an overdose involving any opioid, including prescription and illicit opioids.²

This rise in opioid overdose deaths can be outlined in three distinct waves.

1. The first wave began with increased prescribing of opioids in the 1990s³, with overdose deaths involving [prescription opioids](#) (natural and semi-synthetic opioids and methadone) increasing since at least 1999.
2. The second wave began in 2010, with rapid increases in overdose deaths involving [heroin](#).
3. The third wave began in 2013, with significant increases in overdose deaths involving synthetic opioids – particularly those involving illicitly-manufactured [fentanyl](#) (IMF). The IMF market continues to change, and IMF can be found in combination with heroin, counterfeit pills, and cocaine.^{2,4}



SOURCE: National Vital Statistics System Mortality File.

*"Understanding the Epidemic", the CDC, <https://www.cdc.gov/drugoverdose/epidemic/index.html>

NIH PROFILE: MARYLAND OPIOID INVOLVED OD DEATH, PRESCRIBING & THE 3 WAVES

In 2017, there were 1,985 overdose deaths involving opioids in Maryland—a rate of 32.2 deaths per 100,000 persons, which is twofold greater than the national rate of 14.6 deaths per 100,000 persons. The state ranks in the top 5 for opioid-related overdose death rates with the largest increase attributed to cases involving synthetic opioids (mainly fentanyl).

From 2012 to 2017, the number of deaths involving synthetic opioids rose from 52 to 1,542 deaths (Figure 1). Heroin involved overdose deaths recently dropped to 522 in 2017 after a dramatic increase from 173 deaths in 2012 to 650 in 2016. Drug overdose deaths involving prescription opioids also recently declined to 711 in 2017.

