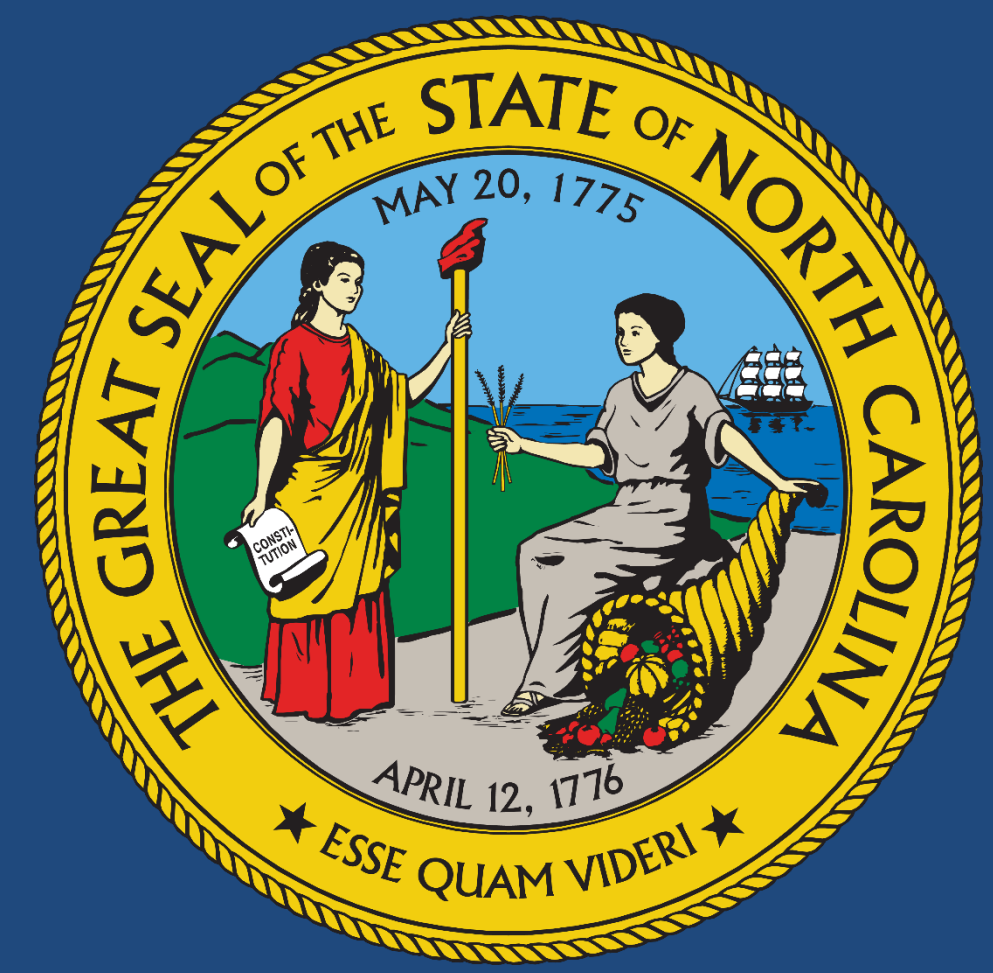


It's more than opioids: Cocaine and Polysubstance Use in North Carolina, 1999-2016



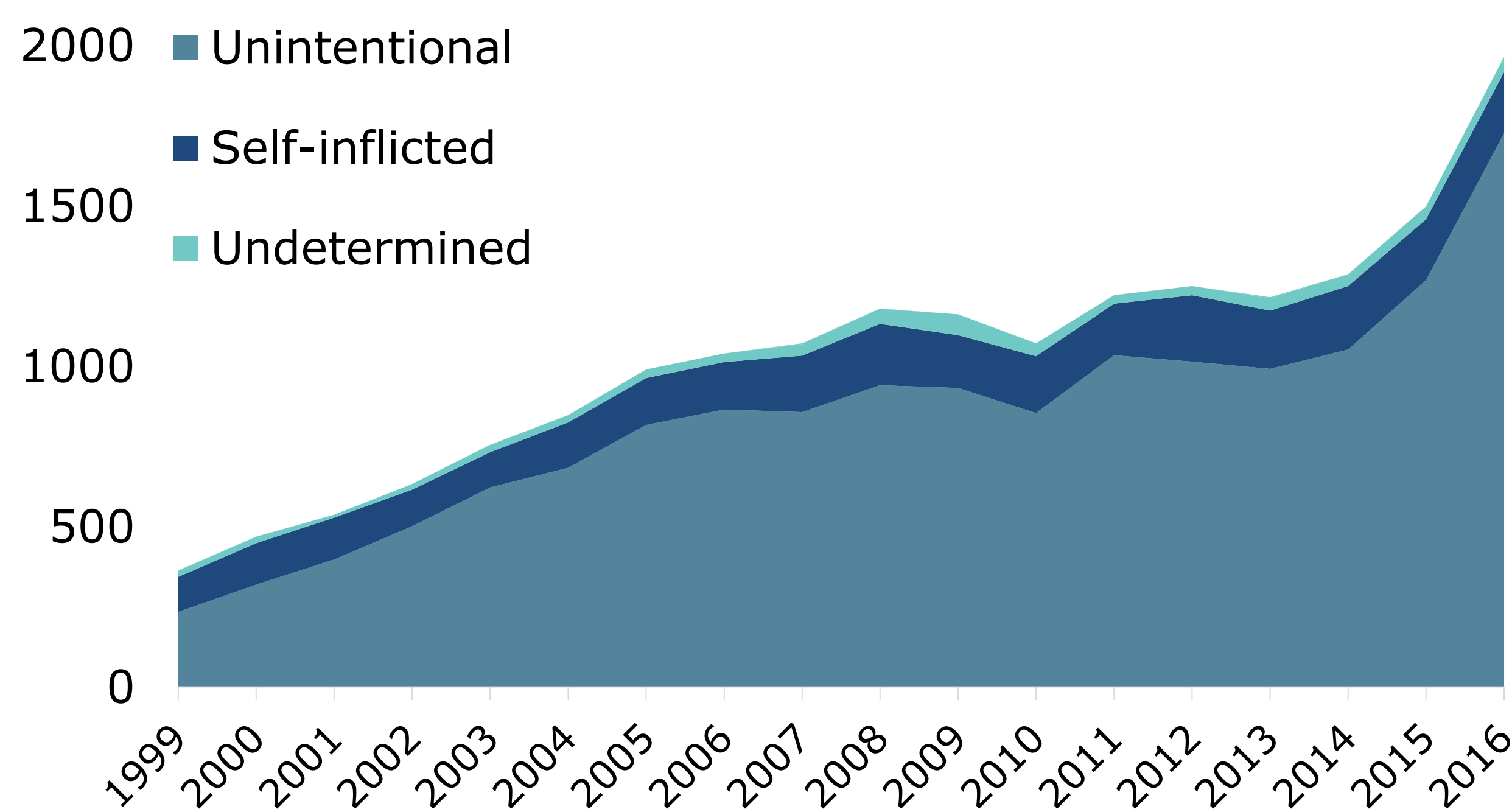
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Background

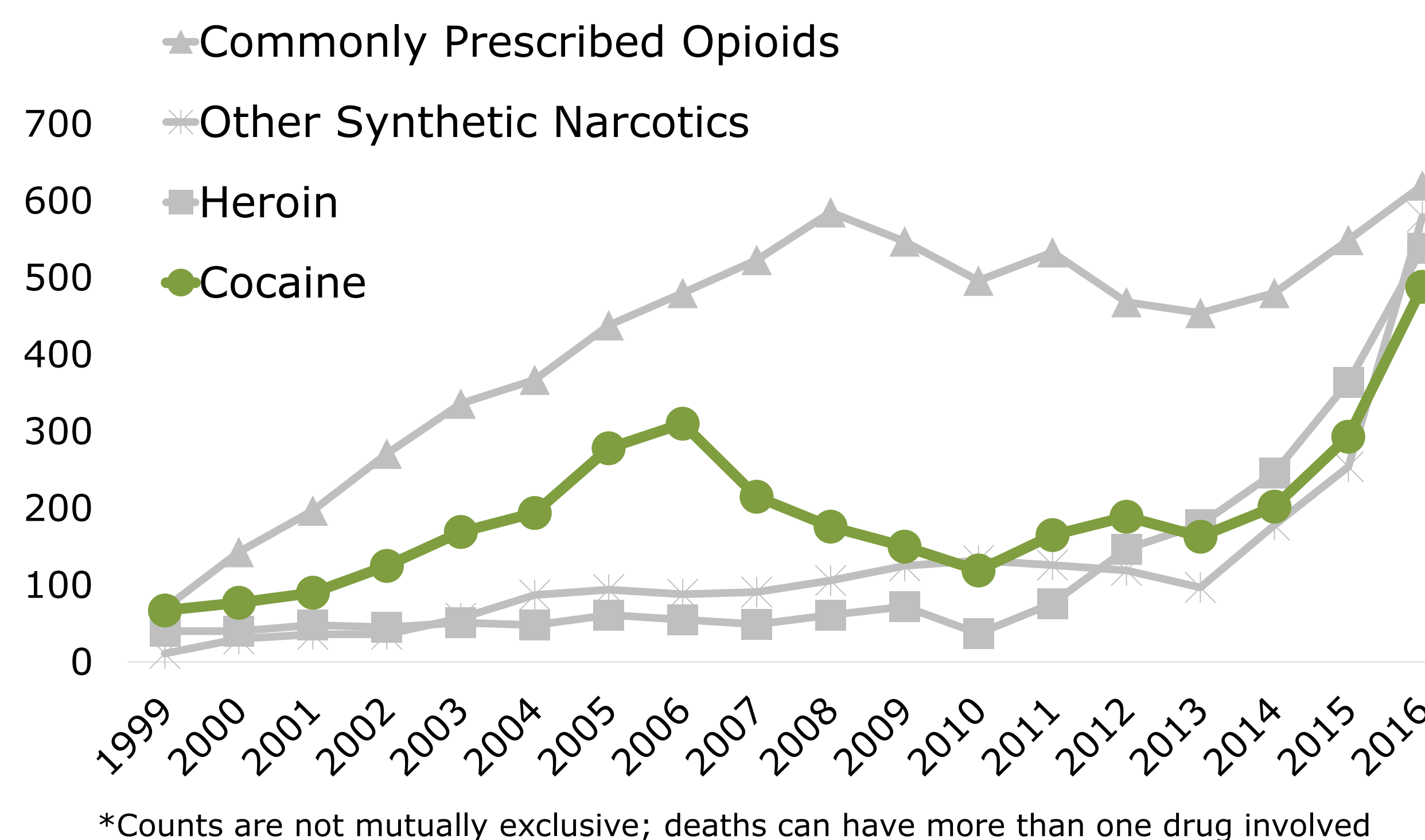
- In North Carolina (NC), deaths due to medication and drug overdose have been steadily increasing. In 2016, 88% of overdose deaths were unintentional.

Medication & Drug Deaths by Intent NC Residents, 1999-2016



- Historically, opiates (commonly prescribed opioids, heroin, and other synthetic narcotics) have driven this epidemic. But in recent years, the number of unintentional cocaine deaths is also on the rise.

Unintentional Medication & Drug Deaths* by Drug Type NC Residents, 1999-2016



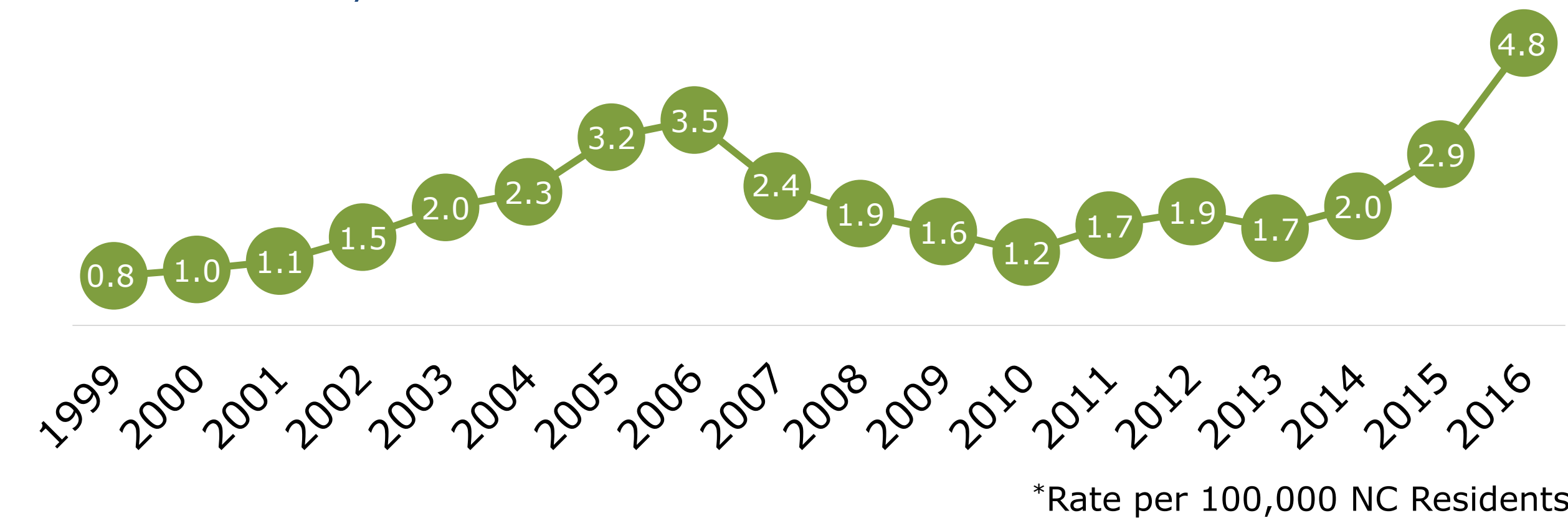
- Understanding the changing landscape of the drug epidemic is a key step in developing tailored prevention efforts to reduce unintentional medication and drug overdoses in NC.

Methods

- NC State Center for Health Statistics (SCHS) Vital Records death certificate data for NC residents were used to identify unintentional medication and drug overdose with an ICD-10 primary cause-of-death code of X40-X44.
- Cocaine mortality rates were calculated using Vital Records death certificate data from 1999-2016 to observe trends over time.
- To assess drug combinations most frequently implicated in overdose deaths, deaths involving specific drugs were identified using underlying cause-of-death codes for cocaine (T40.5), commonly prescribed opioids (T40.2 or T40.3), other synthetic narcotics (T40.4), heroin (T40.1), and benzodiazepines (T42.4).

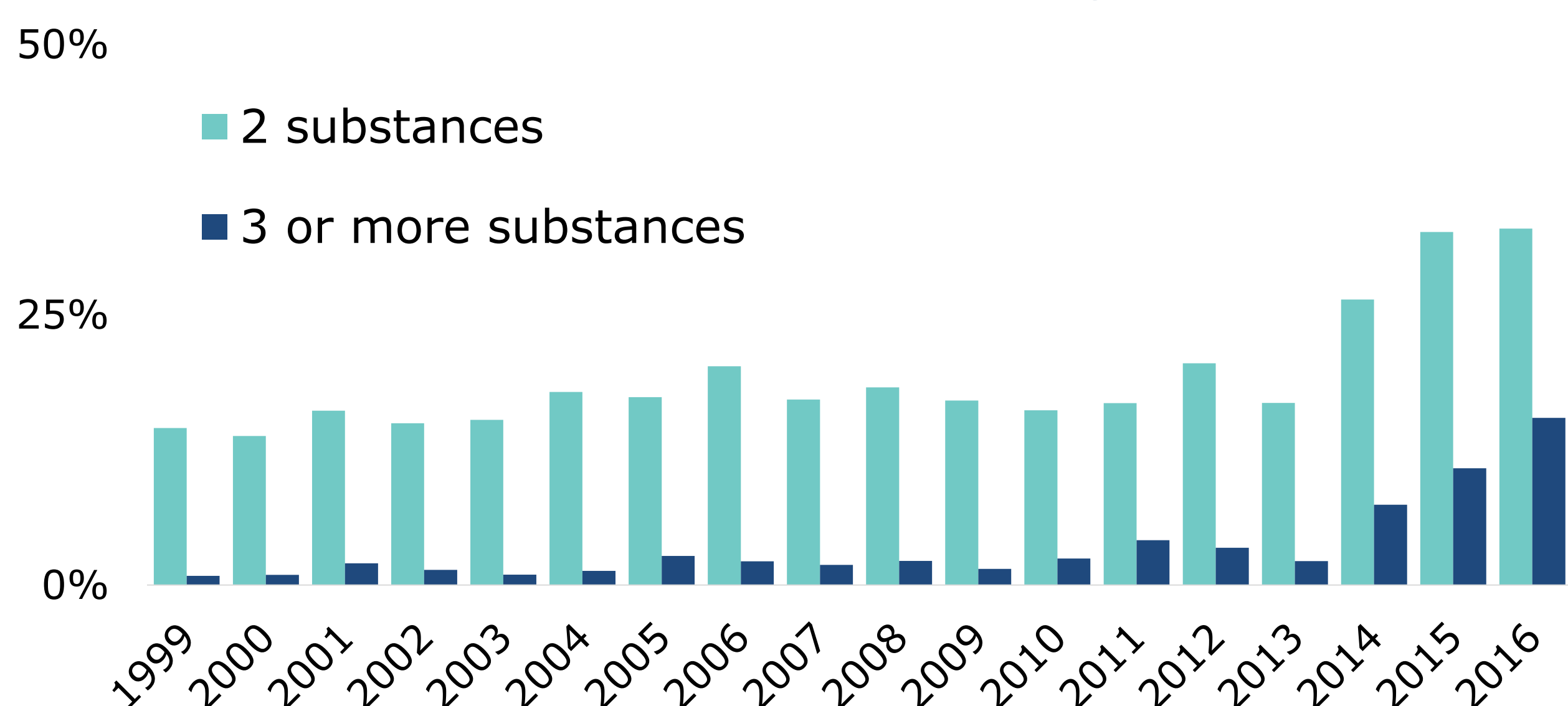
Results

Rates* of Unintentional Cocaine Overdose Deaths NC Residents, 1999-2016



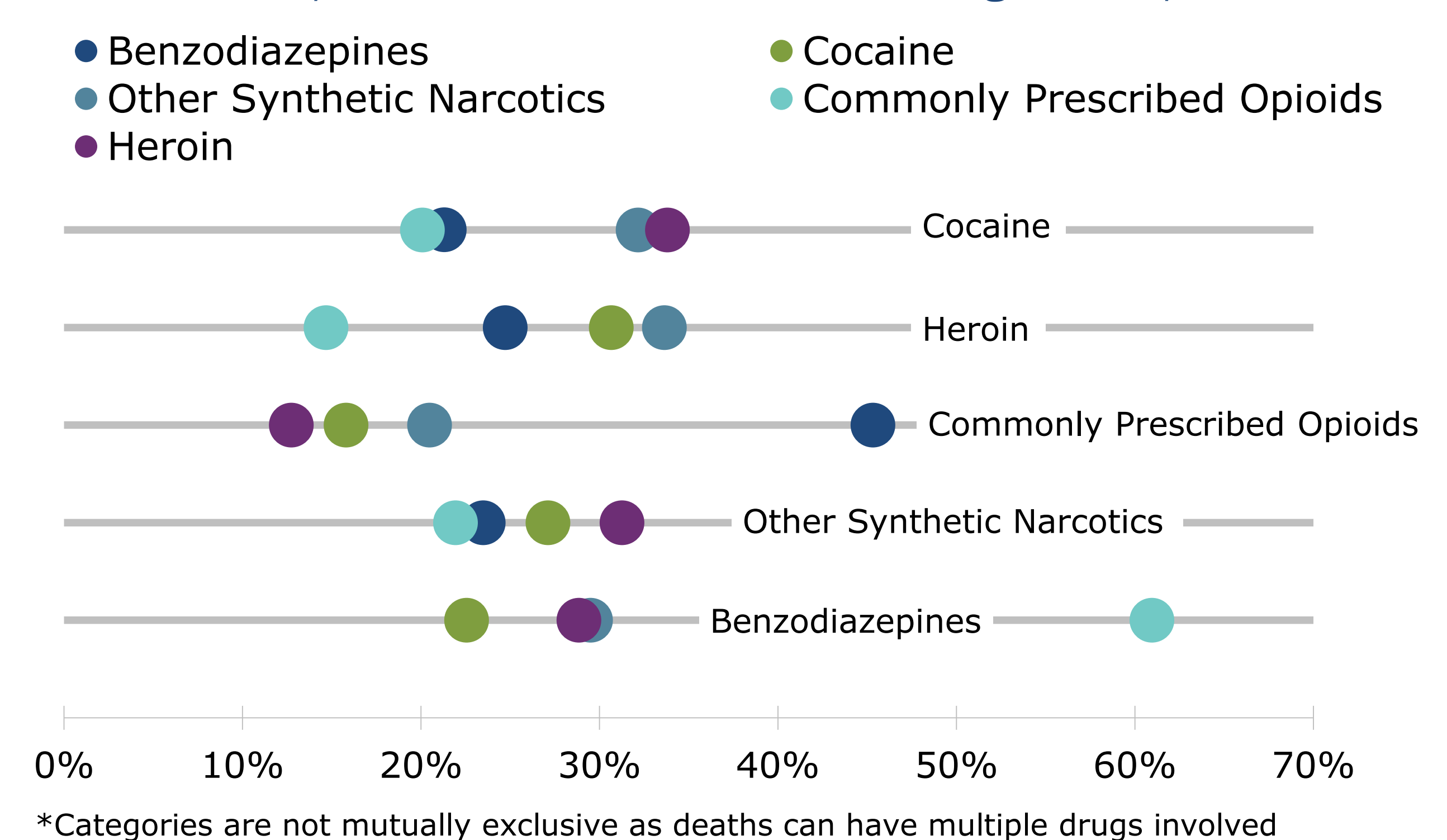
- Cocaine mortality rates seemed to peak in 2006 and rates then steadily decreased. However, since 2011, cocaine mortality rates began increasing again, reaching a rate of 4.8 per 100,000 in 2016, **the highest rate in 20 years.**

Percent of Overdoses involving Multiple Substances NC Residents, Unintentional Medication & Drug Deaths, 1999-2016



- Polysubstance use is increasing. In 2016, 33% of unintentional overdoses involved two substances and 15% involved three or more substances.

Percent* of Polysubstance Use by Drug Type NC Residents, Unintentional Medication & Drug Deaths, 2016



- In 2016, 34% of cocaine overdose deaths also involved heroin, 32% involved other synthetic narcotics, 20% involved commonly prescribed opioids.
- 61% of 2016 benzodiazepine deaths also involved commonly prescribed opioids.

Conclusion

Polysubstance use is increasing in North Carolina. Overdose prevention efforts must expand to include more than prescription opioids and heroin.

- While the main focus may currently be on the opioid and heroin epidemic, our data show that rates of cocaine overdose are also on the rise in NC.
- Our results also show multiple drug combinations responsible for overdose deaths, suggesting a need to include polysubstance use prevention efforts in our overdose prevention interventions.
- Additional analyses should be completed to better understand the involvement of cocaine, benzodiazepines, and other drugs (including alcohol) in overdose deaths.

Acknowledgements: We acknowledge the NC Office of the Chief Medical Examiner and the NC State Center for Health Statistics for their work in processing and making the North Carolina death data available for injury surveillance.

