



Opioid Overdose: Understanding the Current Epidemic in Chicago

Tamara Rushovich, MPH

CDPH Infection Control Conference
Chicago Department of Public Health
Office of Epidemiology

Data Sources

Opioid Use and Misuse

CDPH Healthy Chicago Survey

Opioid Overdose

Chicago Fire Department, EMS Responses

Opioid Overdose Death

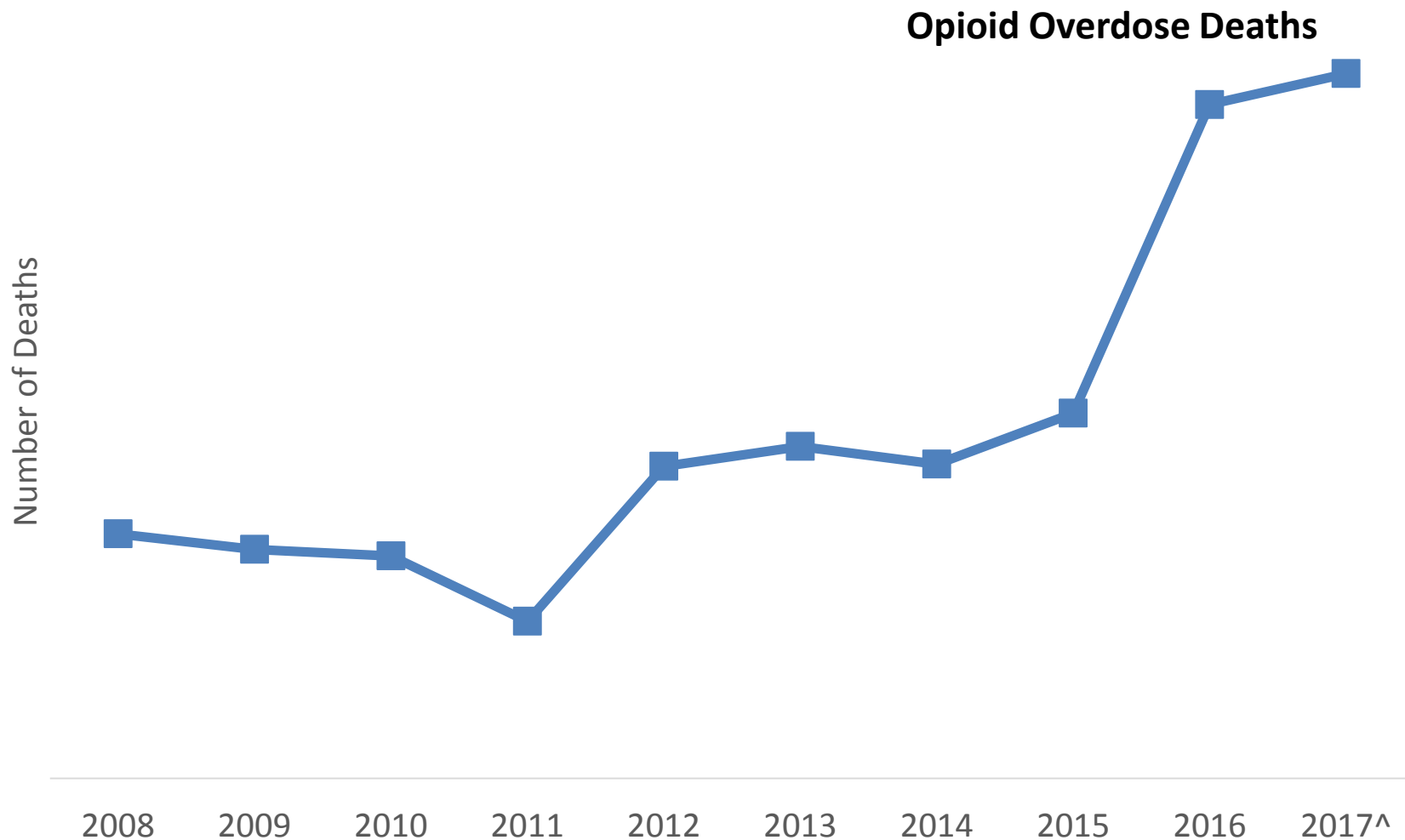
Cook County Medical Examiner

In Chicago, in 2017:

Almost **800** people died from an opioid-related overdose and

7,500 people received EMS services for an opioid overdose

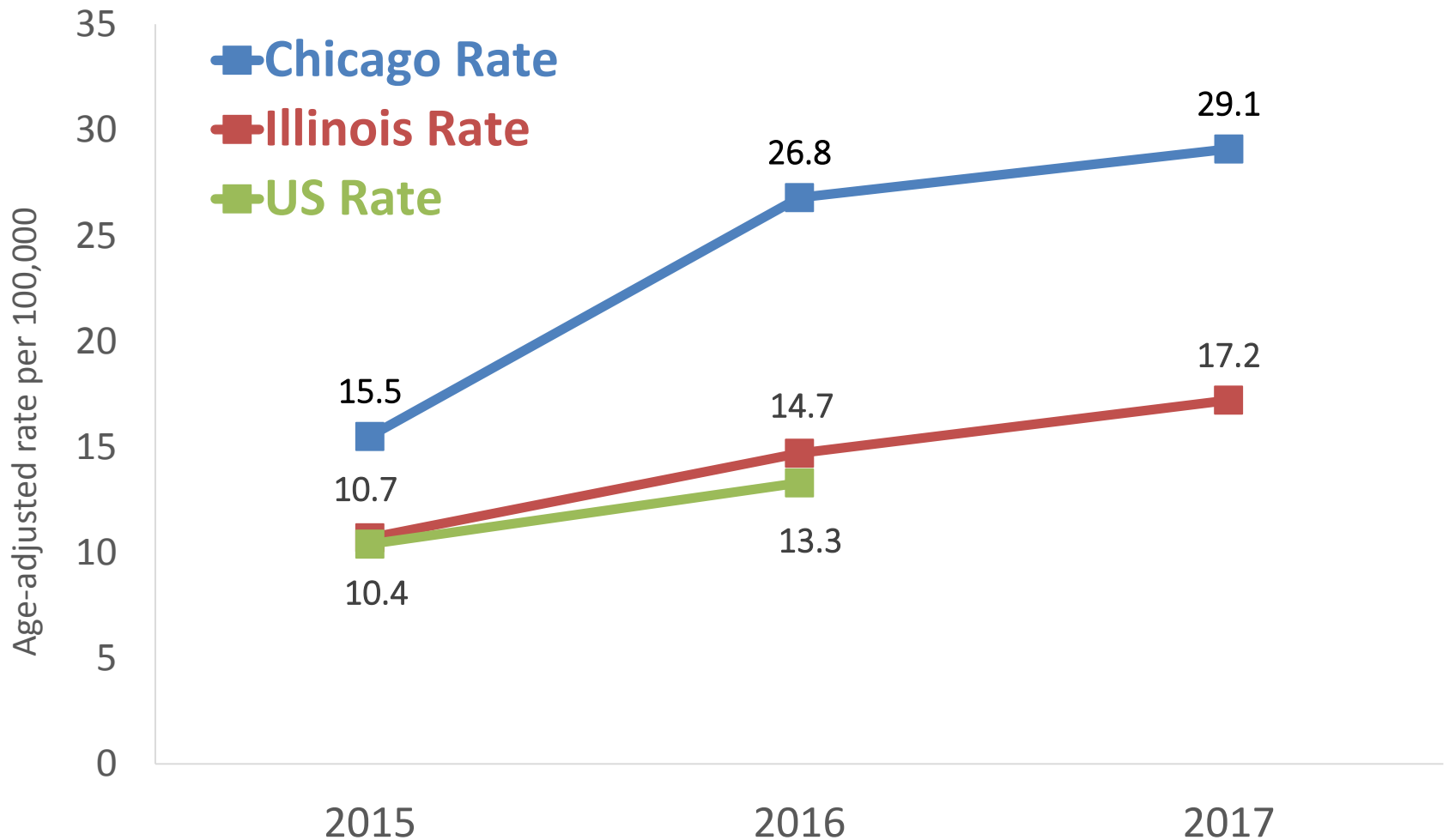
Opioid overdose deaths have increased dramatically in the past ten years in Chicago



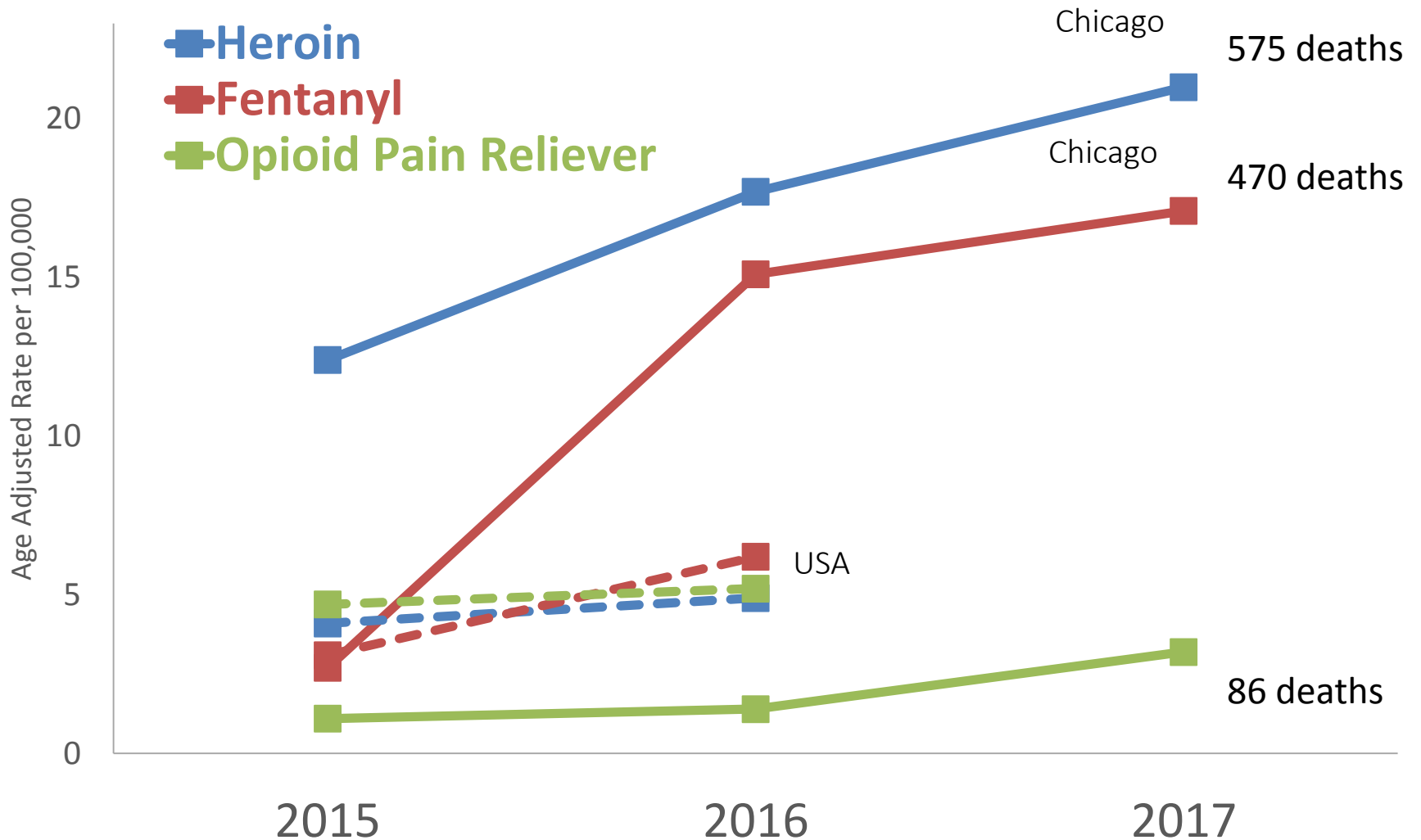
Data Sources: Years 2008-2016: Illinois Department of Public Health, Division of Vital Records, Death Certificate Data Files.

^Year 2017: Cook County Medical Examiner. These data refer to deaths that occurred among Chicago Residents.

The opioid overdose death rate is over 1.5x higher in Chicago than in Illinois



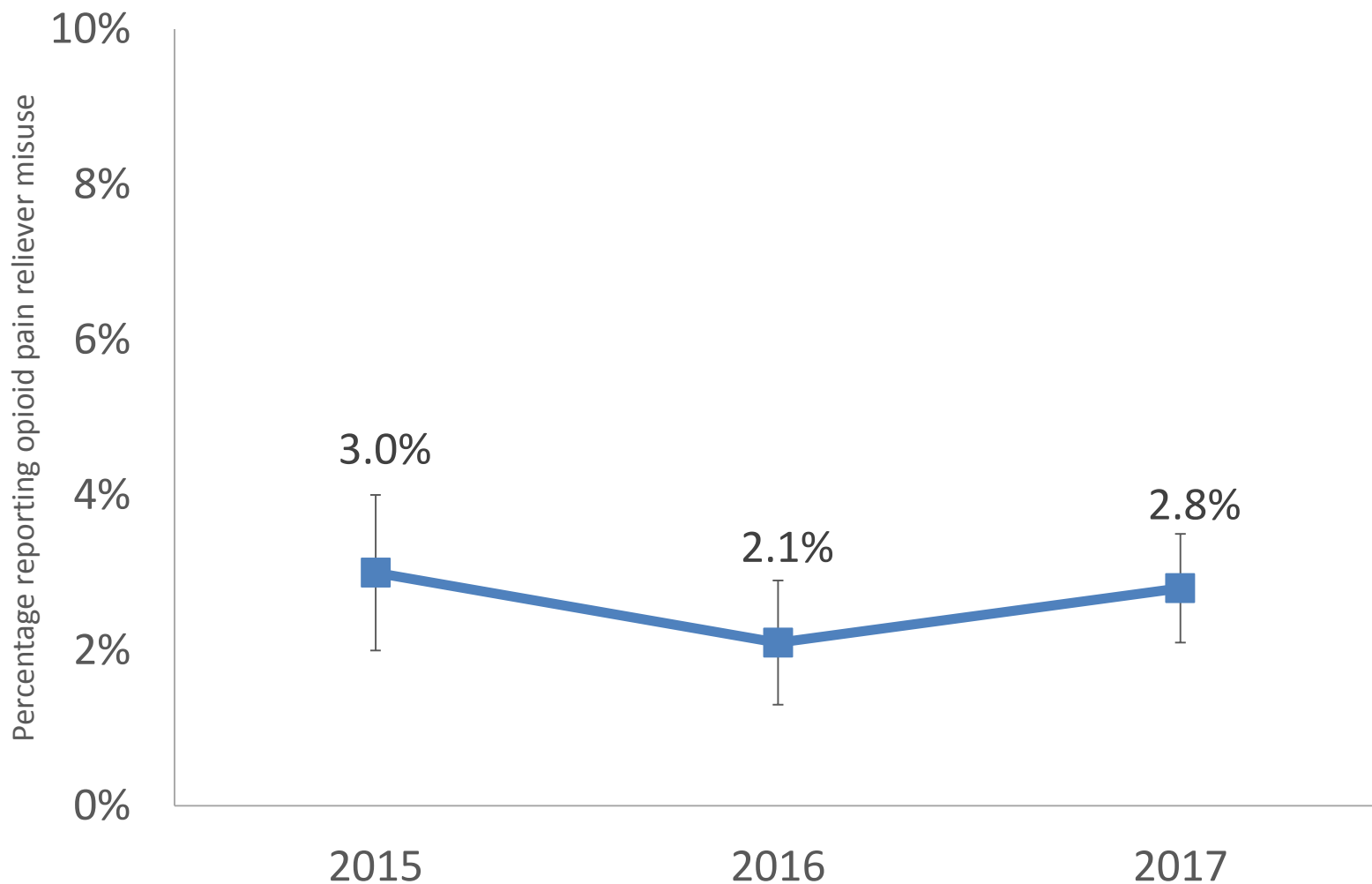
Fentanyl and heroin overdose death rates are over 5x and 6x higher than the opioid pain reliever overdose death rate



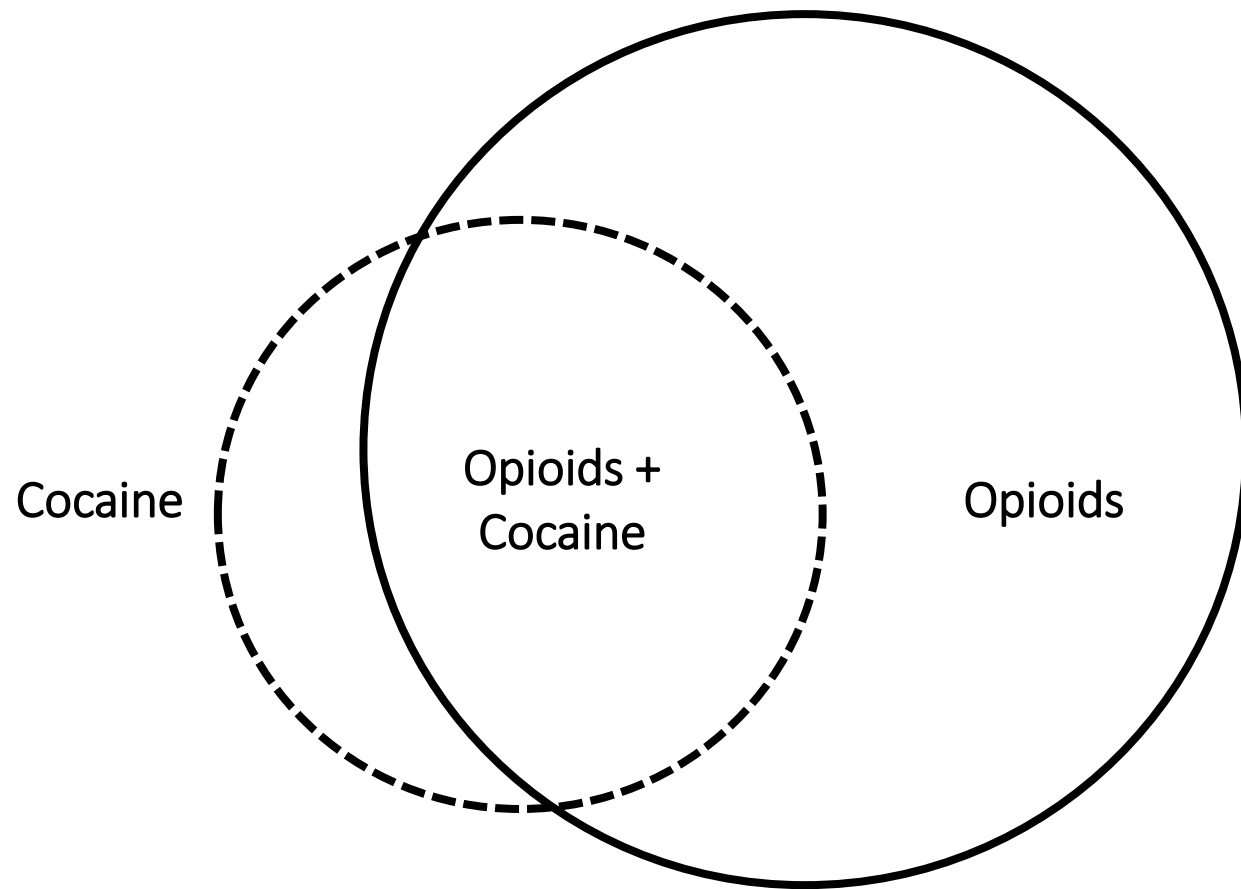
In one year in Chicago the number of opioid overdose deaths involving *fentanyl* increased

from **71** to **420**.

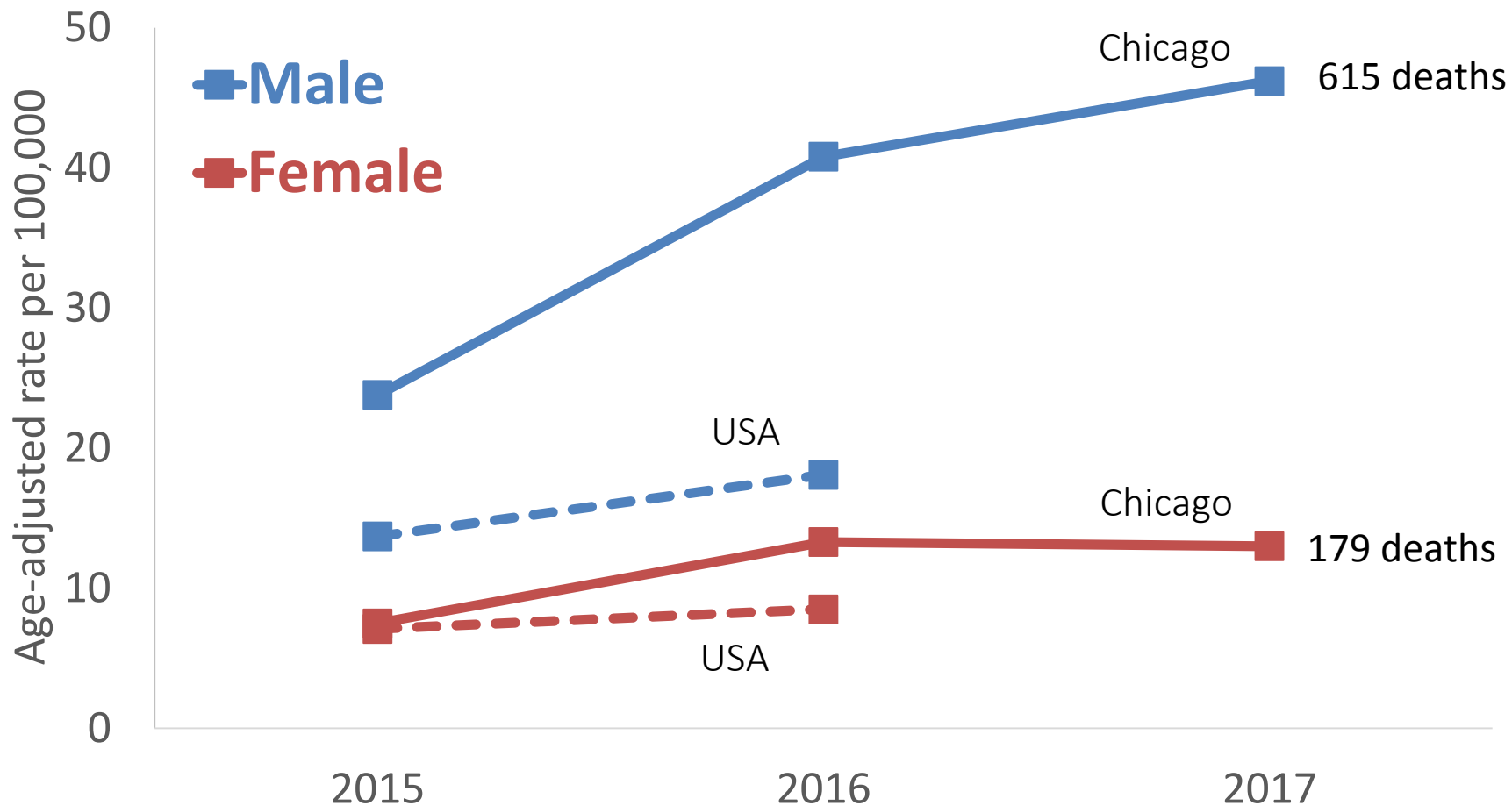
Opioid pain reliever misuse among adults in Chicago has remained steady over the past three years.



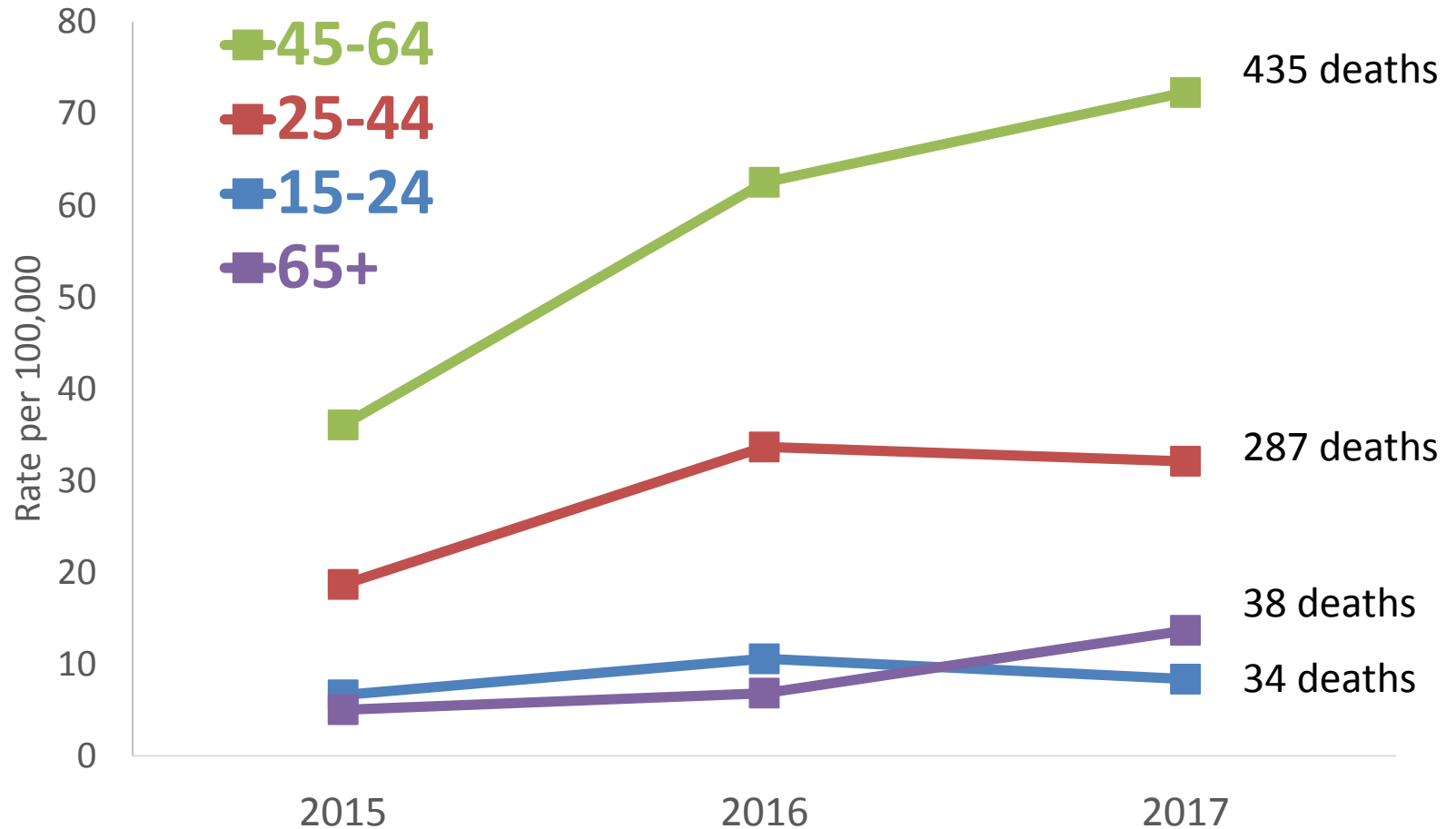
Cocaine was involved in 1/3 of all opioid-related overdose deaths in Chicago (2017)



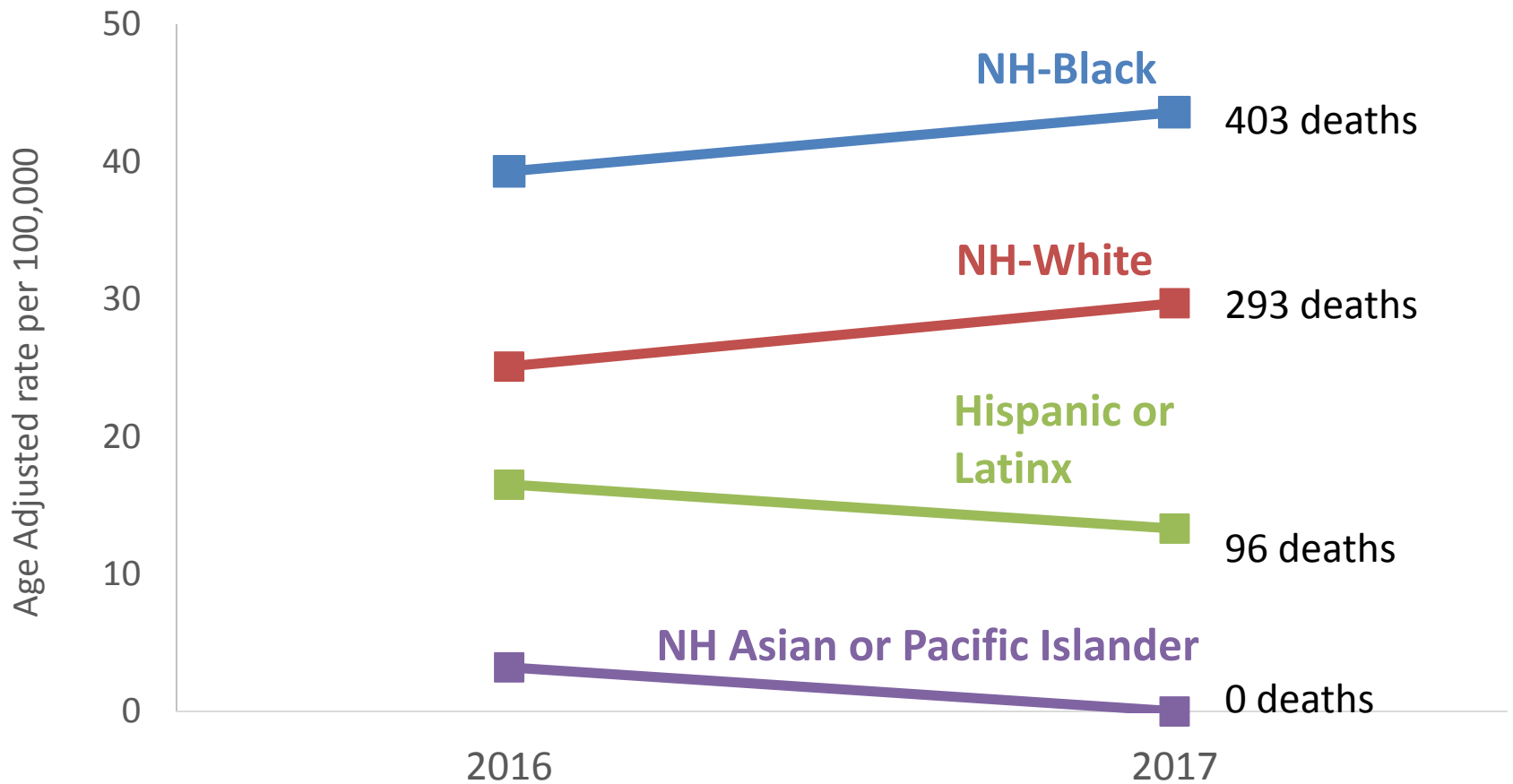
In Chicago, the opioid overdose death rate was 3.5x higher for men than women



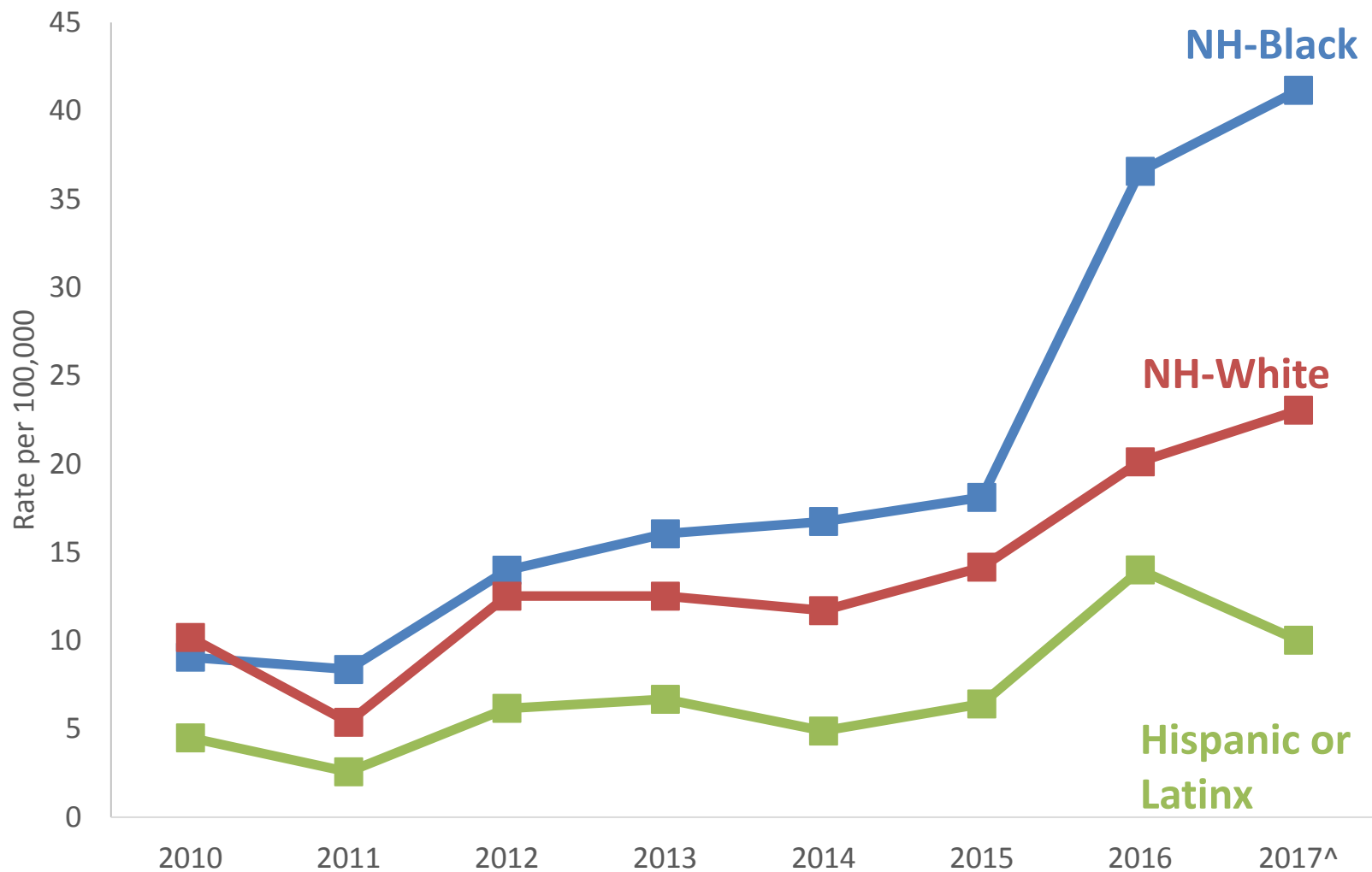
In Chicago, the opioid overdose death rate was 2x higher among 45-64 year olds than among 25-44 year olds



In Chicago, opioid-related overdose rates are higher for non-Hispanic Black than other race groups



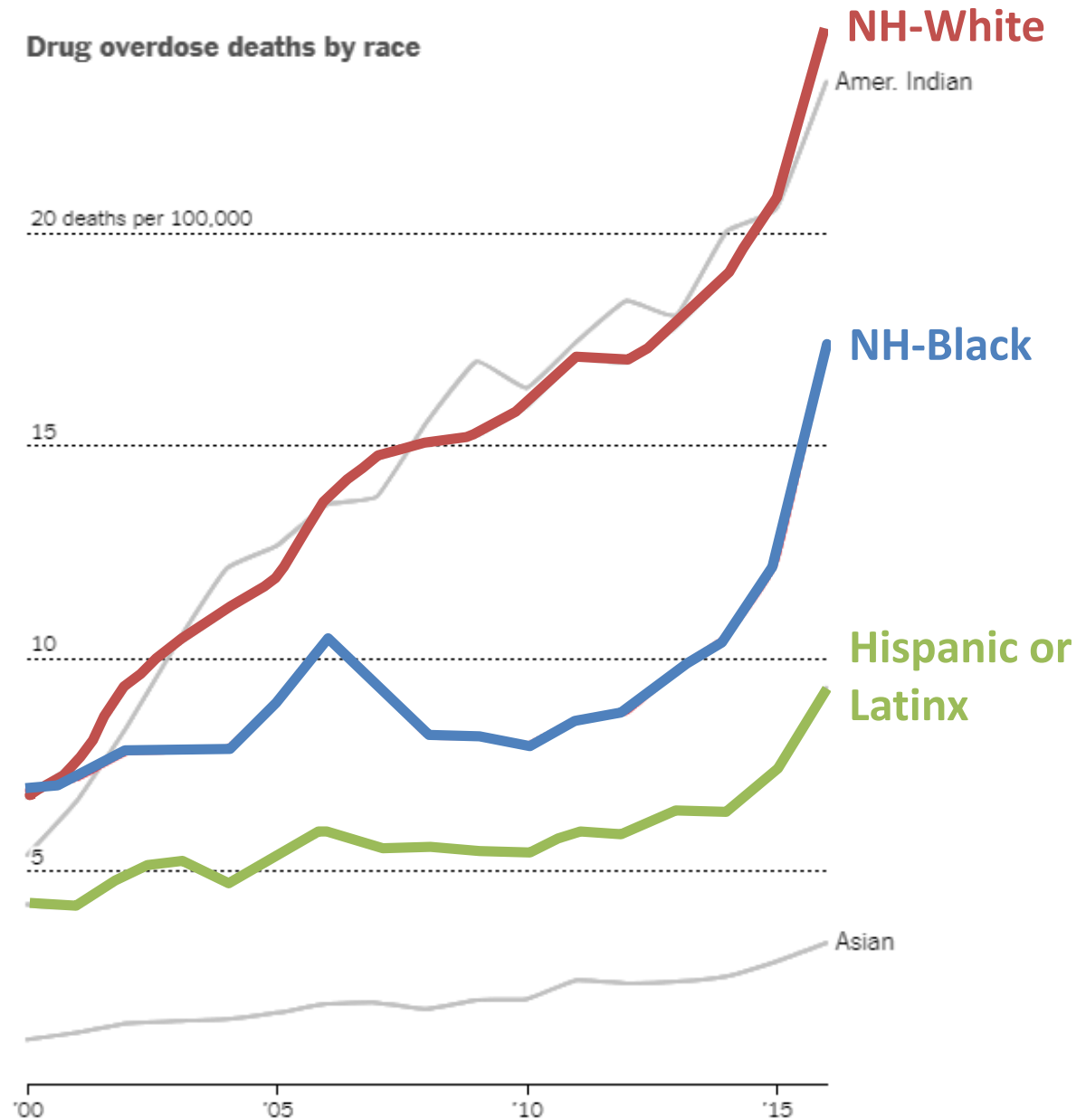
Racial disparities in opioid-related overdose death rates in Chicago persist and have widened in recent years



Data Sources: Years 2008-2016: Illinois Department of Public Health, Division of Vital Records, Death Certificate Data Files.

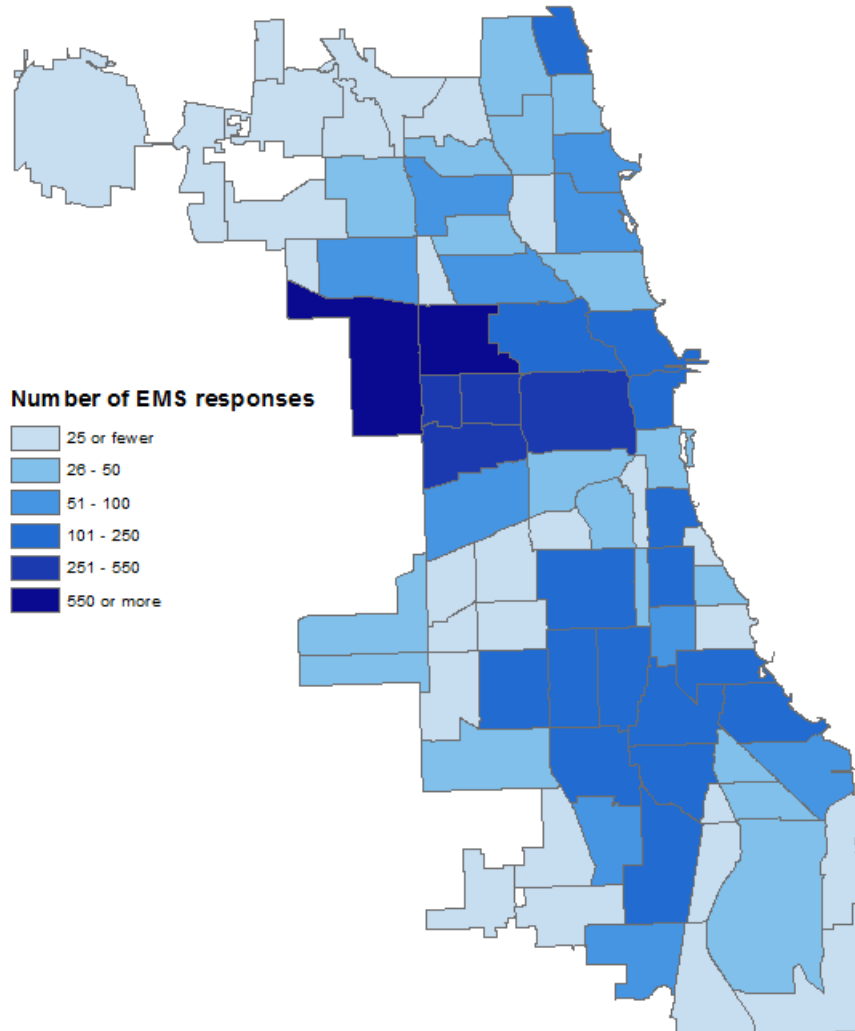
^Year 2017: Cook County Medical Examiner. These data refer to deaths that occurred among Chicago Residents.

In contrast, in the US, overdose death rates are highest among NH Whites, however drug overdose deaths are rising the fastest among NH Blacks

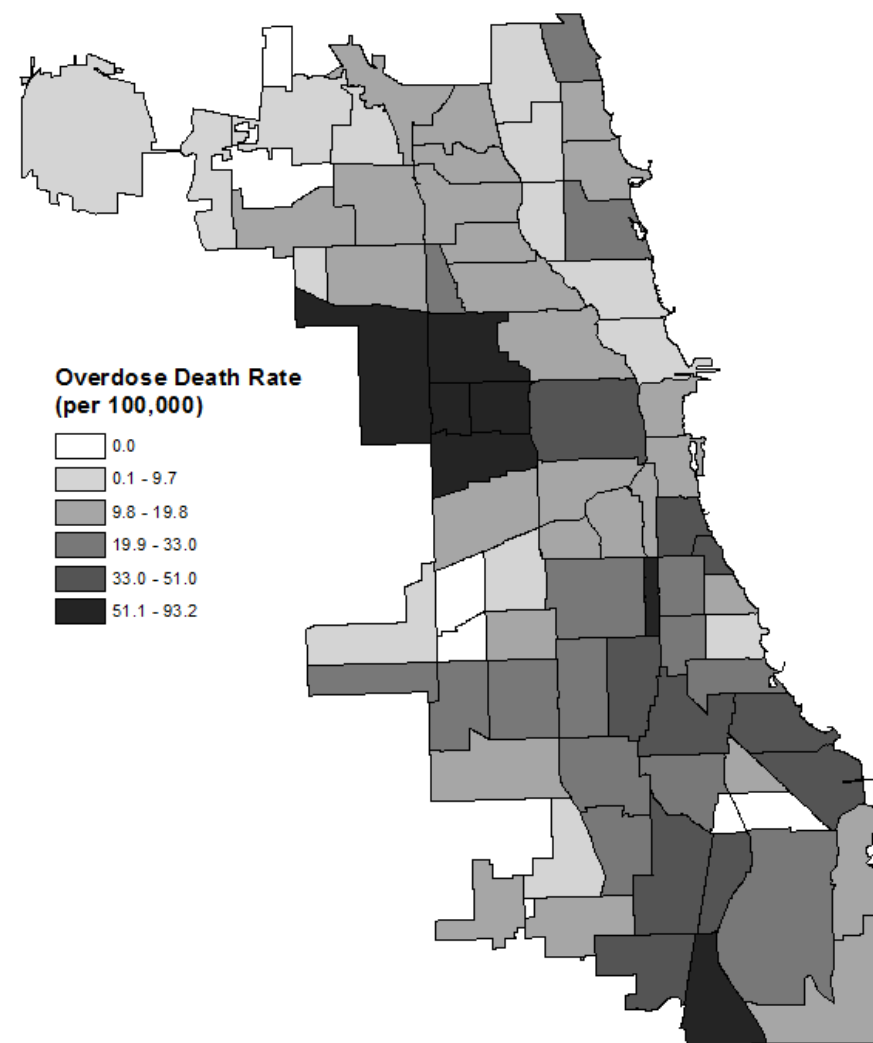


Opioid overdoses occurred in every Chicago neighborhood

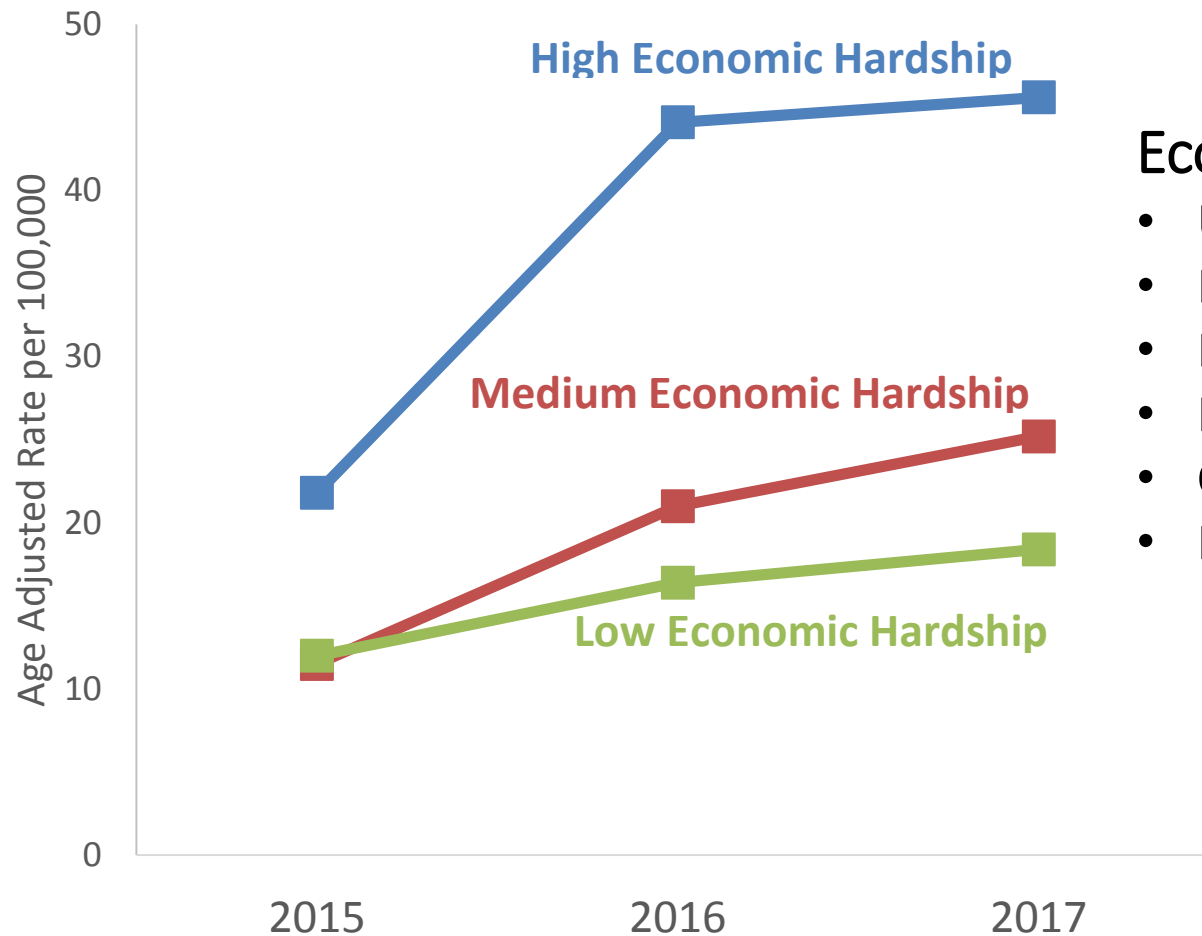
Opioid-related overdoses



Opioid-related overdose deaths

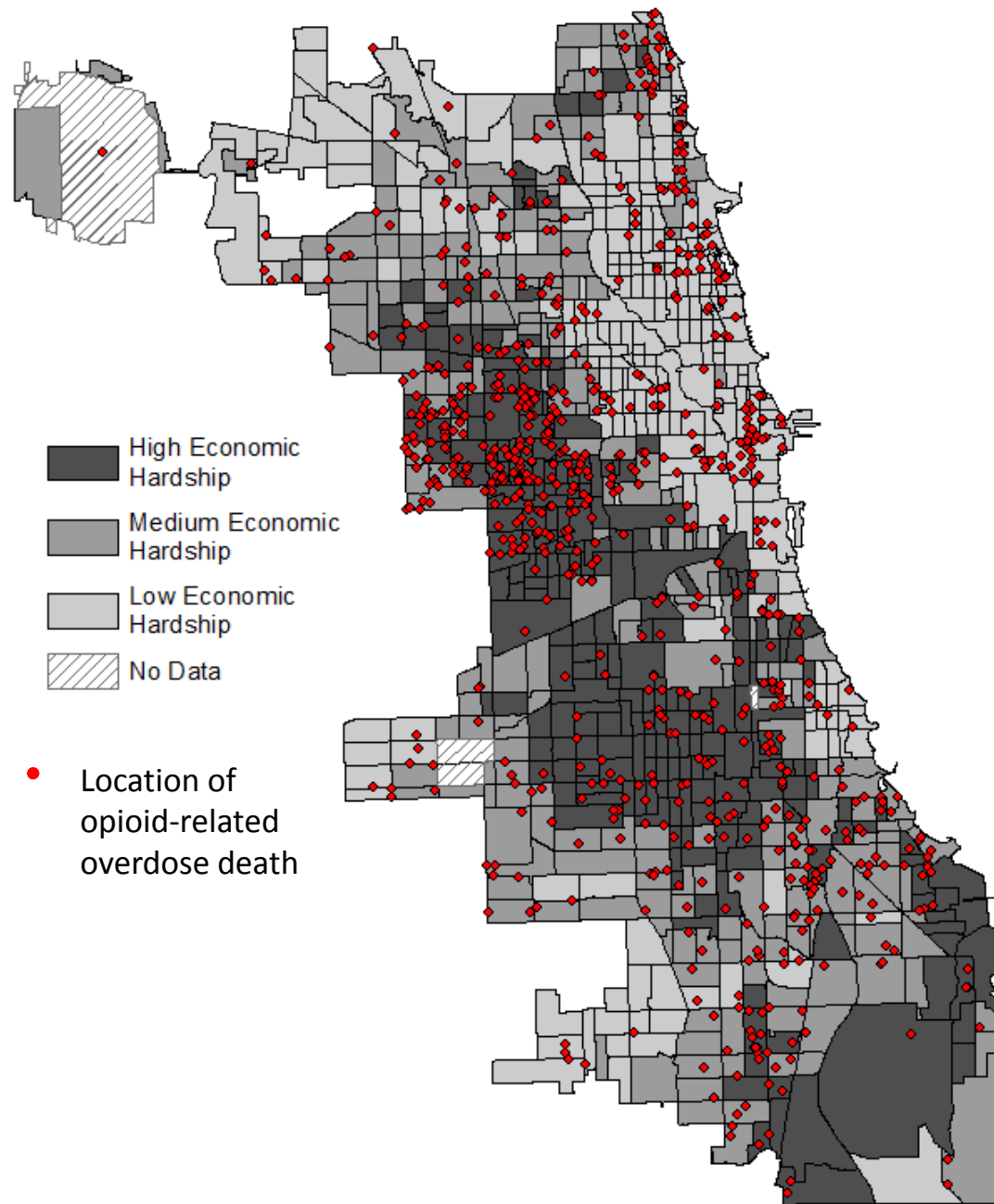


Opioid overdose death rates are higher in neighborhoods with high economic hardship in Chicago.



Economic Hardship

- Unemployment
- Dependency
- Education
- Income level
- Crowded housing
- Poverty



Data Source: Cook County Medical Examiner. Includes all opioid-related overdose deaths that occurred in Chicago (2017).

Economic Hardship Index: Developed by the Nelson A. Rockefeller Institute of Government. Calculated using 2014 5-YR American Community Survey Population Estimates



Objectives

- Reduce opioid overdose by 20%
- Reduce prescription opiate abuse

Strategies

- Naloxone distribution and overdose prevention education (HC2.0)
- Medication Assisted Treatment (HC2.0)
- Syringe exchange and other harm reduction strategies
- Improve economic conditions and address root causes
 - Affordable housing
 - Job training and availability
 - Education opportunities

Conclusions

In Chicago:

- The opioid overdose death rate continues to increase and is 1.5x larger than the rate in IL.
- Over 90% of deaths involved illicit opioids (heroin and/or fentanyl) rather than prescription opioid pain relievers
- There are significant disparities in the rate of death among demographic subgroups. The highest rates of death are among men, older age groups, NH-Blacks and neighborhoods with high economic hardship.

Future Epidemiology/Data Directions:

- Further collaboration with city agencies, hospitals, community based organizations, and other health departments.
- Obtain and analyze more detailed data (prescription drug monitoring program data, more detailed circumstances of death data, etc.)
- In depth analysis to understand connection between social determinants of health, economic hardship, structural inequity and opioid overdose deaths.

Thank you!

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References

Seth P, Scholl L, Rudd RA, Bacon S. Overdose Deaths Involving Opioids, Cocaine, and Psychostimulants — United States, 2015–2016. MMWR Morb Mortal Wkly Rep 2018;67:349–358.

DOI: <http://dx.doi.org/10.15585/mmwr.mm6712a1>

<https://www.nytimes.com/interactive/2017/12/22/upshot/opioid-deaths-are-spreading-rapidly-into-black-america.html>

<http://www.dph.illinois.gov/sites/default/files/publications/Drug-Overdose-Deaths-Aug2018.pdf>

<http://www.dph.illinois.gov/opioids/idphdata>