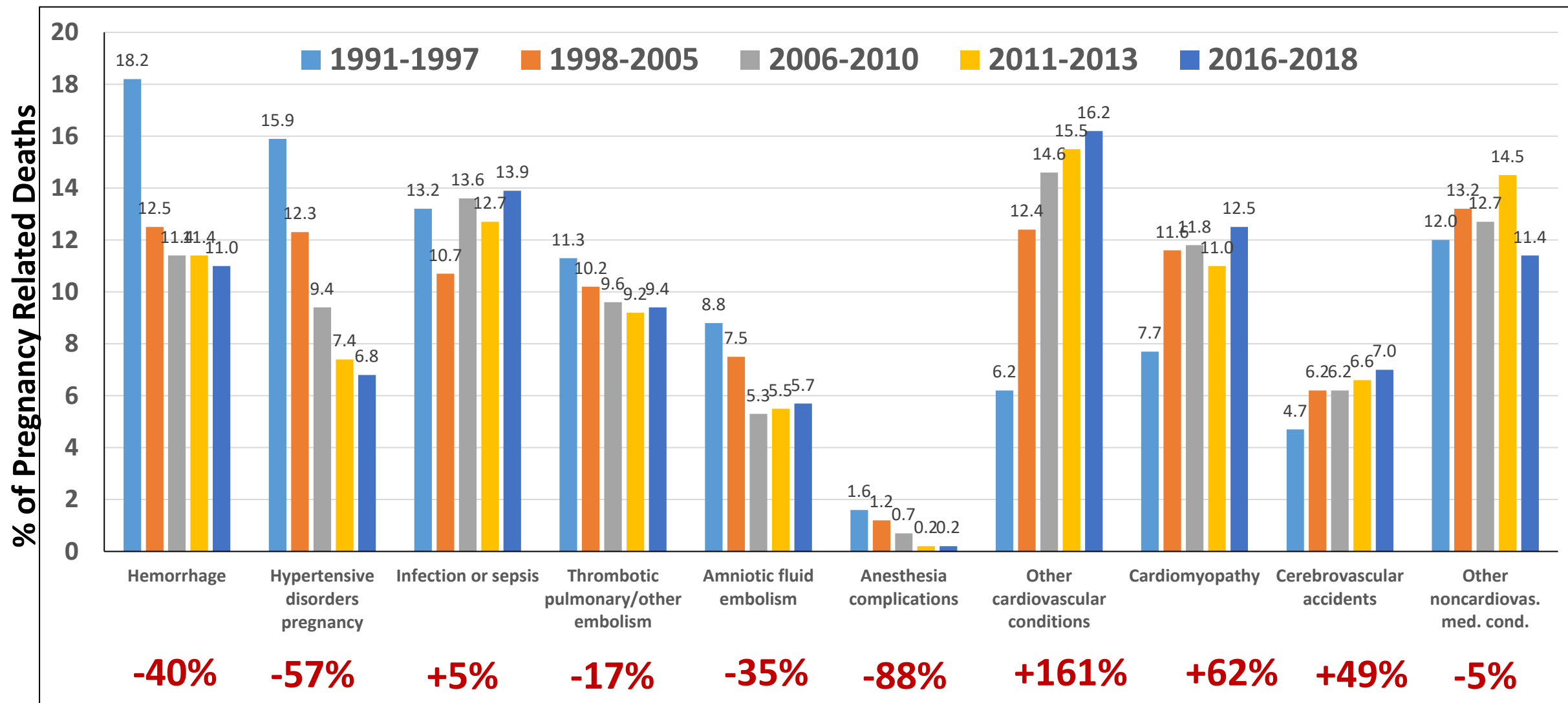


# Maternal Mortality Part 6

*Maternal Mortality as an Indicator of a Public Health Problem beyond Pregnancy*

# Maternal Mortality as a Public Health Problem

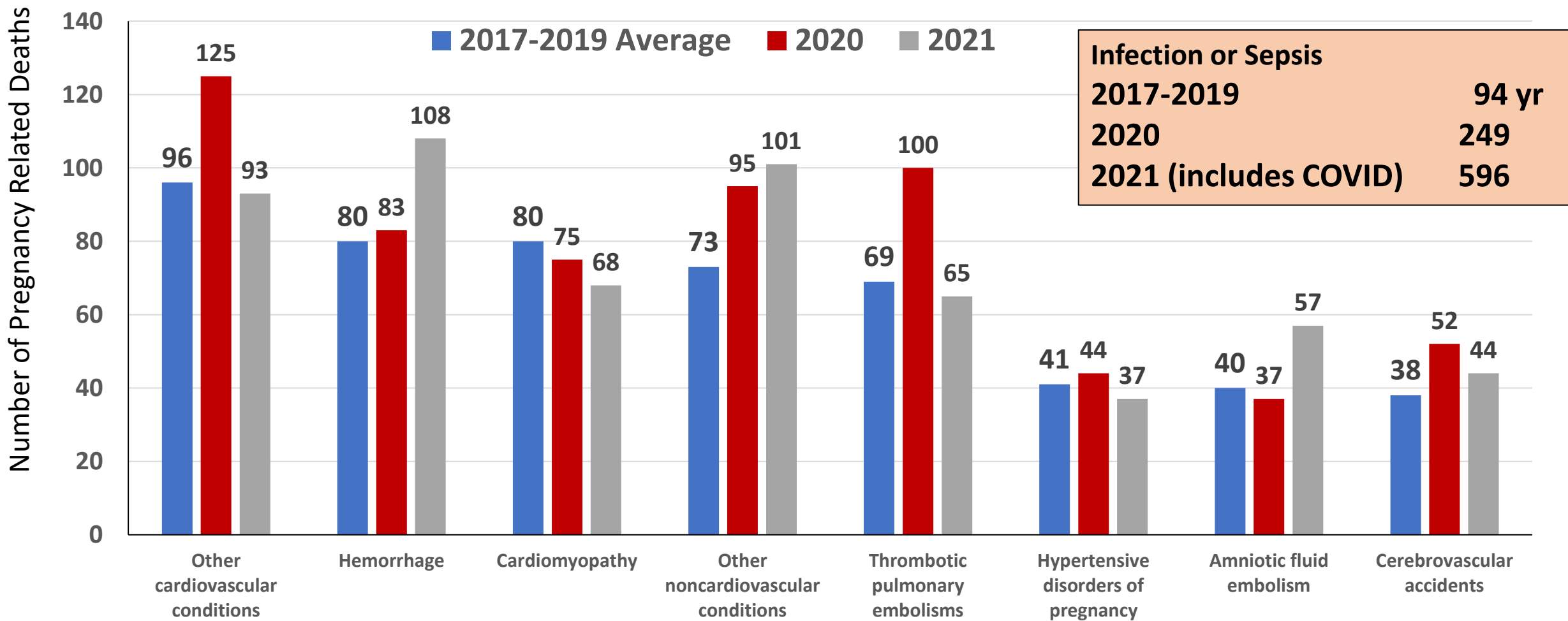
Cause-specific proportionate *Pregnancy-Related* mortality: U. S., 1991–2018.



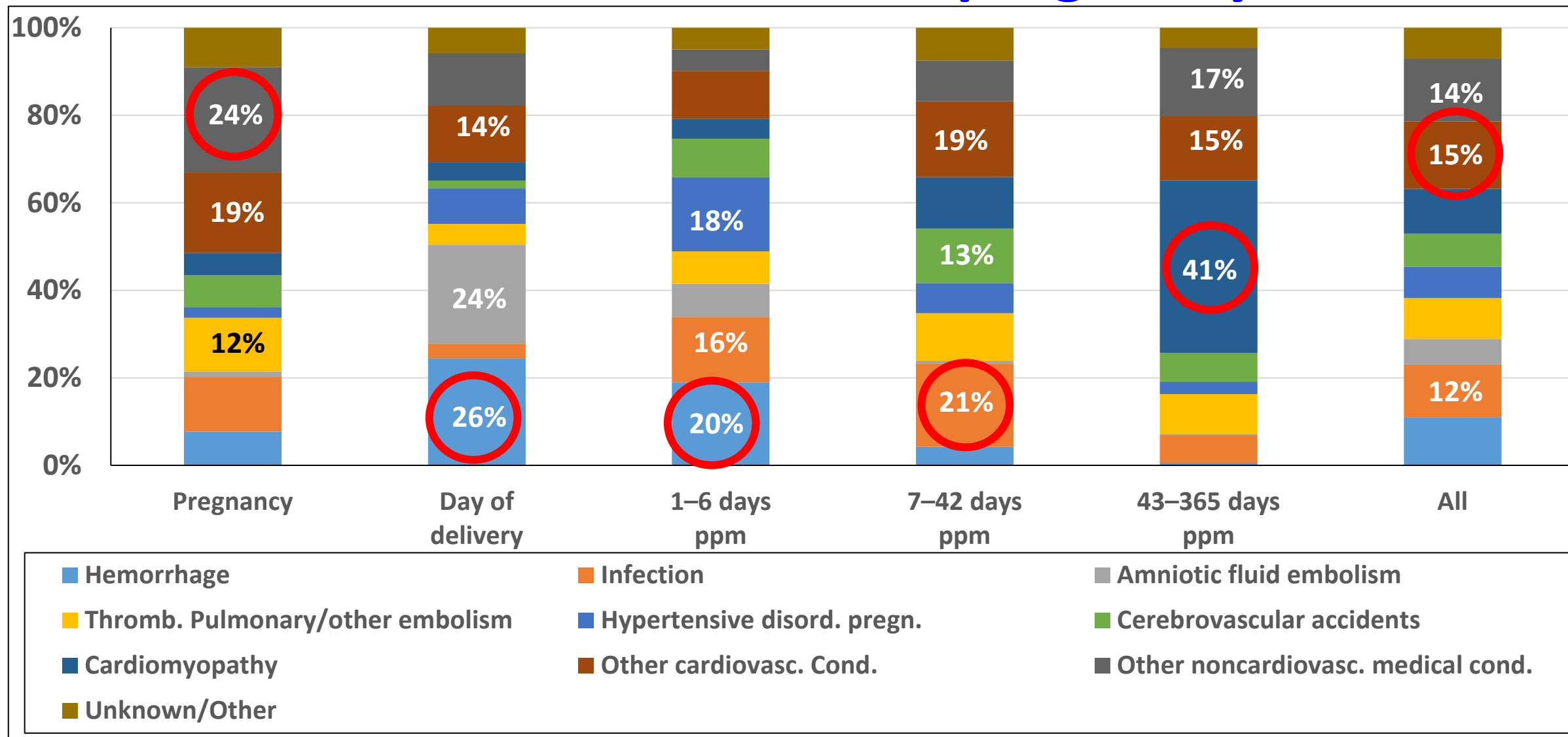
Source: Creanga. Pregnancy-Related Mortality in the United States. *Obstet Gynecol* 2017(1991-2013); CDC PRMSS (2016-2018).



# Infection and Cardiac related Conditions Continue the Leading causes of maternal Deaths in the U.S. 2017-19 & 2020 & 2021

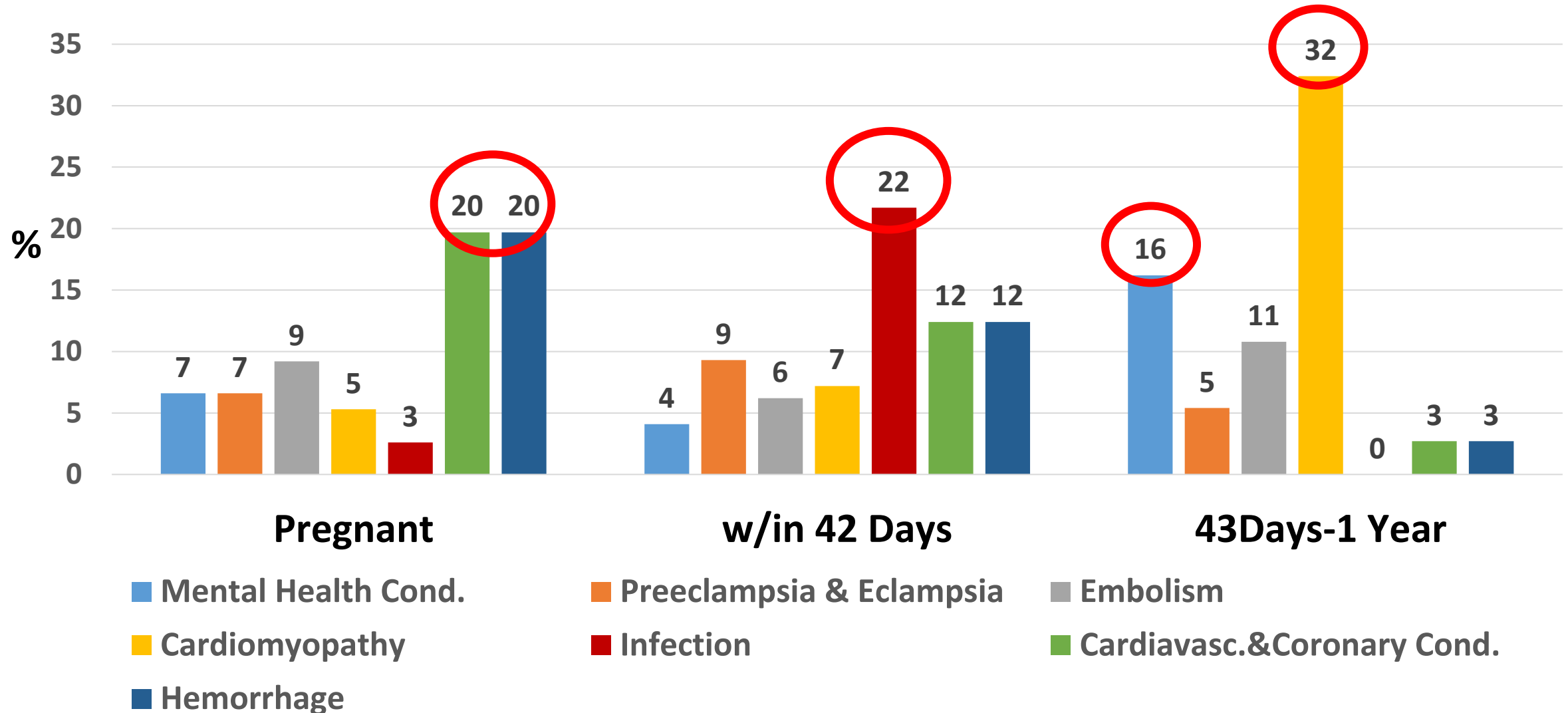


# Pregnancy-related deaths, by cause of death and **timing of death** relative to the end of pregnancy, 2011-15



# Moving to a Public Health Approach

## Underlying Causes of Pregnancy-Related Deaths, by *Timing of Death*



Source: CDC. 2018. *Report from 9 Maternal Mortality Review Committees.*

# Summary on Causes of Death

- If only a quarter of maternal deaths occur at the time of birth, solutions have to look beyond the birth hospitalization to improve outcomes.
- We have made considerable strides in improving care at the time of birth. The recent increases have been largely among cardiovascular conditions, many of which only manifest after the birth.
- There are clearly different patterns of causes of death by timing indicating a need for more nuanced approaches.
- Research into the underlying causes of death suggests a need for a greater focus on maternal mental health, particularly in the postpartum period.

# **The Issue is Broader than Maternal Mortality**

# Not just about maternal mortality

## National Vital Statistics Reports



Volume 73, Number 8

October 4, 2024

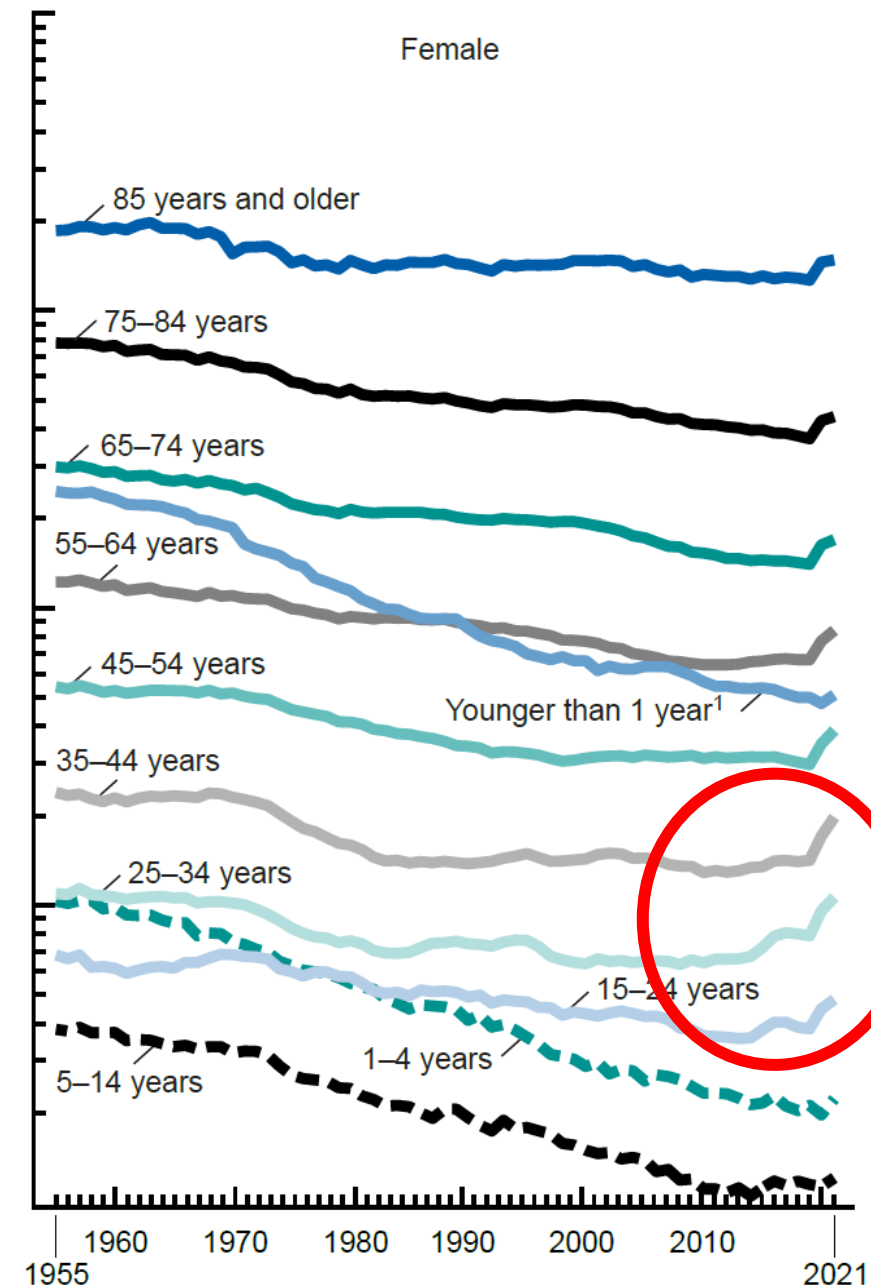
### Deaths: Final Data for 2021

#### STAT

Maternal deaths represent the canary in the coal mine for women's health

By Eugene Declercq and Neel Shah

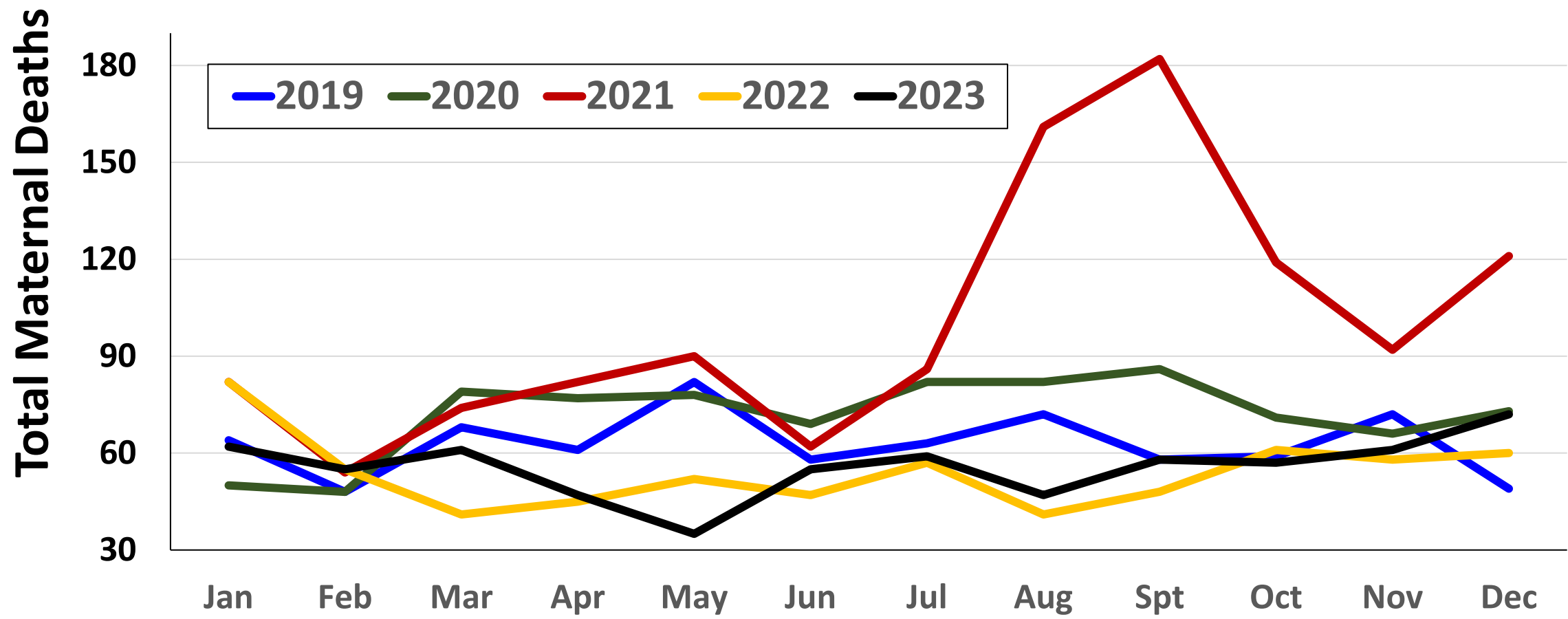
August 22, 2018



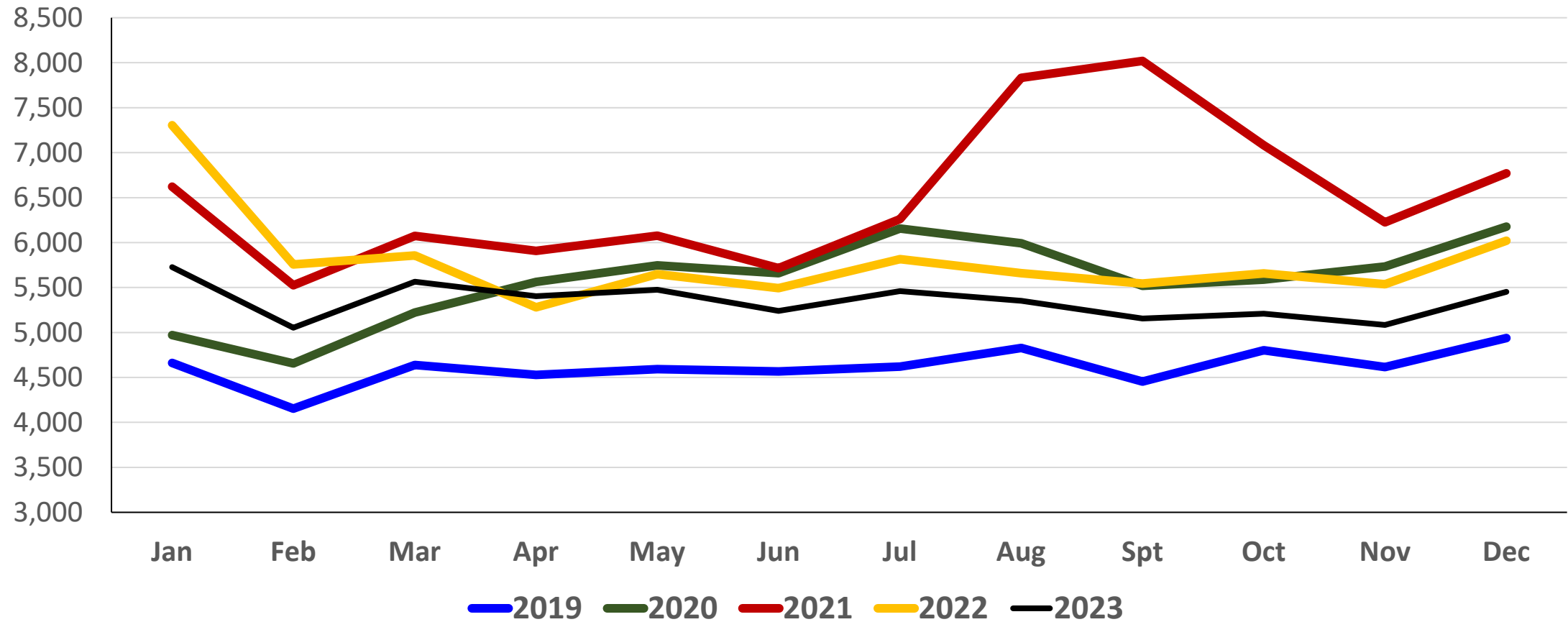




# U.S. Maternal Deaths per Month, 2019-2023

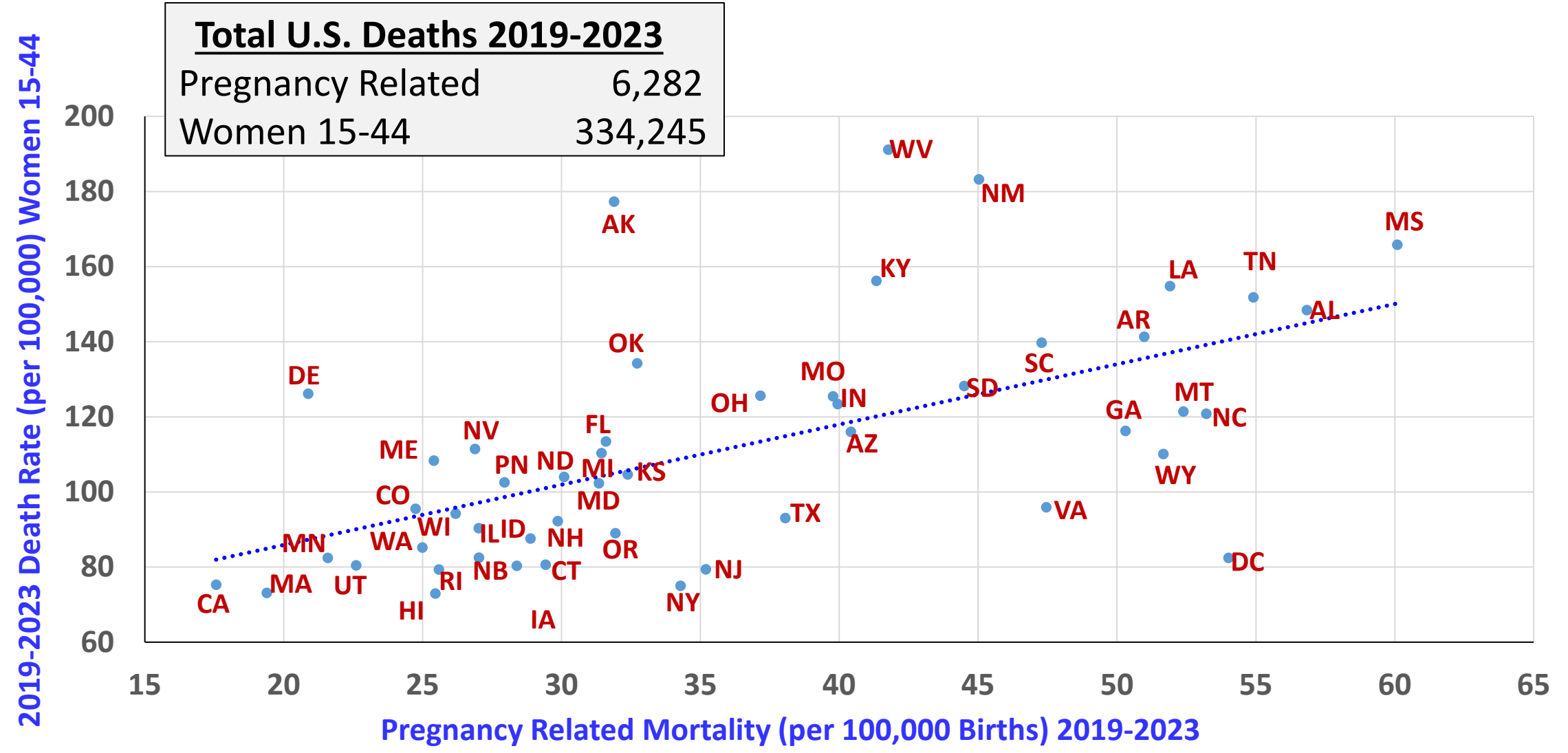


# U.S. Overall Deaths to Women of Reproductive Age (15-44), by Month 2019-2023





# Relationship Between Pregnancy Related Mortality and Overall Death Rate for Women 15-44, U.S. States\*, 2019-2023



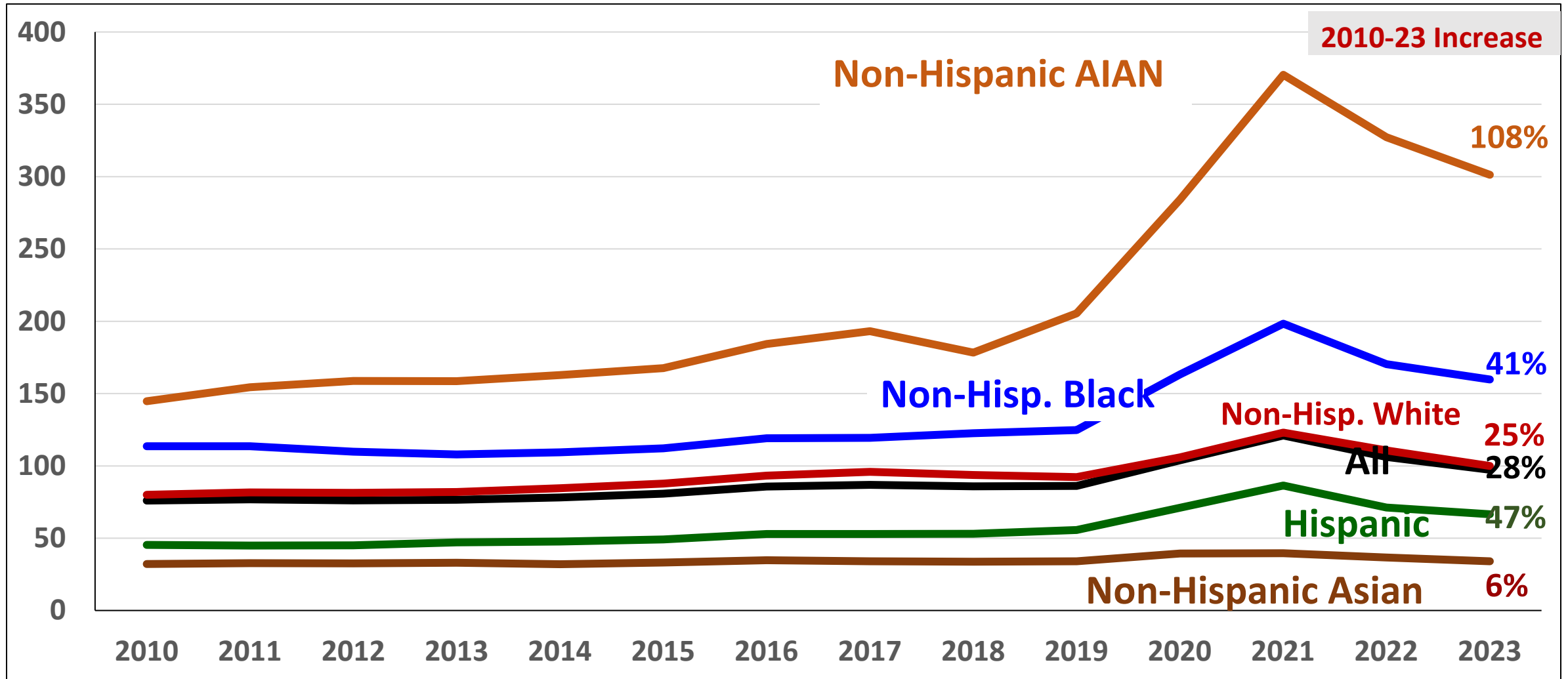
Source: CDC Wonder Mortality files

\* Excludes Vermont with < 10 Pregnancy Related Deaths



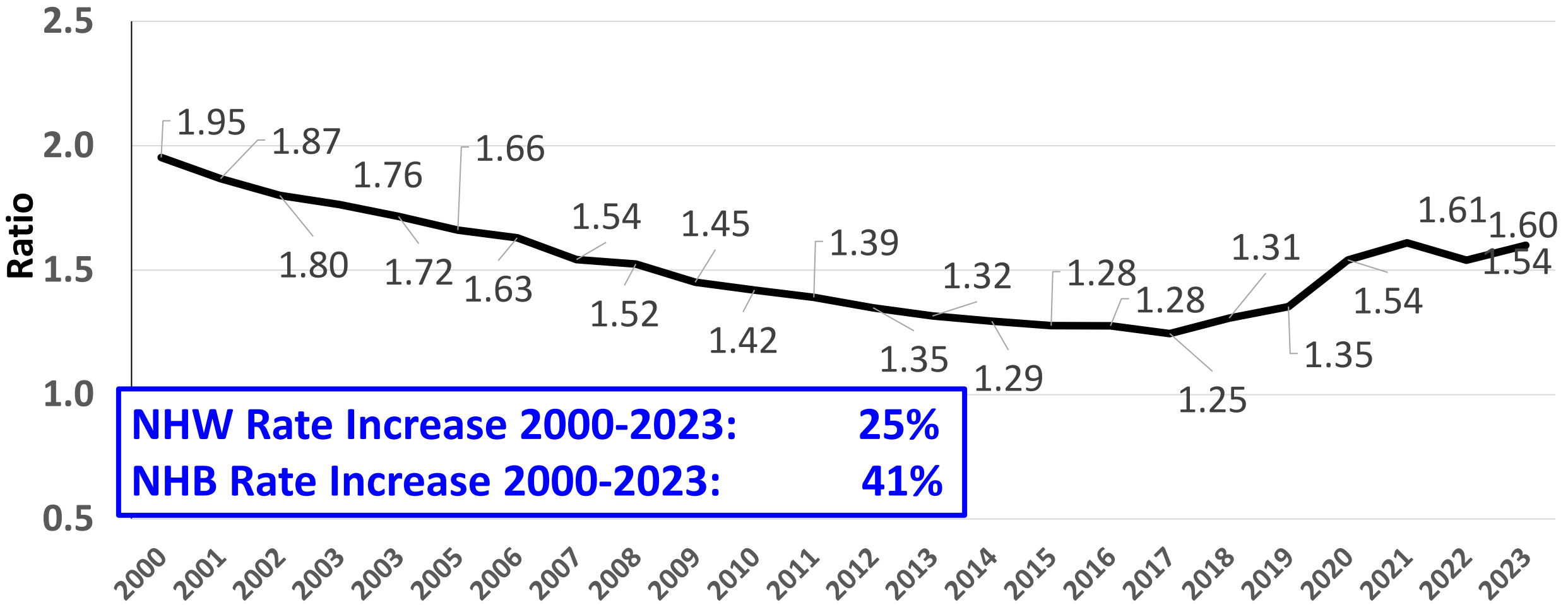
# The Problem is Bigger than Maternal Mortality

## Overall Deaths rates (per 100K), Females 15-44, 2010-2023



**All Female Deaths 15-44**  
**2010 -- 47,427; 2023 – 64,181 (COVID 612)**

# Ratio of Black/White Female Death Rates, Women 15-44, 2000-2023



**NHW Rate Increase 2000-2023: 25%**  
**NHB Rate Increase 2000-2023: 41%**

# Problem is Bigger than Maternal Mortality

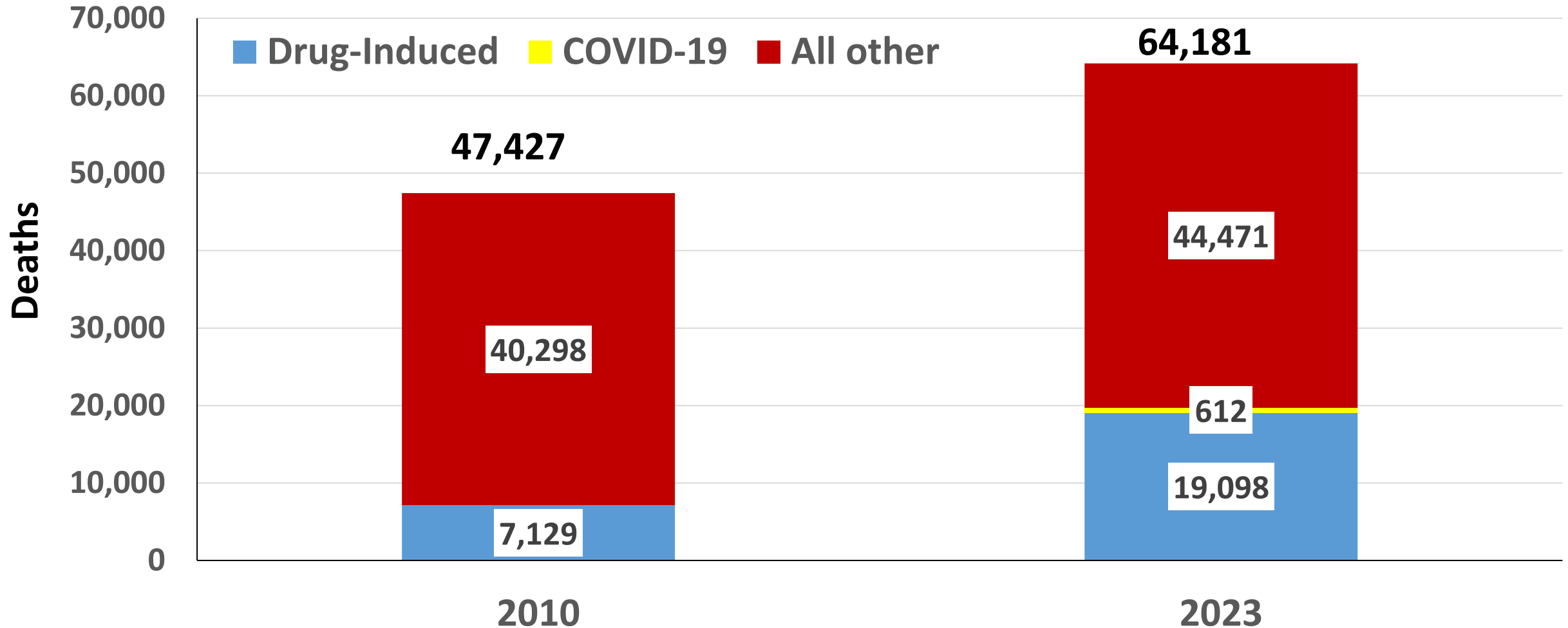
## Top 10 Causes of Death for Women **15-44** in 2023

	2023 Total Deaths	% of total	Rate per 100 K	% Change in rate 2010-2023	Proportion of 2010-23 Increase
<b>All causes</b>	64,181	100%	97.3	<b>28.0%</b>	---
<b>Accidents (unintentional inj.)</b>	21,315	33.2%	32.3	<b>73.7%</b>	<b>57.9%</b>
Malignant neoplasms	8,704	13.6%	13.2	-9.6%	-2.4%
Diseases of heart	5,050	7.9%	7.7	5.5%	3.0%
<b>Intentional self-harm (suicide)</b>	4,619	7.2%	7.0	<b>27.3%</b>	<b>6.9%</b>
Assault (homicide)	2,615	4.1%	4.0	<b>33.3%</b>	<b>4.3%</b>
<b>Chronic liver disease and cirrhosis</b>	2,579	4.0%	3.9	<b>143.8%</b>	<b>9.4%</b>
Diabetes mellitus	1,461	2.3%	2.2	29.4%	2.4%
Cerebrovascular diseases	1,235	1.9%	1.9	0.0%	0.1%
Pregnancy, childbirth & puerperium	1,038	1.6%	2.6	33.3%	1.7%
All other causes (residual)	15,565	24.3%	23.6	28.0%	16.7%

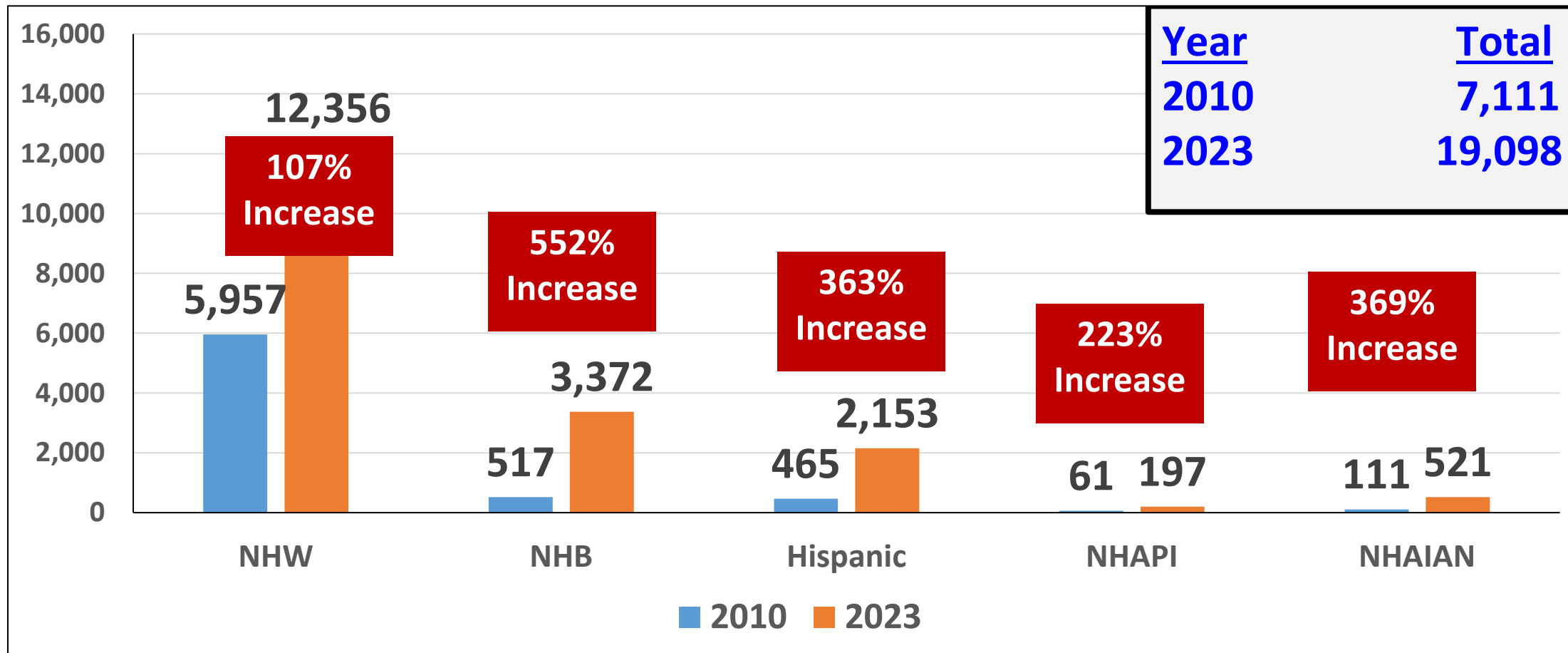
Sources: CDC, NCHS. Underlying Cause of Death 1999-2023 on CDC WONDER Detailed Mortality Database, released in 2025. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on Feb. 2, 2025

[www.birthbythenumbers.org](http://www.birthbythenumbers.org)

# Drugs were involved in 74 percent of the increase in non-COVID deaths of women ages 15 to 44 between 2010 and 2023.



# Increase in Drug Induced Deaths, Women 15-44, by Race/Ethnicity, 2010 & 2023

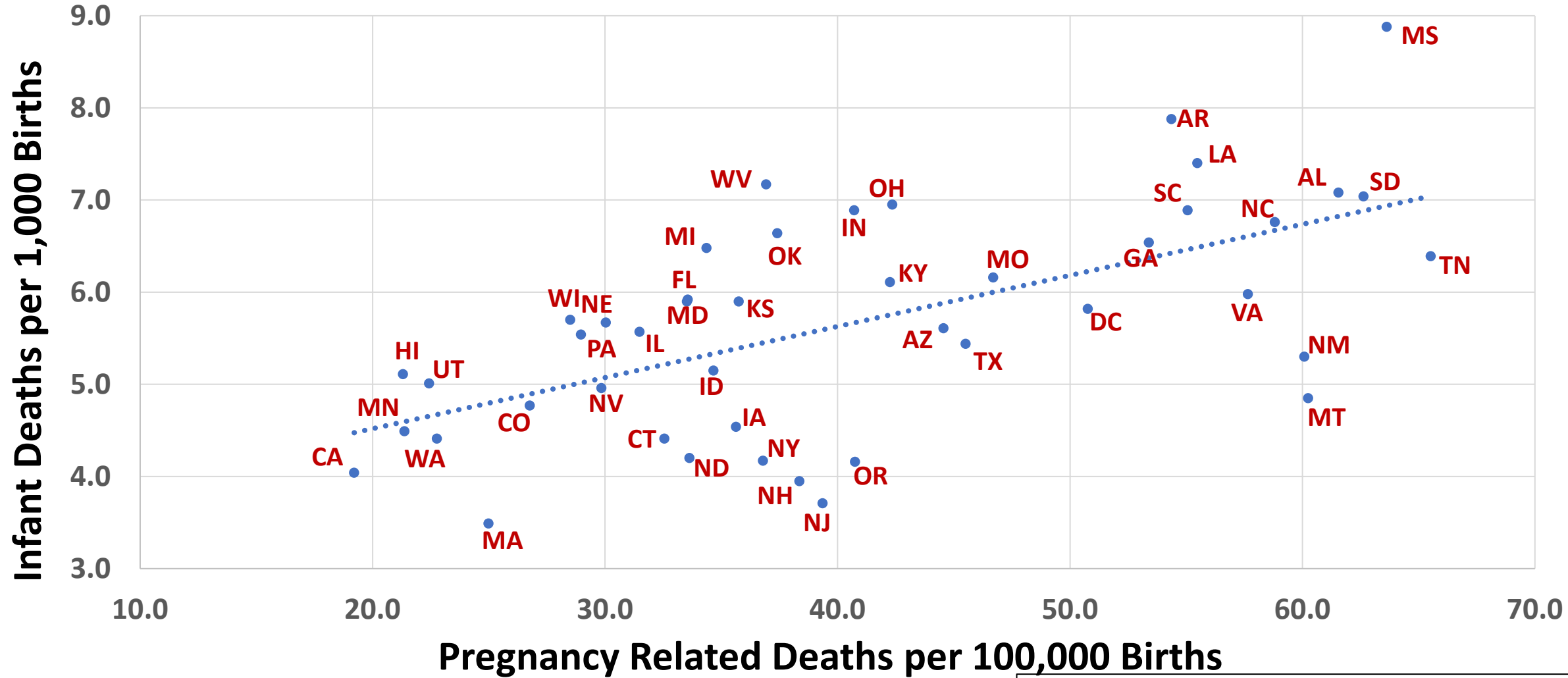


CDC, NCHS. CDC WONDER Online Detailed Mortality Database, released in 2024. Accessed at <http://wonder.cdc.gov/ucd-icd10.html> on February 2, 2025





# Pregnancy Related Deaths and Infant Death Rates, 2020-2022.



\* Maternal Deaths out to 1 year postpartum;  
45 states with at least 10 deaths 2020-2022

# Summary

- Pick your idiom: tip of the iceberg or canary in the coal mine – the 1000 pregnancy related deaths are a warning about a much larger problem in the U.S. -- the rising death rate among women of reproductive age.
- While the pregnancy related mortality rate has remained steady pre pandemic, the overall death rate for women 15-44 increased substantially (28%) through 2023.
- The death rate for non-Hispanic White women was rising 2010-2017 at a much faster rate than the rate among non-Hispanic black women, but that has shifted.
- The primary factor in this increase in women's deaths is clear – substance use.