



# Influence of Mental Health on Maternal Mortality: A Literature Review

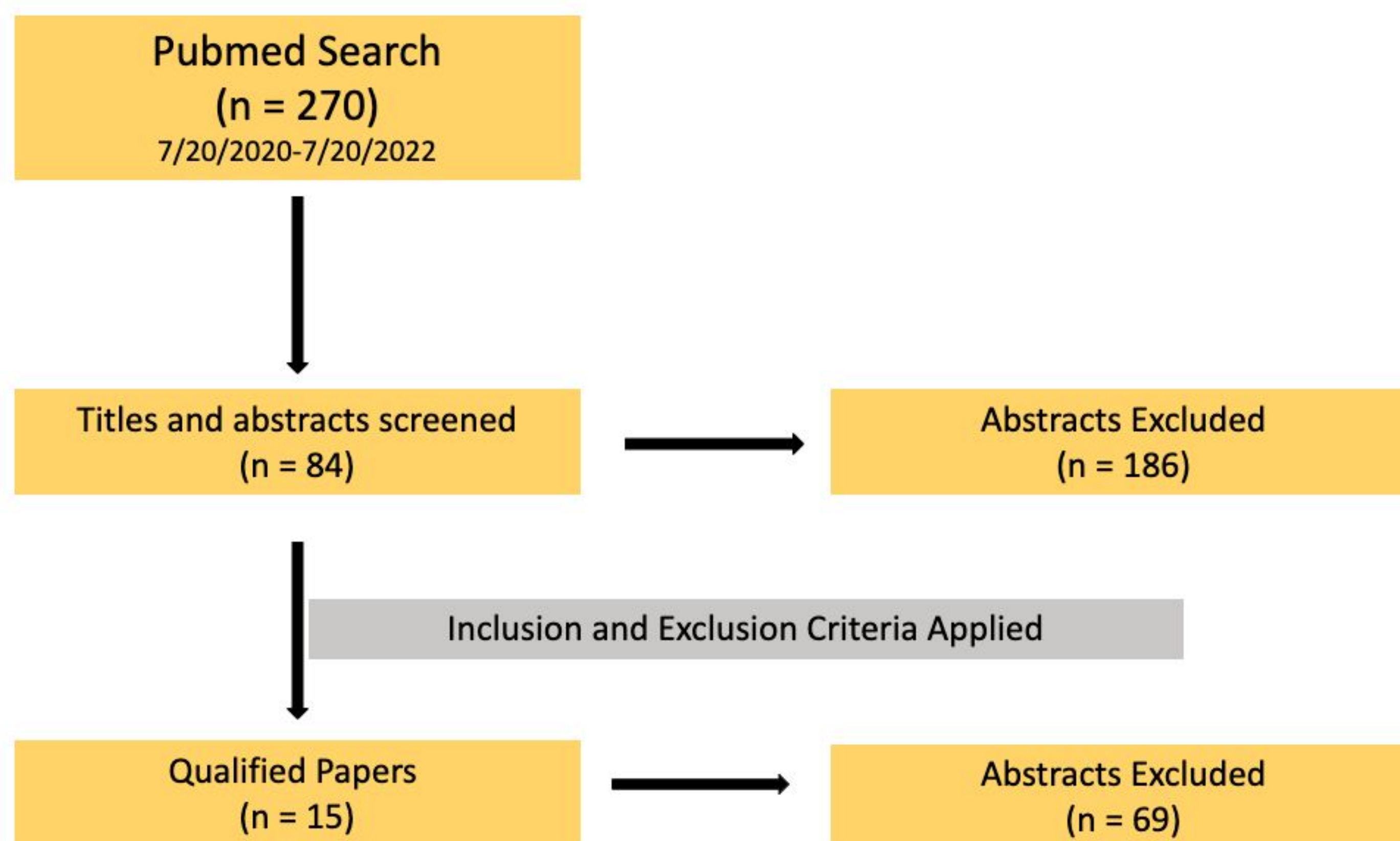
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## INTRODUCTION

Maternal mortality is a rising concern in the field of obstetrics and continues to increase in prevalence in the United States. Many factors contribute to this increase, and of particular note, mental health. According to some studies, as many as 25% of pregnant women experience a psychiatric illness during the antepartum and postpartum periods and a large percentage of maternal mortality cases are due to suicide.<sup>1</sup>

The purpose of this literature review is to establish a foundation for the research conducted on maternal mortality in the United States since 2020 and its association with mental health. Due to the lack of data and information on maternal mortality and its association with depression, the study was shifted from being a systematic literature review to a scoping review. This information is vital to understanding the recent increase in maternal mortality in the United States and provides a framework for moving forward with interventions to stop this upward trend.

## METHODS



- First search input: ((Mental health) OR (suicide)) AND ((Maternal Mortality) OR (Postpartum death))
- Inclusion: maternal mortality (defined as 6 weeks before labor and one year after birth)
- Exclusion: anything out of the US, all articles stating mental health related diagnoses were not the primary cause of death, exclusion for participants under 16 years old

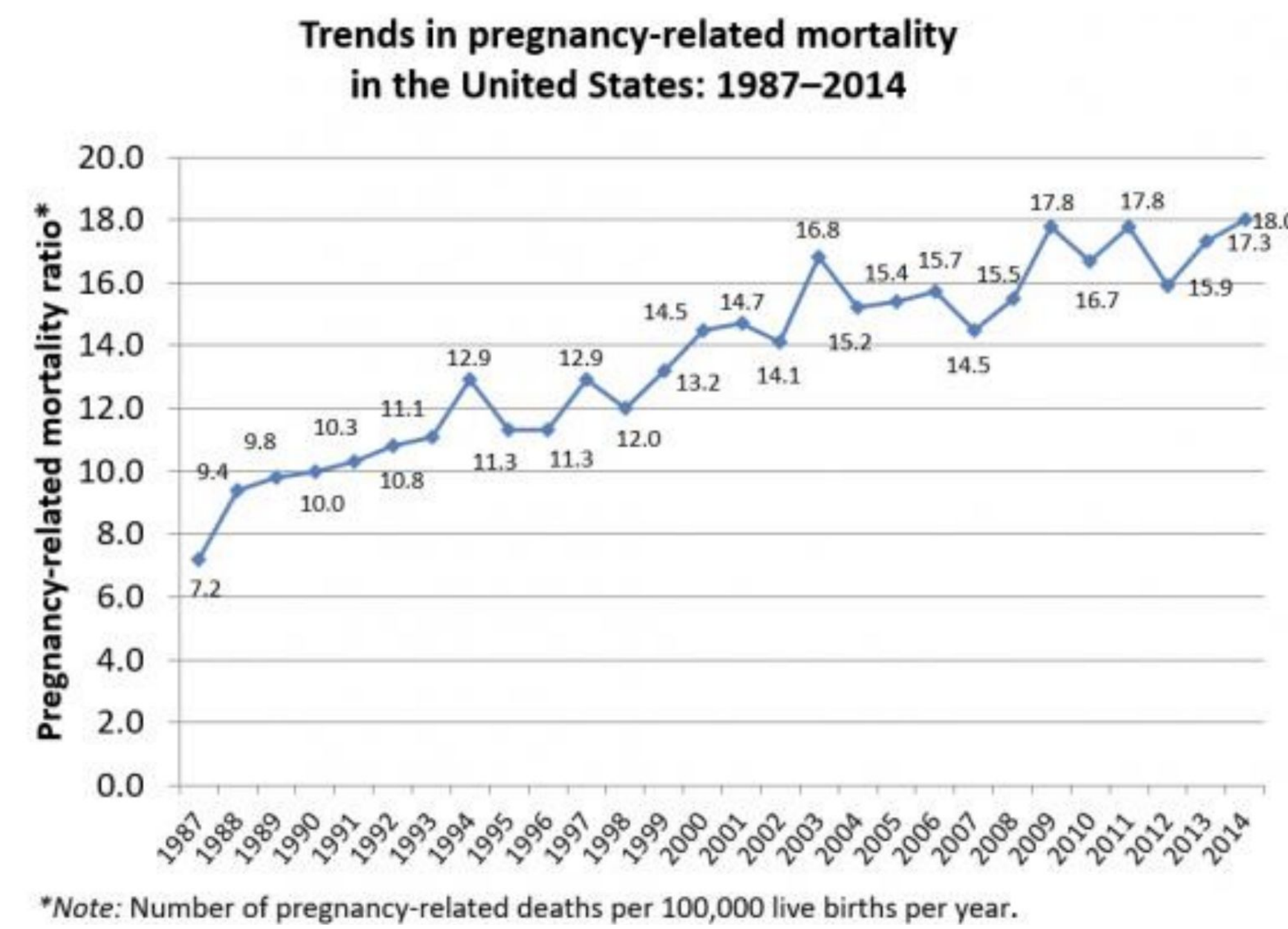


Figure 1. Trends in Pregnancy related mortality in the United States: 1987-2014.<sup>2</sup>

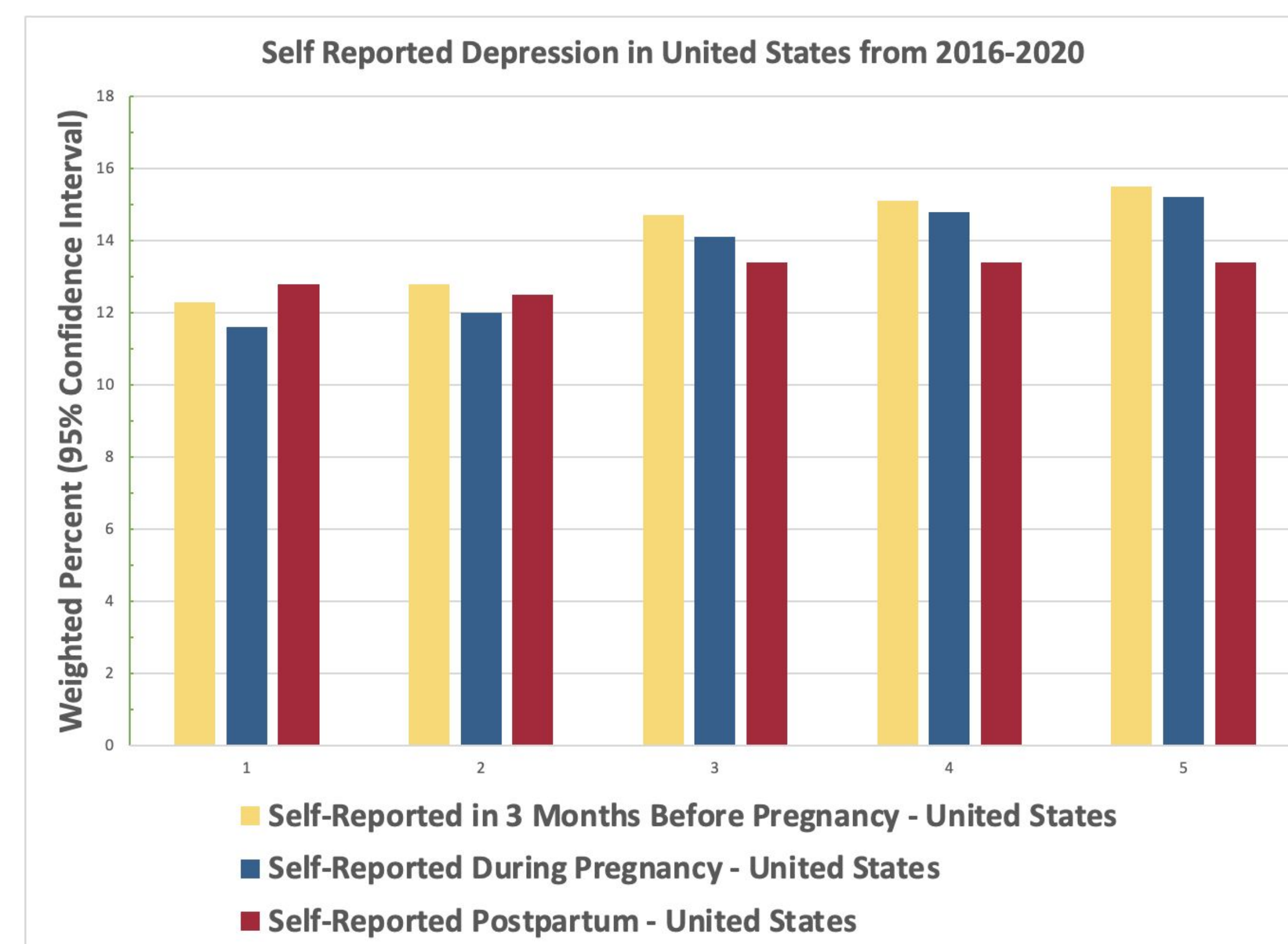


Figure 2. Self Reported Depression in the United States from 2016-2020.<sup>3</sup>

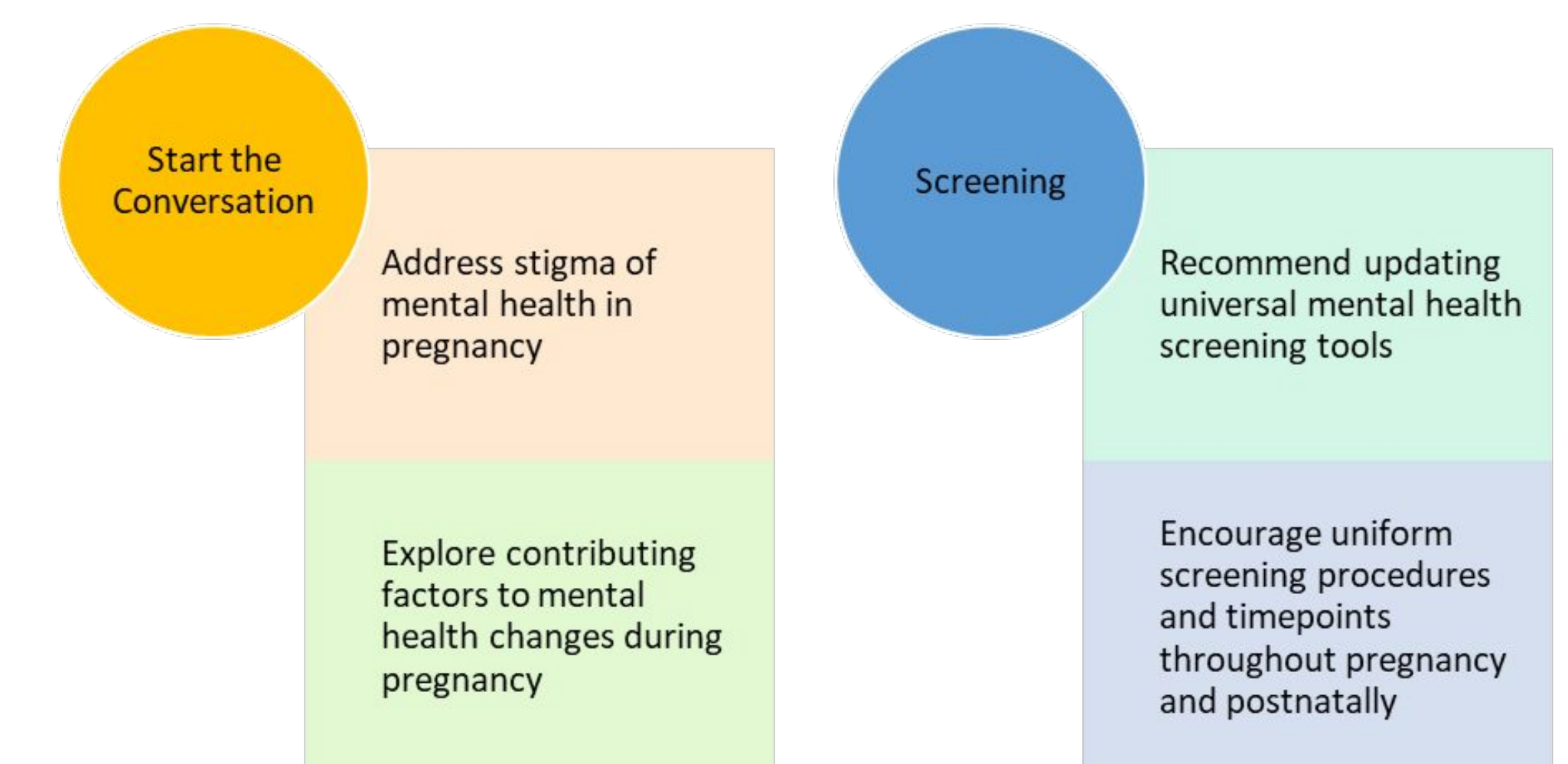


Figure 3. Maternal Mortality Rate by State in 2022.<sup>4</sup>

## RESULTS/CONCLUSION

- There has been a clear upward trend in maternal mortality rates in the United States over the last few decades, despite being one of the top countries in health care expenditure
- The leading causes for maternal mortality have shifted throughout this time with one of the current leading causes being suicide
- Rates of depression and suicide have also demonstrated an increasing trend, specifically in the adult female population.
- As of now, there is very little research on mental health related maternal deaths
- This scoping review aims to draw an association between maternal mortality and mental health and pave the way for future studies and interventions that can address this national health issue
- It is evident mental health during pregnancy is vastly understudied and needs to be addressed, starting with interventions such as mental health screenings during obstetric appointments

## FUTURE DIRECTIONS



## REFERENCES

1. Vesga-López O, Blanco C, Keyes K, Olfson M, Grant BF, Hasin DS. Psychiatric Disorders in Pregnant and Postpartum Women in the United States. *Arch Gen Psychiatry*. 2008;65(7):805–815. doi:10.1001/archpsyc.65.7.805
2. Pregnancy Mortality Surveillance System. Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion. Updated June 22, 2022. Accessed September 5, 2022. [https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm?CDC\\_AA\\_refVal=https%3A%2F%2Fwww.cdc.gov%2Fproductivehealth%2Fmaternalinfanthealth%2Fpregnancy-mortality-surveillance-system.htm](https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fproductivehealth%2Fmaternalinfanthealth%2Fpregnancy-mortality-surveillance-system.htm)
3. Selected 2016 Through 2020 Maternal and Child Health (MCH) Indicators for the United States. Centers for Disease Control and Prevention. Updated May 23, 2022. Accessed September 5, 2022. <https://www.cdc.gov/prams/prams-data/mch-indicators/states/pdf/2020/All-Sites-PRAMS-MCH-Indicators-508.pdf>
4. Maternal Mortality Rate by State in 2022. World Population Review. Accessed September 5, 2022. <https://worldpopulationreview.com/state-rankings/maternal-mortality-rate-by-state>