



**Smoking During Pregnancy Among Mothers in Florida
2016-2020**

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Key Findings:

- Since 2016, the percentage of births to mothers who smoked during pregnancy declined significantly, from 5.1% in 2016 to 3.7% in 2020 (provisional).
- The percentage of births to mothers who smoked during pregnancy declined significantly among non-Hispanic White and non-Hispanic Black populations. However, percentages were lowest among Hispanic mothers.
- Percentages have declined significantly across all age groups, except for mothers ages 35-39 and 40-44. The highest percentage of births to mothers who smoked during pregnancy were among women ages 20-29.
- The percentages of births to mothers who smoked during pregnancy were lowest among women who obtained higher levels of education post high school.

Background

Maternal tobacco use during pregnancy increases the risk of pregnancy complications and adverse birth outcomes, including preterm birth, low birthweight, birth defects, and an increased risk of sudden infant death syndrome (SIDS) [1]. Findings from other studies suggest that there is no level or safe trimester for maternal smoking during pregnancy, and therefore women of reproductive age are encouraged to avoid tobacco use before, during, and after pregnancy [2]. Thus, eliminating smoking before pregnancy is an effective way to reduce the risk of associated adverse birth outcomes. Accordingly, the U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, established a Healthy People (HP) 2030 objective to increase abstinence from cigarette smoking among pregnant women to 95.7% (MICH-10) [3].

The Florida Department of Health (Department) is committed to reducing and preventing tobacco use in administering the Tobacco Free Florida program, which provides comprehensive tobacco education and use prevention program [4]. In Florida, the percentage of births to mothers who smoked during pregnancy has steadily declined for over a decade, from 9.5% in 2000 to 3.7% in 2020 (provisional) [5]. This decline reflects progress that falls in line with the HP 2020 objective to increase smoking cessation during pregnancy [6]. While smoking during pregnancy has decreased over the years, disparities still exist among different groups based on race/ethnicity, age, and education.

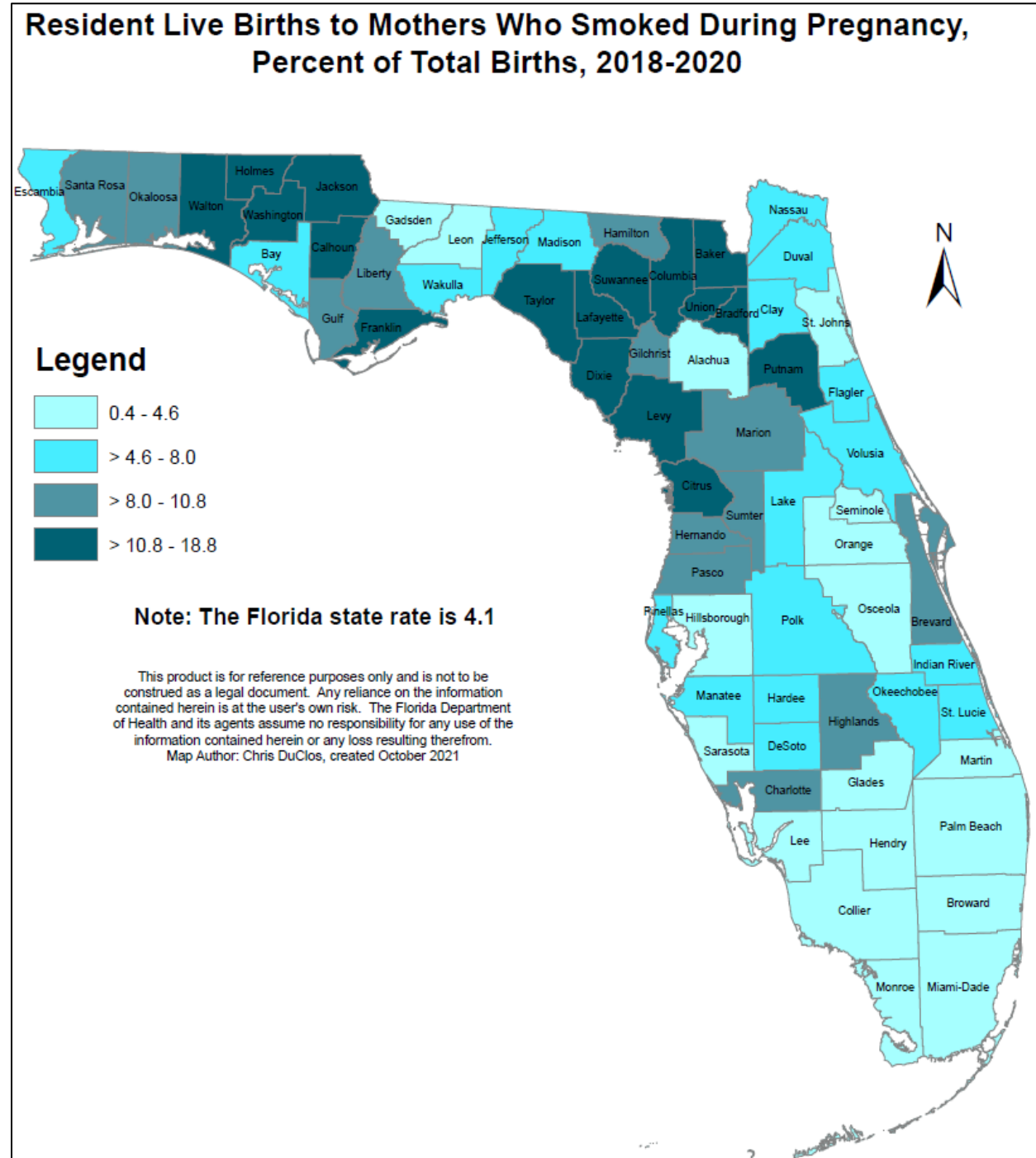
Methods

This report utilizes 2016-2020 data from the FLHealthCHARTS birth query system—which is provided by the Department’s Bureau of Vital Statistics. The birth query system provides counts and rates for Florida’s resident births as reported to the Bureau of Vital Statistics on birth certificates. Maternal data are also obtained from birth certificates, including smoking status, race/ethnicity, age, and education level. Importantly, all 2020 data in this report are provisional. This report is intended to inform policy makers and key stakeholders in assessing data trends to measure progress and disparities in maternal tobacco use during pregnancy.

Analyses of trends were done using JoinPoint statistical software. References to increases and decreases in percentages indicates that differences are statistically significant from zero at the alpha = 0.05 level.

Results

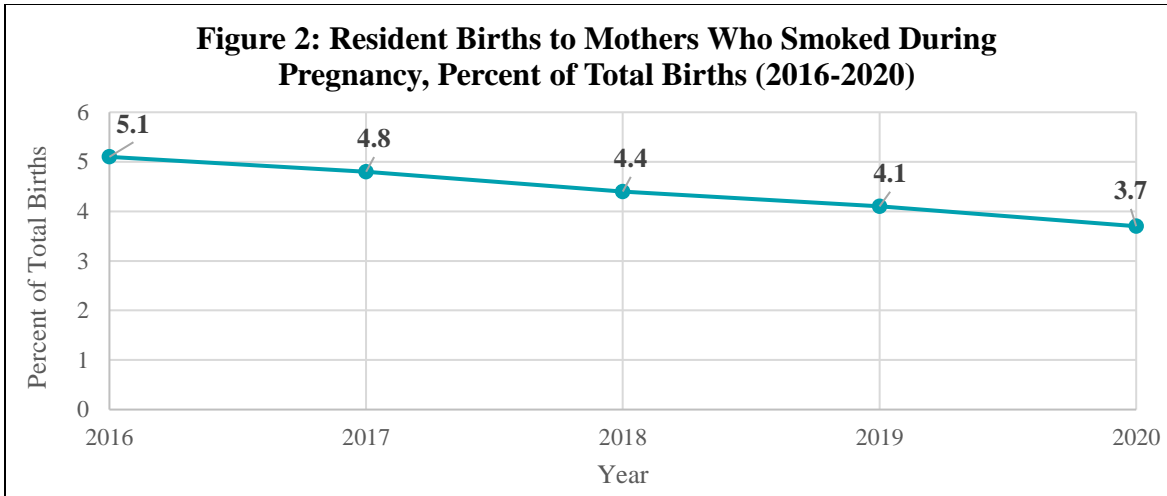
Figure 1



Source: FLHealthCHARTS [7]

- From 2018 to 2020, 16 counties in Florida had a rate of smoking during pregnancy lower than the state rate (Figure 1).

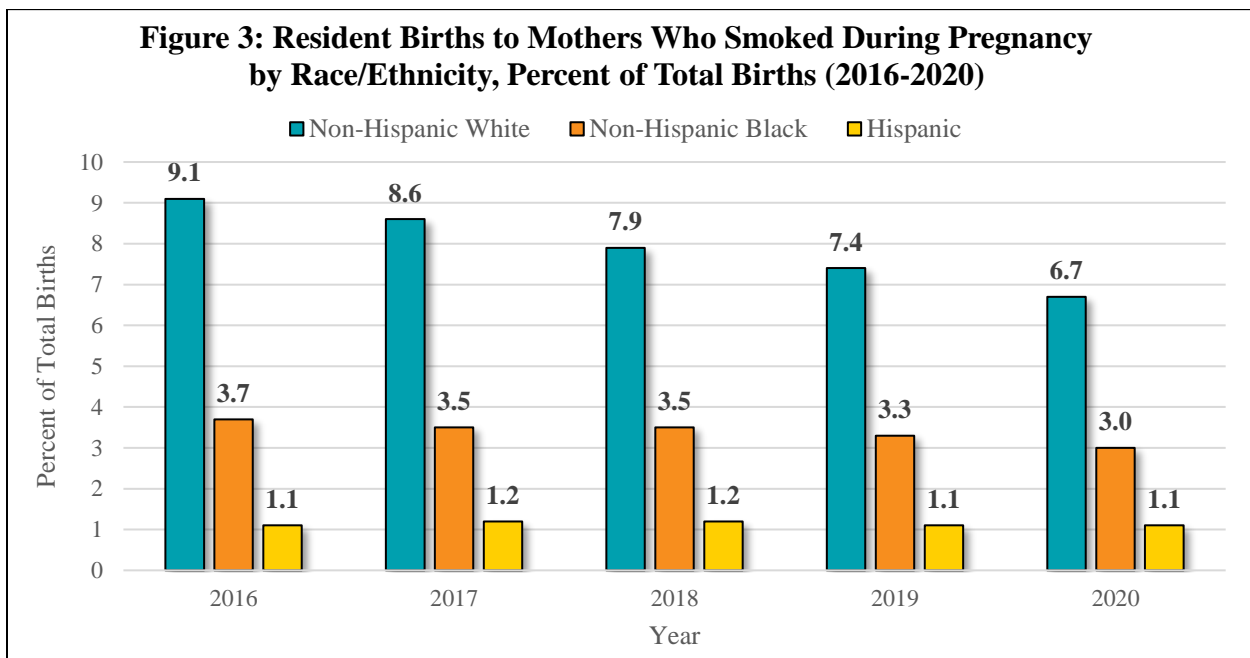
Smoking during pregnancy declined since 2016.



Source: FLHealthCHARTS [5]

- Since 2016, mothers who smoked during pregnancy decreased significantly by 27.5%, from 5.1% in 2016 to 3.7% in 2020 (Figure 2).

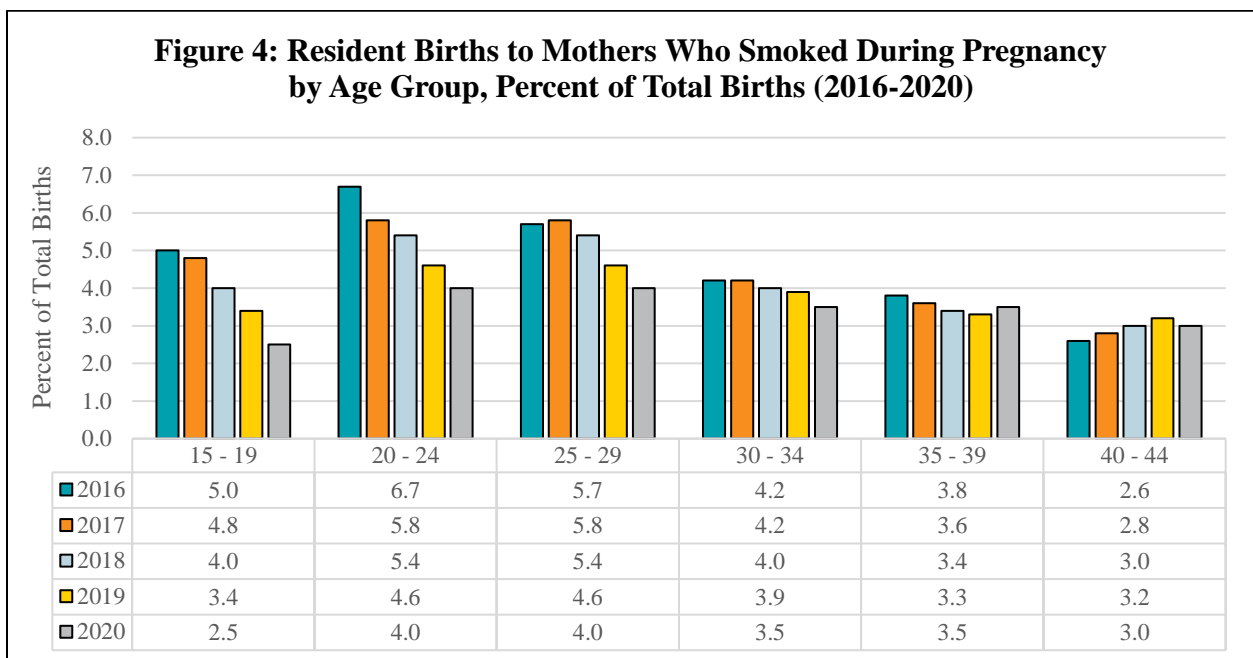
Smoking during pregnancy declined among non-Hispanic White and non-Hispanic Black women.



Source: FLHealthCHARTS [7]

- There was a significant decrease in the percentage of mothers who smoked during pregnancy among non-Hispanic White (26.4%) and non-Hispanic Black (18.9%) mothers. In contrast, there was no statistically significant change among Hispanic mothers (Figure 3).
- The highest percentage of smoking during pregnancy was among non-Hispanic White mothers, at over twice the percentage of non-Hispanic Black mothers during the 2016 to 2020 period. However, the percentage point difference between these groups has lessened during this time, dropping from 5.4% in 2016 to 3.7% in 2020.

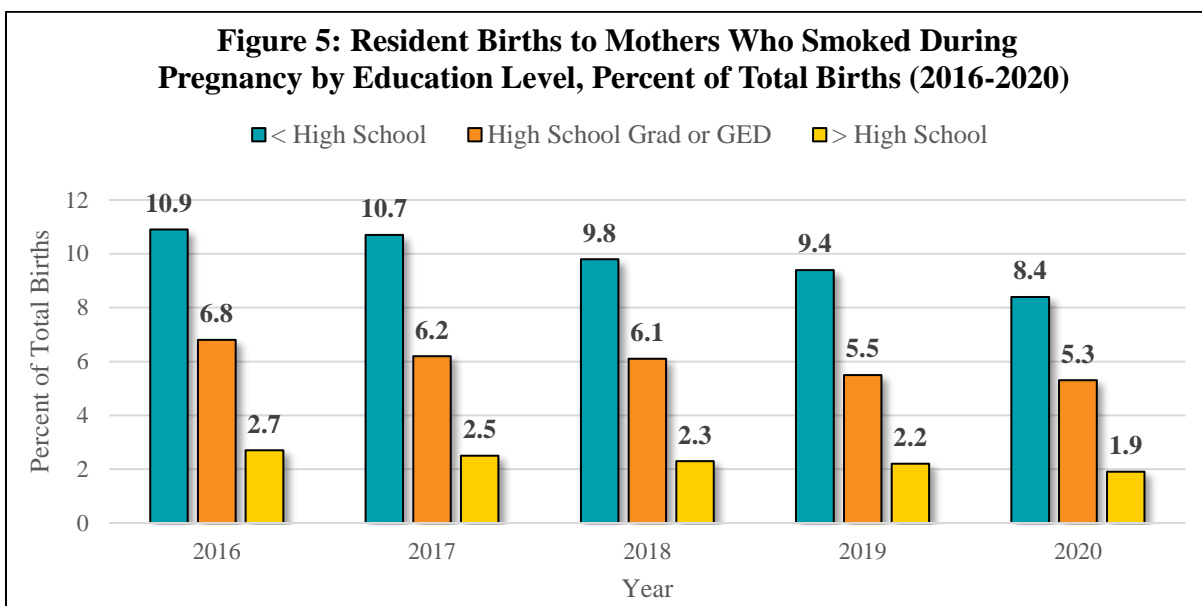
Smoking during pregnancy varied by age group.



Source: FLHealthCHARTS [7]

- The percentage of mothers who smoked during pregnancy decreased across all age groups, except for mothers ages 40-44 (which increased from 2.6% to 3.0%). This decrease was statistically significant among age groups 15-19, 20-24, 25-29, and 30-34 (Figure 4).
- The largest percentage decrease among mothers who smoked during pregnancy was seen among age group 15-19, with a 50.0% decrease from 5.0% in 2016 to 2.5% in 2020.
- From 2016 to 2020, age groups 20-24 and 25-29 had the highest percentage of mothers who smoked during pregnancy. In contrast, despite seeing a nonsignificant increase, age group 40-44 had the smallest percentage of mothers who smoked from 2016 to 2019.

Mothers who did not graduate high school had the highest percentage of smoking during pregnancy.



Source: FLHealthCHARTS [7]

- There was a significant decrease in the percentage of mothers who smoked during pregnancy across all education levels. Specifically, there was a 22.9% decrease among mothers who did not graduate high school, 22.1% decrease among high school graduates or those who obtained their GED, and a 29.6% decrease among mothers with higher levels of education (ex. Some college, associate degree, bachelor degree, etc.) (Figure 5).
- Since 2016, the highest percentage of mothers who smoked during pregnancy was among those who did not graduate high school, at 1.6 times the percentage of high school graduates or those with a GED.
- During the 2016 to 2020 period, the lowest percentage of births to mothers who smoked during pregnancy was seen among those who obtained higher levels of education post high school.

Summary

From 2016 to 2020, there was a significant decrease in the percentage of mothers who smoked during pregnancy. Decreases in the percentages of mothers who smoked during pregnancy were statistically significant among non-Hispanic White and non-Hispanic Black race groups. Percentage decreases were seen across all age groups, except for mothers ages 40-44, with age groups 20-24 and 25-29 having the highest percentage of mothers who smoked during pregnancy. There was a significant decrease in the percentage of mothers who smoked during pregnancy across all education levels. Finally, the lowest percentage of mothers who smoked

during pregnancy was seen among those who obtained higher levels of education post high school.

Discussion

The decrease in the prevalence of smoking during pregnancy over the past several years indicates progress made in supporting cessation of tobacco use. Although the state has been moving in a positive trajectory, there are still notable disparities among different groups. Specifically, smoking during pregnancy was more prevalent among mothers who are non-Hispanic White, between 20 and 29 years of age, and have not graduated high school. It is understood that quitting is difficult and many pregnant women who smoke want to quit, but it may be even more difficult to do so when pregnant. While it is best to quit smoking before becoming pregnant, quitting at any time during pregnancy—especially during early pregnancy—is still strongly encouraged as it can help reduce the risk of adverse health outcomes of the mother and baby [8]. Continued efforts should be made to lower the prevalence of smoking during pregnancy.

Tracking and monitoring variation in maternal tobacco use during pregnancy across demographic characteristics helps measure the progress in meeting the need for supporting positive maternal and child health outcomes. Utilizing this information can help guide strategic planning in implementing effective policies and programs that aim toward meeting these outcomes.

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