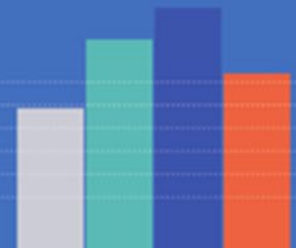




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CHART



Perinatal Cigarette Smoking in Philadelphia, 2018-2022

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Cigarette smoking shortly before, during, or after pregnancy (perinatal period), along with secondhand smoke exposure, contributes to poor birth outcomes including low birth weight, prematurity, birth defects, and stillbirth.^{1,2} Nationally, 54% of people who smoke cigarettes quit before or during their pregnancies.³ However, 50–60% of those who quit smoking during pregnancy use again within one year postpartum.³ Smoking cigarettes after delivery is a significant contributor to over 40% of children in the United States being exposed to secondhand smoke.⁴ Exposure to secondhand smoke has serious health risks for infants and children, including an increased risk for sudden infant death syndrome (SIDS), respiratory infections, ear infections, and asthma.⁵

Healthy People 2030 established the national objective to reduce pregnant persons smoking cigarettes to 4.3%.⁶ In 2021, 5.4% of individuals who gave birth in the United States reported cigarette smoking during pregnancy. By comparison, 8.7% of Pennsylvanians reported smoking cigarettes during their pregnancy for the same time.⁷ Given the prevalence of cigarette smoking among adults in Philadelphia exceeds national rates (15% vs 11.5% in 2021, respectively), it is important to examine these rates in Philadelphia among the birthing population.^{8,9}

The Philadelphia Pregnancy Risk Assessment Monitoring System (Philly PRAMS) is a survey of Philadelphians who recently gave birth, modeled on the national Pregnancy Risk Assessment Monitoring System (PRAMS). Philly PRAMS, initiated in 2018, asks about cigarette smoking and receipt of tobacco screening in the perinatal period. This issue of CHART describes an analysis of Philly PRAMS data on prevalence and trends in perinatal cigarette smoking and screening in Philadelphia, 2018-2022.

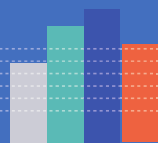
KEY TAKEAWAYS

1 in 5 infants in Philadelphia are exposed to secondhand smoke.

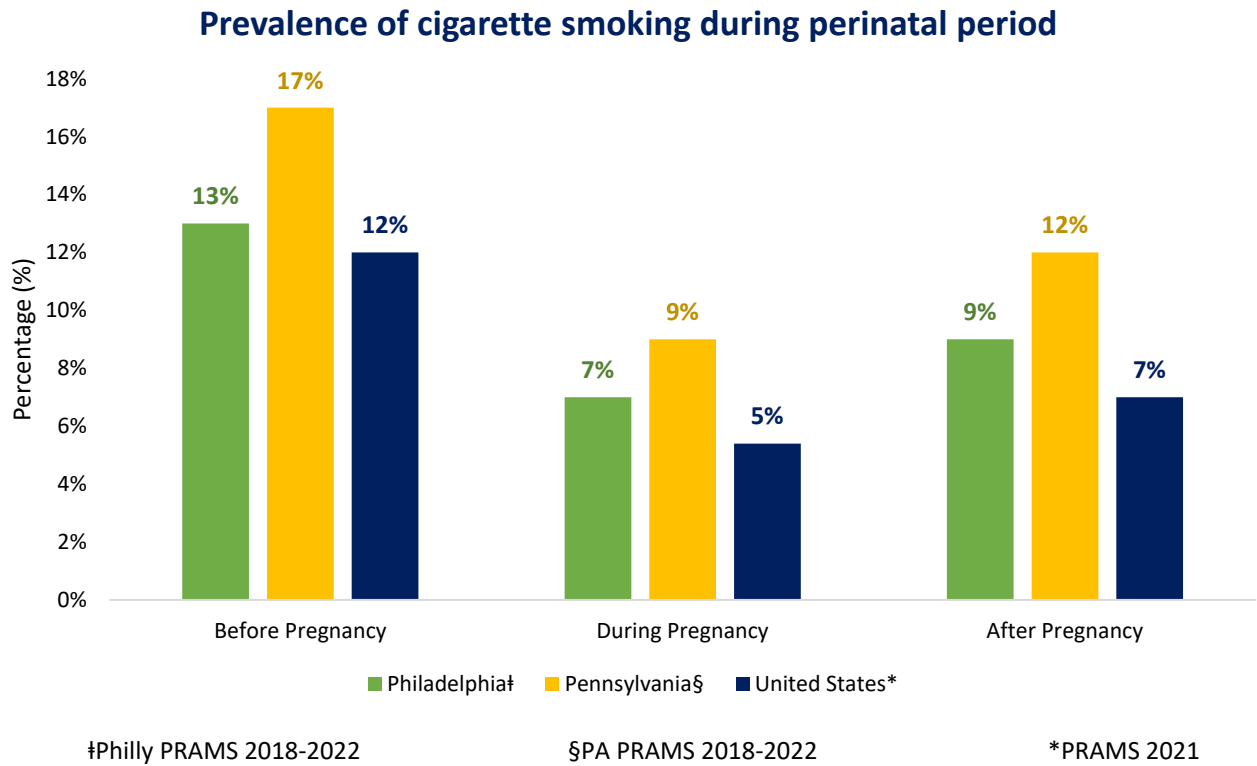
Perinatal cigarette smoking rates are lower in Philadelphia compared to Pennsylvania.

While many stop smoking during pregnancy, some start again after delivery, highlighting the need for postpartum smoking cessation resources.

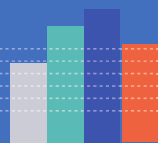
Postpartum smoking rates were higher among people living in poverty compared to those who were not.



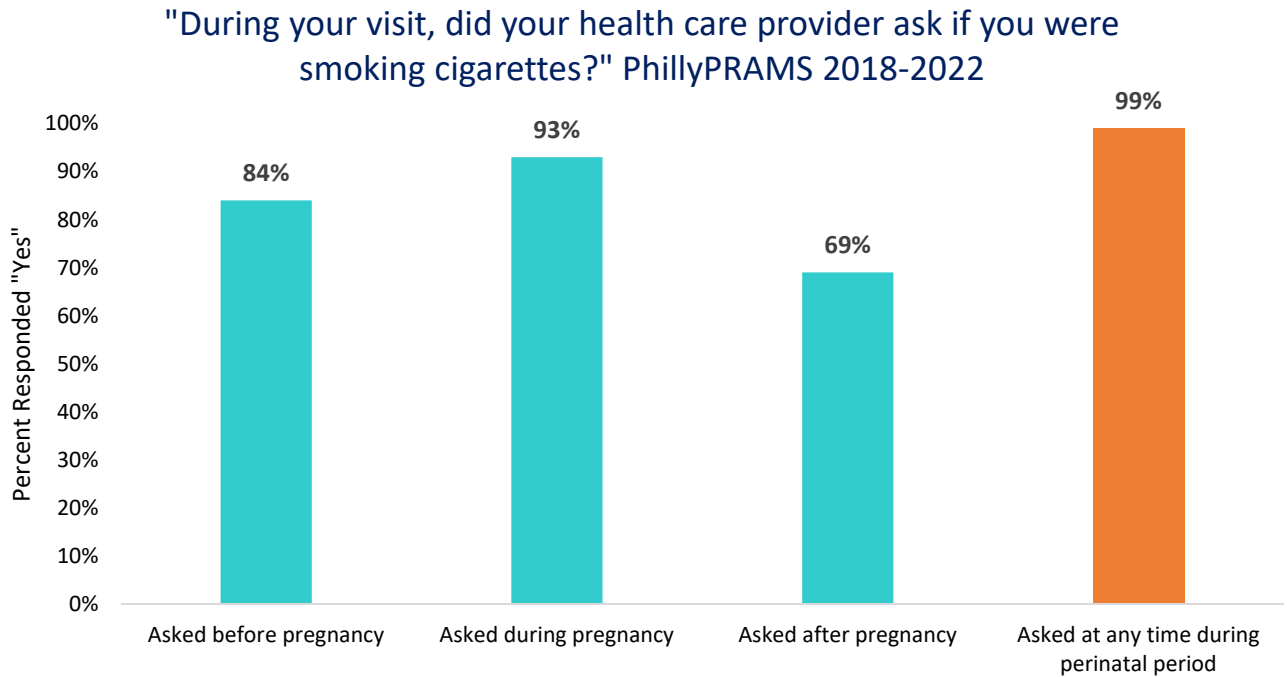
Perinatal cigarette smoking rates are lower in Philadelphia compared to Pennsylvania but is slightly higher than the national level.



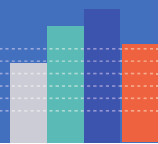
- In Philadelphia, 13% of birthing people reported smoking cigarettes in the 3 months before pregnancy, 7% reported smoking cigarettes during pregnancy, and 9% percent reported smoking cigarettes after delivery. Perinatal cigarette smoking rates are lower in Philadelphia than what was seen at the state levels but is slightly higher than national levels.
- Consistent with Pennsylvania state and national level data, cigarette smoking rates among Philadelphians declined roughly 50% during pregnancy but increased after delivery.
- Pregnancy is an opportune time to support sustained abstinence from tobacco use as data suggests many birthing people are already attempting to stop using tobacco.



Only 7 out of 10 birthing people were asking about cigarette smoking by providers after pregnancy.

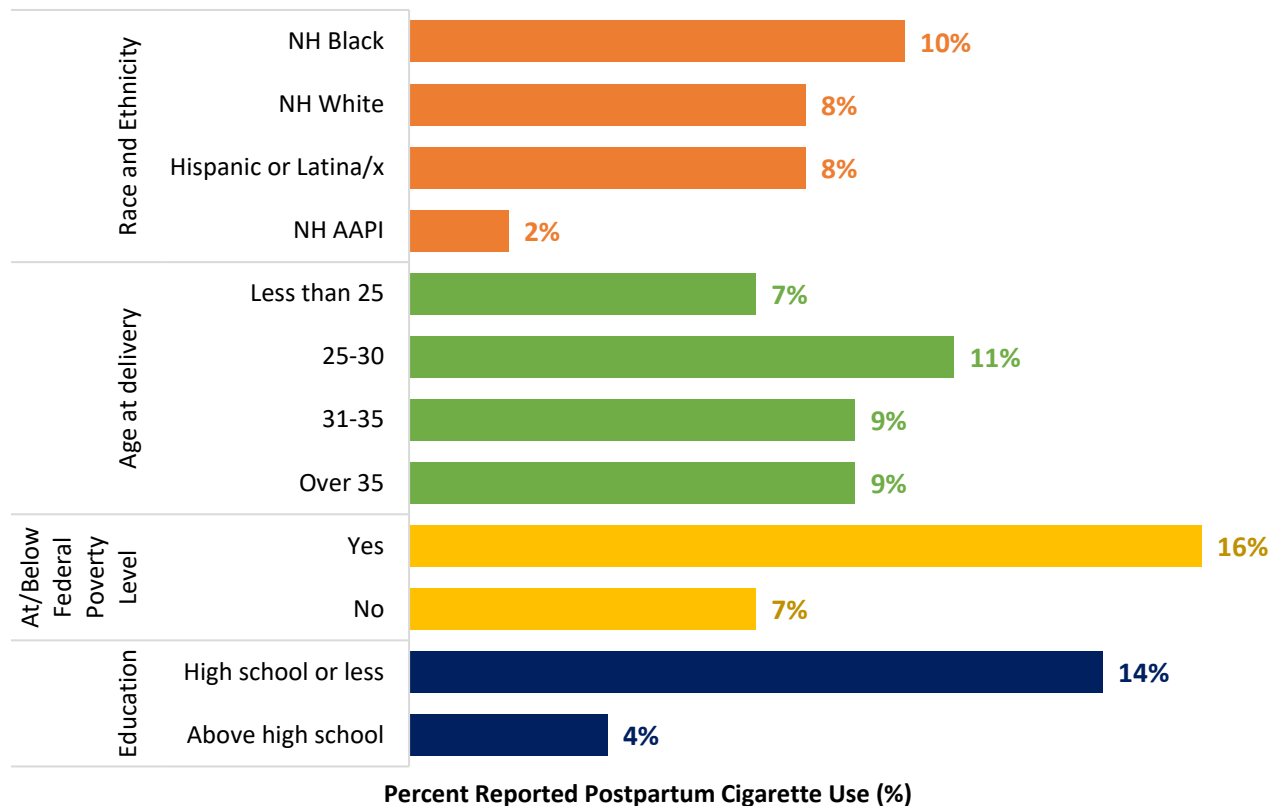


- Birthing people who attended a healthcare visit for themselves during their perinatal period were asked about cigarette smoking by a health care provider at the highest rates while they were pregnant (93%) and the lowest rates after pregnancy (69%). Healthcare providers can play a role in supporting continued abstinence from tobacco use after pregnancy by consistently screening people and offering treatment during their postpartum visit.
- Among those who had a visit at any time point during the perinatal period, 99% reported that they were asked about cigarette smoking by a health care provider at least once.



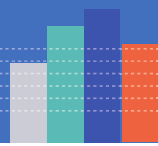
Postpartum cigarette smoking was more common among those at or below the FPL and without a college education than their counterparts.

Postpartum cigarette smoking rates by select characteristics, Philly PRAMS 2018-2022



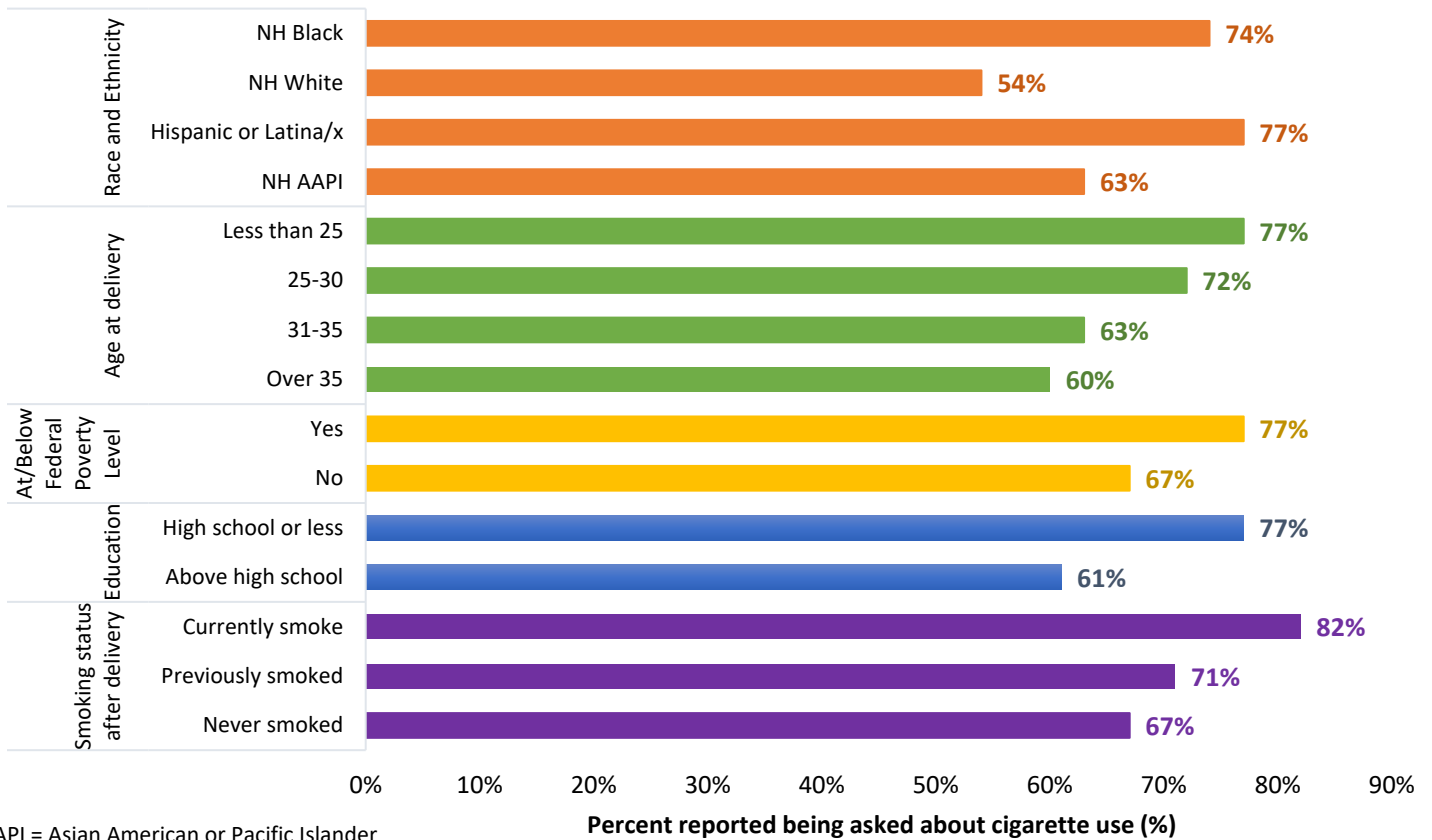
AAPI = Asian American or Pacific Islander
NH=Non-Hispanic

- Individuals who were at or below the Federal Poverty Level (FPL) or had high school diploma or less reported higher rates of smoking after delivery than their counterparts.
- These may be attributed to a range of factors including disparate targeting by the tobacco industry, inadequate health education, lower access to smoking cessation resources, and economic stress.¹¹



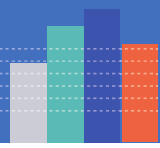
Reports of being screened for cigarette use at postpartum visit varied based on demographic and risk factors; however, universal screening is recommended.

Characteristics of those asked about cigarette use during postpartum healthcare visit, PhillyPRAMS 2018-2022



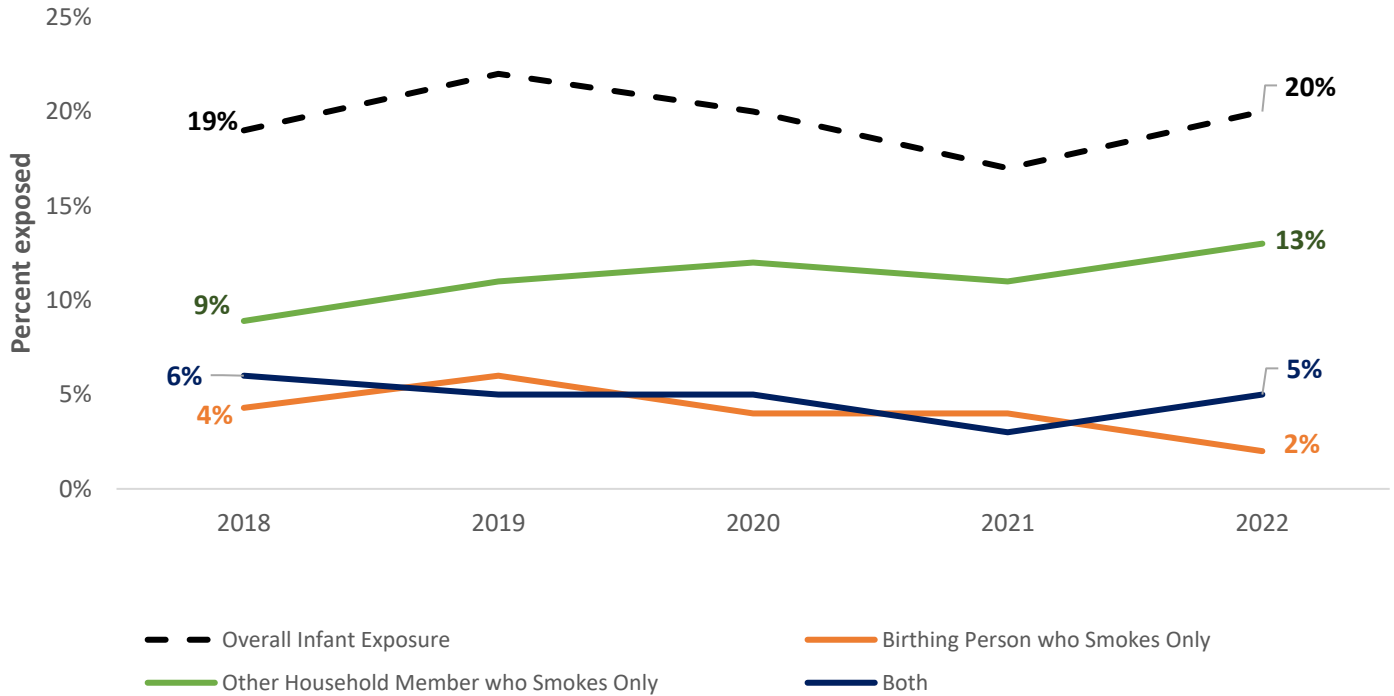
AAPI = Asian American or Pacific Islander
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- Birthing people who identified as Hispanic or NH Black, 30 years old or younger, were living at or below the FPL, had high school education or less, and currently smoke reported being asked about cigarette use during their postpartum visit more than their counterparts.
- The American College of Obstetrics and Gynecologists recommendations to screen **all** patients for tobacco use during the postpartum period. Philly PRAMS self-reported data reveals that screening in Philadelphia appears to be based on a birthing person’s risk or demographic characteristics.

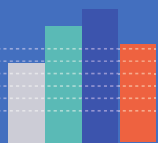


One in five infants in Philadelphia are exposed to secondhand smoke.

Infant exposure to secondhand smoke by year: PhillyPRAMS



- Between 2018-2022, one in every five Philadelphian infant was exposed to secondhand smoke; defined as living in the same household as someone who smokes; this could be the birthing person or another household member.
- In 2022, 13% of all infants lived in the same house as person other than the birthing person who smoked; an increase from 2018 at 9%.
- While rates for postpartum cigarettes smoking have decreased, from 4% in 2018 to 2% in 2022, rates for other household members who smoke has increased. These trends indicate a need for education and tobacco use disorder treatment resources for all persons who live in the same household as the infant.



WHAT CAN BE DONE

The Health Department:

- Has surveyed and convened pediatric and obstetric providers about their practices regarding screening, tobacco use disorder treatment, and referral for treatment resources.
- Is providing tobacco use disorder treatment resources and counseling to families enrolled in the Safe Sleep Program
- Is continuing a cross division, city-wide media campaign celebrating postpartum individuals who stopped their tobacco use and encouraging other individuals to seek treatment.
- Is offering training and samples of nicotine replacement therapy for home visiting programs on tobacco use disorder treatment.
- Is providing smoke-free housing information to share with new mothers, their families, and other clients.
- Is developing information on tobacco treatment resources and tobacco-free housing for early childhood education providers to share with parents/families.

Obstetric and pediatric providers can:

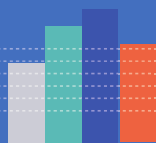
- Screen, assess, and consistently offer tobacco use disorder treatment for all patients and members of their household for all types of tobacco use before, during, and after pregnancy.
- Provide appropriate interventions or referrals, such as the PA Free Quitline at 1-800-QUIT-NOW to all patients who disclose tobacco use, including vaping.
- Educate all patients on the harms of tobacco use, especially during and after pregnancy.
- Provide additional support to prevent patients from relapsing during the postpartum period.
- Offer tobacco use disorder treatment, including nicotine replacement therapy to caregivers during pediatric visits and postpartum visits.

People can:

- Ask your physical health or behavioral health provider for support with tobacco use disorder treatment, especially if you use tobacco and are pregnant or have a child.
- Call 1-800-QUIT-NOW for free nicotine-replacement therapy medications (e.g. nicotine patches, gum, and lozenges) and counseling.
- Enroll in SmokefreeMOM program to get help with quitting. <https://women.smokefree.gov/tools-tips-women/text-programs/smokefreemom>
- Keep your home and car tobacco-free by asking all family, friends, and visitors not to smoke or vape around you and your baby.

RESOURCES

- SmokeFree Philly [Smokefreephilly.org](https://smokefreephilly.org)
- Pennsylvania Free Quitline (1-800-QUIT-NOW) <https://pa.quitlogix.org/>



- CDC Tobacco Use and Pregnancy Resources:

<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/tobaccousepregnancy/resources.htm>

REFERENCES

1. Crume T. (2019). Tobacco Use During Pregnancy. *Clinical obstetrics and gynecology*, 62(1), 128–141. <https://doi-org.ezproxy2.library.drexel.edu/10.1097/GRF.0000000000000413>
2. Diamanti, A., Papadakis, S., Schoretsaniti, S., Rovina, N., Vivilaki, V., Gratziou, C., & Katsaounou, P. A. (2019). Smoking cessation in pregnancy: An update for maternity care practitioners. *Tobacco Induced Diseases*, 17, 57. <https://doi.org/10.18332/tid/109906>
3. American College of Obstetricians and Gynecologists (ACOG). (2020). Tobacco and nicotine cessation during pregnancy. <https://www.acog.org/en/clinical/clinical-guidance/committee-opinion/articles/2020/05/tobacco-and-nicotine-cessation-during-pregnancy>
4. Children's Hospital of Philadelphia, PolicyLab. (2019, July). Helping parents quit smoking in pediatric settings. <https://policylab.chop.edu/project/helping-parents-quit-smoking-pediatric-settings>
5. Centers for Disease Control and Prevention (CDC). (2022, September 14). General information about secondhand smoke. <https://www.cdc.gov/tobacco/secondhand-smoke/about.html>
6. U.S. Department of Health and Human Services. (n.d.). Tobacco Use—Healthy People 2030. [health.gov. https://health.gov/healthypeople/objectives-and-data/browse-objectives/tobacco-use](https://health.gov/healthypeople/objectives-and-data/browse-objectives/tobacco-use)
7. Kipling L, Bombard J, Wang X, Cox S. Cigarette Smoking Among Pregnant Women During the Perinatal Period: Prevalence and Health Care Provider Inquiries — Pregnancy Risk Assessment Monitoring System, United States, 2021. *MMWR Morb Mortal Wkly Rep* 2024;73:393–398. DOI: <http://dx.doi.org/10.15585/mmwr.mm7317a2>.
8. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2022.
9. Centers for Disease Control and Prevention. (2023, May 4). *Current cigarette smoking among adults in the United States*. Centers for Disease Control and Prevention. https://www.cdc.gov/tobacco/data_statistics/fact_sheets/adult_data/cig_smoking/index.htm
10. Marbin, J., Balk, S. J., Gribben, V., & Groner, J. (2021). Health Disparities in Tobacco Use and Exposure: A Structural Competency Approach. *Pediatrics (Evanston)*, 147(1), 1–. <https://doi.org/10.1542/peds.2020-040253>

Suggested citation:

Perinatal Cigarette Smoking in Philadelphia, 2018-2022. CHART 2024; 9(1):1-8.



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