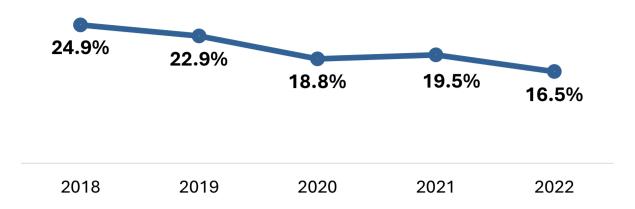
Cigarette Use Before Pregnancy

SD PRAMS, 2022

Smoking cessation before pregnancy can improve fertility rates and overall reproductive health.

Smoking can damage genetic material, increasing the risk of miscarriage and birth defects. Ectopic pregnancies and preterm labor are also more common among women who smoke.^a The percentage of women who smoked cigarettes the three months before pregnancy **has decreased** over the past five years (p<0.001).

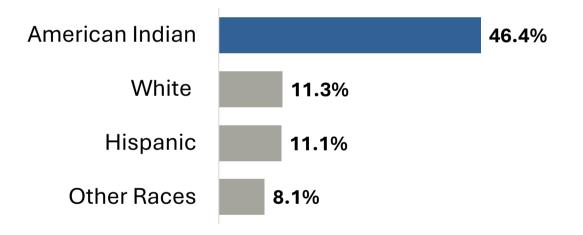


51% of women who smoked in the 3 months before pregnancy had an ACE (adverse childhood experiences score of 4 +	Women who smoked in the 3 months before pregnancy were 5 times more likely to also use illicit drugs during this time	Married women were significantly less likely to smoke in the 3 months before pregnancy
--	--	--

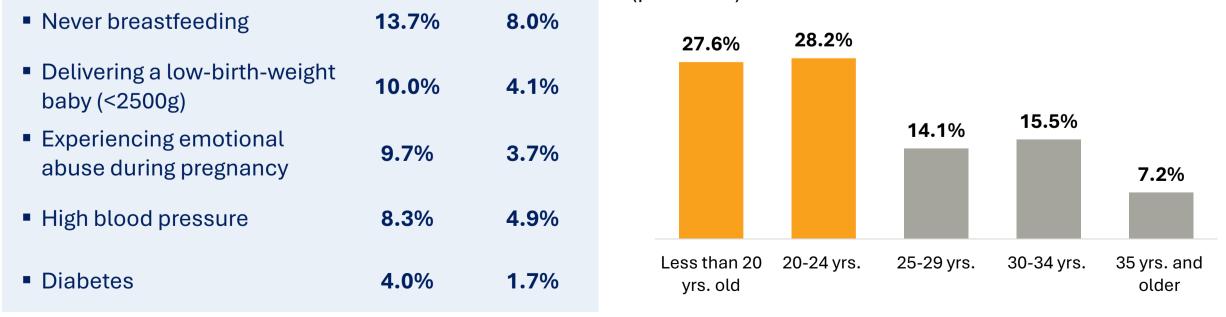
Compared to women who did not smoke, those who *did* smoke in the 3 months before pregnancy were *significantly* more likely to report:

	Smoker	Non- smoker
 Drinking alcohol before pregnancy 	71.5%	62.5%
Experiencing depression	43.5%	18.1%
 Using illicit drugs before pregnancy 	41.9%	8.5%
 Attending less than 80% of prenatal care visits 	26.5 %	11.0%
 Delivering a preterm baby 	16.1%	6.5%

American Indian women are much more likely to report tobacco use the three months before pregnancy (p<0.0001).



Women under 25 years of age were significantly more likely to report smoking the 3 months before pregnancy (p<0.0001).



Of those who smoked in the 3 months before pregnancy,

46% reported using less than 5 cigarettes per day

Cigarette Use During Pregnancy

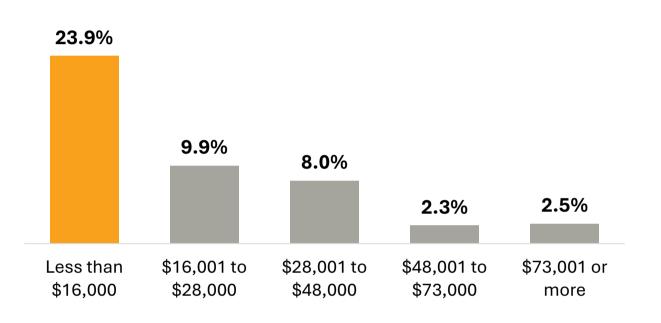
SD PRAMS, 2022

Cigarette use during pregnancy is associated with serious health outcomes for both mother and infant. Some of the risks for infants include sudden infant death syndrome, asthma, and low birth weight.^b

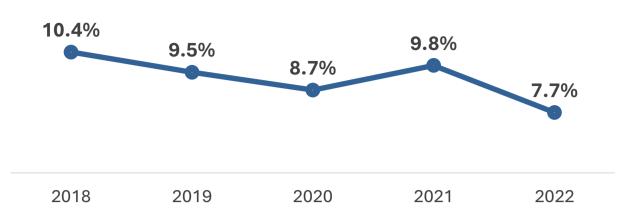
Mother and baby's health benefit from cessation at any point in the pregnancy. ^c

Mothers with a household income of less than \$16,000

were significantly more likely to report smoking the last 3 months of pregnancy (p<0.0001).



The percentage of moms who smoked in the last three months of pregnancy **has not changed.**



Mothers who smoked during pregnancy were

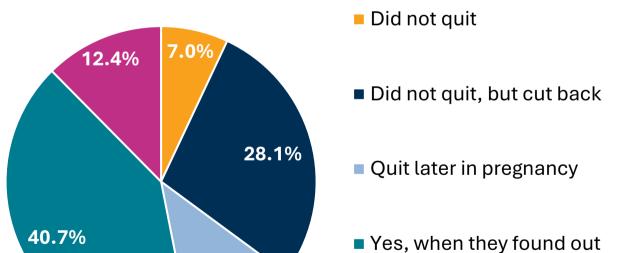
also more likely to report:

- Attending <80% of prenatal care visits</p>
- Experiencing emotional abuse during pregnancy
- Delivering a low-birth-weight baby (<2500g)
- Delivering a preterm baby
- Never breastfeeding

Cessation

Among moms who were smoking in the three months before pregnancy, 53.1% quit smoking **before or when** they found out they were pregnant.





Quit status around the time of pregnancy

Other people smoking around her

Loss of a way to handle stress

Not wanting to quit

- Lack of support from others to quit
- Fear of gaining weight
- Cost of medicines or products to help with quitting
- Cost of classes to help with quitting

16.7%

54.7%

52.3%

37.8%

24.2%

19.5%

15.4%

11.8%

they were pregnant

Yes, before they found out they were pregnant

RELAPSE RATE

Among moms who quit smoking during pregnancy,



were smoking again at the time of the survey.

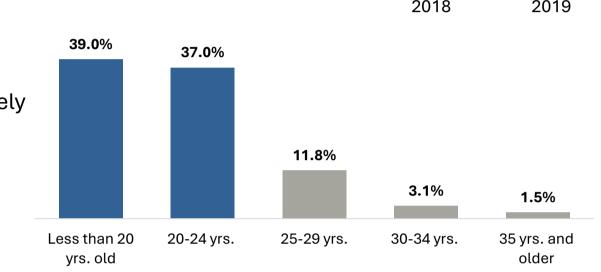
E-Cigarette Use

SD PRAMS, 2022

E-cigarette use has become increasingly popular, especially among younger people, leading to an increase in vaping and other nicotine product use before and during pregnancy.

While e-cigarette use is sometimes believed to be a safer alternative to smoking, it has been linked to a higher risk of low birth weight and preterm birth.^d

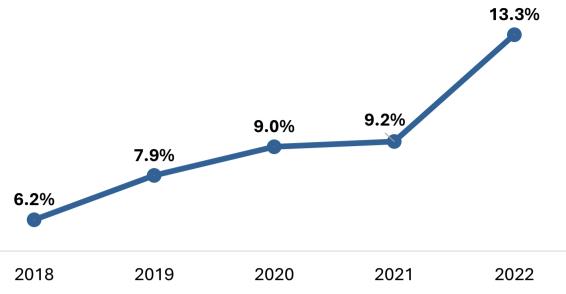
Mothers under 25 years of age were significantly more likely to report using ecigarettes or other electronic nicotine products in the last 2 years (p<0.001).



Among moms who reported using e-cigarettes in the past two years, **over half were daily users** in the three months **before** pregnancy.

More than once a day, 51.9%	Once a day, 9.6%	2-6 days a week, 11.1%	1 day a week, 8.6%	Did not use e-cigarettes then, 18.8%
--------------------------------	------------------------	------------------------------	--------------------------	--

The percentage of mothers who used e-cigarettes or other electronic nicotine products in the two years before pregnancy **has increased** over time.



Moms who reported using e-cigarettes in the last 2 years were more likely to report:

- Lower household income
- American Indian race
- Not insured before pregnancy
- Smoking the 3 months before pregnancy
- Alcohol use in the 3 months before pregnancy
- Illicit drug use in the 3 months before

Of these moms who used e-cigarettes in the past two years, **many** had stopped or decreased use during pregnancy.

More than once a day, 13.1%

2-6 days a 1 day a week, 5.8% week, 6.4%

Once a

day, 1.6%

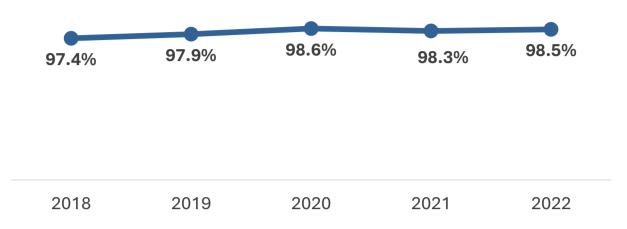
pregnancy

- Emotional abuse during pregnancy
- Depression during pregnancy
- Baby was exposed to smoke
- ACE (adverse childhood experiences) score 4+

Environmental Smoke Exposure and Actions of Health Care Provider

Second-hand smoke is the release of smoke into the environment when someone exhales a cigarette. ^e

It is important for babies to stay in a smoke-free house as it can help with fewer colds, lower chances of bronchitis or pneumonia, fewer ear infections, and lower risk of SIDS.^f The percentage of South Dakota mothers who stated that their infant was not in an enclosed space with someone who smoked **has not changed** over time.

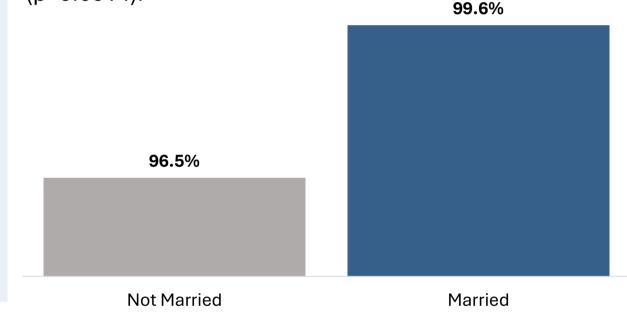


Among smokers, 73% were advised to quit smoking by their health care provider

Many women who smoked the 3 months before pregnancy were advised to quit smoking by their health care provider. The following are the actions of the health care provider:

- Referred to a national or state quit line 39.5%
- Spent time discussing how to quit smoking 37.8%
- Provided booklets, videos, or other materials to help quit smoking
 27.1%
- Suggested attending a class or program to stop smoking

Married mothers were more likely to report that their infant was not in an enclosed space with a smoker (p=0.0014).



References

- a) American Society for Reproductive Medicine. (2023). Smoking and Infertility. Retrieved from https://www.reproductivefacts.org/news-and-publications/fact-sheets-and-infographics/smoking-and-infertility/
- b) National Library of Medicine. (2021). Health Outcomes of Smoking During Pregnancy and the Postpartum Period: An Umbrella Review. Retrieved from

18.2%

https://pubmed.ncbi.nlm.nih.gov/33771100/

- c) U.S. Centers for Disease Control and Prevention. (2024). *Maternal and Infant Care Settings and Smoking Cessation*. Retrieved from https://www.cdc.gov/tobacco/hcp/patient-care-settings/maternal-infant.html
- d) Vilcassim, M. J. M., Stowe, S., Majumder, R., Subramaniam, A. & Sinkey, R.G. (2023). *Electronic Cigarette Use during Pregnancy: Is It Harmful?*. *Toxics*, *11(3)*. Doi: <u>10.3390/toxics11030278</u>
- e) American Pregnancy Association. (2024). Second Hand Smoke and Pregnancy. Retrieved from https://americanpregnancy.org/healthy-pregnancy/pregnancy-health-wellness/second-hand-smoke-and-pregnancy/
- f) Smokefree Women. (2024). Smoking & Your Baby. Retrieved from https://women.smokefree.gov/pregnancy-motherhood/quitting-while-pregnant/smoking-and-your-baby



This data brief was created in February 2025 by Courtney Valencia, Tingting He, and Jenny Kerkvliet in the Population Health Evaluation Center at South Dakota State University through an interagency agreement with the SD Department of Health. Further information about the SD PRAMS can be obtained by contacting the Office of MCH Data Analytics and Insights at DOH.MCHdata@state.sd.us.

