

Maternal Tobacco Use in Montana, 2017-2020

What is PRAMS?

The Montana Pregnancy Risk Assessment Monitoring System (PRAMS) is a survey of recent mothers about their experiences and behaviors before, during, and shortly after pregnancy. PRAMS aims to improve the health of Montana mothers and infants by collecting high-quality data that is representative of the Montana population. The project is a collaborative effort between the Montana Department of Public Health and Human Services (DPHHS) and the Centers for Disease Control and Prevention (CDC). More information, including methods, can be found at the [CDC's PRAMS Website](#) and at the [Montana PRAMS Website](#).

Maternal Tobacco Use

Tobacco use is the leading cause of preventable health issues in the United States,¹ and tobacco use during pregnancy is especially problematic. It can increase the risk of health problems such as preterm birth, low birth weight, and certain birth defects.² These risks are increased for cigarette smoking, e-cigarette use, and smokeless tobacco use.^{2,3,4} Nicotine is a health danger to pregnant people, fetuses, and babies,^{2,3} and tobacco cessation during any point during pregnancy is beneficial.⁴ Additionally, smoking can damage a baby's lungs and brain, which increases the risk of sudden infant death syndrome (SIDS) and can have lasting effects into childhood and the teen years.^{2,5}

Nationally, objectives related to maternal tobacco use include:

Healthy People 2030:

- Increase abstinence from cigarette smoking among pregnant people.
- Increase successful quit attempts in pregnant people who smoke.

Title V Maternal and Child Health Block Grant Performance Measures:

- Decrease the number of people who smoke during pregnancy.
- Decrease the number of households where someone smokes.

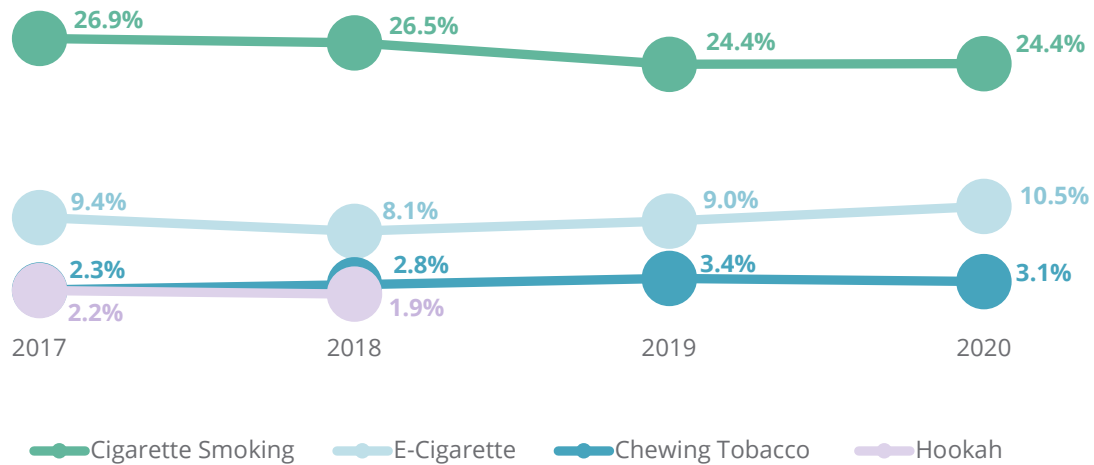
PRAMS asks respondents about their tobacco use and behaviors, as well as interactions with health care professionals regarding their tobacco use. PRAMS questions are especially detailed regarding cigarette smoking. This project utilized both separate year and combined year analysis, where appropriate, to produce stable estimates.

Fast Facts

- ♥ Cigarette smoking during pregnancy in Montana is **higher than national estimates** (11.3% vs 6.5%).
- ♥ Among those who smoked cigarettes before pregnancy, approximately **50%** quit and **30%** reduced smoking during pregnancy.
- ♥ **Most households** (95% or greater) did not allow smoking inside.
- ♥ Over 95% of mothers who attended a prenatal visit were **screened for cigarette smoking**.
- ♥ However, **only 78%** those who smoked were advised to quit smoking during a prenatal visit.

A total of 3,183 responded to PRAMS from 2017 to 2020, with an average weighted response rate of 55%. During that time, 29.2% of respondents reported using any tobacco (i.e., cigarette smoking, e-cigarette use, chewing tobacco, or hookah) in the past two years.

Use of any tobacco in the past two years has not significantly changed from 2017 to 2020.
% of mothers reporting tobacco use in the past two years



More Montana mothers report cigarette smoking during pregnancy than mothers nationally.

% of mothers reporting use of tobacco during pregnancy

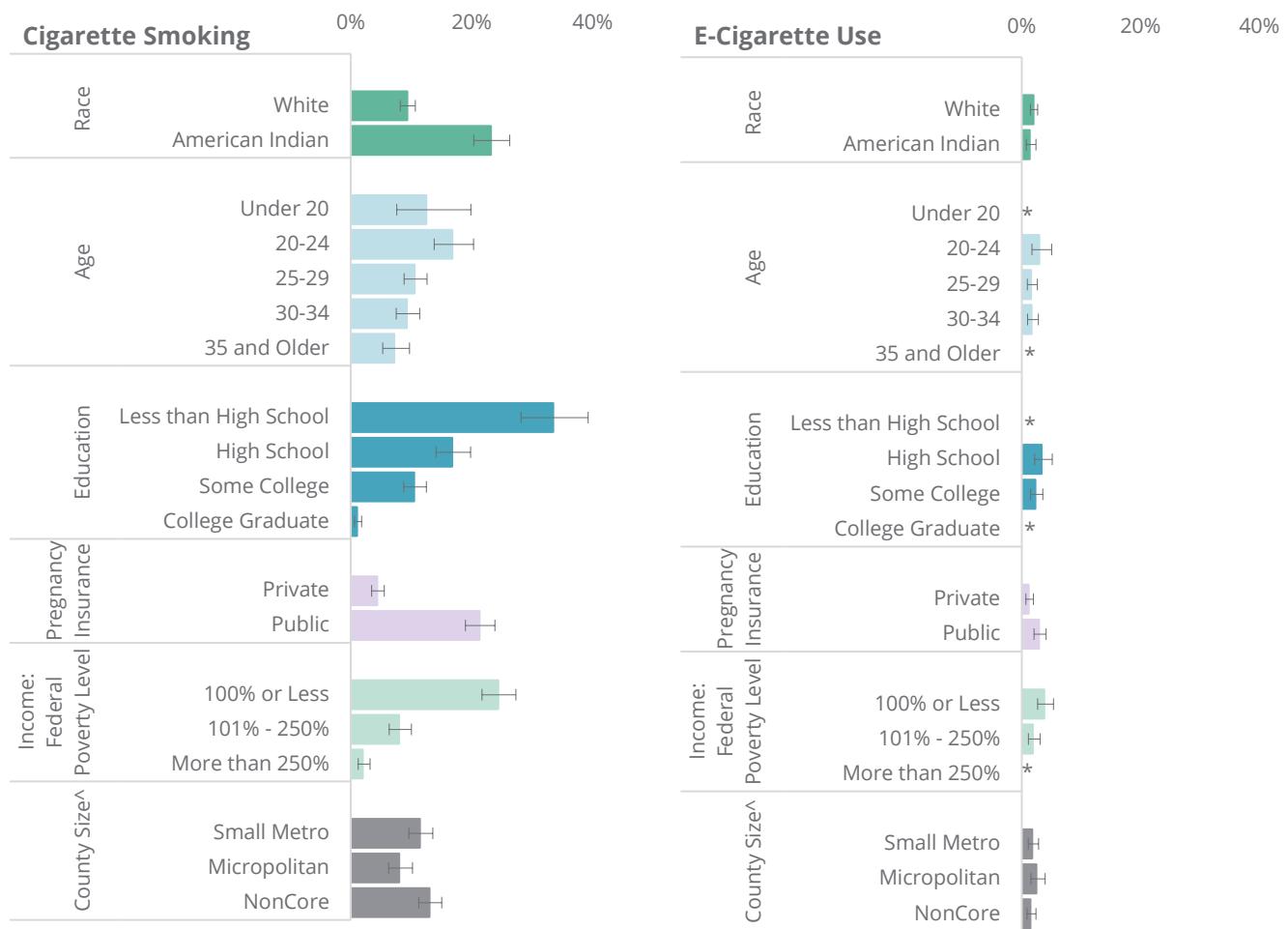
Type of Tobacco	Montana % (95% CI)**				National Data*** % (95% CI)*
	2017	2018	2019	2020	2020
Cigarette Smoking	9.9% (8.2-11.8)	11.1% (9.1-13.4)	11.7% (9.5-14.3)	11.3% (9.0-14.2)	6.5% (6.2-6.9)
E-Cigarette Use	2.3% (1.4-3.5)	1.7% (1.0-2.9)	1.8% (1.0-3.2)	-	1.5% (1.3-1.7)
Cigarette Smoking <u>or</u> E-Cigarette Use	10.6% (8.9-12.7)	11.7% (9.7-14.0)	12.4% (10.2-15.0)	12.1% (9.7-15.1)	Not Available

**Weighted percent (95% Confidence Interval). Weighted Percent is the estimated percent representing a population based on only a sample of the population. The weighted percent considers sampling, nonresponse, and noncoverage to calculate the estimate. Confidence Interval is a range of values that is likely to include the population value with a degree (i.e., 95%) of confidence.

***National Data are estimates that include PRAMS sites that meet or exceed the CDC response rate threshold for the survey year.
 - Estimate has been suppressed because it is statistically unstable.

During pregnancy, the percent of mothers reporting cigarette smoking and e-cigarette use have remained relatively stable from 2017 to 2020. Troublingly, the proportion of Montana mothers reporting cigarette smoking during pregnancy is almost double the proportion seen nationally. When stratified by maternal characteristics, difference can be seen among mothers who smoked cigarettes during pregnancy; however, there is little variation among mothers who used e-cigarettes during pregnancy. American Indian mothers, mothers with less than a college degree, mothers on public health insurance, and mothers whose income is 250% or less of the federal poverty level, had higher prevalence of cigarette smoking during pregnancy. The percent of households where smoking was allowed inside has averaged 3.5% from 2017-2020 with little annual fluctuation.

There are differences among subgroups of mothers who report cigarette smoking, but no differences among subgroups of mothers who report e-cigarette use during pregnancy.
% of mothers reporting tobacco use during pregnancy by subgroup, 2017-2020



^NCHS Urban-Rural Classification Scheme for Counties

*Estimate have been suppressed because it is statistically unstable.

Over 95% of households did not allow smoking inside the home.

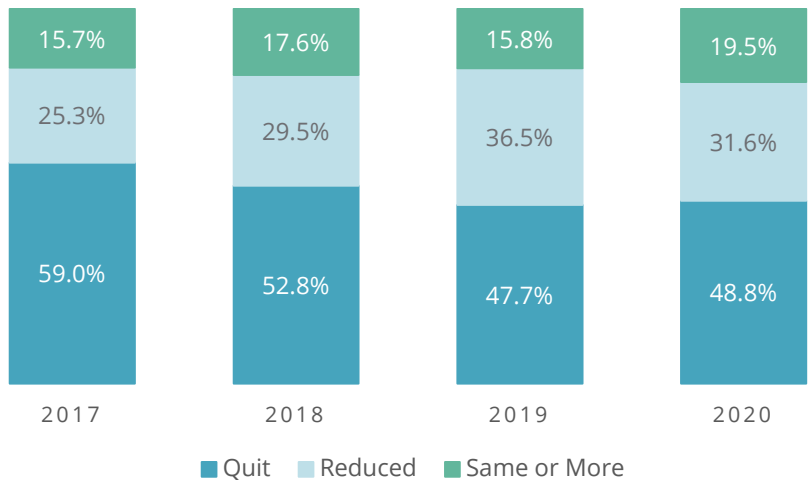
Household smoking rules during pregnancy

Household Rule	2017	2018	2019	2020
	% (95% CI)**	% (95% CI)**	% (95% CI)**	% (95% CI)**
No one was allowed to smoke anywhere inside home	96.3% (94.9-97.3)	97.1% (95.7-98)	96.9% (95.2-98)	95.7% (93.7-97.1)
Smoking was allowed inside the home	3.7% (2.7-5.1)	2.9% (2.0-4.3)	3.1% (2.0-4.8)	4.3% (2.9-6.3)

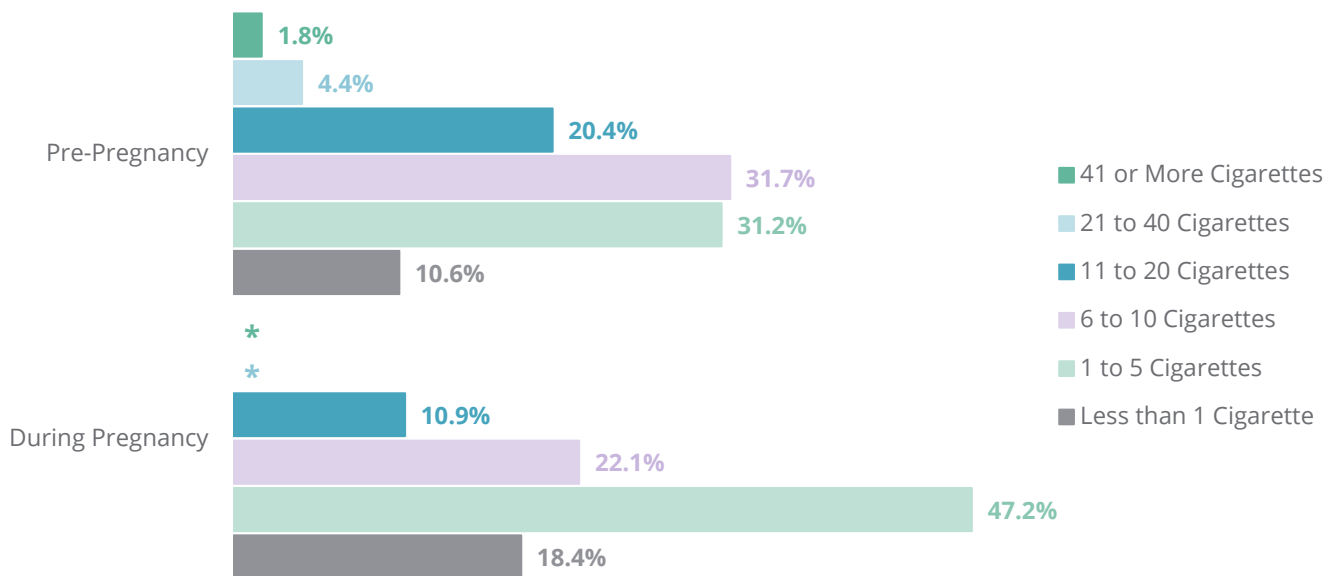
*Weighted percent (95% Confidence Interval)

The majority of mothers who reported smoking before pregnancy either quit or reduced the number of cigarettes they smoked during pregnancy. A reduction in the overall number of cigarettes smoked during pregnancy was seen. While the number of mothers reporting smoking 5 or less cigarettes a day increased during pregnancy, the number of mothers reporting 6 or more cigarettes a day decreased.

Approximately 50% of mothers who smoked prior to pregnancy quit during pregnancy.
Cigarette smoking status change during pregnancy compared to before pregnancy



Less mothers reported using 6 or more cigarettes during pregnancy than before pregnancy; however, the number of mothers reporting 5 or fewer cigarettes increased.
Number of cigarettes smoked per day of mothers who reported smoking, 2017-2020

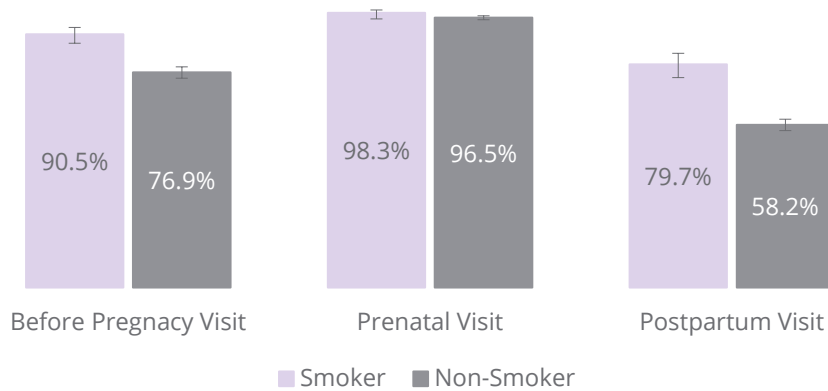


* Estimate have been suppressed because it is statistically unstable.

Almost all mothers who attended a prenatal care visit were screened for smoking regardless of smoking status, while mothers who reported cigarette use before and after pregnancy were more likely to be screened for smoking by their health care provider. Overall, 78.1% of mothers who reported smoking prior to pregnancy were advised to quit by a health care provider during a prenatal visit. The type of quitting advice mothers received ranged from over half receiving quitting information to less than 10% receiving a prescription to help quit.

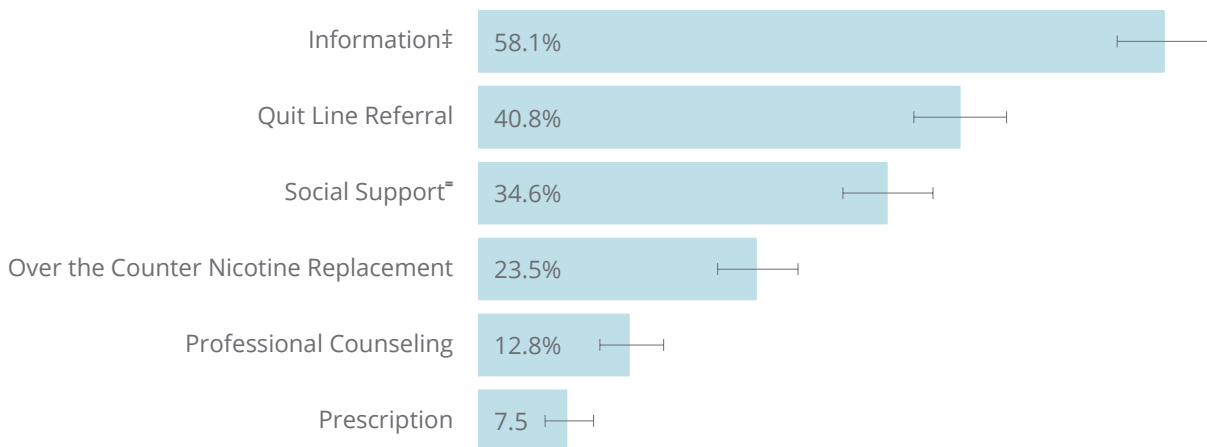
Almost all prenatal care visits included a screening for cigarette smoking.

% of mothers screened for cigarette smoking among those attending a health care visit, 2017-2020



The most common quitting advice mothers received was general information followed by quit line referral.

Quitting advice mothers who smoked received during a prenatal visit, 2017-2020



‡ Includes advice on how to quit, data, or booklets/videos

™ Includes classes, or family/friend support

Recommendations for Practitioners and Public Health Professionals

Smoking while pregnant can lead to complications for both mother and baby. Providers should:

- ask all pregnant persons about commercial tobacco use,
- advise patients to stop using commercial tobacco, and
- refer patients to the Montana Tobacco Free Quit Line, which offers a program specific to pregnant and postpartum people.

Detailed recommendations that include individualized care and cessation aids can be found in the American College of Obstetrician and Gynecologists' [Guidance on Tobacco and Nicotine Cessation During Pregnancy](#). Public health professionals should advocate for programs and policies that support and target cessation of tobacco.

Resources

[Montana Tobacco Quit Line](#)

[Montana DPHHS Smoking During Pregnancy Data Sheet](#)

[American Indian Quit Commercial Tobacco Program Website](#)

References

1. Centers for Disease Control and Prevention, 2022. *Tobacco Control Interventions*. [Online] Available at: <https://www.cdc.gov/policy/hst/hi5/tobaccointerventions/>
2. Centers for Disease Control and Prevention, 2022. *Substance Use During Pregnancy*. [Online] Available at: <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/substance-abuse/substance-abuse-during-pregnancy.htm>
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4. The American College of Obstetricians and Gynecologists, 2020. *Tobacco and Nicotine Cessation During Pregnancy*. [Online] Available at: <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2020/05/tobacco-and-nicotine-cessation-during-pregnancy>
5. Centers for Disease Control and Prevention, 2022. *Smoking, Pregnancy, and Babies*. [Online] Available at: <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2020/05/tobacco-and-nicotine-cessation-during-pregnancy>

Suggested Citation

Maternal Tobacco Use in Montana, 2017-2020. Results from the Pregnancy Risk Assessment Monitoring System. Maternal and Child Health Epidemiology Section, Montana Department of Public Health and Human Services. 2022.

Questions?

Visit our website at <https://dphhs.mt.gov/prams> or
Contact Montana PRAMS at 406-444-1921 or PRAMS@mt.gov

