

NH PRAMS 2016-2019 – Data Brief: Vaping / Smoking / Marijuana

The New Hampshire Pregnancy Risk Assessment Monitoring System (NH PRAMS) collects data on maternal behaviors and experiences just before, during, and just after pregnancy. This report represents the New Hampshire population who had a live birth from 2016 through 2019.

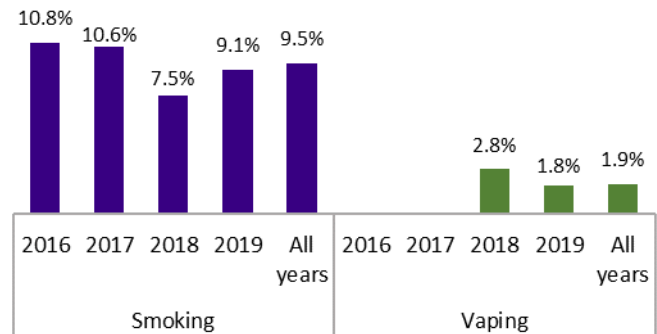
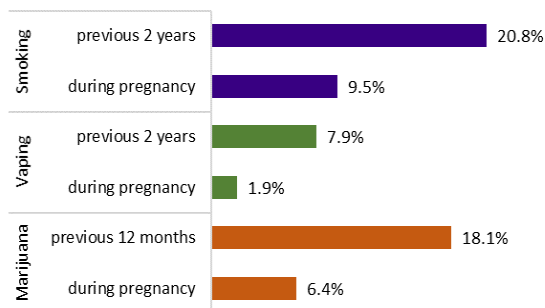
The point estimate for each indicator is expressed as a single number (e.g. 75%); 95% confidence intervals are expressed as a range (e.g. CI = 72-77%). Data are suppressed when the number of responses is less than ten.

This report examines the use of e-cigarettes (vaping) before and during pregnancy, and co-occurring use of cigarettes (smoking) and/or marijuana. While it is commonly accepted that the use of any substances during pregnancy could be harmful to mother and fetus, the extent of co-use of nicotine or other products has not been widely studied. This analysis provides New Hampshire-specific information on persons who use e-cigarettes, who smoke cigarettes, and/or who use marijuana around the time of pregnancy. Data from the Pregnancy Risk Assessment Monitoring System (PRAMS) was analyzed using SAS 9.4 survey analysis procedures for complex survey design.

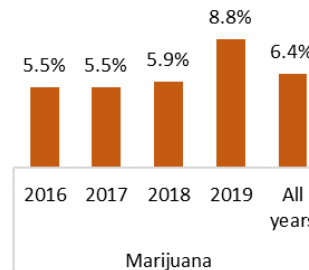
Smoking was more prevalent than vaping, both before and during pregnancy. Smoking and vaping both declined significantly during pregnancy, but still persisted. The prevalence of marijuana use approached that of smoking, and similarly declined during pregnancy.

There was no significant change in prevalence of use during pregnancy year-by-year, for smoking, vaping, or marijuana.

Substance use - NH PRAMS 2016-2019

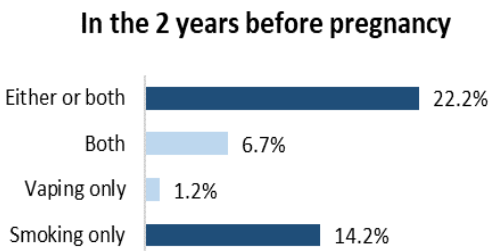


Vaping (numbers in 2016 and 2017 were too small to report)



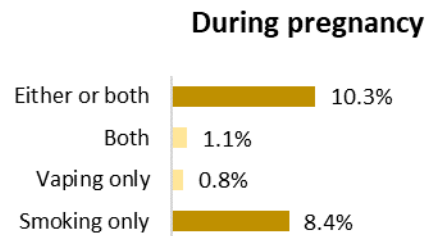
Nicotine exposure – before pregnancy

In the 2-year period before pregnancy, vaping significantly increased nicotine exposure, from 14% who smoked cigarettes only, to 22% who engaged in either or both, smoking or vaping.



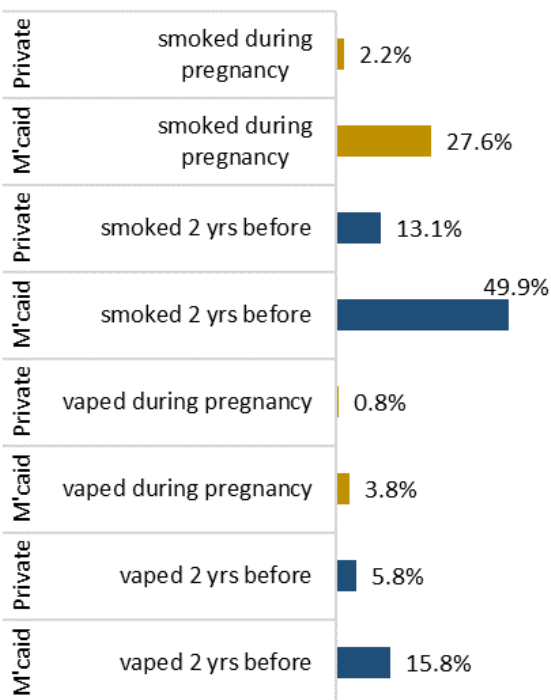
Nicotine exposure – during pregnancy

Similarly, during pregnancy nicotine exposure increased from 8% who smoked only, to 10% who smoked and vaped; this change, however, does not attain statistical significance.



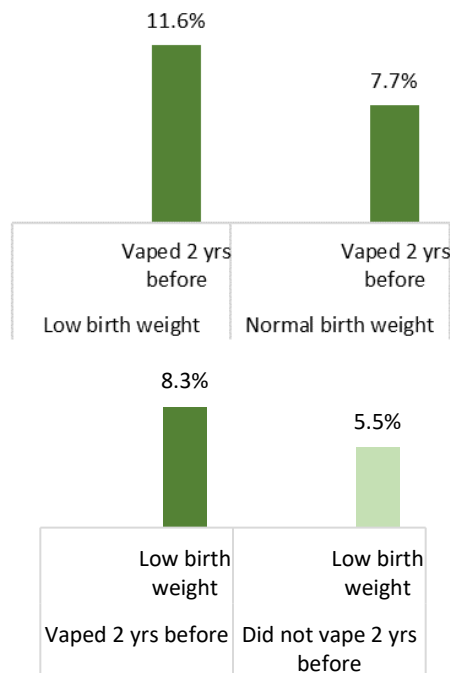
Medicaid and Smoking/vaping

There was significantly more smoking and significantly more vaping reported by Medicaid enrollees than by the privately insured, both before and during pregnancy.



Birth outcomes and Vaping

Vaping in the 2 years before pregnancy was significantly associated with low birth weight ($p=0.0028$); the association was not significant in other time periods.

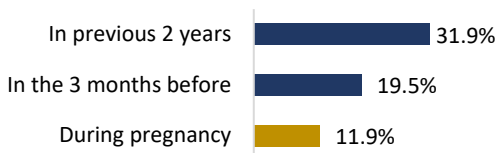


No significant association between preterm birth and vaping was found in any time period.

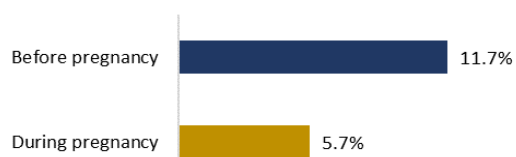
Dual-use

Dual use of substances is widespread, mainly before but even during pregnancy, when it declines but still persists.

Smokers who also vaped



Marijuana users who also vaped



Marijuana use before pregnancy is in the 12 months before.
Vaping before pregnancy is in the 3 months before.

Smokers who also used marijuana



Smoking before pregnancy is in the 3 months before.
Marijuana use before pregnancy is in the 12 months before.

Key findings

1. Vaping has increased the number of persons giving birth who are exposed to nicotine:

- before pregnancy, from 14% who smoked cigarettes only, to 22% who did either or both, smoking and vaping; and
- during pregnancy, from 8% who smoked cigarettes only to 10% who did either or both, smoking and vaping.

2. Vaping in the 2 years before pregnancy was significantly associated with low birth weight.

3. Dual use of substances is widespread, even during pregnancy, when dual use ranged from nearly 6% of marijuana users who also vaped, to nearly 12% of smokers who also vaped, to 37% of smokers who also used marijuana.

Policy Implications

Public health messaging that targets pregnant people to quit smoking should concurrently include messages to also quit vaping and marijuana, given the prevalence of dual use. All products that contain nicotine are not safe, and their use during pregnancy is potentially harmful to a baby's developing brain and lungs. Marijuana smoke has many of the same chemicals as tobacco smoke, and should likewise be avoided during pregnancy.^[1]

[1] What You Need to Know About Marijuana Use and Pregnancy | Fact Sheets | CDC; www.cdc.gov/marijuana/factsheets/pregnancy.htm

A supporting table of counts, population estimates and confidence intervals is available **online** at: www.dhhs.nh.gov/dphs/bchs/mch/prams/documents/vaping-db-data-table.pdf.

Other NH PRAMS publications, including prior years of data and survey questions are available on the [NH PRAMS publications](#) page.

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Disclaimers

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