



Opioid Frequencies – 2019 PRAMS

Iowa Pregnancy Risk Assessment Monitoring System (PRAMS)



Bureau of Family Health
Prepared by PRAMS Program Staff
April 2021



Iowa Department of Public Health
Protecting and Improving the Health of Iowans



Acknowledgements

Suggested Citation:

Iowa Department of Public Health. Bureau of Family Health. *2019 PRAMS Survey Frequencies*. Des Moines: Iowa Dept. of Public Health, 2021. Web.

<https://idph.iowa.gov/Portals/1/userfiles/171/2017%20Survey%20Frequencies%20FINAL.pdf>.

Gov. Kim Reynolds

Lt. Gov. Adam Gregg

IDPH Interim Director Kelly Garcia

Report Contact Information:

Jennifer Pham, PRAMS Project Director

Jennifer.pham@idph.iowa.gov

515-725-2833

<https://idph.iowa.gov/prams>

Funding for PRAMS is provided by the Center for Disease Control and Prevention under grant number U01DP006231.

Acknowledgements

We sincerely thank all of the mothers who have taken the time to respond to the survey. Without their responses, we would not have the data to direct the development of strategic programs and policies to address the needs of mothers and infants in Iowa.

A special thanks to the following contributors for their collaborative effort on this project:

Project Staff

Marcus Johnson-Miller: Bureau Chief, Title V Director

Jennifer Pham: Iowa PRAMS Project Director, Principle Investigator

Brooke Mehner: Data Analyst

Abby Halderson: Iowa PRAMS Data Manager

University of Missouri's Health and Behavioral Risk Research Center

Technical Support

Center for Disease Control and Prevention's PRAMS Team

Iowa PRAMS Steering Committee

Iowa Department of Public Health Bureau of Health Statistics

Debra Kane: MCH Epidemiologist-CDC Assignee

A primary goal of PRAMS is to translate its data into action. Please share with us how you have used the data published here. We also welcome feedback on the usefulness of this format. You may contact the PRAMS staff by e-mail at iowaprams@idph.iowa.gov or by phone at 1-800-383-3826.

Table of Contents

List of Acronyms.....	1
Introduction	2
Overview of PRAMS	2
Why is PRAMS important?	2
How are PRAMS data used?.....	2
PRAMS Methodology.....	3
Sample Design.....	3
Mode of Surveillance	3
Inclusion Criteria	3
Limitations of PRAMS.....	3
Response Rate.....	4
Confidence Intervals	4
Data Suppression	4
Household Income	4
Maternal Residence	4
Maternal Insurance.....	4
Results.....	5

List of Acronyms

CDC.....	Centers for Disease Control and Prevention
IDPH	Iowa Department of Public Health
PRAMS.....	Pregnancy Risk Assessment Monitoring System

* value suppressed for confidentiality

^u unreliable estimate (subgroup <50, or CI >=20 points)

Introduction

About this Report

For the 2019 birth cohort, Iowa PRAMS implemented a 13-question supplemental questionnaire on prescriptions pain relievers. The purpose of this supplement was to use the existing PRAMS methodology to implement rapid surveillance of maternal behaviors and experiences related to prescriptions pain relievers and other opioids during pregnancy.

The following report represents data collected from women that had a live birth from February 2019 to December 2019.

Overview of PRAMS

PRAMS stands for the Pregnancy Risk Assessment Survey (PRAMS) and is a cooperative project between the Iowa Department of Public Health (IDPH) and the Centers for Control and Prevention (CDC). Iowa joined the PRAMS project in 2011 and began data collection in February of 2013. In 2019, 1,974 Iowa mothers were asked to provide information on their experiences and behaviors before, during and after pregnancy.

PRAMS was initiated in 1987 to help state health departments establish and maintain an epidemiologic surveillance system of selected maternal behaviors and experiences. PRAMS was started at a time when the U.S. infant mortality rate was no longer declining as rapidly as it had in past years and the prevalence of low birthweight was showing little change. Maternal behaviors, such as alcohol and tobacco use, and limited use of prenatal care and pediatric care were contributing to the slow rate of decline. PRAMS was designed to supplement data from vital records and to generate data for planning and assessing perinatal health programs in each participating state.

Why is PRAMS important?

- PRAMS provides data for state health officials to use to improve the health of mothers and infants.
- PRAMS allows CDC and the states to monitor changes in maternal and child health indicators (i.e. unintended pregnancy, prenatal care, breastfeeding, smoking, drinking, and infant health).
- PRAMS enhances information from birth certificates used to plan and review state maternal and infant health programs.
- The PRAMS sample is chosen from all women who had a recent live birth, so findings can be applied to the state's entire population of women who recently delivered a live-born infant.
- PRAMS not only provides state-specific data but also allows comparisons among participating states because the same data collection methods are used in all participating states.

How are PRAMS data used?

PRAMS provides data not available from other sources about pregnancy and the first few months after birth. These data can be used to identify groups of women and infants at high risk for health problems, to monitor changes in health status, and to measure progress towards goals in improving the health of mothers and infants.

* value suppressed for confidentiality

∪ unreliable estimate (subgroup <50, or CI >=20 points)

PRAMS data are used by:

- State and local governments to plan and review programs and policies aimed at reducing health problems among mothers and babies.
- State agencies to identify other agencies that have important contributions to make in planning maternal and infant health programs and to develop partnerships with those agencies.
- Researchers to investigate emerging issues in the field of maternal and child health.

For additional information, please visit <http://www.cdc.gov/prams/>. You will find detailed information on the methodology used, other participating states, and data to action success stories.

If you would like to request Iowa PRAMS data, please visit <http://idph.iowa.gov/prams> for information on the request process. Complete versions of the survey are also available.

PRAMS Methodology

Sample Design

All states participating in PRAMS utilize a sampling technique called 'stratified random sampling' in which all birth records are divided into categories, or 'strata.' Iowa stratifies by mother's race and ethnicity as reported by the mother on the birth certificate.

A random sample is drawn from each of these groups on a monthly basis. Selected mothers are then contacted to participate in the PRAMS project. Because a relatively small percentage of the total population of all Iowa mothers is contacted, a simple random sample may not yield sufficient numbers of responses from these women to tell us about their lifestyles and behaviors as a group. Stratified random sampling provides a means to collect more meaningful information about high-risk population groups. A weighting process is used to recombine the resulting responses to reflect the total population of Iowa mothers within a calendar year.

Mode of Surveillance

All PRAMS states use a mixed-mode surveillance system. Mothers are first contacted via mail when their infant is over two months of age. Up to three self-administered surveys are sent to selected mothers. Mothers who do not respond to the mailed survey are called to complete the survey by a phone. All mothers who complete the survey are given a \$10 gift certificate for diapers.

Inclusion Criteria

Any Iowa-resident woman, including teens, who delivers a live birth within Iowa is eligible to be included in the PRAMS sample. When twins or triplets are born, only one infant is randomly selected. Adopted infants and surrogate births are excluded. Birth certificates missing the mother's last name are also excluded.

Limitations of PRAMS

As a self-administered survey, PRAMS data is subject to inaccurate reporting. Types of bias in PRAMS data may include recall bias, reporting bias, and misunderstanding of questions. PRAMS is also subject to non-response bias, especially among harder to reach populations. The data represents estimates of population behavior and experiences. Data can be used as a guideline for program activities.

* value suppressed for confidentiality

∪ unreliable estimate (subgroup <50, or CI >=20 points)

Response Rate

The overall response rate for Iowa PRAMS was 50% in 2019, which met the 50% minimum for PRAMS data to be considered valid. However, some subgroups, such as Non-Hispanic Black (NHB) mothers or mothers with a high school degree or lower, have response rates of less than 50%. Though the sample design described above helps improve estimates for these groups, it cannot fully correct for the selection bias created by non-response, and so estimates from these groups should be treated with higher caution.

Confidence Intervals

Confidence intervals represent uncertainty around an estimate, though they themselves are an estimate. All confidence intervals in this report are at the 95% level. Uncertainty intervals in this report account for uncertainty due to the sample selection process, but cannot fully account for non-response or misinformation given by participants. For more information about confidence intervals, see <https://www.census.gov/did/www/saipe/methods/statecounty/ci.html>.

Data Suppression

Numerators containing less than 6 women have been suppressed from this document to comply with the IDPH confidentiality policy. These groups are indicated by an * in the tables below. Additionally, unreliable estimates, subgroups that contain less than 50 respondents or have a confidence interval half-width of 10 points or greater, are indicated with a ^u and a lighter font color.

Household Income

Household income is analyzed using four groups for this report; the groups were chosen in order to have similar numbers of women in each, and the cutoff of 185% of the Federal Poverty Line (FPL) because this is the threshold for WIC eligibility, and 375% is the threshold for qualification for Medicaid for pregnant women in the state of Iowa. For a four-person family, this cutoff for Medicaid eligibility is an annual income of approximately \$96,000. When calculating FPL for the family, the family size includes one above the number indicated by the respondent to account for the new infant. For example, if the respondent wrote that four people depended on the income reported, FPL will be calculated as if five people depended on the reported income.

Maternal Residence

Urbanity was chosen by mother's county of residence, based on the National Center for Health Statistics urban-rural continuum. Counties designated as Small-Metro or Micropolitan were considered urban (Iowa has no counties with higher urbanity), while the rest of the counties, classified as non-core, are considered rural.

Maternal Insurance

Maternal insurance is tracked at three time periods in the PRAMS survey: before pregnancy, during pregnancy, and at the time of survey (postpartum). Mothers who selected both public insurance and private insurance options during a given time were included in the private insurance group. Military insurance is considered private insurance for this report.

* value suppressed for confidentiality

^u unreliable estimate (subgroup <50, or CI >=20 points)

Results

Question	Sample N	Weighted N	Weighted %	95% CI
<i>During your most recent pregnancy, did you use any of the following over-the-counter pain relievers?</i>				
Acetaminophen	499	22790	71.84	66.44-76.69
Ibuprophen	105	3511	11.12	8.16-14.97
Aspirin	50	2504	7.96	5.45-11.50
Naproxen	21	934	2.96	1.56-5.54
<i>During your most recent pregnancy, did you use any of the following prescription pain relievers?</i>				
Hydrocodone	11	388	1.23	0.51-2.93
Codeine	34	937	2.97	1.64-5.31
Oxycodone	12	473	1.49	0.67-3.30
Tramadol	*	*	*	*
Hydromorphone or meperidine	*	*	*	*
Oxymorphone	*	*	*	*
Morphine	10	582	1.84	0.82-4.07
Fentanyl	7	585	1.86	0.80-4.26
<i>Where did you get the prescription pain relievers that you used during your most recent pregnancy?</i>				
OB-GYN, midwife, or prenatal care provider	^u 27	^u 937	^u 53.12	^u 31.79-73.37
Family doctor or primary care provider	^u 12	^u 274	^u 15.54	^u 6.14-34.08
Dentist or oral health care provider	*	*	*	*
Doctor in the emergency room	^u 10	^u 416	^u 23.58	^u 10.40-45.08
I had pain relievers left over from an old prescription	*	*	*	*
Friend or family member gave them to me	0	0	0.00	0.00-0.00
I got the pain relievers without a prescription some other way	0	0	0.00	0.00-0.00
Other	*	*	*	*
<i>What were your reasons for using prescription pain relievers during your most recent pregnancy?</i>				
To relieve pain from an injury, condition, or surgery I had before pregnancy	*	*	*	*
To relieve pain from an injury, condition, or surgery that happened during my pregnancy	^u 19	^u 724	^u 41.08	^u 22.20-63.01
To relax or relieve tension or stress	*	*	*	*
To help me with my feelings or emotions	*	*	*	*
To help me sleep	*	*	*	*
To feel good or get high	*	*	*	*

* value suppressed for confidentiality

^u unreliable estimate (subgroup <50, or CI >=20 points)

Opioid Frequencies – 2019 PRAMS

Question	Sample N	Weighted N	Weighted %	95% CI
<i>(CONT.) What were your reasons for using prescription pain relievers during your most recent pregnancy?</i>				
Because I was 'hooked' or I had to have them	*	*	*	*
Other	^u 19	^u 764	^u 43.34	^u 23.45-65.64
<i>In each of the following time periods during your pregnancy, for how many weeks or months did you use prescription pain relievers?</i>				
In the first 3 months of pregnancy				
Never	^u 19	^u 842	^u 65.45	^u 41.19-83.68
<1-7 weeks	^u 22	^u 437	^u 34.02	^u 15.93-58.39
8+ weeks	*	*	*	*
In the second 3 months of pregnancy				
Never	^u 20	^u 772	^u 68.59	^u 42.93-86.37
<1-7 weeks	^u 17	^u 347	^u 30.81	^u 13.19-56.61
8+ weeks	*	*	*	*
In the last 3 months of pregnancy				
Never	20	395	29.66	13.34-53.60
<1-7 weeks	19	931	69.83	45.95-86.31
8+ weeks	*	*	*	*
<i>During your most recent pregnancy, did you want or need to cut down or stop using prescription pain relievers?</i>				
NO	^u 40	^u 1528	^u 93.84	^u 87.18-97.16
YES	^u 9	^u 100	^u 6.16	^u 2.85-12.82
<i>During your most recent pregnancy, did you have trouble cutting down or stopping use of prescription pain relievers?</i>				
NO	*	*	*	*
YES	*	*	*	*
<i>During your most recent pregnancy, did you get help from a doctor, nurse, or other health care worker to cut down or stop using prescription pain relievers?</i>				
NO	*	*	*	*
YES	^u 0	^u 0	^u 0.00	^u 0.00-0.00
<i>During your most recent pregnancy, did you receive medication-assistance treatment to help you stop using prescription pain relievers?</i>				
NO	*	*	*	*
YES	^u 0	^u 0	^u 0.00	^u 0.00-0.00

* value suppressed for confidentiality

^u unreliable estimate (subgroup <50, or CI >=20 points)

Opioid Frequencies – 2019 PRAMS

Question	Sample N	Weighted N	Weighted %	95% CI
<i>Do you think the use of prescription pain relievers during pregnancy could be harmful to a baby's health?</i>				
Not harmful at all	33	522	1.72	0.96-3.10
Not harmful, if taken as prescribed	286	9129	30.15	25.31-35.48
Harmful, even if taken as prescribed	400	20625	68.12	62.77-73.03
<i>Do you think the use of prescription pain relievers could be harmful to a woman's own health?</i>				
Not harmful at all	42	960	3.17	1.82-5.47
Not harmful, if taken as prescribed	426	15969	52.68	46.92-58.37
Harmful, even if taken as prescribed	525	13384	44.15	38.51-49.95
<i>At any time during your most recent pregnancy, did a doctor, nurse, or other health care worker talk with you about how using prescription pain relievers during pregnancy could affect a baby?</i>				
NO	328	16567	54.87	49.14-60.49
YES	394	13624	45.13	39.52-50.86
<i>During your most recent pregnancy, did you take or use any of the following medications or drugs for any reason?</i>				
Medication for depression	53	2810	9.10	6.31-12.97
Medication for anxiety	11	732	2.38	1.06-5.23
Methadone, Subutex, Suboxone, or buprenorphine	*	*	*	*
Naloxone	*	*	*	*
Cannabidiol (CBD) products	*	*	*	*
Adderall, Ritalin, or another stimulant	*	*	*	*
Marijuana or hash	18	338	1.10	0.52-2.32
Synthetic marijuana (K2, Spice)	*	*	*	*
Heroin (smack, junk, Black Tar, or Chiva)	*	*	*	*
Amphetamines (uppers, speed, crystal meth, crank, Ice, or agua)	*	*	*	*
Cocaine (crack, rock, coke, blow, snow, or nieve)	*	*	*	*
Tranquilizers (downers or ludes)	*	*	*	*
Hallucinogens (LSD/acid, PCP/angel dust, Ecstasy, Molly, mushrooms, or bath salts)	*	*	*	*
Sniffing gasoline, glue, aerosol spray cans, or pain to get high (huffing)	*	*	*	*

* value suppressed for confidentiality

U unreliable estimate (subgroup <50, or CI >=20 points)