



IOWA'S
BARRIERS TO
Prenatal care
PROJECT

2020 Data Summary

July 2021

Prepared by
Rodney J. Muilenburg, B.L.S.
Alyssa R. McCoy, B.A.
Mary E. Losch, Ph.D
Center for Social and Behavioral Research
University of Northern Iowa

OVERVIEW

The findings in this summary are based on the Iowa Barriers to Prenatal Care project. Ongoing since 1992, the purpose of this project is to obtain brief, accurate information about women delivering babies in Iowa hospitals. Specifically, the project seeks to learn about women's experiences getting prenatal or delivery care during their current pregnancy. Other information is included which may be pertinent to health planners or those concerned with the systematic development of health care services.

This project is a cooperative venture of all Iowa's maternity hospitals, the University of Northern Iowa center for Social and Behavioral Research, and the Iowa Department of Public Health. The Robert Wood Johnson Foundation funded the first three years of this project. The current funding is provided by the Iowa Department of Public Health. The Director is Dr. Mary Losch, University of Northern Iowa Center for Social and Behavioral Research. The Coordinator for the project is Rodney Muilenburg.

The questionnaire is distributed to over sixty maternity hospitals across the state of Iowa. Nursing staff or those responsible for obtaining birth certificate information in the obstetrics unit are responsible for approaching all birth mothers prior to dismissal to request their participation in the study. The questionnaire takes approximately ten minutes to complete. Completed questionnaires are returned to the University of Northern Iowa Center for Social and Behavioral Research for data entry and analysis. Returns are made monthly, weekly, or biweekly depending on the number of births per week in a given hospital. Except in the case of a mother who is too ill to complete the questionnaire, all mothers are eligible to be recruited for participation.

The present yearly report includes an analysis of large Iowa cities, a trend analysis of the last ten years, and a frequency analysis of all variables included in the 2020 questionnaire. Unless otherwise noted, all entries reflect percentages. Please note that, because percentages were rounded, total values may not equal 100%. Data presented are based upon 2020 questionnaires received to date (n = 18,014). All analyses reflect unweighted percentages of those responding.

Questions concerning this project or additional data requests may be addressed to:

Mary Losch, Ph.D.
Director, Center for Social and Behavioral Research
University of Northern Iowa
Cedar Falls, IA 50614-0402
Phone: (319) 273-2105
Fax: (319) 273-3104
mary.losch@uni.edu

Rodney Muilenburg, B.L.S.
Field Supervisor, Center for Social and Behavioral Research
University of Northern Iowa
Cedar Falls, IA 50614-0402
Phone: (319) 273-2105
Fax: (319) 273-2104
rod.muilenburg@uni.edu

Recommended Citation:

Muilenburg, R. J., McCoy, A. R., & Losch, M. E. (2021). Iowa Barriers to Prenatal Care Project. Iowa Department of Public Health, University of Northern Iowa Center for Social and Behavioral Research: 2020 Data Summary.

TABLE OF CONTENTS

- A. Analysis of Selected Variables by City
- B. Trend Analysis of Barriers Data: 2011-2020
- C. COVID-19 Supplement Frequency Tables
- D. 2020 Questionnaire Frequency Tables

Analysis of Selected Variables by City

The present section compares the findings across the following cities for all 2020 data received (n = 10,834). It is important to note that location of hospital where mothers gave birth is the basis for analysis, not the mothers' home zip codes.

DM = Des Moines (n = 5,086)
 QC = Quad Cities (n = 862)
 SC = Sioux City (n = 343)
 WL = Waterloo (n = 1,723)
 CR = Cedar Rapids (n = 1,137)
 DB = Dubuque (n = 581)
 IC = Iowa City (n = 1,102)

*all data in the following tables reflect percentages unless otherwise noted.

Mother/Family Characteristics

Overall, the age of the mothers in the cities closely matched the state data. Iowa City had the lowest number of mothers under 20 (<2%) and the largest percentage of mothers over 35 (14%).

Table A1. Mother's Age

	STATE	DM	QC	SC	WL	CR	DB	IC
<18 years	01	01	<01	<01	01	01	01	<01
18 – 19 years	03	02	03	03	02	03	02	01
20 – 25 years	24	21	24	27	23	22	16	17
26 – 30 years	37	36	35	34	40	38	41	36
31 – 35 years	26	28	27	26	24	25	32	32
> 35 years	10	12	10	09	09	11	09	14

Sioux City had the largest percentage of Hispanic mothers (23%) and American Indian mothers (5%). Dubuque had the lowest percentage of Black mothers (4%) while Waterloo and the Quad Cities had the highest percentage of Black mothers (11%; see Table A2).

Table A2. Race and Ethnicity

	STATE	DM	QC	SC	WL	CR	DB	IC
Hispanic	09	10	10	23	05	05	02	09
Non-Hispanic	91	90	90	77	95	95	98	91
White	90	87	86	85	85	88	94	87
Black	06	08	11	05	11	08	04	08
Asian/Pacific Islander	03	05	02	04	04	03	02	04
American Indian	01	01	01	05	<01	01	01	01

As shown in Table A3, the Quad Cities had the lowest proportion of mothers born in Iowa (50%) while Waterloo had the highest percentage of mothers who were born in Iowa (72%). Sioux City had the highest percentage of mothers who were born outside of the U.S. (15%).

Table A3. Mother's Place of Birth

	STATE	DM	QC	SC	WL	CR	DB	IC
In Iowa	65	65	50	57	72	69	67	59
In U.S., outside of Iowa	26	24	45	28	20	25	31	31
Outside of U.S.	08	11	05	15	08	06	03	10

In general, mothers throughout the major cities reported attaining similar levels of education as compared to educational attainment across the state. Mothers in Iowa City had the highest proportion completing graduate school (22%). Sioux City had the highest percentage (29%) of mothers reporting that they attained a high school education or less (see Table A4).

Table A4. Education

	STATE	DM	QC	SC	WL	CR	DB	IC
<High School	07	06	06	07	08	07	03	04
High School	21	20	21	22	19	17	15	15
Some College	32	28	33	34	32	36	31	27
College	27	31	26	27	29	28	34	31
Graduate School	12	16	14	10	12	12	17	22

The major cities tend to have a higher proportion of mothers reporting an annual income of \$70,000 or more compared to the state as a whole. Sioux City had the highest proportion of mothers (13%) reporting an annual income of under \$10,000 and Dubuque had the highest percent (55%) reporting incomes over \$70,000 per year (see Table A5).

Table A5. Annual Family Income Last Year

	STATE	DM	QC	SC	WL	CR	DB	IC
Under \$10,000	10	09	11	13	11	10	06	08
\$10,000 - \$19,999	08	07	08	10	08	05	04	06
\$20,000 - \$29,999	09	08	09	12	08	08	06	09
\$30,000 - \$39,999	08	08	07	08	09	07	06	06
\$40,000 - \$49,999	07	07	07	06	08	07	06	06
\$50,000 - \$59,999	07	05	06	07	07	07	08	07
\$60,000 - \$69,999	07	06	06	06	07	06	09	08
\$70,000 or more	43	50	45	38	42	49	55	50

During Pregnancy

Sioux City (36%) had the highest percentage of women reporting drinking in the last two years while Dubuque (18%) had the lowest percentage (see Table A8).

Table A8. Drank in Last Two Years

	STATE	DM	QC	SC	WL	CR	DB	IC
Not drank in last 2 years	72	72	75	64	69	77	82	72
Drank in last 2 years	28	28	25	36	31	23	18	28

Reports of drinking alcohol in the last three months of pregnancy remained consistent across all major cities with low percentages of mothers reporting drinking (see Table A9).

Table A9. Alcoholic Drinks per Week in Last 3 Months of Pregnancy

	STATE	DM	QC	SC	WL	CR	DB	IC
Zero in last three months of pregnancy	98	97	98	98	98	98	97	98
1-2 per week in last three months of pregnancy	02	02	02	01	02	01	02	01
3-5 per week in last three months of pregnancy	<01	<01	01	01	01	<01	<01	<01
6-10 per week in last three months of pregnancy	<01	<01	<01	<01	<01	<01	<01	<01
11 or more per week in last three months of pregnancy	<01	<01	<01	<01	<01	<01	<01	<01

The Quad Cities (25%) had the highest rate of unintended pregnancy (see Table A10). Women in Dubuque and Iowa City had the lowest reports of unintended pregnancies (17%). Comparing unintended pregnancies across the major cities (mistimed/unwanted), the Quad Cities and Dubuque (78%) had the highest proportion of women reporting an unintended pregnancy while not using birth control compared with a state average of 74% (see Table A11).

Table A10. Pregnancy Intent

	STATE	DM	QC	SC	WL	CR	DB	IC
Intended	77	79	75	76	78	79	83	83
Unintended	23	21	25	24	22	21	17	17

Table A11. Unintended Pregnancy, Birth Control Use

	STATE	DM	QC	SC	WL	CR	DB	IC
Unintended - no birth control used	74	74	78	77	77	71	78	71
Unintended - birth control used	26	26	22	23	23	29	22	29

Statewide, the three most common reported stressors were moving homes (20%), close friends or family dying (15%), and close family members being sick and hospitalized (12%). In the city comparison, Cedar Rapids had the highest reports of mothers moving homes (22%). More mothers in Iowa City and Cedar Rapids reported experiencing close family members being sick and hospitalized (13%) compared to the other cities. Sioux City mothers were more likely than others to report that they or their partners were incarcerated during the past year (see Table A12).

Table A12. Possible Stressors during Pregnancy

	STATE	DM	QC	SC	WL	CR	DB	IC
A close family member was very sick and had to be hospitalized	12	12	12	08	11	13	11	13
I got separated or divorced from my husband or partner	02	02	02	04	02	02	02	01
I moved to a new address	20	21	17	17	19	22	15	18
I was homeless (had to sleep outside, in a car, or in a homeless shelter)	01	01	01	01	01	01	01	01
My husband or partner lost their job	05	05	04	04	04	06	03	04
I lost my job	06	07	07	06	06	08	04	07
I argued with my husband or partner more than usual	07	07	07	08	08	08	07	07
My husband or partner said they didn't want me to be pregnant	01	01	01	02	01	01	01	01
I had a lot of bills I couldn't pay	05	04	05	03	04	06	03	03
I was in a physical fight	01	<01	<01	01	<01	01	<01	<01
My husband or partner or I went to jail	02	01	02	04	01	02	02	01
A family member or close friend has a bad problem with drinking or drugs	03	03	03	04	02	03	03	03
A family member or close friend died	15	15	15	12	13	16	15	15

The major cities had similar percentages of respondents reporting they had been diagnosed with depression during their pregnancy. Cedar Rapids had the highest rate of respondents diagnosed with depression both before and during their pregnancy (15% and 4%, respectively) while Dubuque was the lowest (10% and 1%; respectively see Table A13).

Table A13. Diagnosed with Depression

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	03	03	02	03	03	04	01	02
No	83	84	85	84	83	81	89	84
No – Diagnosed before pregnancy	14	13	13	13	14	15	10	14

Of those reporting a diagnosis of depression, Sioux City had the highest percentage of depressed mothers who took prescription medicine during their pregnancy (61%). Dubuque had the highest percentage of depressed mothers deciding on their own to not take prescription medicine for depression during their pregnancy (15%; see Table A14).

Table A14. Take Prescription Medicine for Depression (of those diagnosed with depression)

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	52	55	50	61	48	51	49	59
No	33	31	37	31	36	33	31	31
No – Doctor told me to stop	04	04	02	02	06	05	05	03
No – I decided to stop	11	11	11	06	10	12	15	07

Statewide about three in ten mothers who were diagnosed with depression received counseling for depression during their pregnancy (28%). Across cities, Waterloo (35%) had the highest percentage of mothers who had counseling for depression during their pregnancy and Sioux City had the lowest (20%; see Table A15).

Table A15. Counseling for Depression (of those diagnosed with depression)

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	28	30	26	20	35	32	21	33
No	72	70	74	80	65	68	79	67

Similar to depression diagnoses, the major cities had consistent reports of mothers with anxiety diagnoses before and during their pregnancy. Cedar Rapids had the highest rate of respondents diagnosed with anxiety before their pregnancy (18%; see Table A16).

Table A16. Diagnosed with Anxiety (of those diagnosed with anxiety)

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	03	03	02	02	02	04	02	04
No	82	82	83	84	83	79	86	81
No – Diagnosed before pregnancy	15	15	15	13	15	18	12	15

Of those diagnosed with anxiety disorders, Sioux City had the highest percentage of mothers who took prescription medicine for anxiety during their pregnancy (53%). The Quad Cities had the highest percentage of mothers reporting that their doctors told them to stop taking their prescription anxiety medication (11%) (see Table A17).

Table A17. Take Prescription Medicine for Anxiety (of those diagnosed with anxiety)

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	45	46	40	53	38	43	52	51
No	37	38	38	39	40	39	27	33
No – Doctor told me to stop	06	05	11	02	09	07	07	03
No – I decided to stop	12	11	11	06	13	11	14	13

Of those diagnosed with anxiety, mothers across the major cities reported receiving counseling for anxiety at varying rates compared to the state average of 27%. Iowa City (38%) had the highest percentage of mothers who had counseling for anxiety during their pregnancy and Sioux City had the lowest (18%; see Table A18).

Table A18. Counseling for Anxiety

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	27	29	26	18	30	29	19	38
No	73	71	74	82	70	71	81	62

Mothers giving birth in the Quad Cities reported the highest rate of e-cigarette use in the past two years at 9% and mothers in Dubuque reported the lowest (5%) (see Table A19).

Table A19. Used E-Cigarettes in Past 2 Years

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	08	08	09	08	07	08	05	06
No	92	92	91	92	93	92	95	94

The major cities had more inconsistent reporting of e-cigarette use three months before the pregnancy compared to the state. Des Moines and Dubuque mothers reported the highest percentage of using e-cigarettes more than once a day three months before their pregnancy (43%). More mothers in Cedar Rapids (40%) reported that they did not use e-cigarettes during this time (see Table A20).

Table A20. E-Cigarette Use 3 Months before Pregnancy

	STATE	DM	QC	SC	WL	CR	DB	IC
More than once a day	37	43	39	25	30	23	43	33
Once a day	08	07	05	07	09	09	10	10
2-6 days a week	10	09	11	11	14	13	07	02
1 day a week	13	10	11	21	13	15	13	21
Did not use e-cigarettes	32	30	34	36	34	40	27	34

Sioux City had the highest percentage of mothers by far, who did not use an e-cigarette during their last three months of pregnancy (96%). Whereas Des Moines and Dubuque had the highest percentage (10%) of mothers reporting use of an e-cigarette more than once a day during their last three months of pregnancy (see Table A21).

Table A21. E-Cigarette Use in the last 3 Months of Pregnancy

	STATE	DM	QC	SC	WL	CR	DB	IC
More than once a day	07	10	05	<01	05	05	10	09
Once a day	03	03	01	<01	04	01	10	05
2-6 days a week	02	02	05	<01	03	04	07	02
1 day a week	07	08	08	04	10	07	10	05
Did not use e-cigarettes	80	77	80	96	78	83	62	79

The Quad Cities and Cedar Rapids had the highest percentage of mothers reporting marijuana use during the last two years (both 11%) and mothers in Dubuque reported the lowest (5%) (see Table A22).

Table A22. Used Marijuana in Past 2 Years

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	08	08	11	07	09	11	05	06
No	92	92	89	93	91	89	95	94

Dubuque had the highest reports (48%) of no marijuana use three months before pregnancy, whereas the Quad cities had the highest percentage (26%) of mothers reporting using marijuana more than once a day during the same period (see Table A23).

Table A23. Marijuana Use 3 Months before Pregnancy

	STATE	DM	QC	SC	WL	CR	DB	IC
More than once a day	16	16	26	16	15	13	06	16
Once a day	12	12	07	12	13	13	10	12
2-6 days a week	12	10	11	04	16	10	10	18
1 day a week	29	30	25	40	30	29	26	25
Did not use marijuana	31	32	31	28	26	36	48	28

Mothers giving birth in Cedar Rapids reported the least marijuana use in the last three months of pregnancy compared to the state as well as the other major cities (90%). Iowa City had the highest percentage (>22%) of mothers reporting they used marijuana 1 day a week or more during this same time frame (see Table A24).

Table A24. Marijuana Use in the last 3 Months of Pregnancy

	STATE	DM	QC	SC	WL	CR	DB	IC
More than once a day	02	02	03	04	02	01	<01	<01
Once a day	03	04	<01	04	01	02	03	01
2-6 days a week	02	02	05	04	03	01	<01	03
1 day a week	09	06	13	04	09	07	10	18
Did not use marijuana	84	86	79	83	84	90	87	78

Quad Cities had the highest proportion (5%) of mothers reporting someone other than themselves smoked in the house daily during the pregnancy. Dubuque had the highest percentage of mothers (96%) reporting no one smoking cigarettes in their home during their pregnancy (see Table A16).

Table A25. Someone Smoking Cigarettes in the Home

	STATE	DM	QC	SC	WL	CR	DB	IC
Daily	04	04	05	03	04	04	03	03
Weekly	01	01	01	01	01	01	<01	<01
Monthly	<01	<01	<01	01	<01	<01	<01	<01
Less than monthly	01	01	01	02	02	01	01	01
Never	93	94	92	93	93	94	96	95

Prenatal Care

How to monitor changes in the baby’s activity (84%) and medicines that are safe to take during pregnancy (83%) were the most frequently reported types of information received during pregnancy. Des Moines and Iowa City had an even higher percentage (87%) of mothers compared to the state and other major cities reporting receiving information about monitoring changes in the baby’s activity. Physical abuse and info about the Zika virus were the least reported types of information across locations. The widest variation across locations was for the impact of illegal drugs where only 38% of mothers in Des Moines reported getting information while 53% of those giving birth in the Quad Cities reported getting that information. (see Table A26).

Table A26. Information Provided by a Health Care Professional during This Pregnancy

	STATE	DM	QC	SC	WL	CR	DB	IC
How smoking during pregnancy may affect baby	57	49	62	60	58	60	61	61
Breastfeeding my baby	69	61	74	68	71	67	74	74
How drinking during pregnancy may affect baby	54	47	59	57	54	56	55	58
Using a seatbelt during pregnancy	46	39	56	42	45	46	45	49
Medicines safe to take during pregnancy	83	83	83	82	81	83	87	86
How using illegal drugs may affect baby	46	38	53	48	48	50	47	52
How using prescription medications may affect baby	53	46	58	51	54	54	55	58
Doing tests on me/baby to screen for birth defects/diseases	78	78	80	71	76	79	82	82
What to do if I feel depressed during pregnancy/after baby born	61	60	65	52	61	63	58	66
Physical abuse to women by their husbands or partners	36	31	43	33	40	37	32	39
Signs and symptoms of preterm labor	68	63	73	68	66	66	70	73
What to do if labor starts early	72	68	75	70	71	70	74	76
How to monitor changes in baby’s activity during pregnancy	84	87	86	83	81	83	86	87
What to do if baby had not felt as active as expected	76	75	79	75	72	77	79	81
Oral health or dental care	48	43	52	50	52	50	54	46
The Zika Virus	28	22	36	34	24	28	37	29
Not provided with any information listed above	05	05	04	04	06	04	04	04

Waterloo had the highest percentage of mothers reporting they were tested for HIV/AIDS during their pregnancy (41%) and Dubuque had lowest percentage of mothers reporting that they were not tested (46%). About 25% of mothers indicated that they did not know whether or not they had been tested (see Table A27).

Table A27. HIV/AIDS Testing

	STATE	DM	QC	SC	WL	CR	DB	IC
Tested	39	36	36	40	41	38	31	40
Not tested	34	36	36	36	33	36	46	32
Offered but not tested	01	01	01	01	02	01	01	01
Don't know	26	27	27	24	25	25	23	27

The Iowa City had the highest percentage of mothers (37%) tested for syphilis during their pregnancy; Dubuque had the lowest percentage (44%) of mothers reporting being tested. At least a third of mothers in all locations indicated that they did not know whether or not they had been tested (see Table A28).

Table A28. Syphilis Testing

	STATE	DM	QC	SC	WL	CR	DB	IC
Tested	31	31	34	31	32	30	23	37
Not tested	31	31	28	32	31	31	44	29
Offered but not tested	01	01	01	<01	01	01	<01	<01
Don't know	37	38	36	37	35	38	33	34

The majority mothers statewide (53%) reported that they were able to travel to their prenatal care visits in under 15 minutes; however, mothers giving birth in Iowa City were least likely to report the ability to travel to their provider in under 15 minutes (39%) compared to other major cities. Higher percentages of mothers giving birth in Iowa City also reported travel times in the 31 to 60 minute range (28%) and in the greater than 60 minute category (8%; see Table A29).

Table A29. Travel Time to Prenatal Care Visits

	STATE	DM	QC	SC	WL	CR	DB	IC
<15 Minutes	53	54	55	58	55	59	51	39
16-30 Minutes	30	32	30	26	27	27	30	25
31-60 Minutes	15	12	15	14	16	13	17	28
>60 Minutes	02	03	01	02	02	02	02	08

In general, a majority of mothers reported that received a flu shot during their pregnancy; however, mothers in the Quad Cities had the lowest proportion of mothers reporting they received a flu shot during their pregnancy (53%) and indicating that they did not want the flu shot (16%). Iowa City had the highest percentage of mothers (73%) receiving a flu shot during their pregnancy (see Table 30).

Table A30. Flu Shot

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	68	69	53	69	59	70	72	73
No – Before pregnancy	08	08	09	09	10	07	08	09
No – Did not want it	10	10	16	10	14	12	07	07
No – Doctor told me not to	<01	<01	<01	<01	01	<01	<01	<01
No – Do not ever get them	12	10	19	08	14	11	11	09
Flu shot was not available	02	03	02	03	02	01	01	02

Hospital Care

Mothers giving birth in Iowa City had the highest reports of encouragement to breastfeed (89%) following the birth of their baby and mothers in Cedar Rapids had the highest reports of not receiving encouragement to breastfeed (15%) following the birth of their baby but the percentages were similar across locations (see Table A31).

Table A31. Encouraged to Breastfeed by Hospital Staff

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	84	84	83	84	84	83	84	89
No	13	13	14	14	14	15	14	09
I don't remember	02	03	03	02	02	02	02	01

Mothers in Sioux City had higher reports of receiving information about action steps you can take when their baby cries (69%) and the dangers of shaking an infant (69%) compared to those giving birth in other major cities and the state as a whole. However, Cedar Rapids had the highest percentage of mothers receiving information about laying a baby down to sleep (72%). Less than a third of those giving birth in the Quad Cities reported being given information on the dangers of shaking an infant (see Table A32).

Table A32. Information Provided by a Health Care Professional during This Pregnancy

	STATE	DM	QC	SC	WL	CR	DB	IC
Action steps to decrease frustration when my infant cries	49	36	34	69	38	67	44	40
How to lay my baby down to sleep	61	52	43	69	59	72	58	59
Dangers of shaking an infant	47	35	30	69	36	65	39	38
Did not receive information and have not scheduled time to discuss these topics	28	37	44	14	31	16	35	32

Large percentages of mothers across the state indicated that they planned to lay their babies on their backs to sleep. Iowa City had the highest percentage of mothers indicating that they planned to lay their baby on their back to sleep (96%). The mothers in the Quad Cities had the highest reports of no preference (7%) for the position they plan to lay their baby in to sleep (see Table A33a).

Table A33. Baby's Sleep Position

	STATE	DM	QC	SC	WL	CR	DB	IC
On his or her back	94	94	91	90	92	95	94	96
On his or her side	02	01	02	03	02	01	01	01
On his or her stomach	<01	<01	<01	01	<01	<01	<01	<01
No preference	05	04	07	06	05	03	04	03

Mothers giving birth in the Quad Cities reported the highest percent for planning to have their baby sleep in the same bed as them on a daily basis (12%); whereas mothers in Cedar Rapids had the highest reports of never planning to have the baby sleep with anyone (86%) (see Table A34).

Table A34. Plan to Have Baby Sleep in Same Bed

	STATE	DM	QC	SC	WL	CR	DB	IC
Daily	07	06	12	06	07	05	06	05
Weekly	06	05	06	05	06	05	06	04
Monthly	01	01	02	01	01	01	01	01
A few times a year	05	04	05	04	04	04	04	04
Do not plan to have my baby sleep with me or anyone else	82	84	75	84	82	86	83	85

Receipt of information about breastfeeding was high across locations. Dubuque had the lowest percentage of mothers who reported having breastfed their baby in the hospital (78%). Mothers in Cedar Rapids had the highest reports of receiving help to learn how to breastfeed (79%; see Table 35).

Table A35. Happened at the Hospital

	STATE	DM	QC	SC	WL	CR	DB	IC
Breastfed my baby	82	82	82	82	81	82	78	82
Hospital staff gave information about breastfeeding	88	88	85	82	87	89	88	89
Hospital staff helped me learn how to breastfeed	77	78	78	74	76	79	75	78
Hospital staff told me to breastfeed whenever my baby wanted	70	68	73	63	68	73	63	72

Most mothers reported being able to have skin-to-skin contact with their baby within the first hour after giving birth. Iowa City had the highest percentage of mothers whose baby was ill or in the NICU preventing skin-to-skin contact (15%; see Table A36).

Table A36. Skin-to-Skin Contact within First Hour

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	88	85	92	88	90	94	88	77
No – not offered chance	04	06	01	04	03	01	05	07
No – baby was ill/in NICU	06	07	06	05	05	04	07	15
No – baby was asleep	01	02	01	03	02	01	01	01

Similar to skin-to-skin contact, mothers giving birth in Iowa City hospitals had the highest reports of their baby being ill or in the NICU preventing them from breastfeeding within the first hour after the birth (18%). Sioux City had the highest percentage of mothers who reported breastfeeding within the first hour after the birth (75%; see Table A37).

Table A37. Breastfed within First Hour

	STATE	DM	QC	SC	WL	CR	DB	IC
Yes	71	69	71	75	71	71	69	63
No – not offered chance	10	11	09	07	09	10	10	12
No – baby was ill/in NICU	08	09	08	06	07	07	12	18
No – baby was asleep	11	11	12	12	13	12	09	07

Those giving birth in Iowa City reported the longest travel times to reach the hospital at 31 to 60 minutes (32%) or greater than 60 minutes (16%), which is much higher than the next highest reporting city in both categories (see Table A38). This is understandable given the role University of Iowa Hospitals and Clinics plays caring for those with high-risk pregnancies.

Table A38. Travel Time to Hospital when Delivering Baby

	STATE	DM	QC	SC	WL	CR	DB	IC
<15 Minutes	47	44	53	53	53	56	52	29
16-30 Minutes	32	38	29	28	26	27	29	23
31-60 Minutes	18	14	17	16	19	15	18	32
>60 Minutes	03	05	01	02	02	02	01	16

B. Trend Analysis of Barriers Data 2011 – 2020

All percentages in the present section reflect statewide percentages. Consistent with drops in the birth rate and total numbers of births per year (<36,000 in 2020), the number of respondents has been declining over the last few years and dipped below 20,000 for the first time in the past decade in 2019 and has continued to decline in 2020.

Respondents by Year

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
N =	23,934	23,674	24,634	24,696	23,212	21,928	20,919	20,035	19,007	18,014

Demographics

The number of mothers who are 26 years old or older has increased since 2011 with mothers between 26 and 30 increasing from 35% to 37%, mothers between 31 and 35 increasing from 22% to 26%, and mothers older than 35 years increasing from 7% to 10% (see Table B1).

Table B1. Mother’s Age Ranges

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<18 years	02	02	02	01	01	01	01	01	01	01
18 – 19 years	05	05	04	04	04	03	03	03	03	03
20 – 25 years	29	29	29	28	27	26	25	24	24	24
26 – 30 years	35	35	35	35	35	36	36	37	37	37
31 – 35 years	22	22	23	24	25	25	26	26	26	26
>35 years	07	07	07	08	08	08	09	09	10	10

Educational attainment of participants has increased over time with smaller percentages of only completing some college (decreasing from 36% to 32%) and increasing percentages of those completing college degrees (26% to 27%) and graduate school (10% to 12%; see Table B2).

Table B2. Education

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Mother										
<High school	09	08	08	08	07	07	07	07	07	07
High school	20	20	20	19	20	20	21	21	21	21
Some college	36	36	36	36	35	34	34	33	33	32
College	26	26	26	27	27	27	27	27	27	27
Graduate school	10	10	10	10	11	11	12	12	12	12

Compared to previous years, there is a continued trend of more racially and ethnically diverse mothers. The number of White mothers has decreased slightly from 92% in 2011 to 90% in 2020 with Hispanic mothers increasing from 6% to 9% across those same years. However, the number of Black, Asian/Pacific Islander, American Indian mothers responding has remained consistent since 2011 (see Table B3).

Table B3. Race / Ethnicity

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Mother										
Hispanic	06	06	07	07	07	07	07	08	08	09
Non-Hispanic*	94	94	93	93	93	93	93	92	92	91
White	92	91	91	91	91	91	90	90	90	90
Black	05	05	05	05	05	05	06	06	06	06
Asian/Pacific Islander	03	03	03	03	03	03	03	03	03	03
American Indian	01	01	01	01	01	01	01	01	01	01

The percentage of mothers reporting an annual income of under \$10,000 has decreased from 16% to 11% since 2012 while the percentage of mothers reporting an annual income above \$70,000 has increased from 29% to 44% (see Table B4).

Table B4. Annual Family Income Last Year

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Under \$10,000	15	16	16	14	14	12	12	11	11	11
\$10,000 - \$19,999	11	11	11	10	10	09	09	08	08	08
\$20,000 - \$29,999	09	10	10	10	09	09	09	09	09	09
\$30,000 - \$39,999	09	08	08	09	09	09	08	08	08	08
\$40,000 - \$49,999	09	08	08	08	07	08	07	08	08	07
\$50,000 - \$59,999	09	09	08	09	08	08	08	08	08	07
\$60,000 - \$69,999	09	08	08	07	08	07	07	07	07	07
Above \$70,000	29	31	32	33	36	38	39	41	42	44

Prenatal Experiences and Care

Over the years, the percentage of mothers reporting they were not using birth control at the time of conception has increased from 84% in 2011 to 89% in 2020. There has also been a slight decrease in reported use of condoms at the time of conception from 5% to 2% (see Table B5).

Table B5. Birth Control Used at Conception

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
No birth control used	84	85	84	86	86	87	86	87	88	89
Birth control pills	07	07	07	06	06	06	06	06	05	05
Diaphragm	<01	<01	<01	<01	<01	<01	<01	<01	<01	<01
Spermicidal foam/insert	<01	<01	<01	<01	<01	<01	<01	<01	<01	<01
Condom	05	04	04	04	04	03	03	03	03	02
NFP / Rhythm Method	01	01	01	01	01	01	01	01	01	01
Birth control patch	<01	<01	<01	<01	<01	<01	<01	<01	01	<01
Birth control injection	01	01	01	01	01	01	01	01	01	<01
NuvaRing	01	01	01	01	01	<01	<01	<01	<01	<01
IUD / IUC	01	01	01	01	01	01	01	01	01	01
Implant / Nexplanon	<01	<01	<01	<01	<01	<01	<01	<01	<01	<01
Other	<01	<01	01	01	<01	01	<01	01	01	<01

Among women not wanting a pregnancy (either mistimed/unwanted), 74% in 2020 reported that they did not use any form of birth control, which has increased from a low of 64% in 2011. The two highest reported forms of birth control used by women not desiring the pregnancy in 2020 were birth control pills (14%) and condoms (5%). The use of both birth control pills and condoms have decreased since 2011 among those not desiring pregnancy (see Table B6).

Table B6. Reported Birth Control Type among Those Not Desiring Pregnancy

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
No birth control used	64	66	66	66	68	70	70	72	72	74
Birth control pills	19	18	18	17	17	16	16	16	15	14
Diaphragm	<01	<01	<01	<01	<01	<01	<01	<01	<01	<01
Spermicidal foam/insert	01	<01	<01	<01	<01	<01	<01	<01	01	<01
Condom	12	11	10	09	09	07	08	07	06	05
NFP / Rhythm Method	02	02	01	02	02	02	02	02	02	02
Birth control patch	01	01	01	01	01	01	01	01	02	01
Birth control injection	01	02	02	02	02	01	02	01	02	01
NuvaRing	02	02	02	01	01	01	01	01	01	01
IUD / IUC	01	01	01	01	01	01	01	01	01	01
Implant / Nexplanon	<01	<01	<01	<01	<01	<01	01	01	01	01
Other	01	01	01	01	01	01	01	01	01	01

There has been a slight increase in the percentage of women reporting wanting to become pregnant at the time of conception and earlier (32% in 2011; 38% in 2020) as well as an increase in the percentage of women reporting that they wanted to become pregnant at that time (36% in 2011 to 40% in 2020). The percentage of women who did not want to become pregnant at the time but did want to sometime in the future have decreased from 29% in 2011 to 20% in 2020. The percentage of women not wanting to become pregnant at all has stayed about the same over the past 10 years (see Table B7).

Table B7. Desirability of Pregnancy

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Yes, and earlier	32	33	32	34	33	34	34	35	35	38
Yes, at that time	36	35	37	36	38	37	37	37	37	40
No, but in the future	29	29	28	27	26	26	25	24	24	20
No, nor in future	03	03	04	04	04	03	04	03	04	03

Lack of birth control use among mothers with mistimed and unwanted pregnancies has increased by 10% over the past ten years (see Table B8).

Table B8. No Birth Control Use by Desirability of Pregnancy

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Yes, and earlier	96	97	96	97	96	97	96	97	97	97
Yes, at that time	94	95	94	94	93	94	94	94	94	94
No, but in the future	65	67	67	67	68	71	70	73	73	75
No, nor in future	57	55	61	59	62	63	62	64	65	68

The most common reason women reported for not using any form of birth control when not desiring a pregnancy was not trying to become pregnant but were not actively preventing the pregnancy (ambivalence; 51.4%). Almost 19% of the women who did not desire the pregnancy reported their birth control failed and an increasing number indicated that they experienced physical discomfort or side effects. Those expressing “ambivalence” as a reason continues to increase and is now the primary reason indicated for more than half of those responding (see Table B9a – note that this table contains a single decimal place owing to the very small percentages and only seven years are included owing to a change in the question).

Table B9a. Reported Reason for Not Using Birth Control When Pregnancy Not Desired

	2014	2015	2016	2017	2018	2019	2020
Didn't want to ruin mood	1.1	1.0	1.0	1.0	1.0	2.7	1.3
Physical discomfort / side effects from birth control	8.0	8.8	10.3	10.0	11.8	12.6	13.0
Embarrassed buying or going to health care provider	0.4	0.5	0.5	0.5	0.5	0.7	0.4
Against religious beliefs	1.2	1.4	1.5	1.5	2.0	1.6	1.4
Judgement impaired	2.0	2.0	1.6	1.8	1.8	1.8	1.9
Ran out	5.7	4.4	5.1	3.8	4.8	3.4	3.3
Did not plan to have intercourse	5.9	5.4	5.7	4.7	5.3	5.0	5.7
Father wanted child / refused	1.0	0.9	0.8	0.7	0.8	1.5	0.9
Preferred method too expensive	1.9	1.4	1.0	1.1	1.0	2.2	1.2
Birth control failed	21.3	19.1	18.9	17.9	18.4	18.5	18.8
Not trying to become pregnant, not actively preventing	45.6	44.8	47.7	46.2	49.9	50.2	51.4
Thought I (or partner) could not become pregnant	8.1	9.0	8.1	8.7	9.3	11.3	10.4
Other	7.1	5.4	6.4	5.2	5.4	6.0	3.7

Across the past six years, out of all mothers, fewer mothers aged 31-35 (27%) and over 35 (28%) reported that they were not trying to become pregnant, but not actively preventing it compared to mothers in other age groups (see Table B9b).

Table B9b. Not Trying to Become Pregnant, but Not Actively Preventing by Age Group

	2015	2016	2017	2018	2019	2020
Under 18 years old	45	40	42	37	39	35
18-19 years old	46	48	46	41	37	41
20-25 years old	45	46	47	39	40	38
26-30 years old	47	45	48	30	33	30
31-35 years old	45	48	46	26	27	27
Over 35 years old	42	43	43	26	26	28

Over time, women reporting that they thought themselves or their partner could not become pregnant as a reason for not using birth control at the time of conception has stayed relatively consistent. The trend shows more women in the over 35 year old age group cited this as a reason than the other age groups (see Table 9Bc – note that some cell sizes are small and range from 8 to 241).

Table B9c. Thought I (or Partner) Could Not Become Pregnant by Age Group

	2015	2016	2017	2018	2019	2020
Under 18 years old	10	06	11	09	16	07
18-19 years old	10	08	09	10	11	10
20-25 years old	08	07	08	07	07	07
26-30 years old	08	07	07	05	07	05
31-35 years old	09	08	09	05	07	06
Over 35 years old	18	14	17	09	11	10

Across the years, a low percentage of mothers reported discussing physical abuse by husbands or partners during the pregnancy. Most mothers reported discussing safe medicines during pregnancy as well as doing tests to screen for birth defects during pregnancy (see Table B10).

Table B10. Topics Discussed during Prenatal Care Visit

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Smoking during pregnancy	56	64	55	62	50	59	52	59	51	57
Breastfeeding my baby	68	71	37	70	66	68	69	67	68	69
Drinking alcohol during pregnancy	53	60	52	57	47	55	51	55	49	54
Using a seat belt during pregnancy	45	48	44	47	41	45	43	43	42	46
Medicines that are safe during pregnancy	81	83	81	83	79	82	81	84	81	83
How using illegal drugs could affect my baby	44	50	43	49	39	46	40	45	40	46
How using prescription medications could affect my baby	50	56	48	56	47	53	49	53	48	53
Doing tests on me or my baby to screen for birth defects or diseases	78	83	77	81	73	81	76	83	75	78
What to do if I feel depressed during or after the pregnancy	52	58	52	58	59	57	53	59	57	62
Physical abuse to women by their husbands or partners	32	36	31	36	29	34	29	31	30	36
The signs and symptoms of preterm labor	65	70	64	68	61	67	62	67	62	68
What to do if my labor starts early	66	70	65	69	63	68	65	69	66	72
Count the kicks, monitor the movements	--	--	--	--	--	--	--	--	82	84
How to monitor changes in my baby's activity during pregnancy	72	75	72	75	73	76	75	78	--	--

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
What to do if my baby had not felt as active as I would have expected	71	74	72	75	73	76	75	78	72	76
Oral health or dental care during pregnancy	--	--	--	--	--	--	44	44	--	48
The Zika Virus	--	--	--	--	--	--	--	36	32	28
Not provided with any information	05	01	02	01	02	01	05	04	04	05

C. COVID-19 Supplements Frequency Tables

The following section contains the frequency tables for all questions included in a supplemental questionnaire that was completed with the Barriers to Prenatal Care survey in 2020. This questionnaire was created in response to the onset of the COVID-19 pandemic in late Spring. The supplement was distributed to the 14 hospitals that had not yet received their entire supply of 2020 questionnaires. The total number of respondents for the following questions was N = 2,003.

A majority of mothers reported never being diagnosed with COVID-19 by a healthcare provider or a positive test result during their pregnancy (91.1%; see Table C1).

1. During your pregnancy, did a healthcare provider tell you that you had COVID-19 or tested positive for COVID-19?

Table C1. COVID-19 Diagnosis

	Frequency	Valid Percent
Yes, I was told that I had COVID-19, but I was not tested	4	0.2
Yes, I was told that I had COVID-19 and it was confirmed by a test	148	7.5
No, no healthcare provider said that I had COVID-19 [SKIP TO Q3]	1,786	91.1
No, no healthcare provider said that I had COVID-19, but I had symptoms and think I had it [SKIP TO Q3]	23	1.2

Of mothers who were diagnosed with COVID-19 during their pregnancy, only one mother reported being told their baby had COVID-19 and no mothers had a confirmed test that their baby had COVID-19 (see Table C2).

2. Did a healthcare provider tell you that your baby had COVID-19 or tested positive for COVID-19?

Table C2. COVID-19 Diagnosis for Baby

	Frequency	Valid Percent
Yes, I was told that my baby had COVID-19, but my baby was not tested	1	0.7
Yes, I was told that my baby had COVID-19 and it was confirmed by a test	0	0.0
No, no healthcare provider said that my baby had COVID-19	137	99.3

Of the mothers who reported being diagnosed with COVID-19, a majority reported that they were not separated from their baby after the birth (94.7%; see Table C3).

3. If you had a diagnosis of coronavirus/COVID-19 or a positive COVID-19 test result at the time of delivery, were you separated from your baby?

Table C3. Positive COVID-19 Diagnosis Cause Separation

	Frequency	Valid Percent
Yes	7	5.3
No [SKIP TO Q3]	124	94.7

Only two mothers reported breastfeeding issues due to the separation after the birth of the baby due to a COVID-19 diagnosis (see Table C4).

4. Did the separation prevent you from breastfeeding?

Table C4. Separation Prevented Breastfeeding

	Frequency	Valid Percent
Yes	2	33.3
No	4	66.7

A majority of mothers reported that their healthcare provider did not instruct them to wear a face mask or covering while at home (88.4%; see Table C5).

5. Has a healthcare provider instructed you to use a mask or face covering at home?

Table C5. Healthcare Provider Instructed Mask Use at Home

	Frequency	Valid Percent
Yes	228	11.6
No	1,739	88.4

Most mothers also reported not being given a mask or other protective equipment to be used at home during the pregnancy (83.6%; see Table C6).

6. Have you been given masks or other protective equipment for use at home?

Table C6. Provided Mask for Use at Home

	Frequency	Valid Percent
Yes	322	16.4
No	1,641	83.6

Almost a quarter of mothers reported that their prenatal care visits were altered in one or more ways due to the COVID-19 pandemic. Of all the mothers reporting, 7.7% reported that they delayed or rescheduled their appointment, 9.1% reported that their healthcare provider delayed or rescheduled the appointment, and 6.6% reported that their prenatal care visit changed to a telehealth appointment (e.g., online, over the phone; see Table C7).

7. Were any of your prenatal care visits delayed, rescheduled or held by telehealth due to COVID-19/pandemic concerns? [SELECT ALL THAT APPLY]

Table C7. Prenatal Care Visits Altered due to COVID-19

	Frequency	Valid Percent
Yes, I delayed or rescheduled the appointment	154	7.7
Yes, my healthcare provider delayed or rescheduled the appointment	182	9.1
Yes, my healthcare provider changed to phone or online visits one or more times	133	6.6
No, number and type of visits were not changed	1,548	77.3

A majority of mothers (91.3%) reported that no one in their household was told they had COVID-19 (see Table C8).

8. During your pregnancy, did a healthcare provider tell any of your other household members they had COVID-19?

Table C8. Household COVID-19 Diagnosis

	Frequency	Valid Percent
Yes, one or more members of my household was told they had COVID-19, but they were not tested	7	0.4
Yes, was told that one or more members had COVID-19 and it was confirmed by a test	106	5.4
No, no healthcare provider said that others in my household had COVID-19	1,795	91.3
No, no healthcare provider said that others in my household had COVID-19, but I think others had it	58	3.0

Most mothers (94.6%) did not experience any changes to their birthing plans as a result of the COVID-19 pandemic (see Table C9).

9. Which of the following changes, if any, have you experienced as a result of the COVID-19 outbreak? [SELECT ALL THAT APPLY]

Table C9. Birth Experience Changed due to COVID-19

	Frequency	Valid Percent
I changed from planning a vaginal birth to a C-section	10	0.5
My planned C-section or labor induction schedule was changed	25	1.2
I changed from planning a home birth to a hospital birth	5	0.2
I changed from planning a hospital birth to planning a home birth	1	<0.0
I had more/extra prenatal visits	25	1.2
Nothing changed	1,894	94.6

A cross-tabulation and chi-square analysis was run for each question with age, education, race, ethnicity, and income. No significant differences were observed from this analysis. This result may be due to coverage bias as a majority of surveys was received from hospitals in urban areas.

D. 2020 Questionnaire Frequency Tables

Presented below is a frequency analysis of all variables in the 2020 questionnaire. Data presented in this section are based upon 2020 questionnaires received to date (n= 18,014). All entries reflect unweighted percentages of those mothers answering the item.

MOTHER / FAMILY CHARACTERISTICS

1. How old are you (baby's mother)?

	Frequency	Valid Percent
< 18 years	140	0.8
18 – 19 years	459	2.6
20 – 25 years	4,292	24.1
26 – 30 years	6,577	36.9
31 – 35 years	4,573	25.7
>35 years	1,784	10.0

2. Where were you born?

	Frequency	Valid Percent
In Iowa	11,497	65.4
In the US outside of Iowa	4,643	26.4
Outside the US	1,434	8.2

3. What is the highest grade or year of regular school or college that you have completed? (select only one)

	Frequency	Valid Percent
Grade school	184	1.0
Junior high	68	0.4
Some high school	966	5.4
12 th grade or GED	3,824	21.4
Vocational school or A.A. Degree	2,575	14.4
Some college	3,202	17.9
Bachelor's degree	4,875	27.2
Master's degree	1,650	9.2
Doctoral/Professional degree	564	3.1

4. Which one of the following **best** describes your **racial background**? (select only one)
Are you...

	Frequency	Valid Percent
Black	1,072	6.1
White	15,751	89.6
Asian/Pacific Islander	579	3.3
American Indian or Native Alaskan	170	1.0

5. Which one of the following **best** describes your **ethnic background**? Are you...

	Frequency	Valid Percent
Hispanic	1,544	8.7
Non-Hispanic	16,199	91.3

6. What was the general range of your household income before taxes last year – including wages, unemployment, Social Security, and all other sources of income?

	Frequency	Valid Percent
Under \$10,000	1,821	10.5
\$10,000 - \$19,999	1,311	7.5
\$20,000 - \$29,999	1,544	8.9
\$30,000 - \$39,999	1,448	8.3
\$40,000 - \$49,999	1,284	7.4
\$50,000 - \$59,999	1,174	6.8
\$60,000 - \$69,999	1,238	7.1
\$70,000 or over	7,546	43.5

7. During the last year, how many people, including you depended on that income?

	Frequency	Valid Percent
1	2,243	12.9
2	5,188	29.8
3	5,118	29.4
4	2,944	16.9
5	1,193	6.8
6	433	2.5
7	142	0.8
8	75	0.4
9	31	0.2
10 or more	53	0.3

BEFORE YOU BECAME PREGNANT

8. In the twelve months prior to becoming pregnant, did a doctor, nurse, dental provider, or other health care professional ever talk to you about any of the following topics as they relate to pregnancy? (mark all that apply)

	Frequency	Valid Percent
Taking folic acid or a multivitamin	8,678	48.3
Smoking	6,493	36.1
Drinking alcohol	5,817	32.4
Your weight	5,404	30.1
Regular exercise	6,103	34.0
How romantic relationships affect your health	2,722	15.2
Oral health	5,096	28.4
Did not see health care professional	5,041	28.1

WHEN YOU BECAME PREGNANT

9. Thinking back to the time you became pregnant were you (or your partner) using any form of birth control when you got pregnant? (mark all that apply)

	Frequency	Valid Percent
No birth control used	16,076	89.5
Birth control pills	819	43.4
Birth control patch	61	3.2
Diaphragm	5	0.3
Spermicidal foam/insert	12	0.6
Birth control injection	69	3.7
NuvaRing	57	3.0
Condom	297	15.7
NFP or rhythm method	178	9.4
IUD/ParaGard/Mirena/Skyla/Liletta	96	5.1
Implant/Nexplanon	44	2.3
Other	54	2.9

10. Thinking back, just before you became pregnant, did you want to become pregnant at that time?

	Frequency	Valid Percent
Yes, I wanted this pregnancy at an earlier time as well as at that time	6,648	37.7
Yes, I wanted to become pregnant at that time	7,007	39.7
No, I did not want to become pregnant at that time, but I wanted a child sometime in the future	3,560	20.2
No, I did not want to become pregnant at that time or any time in the future	434	2.5

**11. If you did not want to get pregnant, why did you not use any form of birth control?
(mark all that apply)**

	Frequency	Valid Percent
Wanted to get pregnant – SKIP TO Q12	11,372	63.3
Didn't want to ruin the "mood" or was embarrassed	53	0.8
Experienced physical discomfort or side effects	524	8.0
Embarrassed buying or uncomfortable going to health care provider	16	0.2
Against religious beliefs	65	1.0
Judgement impaired due to alcohol and/or drug use	78	1.2
Ran out of birth control	132	2.0
Did not plan to have intercourse	227	3.4
Father wanted child/refused to use birth control	42	0.6
Preferred method too expensive	47	0.7
Birth control failed	763	11.6
Not trying to become pregnant, not actively preventing it	2,129	32.3
Thought I (or partner) could not become pregnant	432	6.6
Other	155	2.4

DURING YOUR PREGNANCY

12. Here are a few things that might happen to some women during pregnancy. Please tell us if any of these things happened to you during this pregnancy. (mark all that apply)

	Frequency	Valid Percent
Close family member was sick and hospitalized	2,067	11.5
Got separated or divorced from my husband or partner	423	2.4
Moved to a new address	3,609	20.1
Was homeless (had to sleep outside, in a car, or in a homeless shelter)	135	0.8
Husband or partner lost their job	810	4.5
Lost my job	1,137	6.3
Argued with husband or partner more than usual	1,322	7.4
Husband or partner said they didn't want me to be pregnant	234	1.3
Had a lot of bills I couldn't pay	825	4.6
Was in a physical fight	97	0.5
Husband or partner or I went to jail	284	1.6
Family member or friend had a problem with drinking or drugs	587	3.3
Family member or close friend died	2,702	15.0

13. At any time during this pregnancy, did a doctor, nurse, or other health care worker diagnose you with depression?

	Frequency	Valid Percent
Yes	523	3.0
No – SKIP TO Q16	14,500	82.9
No – Diagnosed with depression before I became pregnant	2,459	14.1

14. At any time during this pregnancy, did you take prescription medicine for your depression?

	Frequency	Valid Percent
Yes	1,533	51.6
No	974	32.8
No, doctor told me to stop taking my medications for depression during pregnancy	127	4.3
No, decided on my own to stop taking my medications for depression during my pregnancy	339	11.4

15. At any time during this pregnancy, did you get counseling for your depression?

	Frequency	Valid Percent
Yes	823	27.8
No	2,139	72.2

16. At any time during this pregnancy, did a doctor, nurse, or other health care worker diagnose you with anxiety?

	Frequency	Valid Percent
Yes	518	3.0
No – SKIP TO Q19	14,052	81.8
No – Diagnosed with anxiety before I became pregnant	2,602	15.2

17. At any time during this pregnancy, did you take prescription medicine for your anxiety?

	Frequency	Valid Percent
Yes	1,416	45.1
No	1,160	36.9
No, doctor told me to stop taking my medications for anxiety during pregnancy	194	6.2
No, decided on my own to stop taking my medications for anxiety during my pregnancy	372	11.8

18. At any time during this pregnancy, did you get counseling for your anxiety?

	Frequency	Valid Percent
Yes	838	26.8
No	2,294	73.2

19. Have you used e-cigarettes or other vaping products in the past 2 years?

	Frequency	Valid Percent
Yes	1,452	8.4
No – SKIP TO Q22	15,809	91.6

20. In the 3 months before you got pregnant, on average, how often did you use e-cigarettes or other vaping products?

	Frequency	Valid Percent
More than once a day	547	37.3
Once a day	123	8.4
2-6 days a week	142	9.7
1 day a week	184	12.5
I did not use e-cigarettes or other vaping products then	471	32.1

21. In the last 3 months of your pregnancy, on average, how often did you use e-cigarettes or other vaping products?

	Frequency	Valid Percent
More than once a day	110	7.5
Once a day	49	3.3
2-6 days a week	34	2.3
1 day a week	103	7.0
I did not use e-cigarettes or other vaping products then	1,171	79.8

22. Have you used marijuana in the past 2 years?

	Frequency	Valid Percent
Yes	1,403	8.2
No – SKIP TO Q25	15,781	91.8

23. In the 3 months before you got pregnant, on average, how often did you use marijuana?

	Frequency	Valid Percent
More than once a day	241	16.5
Once a day	179	12.2
2-6 days a week	173	11.8
1 day a week	420	28.7
I did not use marijuana then	452	30.9

24. In the last 3 months of your pregnancy, on average, how often did you use marijuana?

	Frequency	Valid Percent
More than once a day	27	1.8
Once a day	40	2.7
2-6 days a week	34	2.3
1 day a week	127	8.7
I did not use marijuana then	1,238	84.4

25. Have you had any alcoholic drinks in the past 2 years (A drink is 12 oz. of beer, 4 oz. of wine, and 1 ½ oz. of liquor)

	Frequency	Valid Percent
Yes	12,369	71.7
No – SKIP TO Q28	4,876	28.3

26. In the 3 months before you got pregnant, how many alcoholic drinks did you have in an average week? (If none, fill in 00)

	Frequency	Valid Percent
None	2,744	15.8
1-2 alcoholic drinks	6,146	35.5
3-5 alcoholic drinks	2,710	15.6
6-10 alcoholic drinks	604	3.5
11 or more alcoholic drinks	162	0.9

27. In the last 3 months of your pregnancy, how many alcoholic drinks did you have in an average week? (If none, fill in 00)

	Frequency	Valid Percent
None	12,101	97.8
1-2 alcoholic drinks	226	1.8
3-5 alcoholic drinks	34	0.3
6-10 alcoholic drinks	13	0.1
11 or more alcoholic drinks	5	<0.0

28. During your most recent pregnancy, how often did someone other than you smoke inside your home?

	Frequency	Valid Percent
Daily	788	4.5
Weekly	140	0.8
Monthly	51	0.3
Less than monthly	231	1.3
Never	16,354	93.1

29. Were you attending school or working outside your home prior to the birth of your new baby?

	Frequency	Valid Percent
Yes and I plan to return to work or school following the birth of this baby	12,250	70.7
Yes and I am NOT planning to return to work or school following the birth of this baby	989	5.7
No, I was not attending school or working outside of my home prior to the birth of this baby	4,089	23.6

30. Does your worksite have a designated room/location (not counting bathroom stalls) for mothers to breastfeed or pump/express their breast milk?

	Frequency	Valid Percent
Yes	8,327	52.3
No	4,263	26.8
Don't know	3,328	20.9

PRENATAL CARE

The next questions are about the prenatal care that you received during this pregnancy. Prenatal care includes visits to a doctor, nurse, or health care worker before your baby was born for checkups and advice about pregnancy.

31. During any of your prenatal care visits, did a doctor, nurse, dental provider, or other health care professional provide you with information about any of the things listed below? (mark all that apply)

	Frequency	Valid Percent
How smoking during pregnancy could affect my baby	10,248	57.1
Breastfeeding my baby	12,420	69.1
How drinking alcohol during pregnancy could affect my baby	9,657	53.8
Using a seat belt during my pregnancy	8,329	46.4
Medicines that are safe to take during pregnancy	14,937	83.2
How using illegal drugs could affect my baby	8,300	46.2
How using prescription medications could affect my baby	9,490	52.8
Doing tests on me or my baby to screen for birth defects or diseases	13,963	77.7
What to do if feeling depressed during pregnancy/after baby born	11,044	61.5
Physical abuse to women by their husbands/partners	6,501	36.2
Signs and symptoms of preterm labor	12,191	67.9
What to do if labor starts early	12,910	71.9
Count the kicks, monitor movements	15,135	84.3
What to do if baby had not felt as active as expected	13,658	76.0
Oral health or dental care during pregnancy	8,661	48.2
The Zika virus	4,963	27.6
I was not provided with any of the information listed above	875	4.9

32. Some women experience problems getting prenatal care, while others do not. Here is a list of problems some women can have getting prenatal care.
(mark all that applied during this pregnancy)

	Frequency	Valid Percent
Did not have any problems	16,318	90.8
Couldn't get an appointment when wanted	176	10.7
Difficulty paying for visits	124	7.5
No way to get to doctor's office or clinic	124	7.5
Couldn't take time off work	84	5.1
Doctor or health plan wouldn't start care as early as wanted	67	4.1
Problems signing up for Medicaid/Title 19	151	9.2
Medicaid coverage was dropped during pregnancy	102	6.2
Had no one to take care of my children	123	7.5
Had too many other things going on	115	7.0
Didn't want anyone to know I was pregnant	63	3.8
The drive to the clinic was too far	115	7.0
Some other problem	115	7.0

33. Were you ever refused prenatal care during this pregnancy?

	Frequency	Valid Percent
Yes	132	0.8
No – SKIP TO Q35	17,199	99.2

34. Why were you refused care? (mark all that apply)

	Frequency	Valid Percent
Didn't have insurance	26	19.7
Had problems with insurance	26	19.7
Doctor was not accepting new patients	20	15.2
Unable to find doctor who accepted Medicaid/Title 19	7	5.3
Pregnancy was high risk	25	18.9
Too late in pregnancy to change doctors	12	9.1
Unsure why I was refused care	21	15.9

35. Were you tested for HIV/AIDS during this pregnancy?

	Frequency	Valid Percent
Yes	6,566	38.6
No	5,741	33.8
No – I was offered testing. I did not want to be tested	205	1.2
I don't know	4,477	26.4

36. Were you tested for syphilis during this pregnancy?

	Frequency	Valid Percent
Yes	5,402	31.1
No	5,377	30.9
No – I was offered testing. I did not want to be tested	138	0.8
I don't know	6,472	37.2

37. How many minutes did it usually take you to get to your prenatal care provider?

	Frequency	Valid Percent
1-15 minutes	8,999	52.9
16-30 minutes	5,080	29.8
31-60 minutes	2,538	14.9
More than 60 minutes	402	2.4

38. Did you get a flu shot this pregnancy?

	Frequency	Valid Percent
Yes	11,622	67.6
No – I received a flu shot before I became pregnant	1,360	7.9
No – I did not want a flu shot during pregnancy	1,778	10.3
No – My doctor told me to wait until after my pregnancy to get a flu shot	75	0.4
No – I do not ever get flu shots	1,977	11.5
No – A flu shot was not available	370	2.2

HOSPITAL CARE

39. During the first 24 hours following the birth of your baby, did the hospital staff encourage you to breastfeed?

	Frequency	Valid Percent
Yes	14,617	84.4
No	2,281	13.2
Don't remember	415	2.4

40. During your hospitalization, has a doctor, nurse or other healthcare professional discussed the following topics? (mark all that apply)

	Frequency	Valid Percent
Action steps to decrease frustration when baby cries	8,725	48.6
How to lay baby down to sleep	11,017	61.3
Dangers of shaking an infant	8,401	46.8
Did not receive information and have not scheduled a time to discuss these topics	5,026	28.0

41. In which of the following positions do you plan to lay your baby down to sleep most of the time?

	Frequency	Valid Percent
On his or her back	16,205	93.6
On his or her side	282	1.6
On his or her stomach	40	0.2
No preference – whatever seems most comfortable	784	4.5

42. Listed below are some locations or descriptions of where a new baby might sleep. For each one, please mark yes, no or not sure for whether you think your baby will ever sleep in a similar way for naps or at night.

In a crib, bassinet, or portable crib

	Frequency	Valid Percent
Yes	17,149	99.2
No	70	0.4
Not sure	71	0.4

With pillows nearby or under him/her

	Frequency	Valid Percent
Yes	247	1.5
No	15,375	95.8
Not sure	419	2.6

With bumper pads

	Frequency	Valid Percent
Yes	873	5.5
No	14,279	89.3
Not sure	834	5.2

Covered with a loose blanket

	Frequency	Valid Percent
Yes	799	5.0
No	14,619	91.3
Not sure	587	3.7

With stuffed toys

	Frequency	Valid Percent
Yes	86	0.5
No	15,573	98.0
Not sure	233	1.5

In bed with me or another person

	Frequency	Valid Percent
Yes	554	3.4
No	14,611	90.9
Not sure	907	5.6

43. How often do you plan to have your new baby sleep in the same bed, in a reclining chair or on a couch with you or anyone else? Sleeping would include both at night and for naps during the day.

	Frequency	Valid Percent
Daily	1,183	6.9
Weekly	968	5.6
Monthly	155	0.9
A few times per year	785	4.6
Do not plan to have baby sleep with me or anyone else	14,070	82.0

44. This question asks about things that may have happened at the hospital where your new baby was born. For each item, mark No if it did not happen or Yes if it did.

I breastfed my baby in the hospital

	Frequency	Valid Percent
Yes	13,622	81.7
No	3,060	18.3

Hospital staff gave me information about breastfeeding

	Frequency	Valid Percent
Yes	14,418	87.9
No	1,991	12.1

Hospital staff helped me learn how to breastfeed

	Frequency	Valid Percent
Yes	12,389	76.8
No	3,742	23.2

Hospital staff told me to breastfeed whenever my baby wanted

	Frequency	Valid Percent
Yes	11,123	70.1
No	4,755	29.9

45. My baby was placed in skin-to-skin contact within the first hour of birth.

	Frequency	Valid Percent
Yes	14,897	88.4
No – not offered the chance	721	4.3
No – my baby was ill or admitted to the NICU	975	5.8
No – my baby was asleep	250	1.5

46. I breastfed my baby within the first hour after my baby was born.

	Frequency	Valid Percent
Yes	11,520	71.2
No – not offered the chance	1,584	9.8
No – my baby was ill or admitted to the NICU	1,289	8.0
No – My baby was asleep	1,791	11.1

47. How many minutes did it take you to travel from your home to the hospital where you delivered your baby?

	Frequency	Valid Percent
1-15 minutes	8,022	46.7
16-30 minutes	5,485	31.9
31-60 minutes	3,105	18.1
More than 60 minutes	578	3.4

48. What is the current month?

	Frequency	Valid Percent
January	1,457	8.1
February	1,203	6.7
March	1,181	6.6
April	1,438	8.0
May	1,617	9.0
June	1,616	9.0
July	1,717	9.6
August	1,678	9.3
September	1,706	9.5
October	1,597	8.9
November	1,397	7.8
December	1,347	7.5