



**Prevalence of Selected Maternal and Child Health Indicators for North Dakota, Pregnancy Risk Assessment Monitoring System (PRAMS), 2016–2020**

Health Indicator	2016 <sup>z</sup>		2017		2018		2019		2020		Overall 2020 <sup>ll</sup>
	N <sup>#</sup>	% (95% CI) <sup>nl</sup>	N <sup>#</sup>	% (95% CI) <sup>nl</sup>	N <sup>#</sup>	% (95% CI) <sup>nl</sup>	N <sup>#</sup>	% (95% CI) <sup>nl</sup>	N <sup>#</sup>	% (95% CI) <sup>nl</sup>	% (95% CI) <sup>nl</sup>
<b>Nutrition</b>											
• Multivitamin use ≥4 times a week during the month before pregnancy			585	39.5 (34.9-44.4)	881	42.2 (38.4-46.1)	760	48.1 (43.8-52.4)	775	48.0 (43.6-52.4)	43.6 (42.9-44.4)
<b>Pre-pregnancy Weight</b>											
• Underweight (body mass index [BMI] <18.5 kg/m <sup>2</sup> )			574	4.0 (2.4-6.5)	851	2.0 (1.2-3.5)	738	2.1 (1.2-3.8)	750	1.6 (0.8-3.4)	3.2 (2.9-3.5)
• Overweight (BMI 25–29.9 kg/m <sup>2</sup> )			574	24.1 (20.2-28.5)	851	27.3 (23.9-31.0)	738	29.2 (25.4-33.4)	750	31.5 (27.5-35.8)	26.1 (25.5-26.8)
• Obese (BMI ≥30 kg/m <sup>2</sup> )			574	28.9 (24.6-33.5)	851	28.0 (24.5-31.7)	738	25.6 (22.0-29.6)	750	29.5 (25.6-33.8)	27.7 (27.0-28.4)
<b>Substance Use</b>											
• Any cigarette smoking											
• During the 3 months before pregnancy			582	23.6 (19.8-27.9)	871	23.8 (20.6-27.4)	759	18.4 (15.3-22.0)	772	15.8 (13.0-19.2)	14.0 (13.4-14.5)
• During the last 3 months of pregnancy			585	10.9 (8.3-14.3)	874	11.8 (9.4-14.9)	759	9.1 (6.8-12.1)	772	6.7 (4.9-9.1)	6.5 (6.2-6.9)
• Postpartum			583	18.0 (14.6-22.0)	870	16.4 (13.6-19.6)	758	11.5 (9.0-14.6)	769	8.6 (6.6-11.3)	8.8 (8.3-9.2)
• Any e-cigarette use											
• During the 3 months before pregnancy			583	3.3 (1.9-5.6)	875	2.6 (1.6-4.2)	755	3.3 (2.0-5.3)	770	7.6 (5.5-10.5)	5.2 (4.9-5.6)
• During the last 3 months of pregnancy			583	0.1 (0.0-0.3)	876	0.9 (0.4-2.3)	755	1.2 (0.5-2.9)	770	0.7 (0.3-1.9)	1.5 (1.3-1.7)
• Hookah use in the last 2 years			582	2.8 (1.6-5.0)	872	1.9 (1.1-3.6)	754	1.3 (0.7-2.6)	770	2.0 (1.0-3.7)	4.4 (4.1-4.8)
• Heavy drinking (≥8 drinks a week) during the 3 months before pregnancy			579	3.0 (1.7-5.1)	869	3.3 (2.0-5.3)	754	3.2 (2.0-5.1)	767	4.5 (2.9-6.8)	3.0 (2.8-3.3)
<b>Intimate Partner Violence (IPV)<sup>‡</sup></b>											
• Experienced IPV during the 12 months before pregnancy by a husband or partner and/or by an ex-husband or ex-partner			581	2.4 (1.4-4.3)	870	2.7 (1.7-4.2)	754	2.6 (1.5-4.5)	771	4.5 (3.0-6.6)	2.5 (2.3-2.8)
• Experienced IPV during pregnancy by a husband or partner and/or by an ex-husband or ex-partner			582	1.7 (0.9-3.1)	873	2.6 (1.6-4.2)	751	1.3 (0.6-2.9)	771	2.7 (1.6-4.5)	1.7 (1.5-1.9)
<b>Depression</b>											
• Self-reported depression in the 3 months before pregnancy			588	16.2 (12.9-20.1)	877	19.0 (16.0-22.4)	753	16.6 (13.6-20.1)	774	19.5 (16.1-23.3)	15.5 (15.0-16.1)
• Self-reported depression during pregnancy			587	14.5 (11.4-18.2)	867	15.6 (12.8-18.8)	759	18.5 (15.3-22.3)	769	17.6 (14.5-21.2)	15.2 (14.7-15.8)
• Self-reported postpartum depressive symptoms <sup>**</sup>			575	9.9 (7.3-13.1)	865	11.7 (9.3-14.6)	747	16.1 (13.0-19.7)	761	14.5 (11.7-18.0)	13.4 (12.9-13.9)
<b>Health Care Services</b>											
• Health care visit in the 12 months before pregnancy			583	67.8 (63.1-72.1)	878	67.0 (63.2-70.7)	756	72.8 (68.8-76.5)	770	66.2 (61.9-70.2)	66.0 (65.3-66.8)
• Began prenatal care in 1st trimester			580	85.1 (81.4-88.2)	859	86.1 (83.0-88.7)	742	90.1 (87.4-92.3)	763	87.3 (84.1-90.0)	87.1 (86.5-87.6)
• Had a flu shot in the 12 months before delivery			572	69.7 (65.0-74.0)	867	68.8 (65.0-72.5)	752	73.8 (69.7-77.5)	767	74.2 (70.1-77.9)	60.9 (60.1-61.7)
• Had maternal postpartum checkup			582	87.1 (83.6-90.0)	873	91.0 (88.4-93.0)	754	89.3 (86.3-91.7)	767	89.3 (86.3-91.6)	88.1 (87.6-88.6)
<b>Pregnancy Intention</b>											
• Mistimed			581	18.2 (14.8-22.3)	869	19.5 (16.5-22.9)	754	17.3 (14.2-20.9)	769	12.2 (9.5-15.5)	17.7 (17.2-18.4)
• Unwanted pregnancy			581	6.9 (4.8-9.8)	869	4.5 (3.1-6.5)	754	5.2 (3.6-7.6)	769	4.1 (2.7-6.3)	6.3 (6.0-6.7)
• Unsure whether wanted pregnancy			581	18.6 (15.1-22.7)	869	17.8 (14.8-21.2)	754	15.0 (12.1-18.4)	769	19.8 (16.5-23.6)	15.5 (15.0-16.1)
• Intended pregnancy			581	56.3 (51.4-61.1)	869	58.2 (54.2-62.1)	754	62.5 (58.1-66.6)	769	63.9 (59.5-68.0)	60.4 (59.6-61.1)

Health Indicator	2016 <sup>z</sup>		2017		2018		2019		2020		Overall 2020 <sup>ll</sup>
	N <sup>#</sup>	% (95% CI) <sup>¶</sup>	N <sup>#</sup>	% (95% CI) <sup>¶</sup>	N <sup>#</sup>	% (95% CI) <sup>¶</sup>	N <sup>#</sup>	% (95% CI) <sup>¶</sup>	N <sup>#</sup>	% (95% CI) <sup>¶</sup>	% (95% CI) <sup>¶</sup>
<b>Postpartum<sup>++</sup> Family Planning</b>											
• Use of any postpartum contraception <sup>+++</sup>			573	74.2 (69.7-78.3)	857	74.8 (71.2-78.2)	736	73.9 (69.8-77.6)	756	70.5 (66.3-74.4)	74.5 (73.9-75.2)
• Highly effective contraceptive methods											
• Male or female sterilization			573	10.1 (7.5-13.4)	857	9.8 (7.6-12.5)	736	9.6 (7.3-12.5)	756	11.7 (9.2-14.9)	10.9 (10.4-11.4)
• Long-acting reversible contraceptive method <sup>ss</sup>			573	14.5 (11.5-18.3)	857	11.5 (9.2-14.3)	736	14.4 (11.6-17.7)	756	14.6 (11.7-18.0)	16.7 (16.1-17.3)
• Moderately effective contraceptive methods <sup>ss</sup>			573	26.3 (22.2-30.8)	857	27.6 (24.2-31.4)	736	22.2 (18.7-26.1)	756	20.9 (17.5-24.8)	24.5 (23.9-25.2)
• Least effective contraceptive methods <sup>ss</sup>			573	23.3 (19.4-27.8)	857	25.9 (22.6-29.5)	736	27.7 (24.0-31.8)	756	23.2 (19.7-27.2)	22.4 (21.8-23.1)
<b>Oral Health</b>											
• Teeth cleaned during pregnancy by a dentist or dental hygienist			586	47.3 (42.5-52.2)	879	44.3 (40.5-48.2)	755	51.4 (47.1-55.8)	774	44.3 (39.9-48.7)	40.0 (39.3-40.8)
<b>Health Insurance Status One Month Before Pregnancy<sup>¶¶</sup></b>											
• Private insurance			560	76.0 (71.7-79.8)	840	73.8 (70.1-77.3)	736	74.8 (70.8-78.5)	755	77.5 (73.8-80.9)	61.8 (61.0-62.5)
• Medicaid			560	16.2 (13.1-20.0)	840	15.4 (12.7-18.6)	736	14.2 (11.3-17.6)	755	12.0 (9.7-14.9)	23.5 (22.9-24.1)
• No insurance			560	7.8 (5.6-10.7)	840	10.8 (8.4-13.7)	736	10.7 (8.2-13.8)	755	10.2 (7.8-13.4)	14.0 (13.4-14.5)
<b>Health Insurance Status for Prenatal Care<sup>¶¶</sup></b>											
• Private insurance			542	75.3 (70.9-79.2)	831	70.8 (66.9-74.4)	716	74.5 (70.4-78.2)	731	78.4 (74.6-81.8)	59.6 (58.8-60.3)
• Medicaid			542	21.6 (17.8-25.8)	831	24.8 (21.3-28.6)	716	21.2 (17.7-25.2)	731	17.7 (14.7-21.2)	36.6 (35.8-37.3)
• No insurance			542	3.1 (1.8-5.2)	831	4.3 (2.9-6.2)	716	4.3 (2.8-6.4)	731	3.9 (2.5-6.0)	2.8 (2.5-3.1)
<b>Health Insurance Status Postpartum<sup>++¶¶</sup></b>											
• Private insurance			556	74.7 (70.3-78.6)	845	68.8 (64.8-72.4)	733	71.2 (67.0-75.1)	751	72.3 (68.2-76.1)	56.4 (55.6-57.2)
• Medicaid			556	21.0 (17.4-25.1)	845	23.1 (19.8-26.8)	733	20.7 (17.3-24.6)	751	21.7 (18.3-25.5)	35.4 (34.7-36.1)
• No insurance			556	4.3 (2.7-6.7)	845	8.1 (6.0-10.7)	733	8.0 (5.9-10.8)	751	6.0 (4.1-8.6)	7.2 (6.8-7.7)
<b>Infant Sleep Practices</b>											
• Baby most often laid on back to sleep			568	83.4 (79.3-86.8)	842	84.6 (81.4-87.3)	723	86.2 (82.9-89.0)	737	82.5 (78.8-85.7)	79.5 (78.9-80.2)
<b>Breastfeeding Practices</b>											
• Ever breastfed			574	86.1 (82.4-89.1)	855	89.5 (86.8-91.7)	732	89.1 (86.1-91.5)	740	89.2 (86.1-91.6)	87.9 (87.3-88.4)
• Any breastfeeding at 8 weeks			569	65.9 (61.1-70.3)	847	69.9 (66.0-73.5)	729	72.8 (68.8-76.5)	736	72.8 (68.7-76.6)	68.5 (67.8-69.3)

<sup>z</sup> Did not participate in 2016.

<sup>ll</sup> PRAMS sites aggregated for 2020: Alabama, Alaska, Arizona, Arkansas, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Illinois, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York City, North Dakota, Oregon, Pennsylvania, Puerto Rico, South Dakota, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming that met the required 50% response rate threshold for inclusion.

<sup>#</sup> Unweighted sample size.

<sup>¶</sup> Weighted percentage (95% confidence interval [CI]).

<sup>z</sup> Defined as being pushed, hit, slapped, kicked, choked, or physically hurt in any way by a husband or partner and/or by an ex-husband or ex-partner. In 2016 (Phase 8 questionnaire), the question response options were expanded to include “my ex-husband or ex-partner” in addition to “my husband or partner.”

<sup>\*\*</sup> Defined as “always” or “often” feeling down, depressed, or hopeless or having little interest or little pleasure in doing things she usually enjoyed since delivery.

<sup>++</sup> Postpartum defined as the time the PRAMS survey was completed.

<sup>ss</sup> Defined as using any kind of birth control postpartum (female or male sterilization, intrauterine device (IUD), contraceptive implant, birth control pills, shots or injections, contraceptive patch, vaginal ring, condoms, rhythm method or natural family planning, withdrawal).

<sup>ss</sup> Long-acting reversible contraception (LARC) methods include IUD or contraceptive implant. Moderately effective methods include birth control pills, shots or injections (e.g., Depo-Provera), contraceptive patch, and vaginal ring. Least effective methods include condom, rhythm method or natural family planning, and withdrawal. Women who selected the “other” write-in option were excluded from the analysis.

<sup>¶¶</sup> Insurance coded as Medicaid (Medicaid or state-named Medicaid program), Private (private only, any other insurance in combination with private, or TRICARE or other military insurance), or No insurance (no insurance or Indian Health Service (IHS) only; in Alaska, coverage by the Alaska Tribal Health System was part of the IHS response option). Other state-specific government plans or programs, such as the Children’s Health Insurance Program (CHIP) or State Children’s Health Insurance Program (SCHIP), were excluded from estimates.